



**Central Okanagan
Public Schools**
Together We Learn



School District No. 23 (Central Okanagan)

2024 PUBLIC SECTOR ORGANIZATION (PSO) CLIMATE CHANGE ACCOUNTABILITY REPORT

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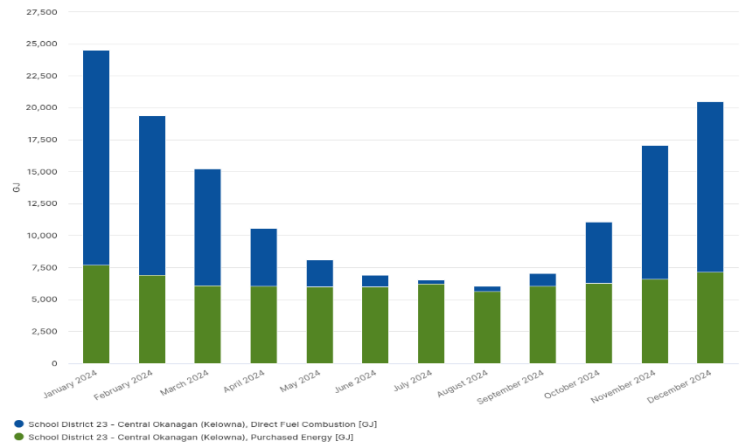


In 2024, SD23 increased the numbers of Electric Charging Stations

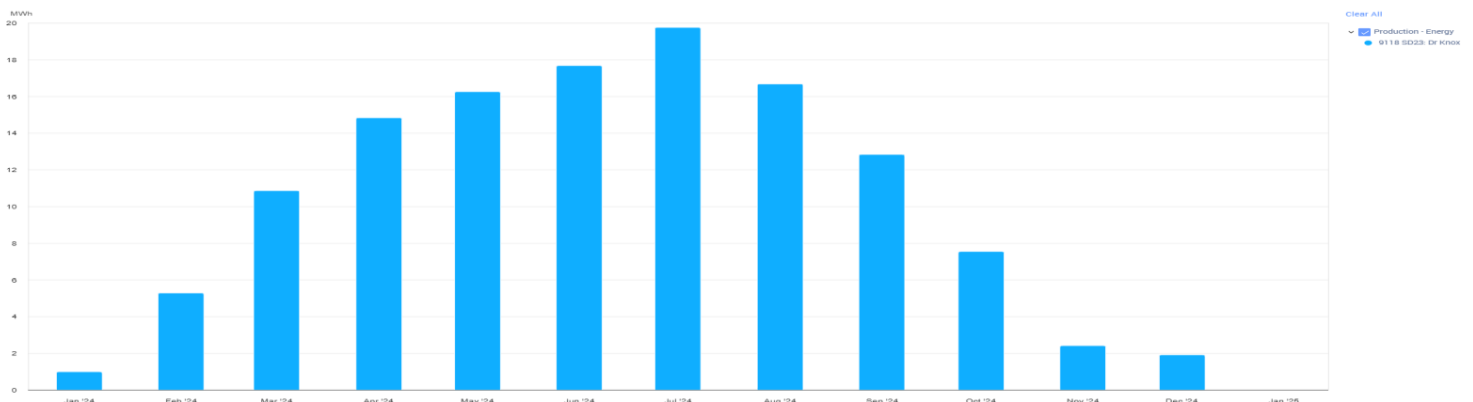
Declaration Statement

This PSO Climate Change Accountability Report for the period January 1, 2024 to December 31, 2024 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2024 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2024 and beyond. Plans are in place to continue reducing Greenhouse Gas Emissions in 2025.

By June 30, 2025, Central Okanagan Public Schools final 2024 Climate Change Accountability Report will be posted to our website at www.sd23.bc.ca.



In 2024, SD23's reported emissions increased by over 800 tonnes of CO₂ due to the newly required inclusion of fugitive gases; this figure was based on the estimation method.



Dr. Knox Middle School - 100 kWh Solar Panel Installation consistently working in 2024.

Executive Summary



Delta Carmichael, CPA, CA
Secretary Treasurer/CFO

Central Okanagan Public Schools (SD23) acknowledges and honours the unceded Traditional Territory and long-standing stewardship of the Okanagan (Syilx) People and the Westbank First Nation. As a public education institution, SD23 is committed to creating positive and lasting impacts in the lives of students and their communities by providing safe, inclusive, and inspiring learning environments.

To achieve this, SD23 works collaboratively with a broad network of partners, including community organizations, health authorities, provincial ministries, and municipal governments. These partnerships support not only our educational mission but also our ongoing efforts to address the growing challenges of climate change.

As part of our responsibility under the Climate Change Accountability Act and our commitment to the CleanBC Plan, SD23 continues to embed sustainability into the heart of its operations.

We are proud to announce that in 2024, School District No. 23 (Central Okanagan Public Schools) achieved carbon neutrality for the 15th consecutive year. This significant milestone was made possible through our continued investment in British Columbia-based carbon reduction projects via the BC Ministry of Environment and Climate Change Strategy, effectively offsetting all remaining emissions. SD23 remains firmly committed to the CleanBC Plan, continuously working to improve operational sustainability and energy efficiency while upholding our core responsibility to deliver excellent educational outcomes—even as we balance these priorities with climate and fiscal challenges.

As we reflect on 2024 and look ahead, we recognize the increasing frequency and severity of climate-related events across the province. From prolonged wildfire seasons to atmospheric rivers and record heat events, these challenges underscore the importance of adaptive infrastructure and planning. We are deeply grateful to our District staff for their unwavering dedication to learning, providing support to those facing food insecurity, offering technology to families navigating digital divides, and ensuring safety and stability in our learning environments throughout the year.

SD23 remains actively engaged in partnerships with municipal, provincial, and nonprofit organizations to address climate resilience. Whether through district-level energy retrofits, fleet decarbonization, or the expansion of school-based climate education, we continue to lead by example and foster a culture of sustainability.

In summary, this 2024 Climate Change Accountability Report outlines the actions taken by SD23 during the 2024 reporting year to reduce greenhouse gas emissions, maintain carbon neutrality, and strengthen climate resilience. It reflects our deep gratitude to staff, students, and partners, and reaffirms our commitment to a low-carbon, climate-resilient future for our schools and our broader community.



Delta Carmichael, CPA, CA
Secretary-Treasurer/CFO
May 28, 2025

2024 Greenhouse Gas Emissions and Offsets Overview

SD23 GHG Emissions and Offsets for 2024 (tCO₂e)

BioCO₂ is included in Total Emissions but not Total Offsets. For K-12 and Post-Secondary organizations, and BC Transit, Total Offsets will not equal Total Emissions minus Total BioCO₂ because offset exempt emissions for buses are included within Total Emissions.

GHG EMISSIONS AND OFFSETS FOR 2024	
Total Emissions (tCO ₂ e)	6,895
Total BioCO ₂	60
Total Offsets (tCO ₂ e)	6,955
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	57
GHG EMISSIONS AND OFFSETS FOR 2024	
Grand Total Offsets (tCO ₂ e) to be Retired for 2023 Reporting Year	5,606
Offset Investment (\$25 per tCO ₂ e)	\$140,150

Total Emissions for Offsets for the 2024 - Reporting Year

SD23 purchased carbon offsets from the Government of BC for the equivalent of 5,606 tonnes of CO₂e to obtain carbon neutral status for 2024.

Sixty tonnes of CO₂e emissions from the combustion of biomass and biomass-based fuels were reported as part of our greenhouse gas emissions profile in 2024.

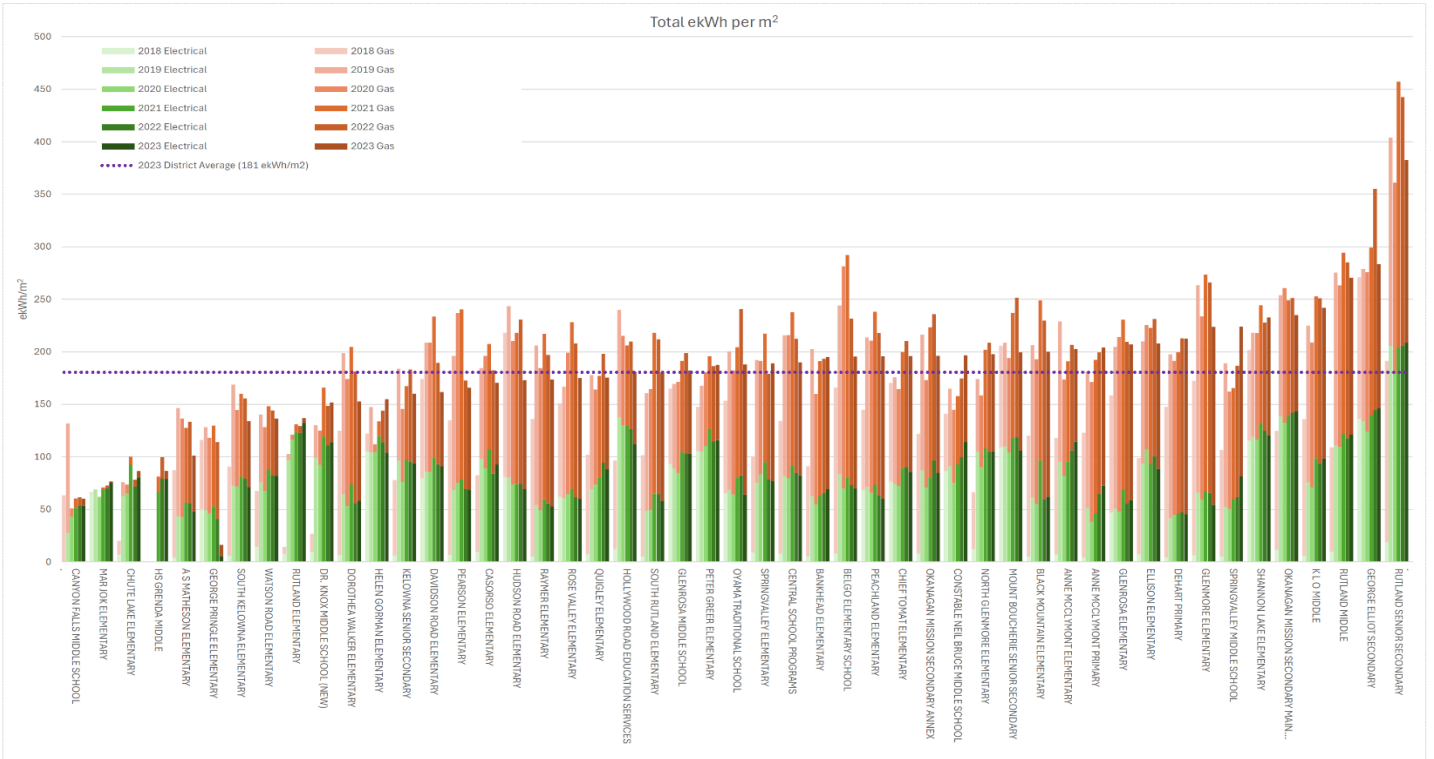
However, while all CO₂e emissions from these sources must be reported. CO₂ emissions from school buses do not require offsets.

Retirement of Offsets

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, SD23 (the Organization) 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 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.



New DC Charges – SD23 Electric School Buses



FALCON ENGINEERING 2024-07-24

2023 District Average (181 ekWh/m2) Geo-Exchange Schools are clear winners to reduce green gas emissions, averaging 50% less energy per square meter.



Four high-efficiency IBC condensing boilers at École Casorso Elementary School now provide clean, reliable heat while operating at up to 98% efficiency. These units replaced older, non-condensing, naturally vented boilers—cutting natural gas use by 30% and significantly reducing energy waste.

PART 2. Public Sector Leadership

Actions Taken to Reduce Greenhouse Gas Emissions in 2024

Energy Efficiency Measures:

In 2024, Central Okanagan Public Schools (SD23) implemented a range of targeted energy-saving measures to reduce energy consumption and associated greenhouse gas (GHG) emissions. These measures reflect SD23's ongoing efforts to optimize building performance, enhance occupant comfort, and reduce environmental impact. Initiatives included:

- **LED Parking Lot Lighting Upgrade:** Replaced legacy lighting at École George Elliot Secondary School with energy-efficient LED fixtures, improving illumination and safety while significantly reducing energy use.
- **HVAC Optimization and DDC Panel Upgrades:** Upgraded Direct Digital Control (DDC) panels to enhance system reliability and enable more precise control of heating, ventilation, and air conditioning (HVAC) systems.
- **Gymnasium Lighting Retrofits:** Replaced outdated gym lighting with high-efficiency, hi-bay LED fixtures, reducing electrical demand and maintenance costs.
- **Building Envelope Improvements:** Enhanced roof insulation and sealed exterior doors across several facilities to reduce thermal losses and improve overall building performance.
- **Energy Audits and Retro-Commissioning:** Conducted detailed energy audits at key sites, followed by implementation of audit recommendations to reduce energy use intensity and emissions.

Electric Vehicle Infrastructure Expansion: Through ZEVIP (Zero-Emission Vehicle Infrastructure Program) funding, SD23 supported the procurement and installation of DC fast chargers to accelerate the transition to electric school buses.

Plans to Continue Reducing Greenhouse Gas Emissions in 2025

School District No. 23 (Central Okanagan) remains committed to reducing GHG emissions and supporting provincial climate goals. The following actions are planned or ongoing for the 2025 calendar year:

- **Building Automation System Upgrades – Ongoing**
The District will continue upgrading and recommissioning Building Automation Systems to improve energy efficiency and reduce emissions.
- **Promoting Sustainable Transportation – Ongoing**
In partnership with the City of Kelowna, SD23 will continue to promote carpooling, cycling, e-transportation, and transit use among staff and students.
- **School Transportation Optimization – Ongoing**
Efforts to streamline bus routes and reduce fuel use will continue, with a focus on efficient logistics and reduced emissions.
- **Waste Management – Ongoing**
Schools will maintain and enhance waste reduction programs, including commingled recycling, composting, and limiting single-use items.
- **Solar Energy Expansion – Planned for 2025**
New solar installations are planned at: École George Elliot Secondary School, École Peter Greer Elementary, and Phase 2 at École H.S. Grenda. Solar projects will add to SD23's renewable energy capacity and support long-term energy cost savings.

These initiatives strengthen SD23's role as a climate-conscious public sector leader and support its long-term sustainability goals.