

# CLIMATE CHANGE ACCOUNTABILITY REPORT

REPORTING YEAR: 2025

PRODUCED: MAY 2026

**MAPLE RIDGE-PITT MEADOWS SCHOOL DISTRICT**



## EXECUTIVE SUMMARY

The Board of Education of School District No. 42 (Maple Ridge-Pitt Meadows) respectfully acknowledges that the district operates on the traditional and unceded territories of the Katzie First Nation and Kwantlen First Nation.

This Climate Change Accountability Report (CCAR) covers the period from January 1 to December 31, 2025. It summarizes the district's greenhouse gas (GHG) emissions profile, outlines the carbon offsets required to achieve net-zero emissions, and highlights initiatives undertaken in 2025 to reduce emissions, as well as planned actions for 2026 and beyond.

The 2025 CCAR will be posted on the district website by June 30, 2026, at <https://www.sd42.ca/energy-environmental-sustainability/>.

The Board of Education is committed to environmental sustainability and ensures that efforts are made to conserve energy and natural resources while exercising sound financial management. The district supports BC Climate Action Legislation and the targets established by the [Climate Change Accountability Act](#).

As part of this commitment, the Board has adopted [Policy 6530 Environmental Sustainability](#), which recognizes the importance of sustainability and emphasizes collaboration among trustees, district leaders, administrators, teachers, support staff, parents, guardians, and students. The policy's guiding principles include the development, monitoring, continuous improvement, and reporting of an environmental sustainability plan.

The district's [Environmental Sustainability Plan](#), approved in 2022 as part of the Strategic Facilities Plan, outlines capital investments to reduce GHG emissions by 22% from 2010 levels by 2026 and improve building performance by 20%.

The district continues to prioritize capital investments to reduce emissions and support sustainability education.

In 2025, the district implemented an enhanced approach to quantify hydrofluorocarbon (HFC) refrigerant emissions across its facilities. Using a combination of unit- and asset-based methods, total fugitive emissions were calculated to be 13.3 tCO<sub>2</sub>e. Total emissions were 3,738 tCO<sub>2</sub>e, of which 3,654 tCO<sub>2</sub>e were offsettable and require the purchase of carbon offsets.

Despite reductions in energy consumption for electricity by 0.81% and natural gas and propane by 1.64%, the offsettable emissions have increased by 1.89%. This increase reflects both the addition of refrigerant emissions as a new reporting requirement and changes in the emissions intensity of grid-supplied electricity, associated with BC Hydro importing power from non-renewable sources, rather than increased overall energy use.

At an offset price of **\$25 per tonne**, the total cost of carbon offsets was **\$91,350**, based on 3,654 tCO<sub>2</sub>e of offsettable emissions, enabling the district to maintain carbon neutrality.

### Key Results – 2025 Reporting Year

- Total emissions: **3,738 tCO<sub>2</sub>e**
- Offsettable emissions: **3,654 tCO<sub>2</sub>e** (+1.89% vs. 2024)
- Carbon offset cost: **\$91,350**

### Energy consumption changes:

- Electricity: ↓ 0.81%
- Natural gas and propane: ↓ 1.64%

### Key drivers of change:

- Addition of refrigerant (HFC) emissions (**13.3 tCO<sub>2</sub>e**)
- Increased emissions intensity of grid-supplied electricity

### Notable reductions:

- Paper emissions: ↓ 14% (27 tCO<sub>2</sub>e reduction)

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## INTRODUCTION

The Maple Ridge – Pitt Meadows School District respectfully acknowledges that it operates on the traditional and unceded territories of the Katzie and Kwantlen First Nations. The district is committed to advancing in climate action in a manner that honours these lands and the Indigenous Peoples who have cared for them since time immemorial.

The Maple Ridge – Pitt Meadows School District (“the district”), legally known as The Board of Education of School District No. 42 (Maple Ridge-Pitt Meadows), owns and operates 34 facilities that serve over 17,000 students and nearly 2,500 employees. In 2025, the district’s annual greenhouse gas (GHG) emissions were 3,738 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e), of which 3,654 tCO<sub>2</sub>e were offsetable—equivalent to the annual emissions of approximately 773<sup>1</sup> cars on the road each year (based on U.S. EPA equivalency factors). As an educational organization, the district is well-positioned to foster sustainability awareness and support environmental leadership among students and staff.

Hydrofluorocarbon (HFC) emissions are included within the scope of the [Carbon Neutral Government Regulation](#) (CNG Regulation), but have not historically represented a significant source of emissions. At the inception of the CNG program, most of the refrigerants used were ozone-depleting substances (ODSs), which were not subject to reporting requirements.

With the phase-out of ODS under the [Montreal Protocol](#) and the increased adoption of air conditioning systems and heat pumps, the use of HFC-based refrigerants has increased. Given their high global warming potential, the Climate Solutions Division (CSD) required the inclusion of refrigerant emissions in the 2024 reporting cycle. Recognizing the district's need to adapt its data collection and reporting processes, a transition period was provided. During this time, the district began developing a methodology to accurately quantify refrigerant emissions.

In 2025, the district fully implemented this methodology and began reporting HFC emissions. Larger HVAC systems were assessed using a unit-based approach, while smaller equipment was evaluated using an asset-based approach. This combined methodology improves accuracy while minimizing administrative burden. Total fugitive emissions from refrigerants were calculated at 13.3 tCO<sub>2</sub>e for the 2025 reporting year.

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<sup>1</sup> <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>

## PART 1: LEGISLATIVE REPORTING REQUIREMENTS

### 1A. DECLARATION STATEMENT

This Climate Change Accountability Report for the 2025 calendar year summarizes the district’s emissions profile, the total offsets required to achieve net-zero emissions, the actions taken in 2025 to reduce greenhouse gas (GHG) emissions, and the plans to continue reducing emissions in 2026 and beyond.

#### A. EMISSIONS REDUCTIONS: ACTIONS AND PLANS

Maple Ridge-Pitt Meadows School District has adopted [Policy 6530 Environmental Sustainability](#), which outlines the Board’s commitment to environmental stewardship and sustainable practices. The policy establishes guiding principles that support the development and implementation of an environmental sustainability plan, including strategic resource management, operational practices, and ongoing monitoring and reporting.

The district’s emissions reduction initiatives and plans are organized into the following three key areas:

##### *a. Stationary Sources (Building/Heating Plants)*

The district’s buildings and core mechanical assets—including boilers, domestic hot water (DHW) systems, unit ventilators (UVs), rooftop units (RTUs), air handling units (AHUs), and direct digital control (DDC) systems—are aging. To address these infrastructure challenges, the district prioritizes facility upgrades based on asset condition, operational requirements, and available funding. Energy projects are aligned with facility plans and capital programs to ensure a coordinated approach to achieving GHG reduction objectives. The district continues to implement capital upgrades focused on improving system efficiency and reducing natural gas consumption, including:

1. DDC upgrades to optimize equipment operation, extend asset life, and reduce energy consumption
2. Recommissioning (RCx) of heating plants to reduce natural gas use and associated GHG emissions
3. Fuel-switching initiatives to lower emissions while meeting BC Hydro (BCH) and FortisBC program requirements
4. DHW upgrades, including replacement of conventional storage tanks with tankless water heaters.

Projects and initiatives completed or underway in 2025 are described under [actions taken to reduce greenhouse gas emissions](#). Planned actions for 2026 are outlined under [plans to continue reducing greenhouse gas emissions in 2026 and beyond](#).

##### *b. Mobile Sources (Fleet)*

To align with CleanBC zero-emission vehicle targets, the district completed an analysis of potential fleet transition pathways. The analysis considered three scenarios: a business-as-usual approach using internal combustion engine (ICE) vehicles; an aggressive electrification scenario that transitions fully to electric vehicles; and a balanced approach that incorporates both electric and ICE vehicles within budget constraints.

Projects and initiatives completed or underway in 2025 are described under [actions taken to reduce greenhouse gas emissions](#). Planned actions for 2026 are outlined under [plans to continue reducing greenhouse gas emissions in 2026 and beyond](#).

##### *c. Paper Consumption:*

Conventional paper (i.e. traditional wood-pulp-based paper) remains a significant contributor to the district’s greenhouse gas emissions, although it is no longer the second-largest source. Over the past five years, the district has used PaperCut software to raise users’ awareness of their paper consumption. Paper consumption increased over the previous four years, with a slight decrease observed in 2024. The district plans to reduce paper consumption by promoting digital workflows, encouraging paperless practices, and setting double-sided printing as the default.

In 2024, the district piloted replacing traditional wood-pulp-based paper with sugar sheet paper—a sustainable alternative derived from sugarcane bagasse—at the maintenance department office.

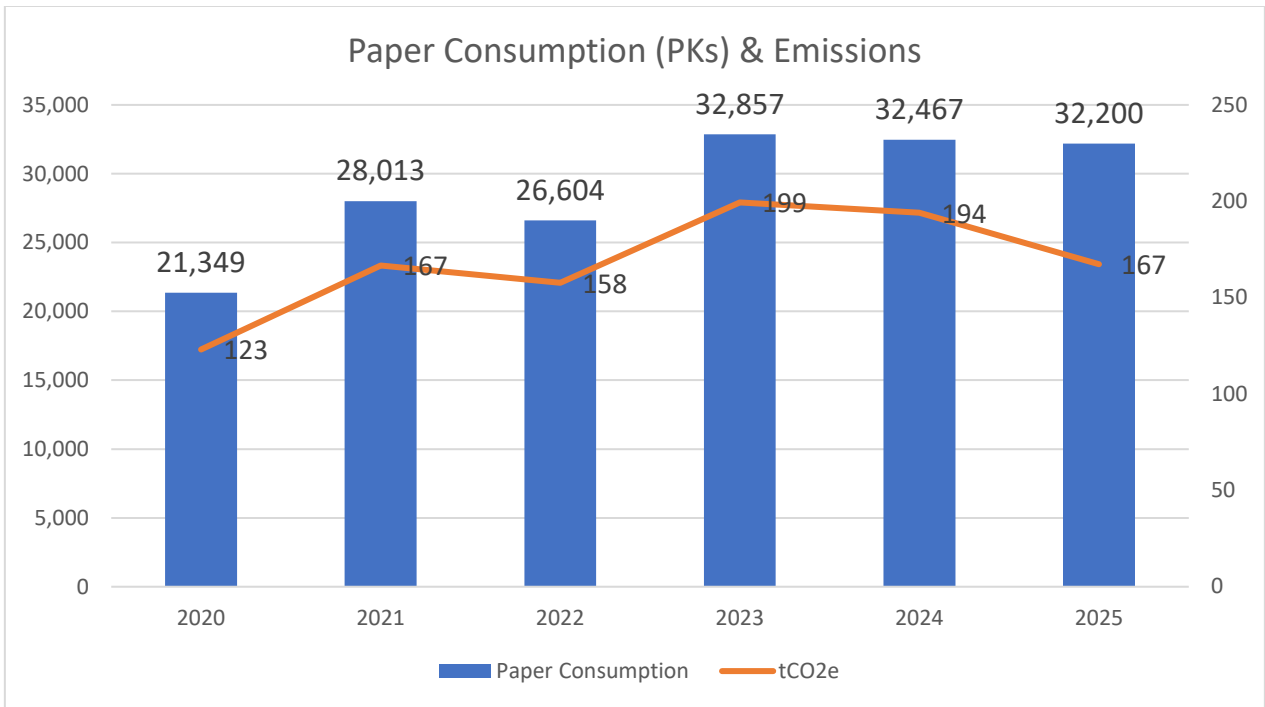


Figure 1: Paper consumption (PKs) and emissions trend

In 2025, the district transitioned from traditional paper to sugar sheet paper to achieve environmental and financial benefits. The district approved the purchase of 8.5" x 11" sugar sheet paper, which accounts for approximately 89% of total paper use. This transition was estimated to reduce annual GHG emissions by up to 65 tonnes and generate net annual savings of up to \$26,000. Actual results are presented in the section titled "[Alternate Paper Use](#)" of this report.

## 1B. EMISSIONS AND OFFSET SUMMARY TABLE 2025

In 2025, the district's total emissions were 3,738 tCO<sub>2</sub>e, of which 83.9 tCO<sub>2</sub>e were from low-carbon biogenic fuels that do not require offsets. The total offset requirement was 3,654 tCO<sub>2</sub>e. An offset summary of the district's GHG Emissions for 2025 is tabulated below:

Maple Ridge–Pitt Meadows School District 2025 GHG Emissions and Offsets Summary	
<b>GHG Emissions for the period January 1 to December 31, 2025</b>	
Total Emissions (tCO <sub>2</sub> e)	<b>3,738</b>
Less: Biogenic Emissions (tCO <sub>2</sub> e)	<b>(83.9)</b>
Equals: Offsetable Emissions (tCO <sub>2</sub> e)	<b>3,654</b>
<b>Adjustments to Offset Required GHG Emissions Reported in Prior Years</b>	
Total Offsets (tCO <sub>2</sub> e)	<b>0</b>
<b>Grand Total Offsets for the 2025 Reporting Year</b>	
Grand Total Offsets to be Retired for 2025 Reporting Year (tCO <sub>2</sub> e)	<b>3,654</b>
<b>Offset Investment</b> (Grand Total Offsets to be Retired for 2025 Reporting Year X \$25/tCO <sub>2</sub> e)	<b>\$91,350</b>

Table 1: 2025 GHG Emissions and Offsets Summary

## 1C. RETIREMENT OF OFFSETS

In accordance with the requirements of the *Climate Change Accountability Act* and the Carbon Neutral Government Regulation, School District No. 42 (**the Organization**) is responsible for arranging for the retirement of the offset obligation reported above for the 2025 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Energy and Climate Solutions (**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 LEADERSHIP

The Maple Ridge–Pitt Meadows School District is committed to advancing emissions-reduction and climate-change adaptation initiatives across its facilities. As part of this commitment, the district has undertaken the following initiatives.

### 2A: CLIMATE RISK MANAGEMENT

The district recognizes the importance of environmental sustainability, as outlined in Policy 6530, and promotes operational and behavioural practices that reduce energy and water consumption while improving waste diversion. These efforts contribute to lower utility costs and reduced greenhouse gas emissions. The current environmental sustainability plan (2022–2026) targets a 22% reduction in GHG emissions and a 20% improvement in building performance relative to the 2010 baseline.

The district continues to monitor progress toward its target of a 22% reduction in greenhouse gas emissions from 2010 levels by 2026. While overall emissions have remained relatively stable in recent years, continued capital investments, fuel-switching initiatives, and operational improvements are expected to support further progress toward this target.

### 2B: ADDITIONAL SUSTAINABILITY INITIATIVES

The energy and environmental sustainability department has introduced several sustainable initiatives to engage students and staff across the district. These initiatives are listed below:

#### 1. Training for Heating, Ventilation and Air-Conditioning (HVAC) trades team

In 2025, the district delivered training on RC Webview and identified energy optimization opportunities. Sessions were held on July 10 and July 14 at Garibaldi Secondary, with funding support from FortisBC.

A similar training session was delivered in November 2025, focused on Enteliweb, covering advanced topics such as alarm management, reporting, and system optimization.

#### 2. Energy Catalyst Newsletter

In 2024, the district launched a newsletter to share its sustainability initiatives with the community. Since its initiation, six editions, including three for 2025, have been published on the district’s website at [www.sd42.ca/energy-environmental-sustainability](http://www.sd42.ca/energy-environmental-sustainability). The newsletter highlights energy and sustainability initiatives across the district.

#### 3. Joint Tree Planting Initiative

The City of Maple Ridge partnered with School District 42 to deliver student-led tree planting events across the community.

Students from ci:tmæx<sup>w</sup> Environmental Community school and Alouette Elementary participated in planting activities at Allco Park and Alouette Park. Additional planting occurred at Telosky Park and Chilcotin Park.

The initiative, funded through the Growing Canada’s Community Canopies Program, provided hands-on learning opportunities while supporting climate mitigation, biodiversity, and community well-being.

A total of 116 trees were planted across multiple locations.

#### 4. Waste Management

A site visit was organized to a waste sorting facility with a partner group (CUPE 703) to provide education on how waste is handled after collection from school facilities.



Figure 2: Joint tree planting drive

The district conducted a waste assessment in November 2025 to evaluate the effectiveness of current waste management practices and identify opportunities for improvement.

## 2C: SUCCESS STORIES

The district implemented fuel-switching projects by replacing natural gas-based systems with electric heating solutions, including unit ventilators with heat pump capability. These upgrades improved occupant comfort, enhanced system performance, and reduced energy consumption and associated emissions.

The district integrated sugar sheet paper, resulting in cost savings of \$21,183 compared to 100% recycled paper and a 27 tCO<sub>2</sub>e reduction in emissions.

## EXECUTIVE SIGN OFF

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Signature	Date
Richard Rennie	Title: Secretary Treasurer

\*Signature by a senior official such as CEO, COO, Secretary Treasurer, or Superintendent

# GREENHOUSE GAS EMISSIONS SOURCE BREAKDOWN

The chart below presents the breakdown of greenhouse gas (GHG) emissions by source for 2025.

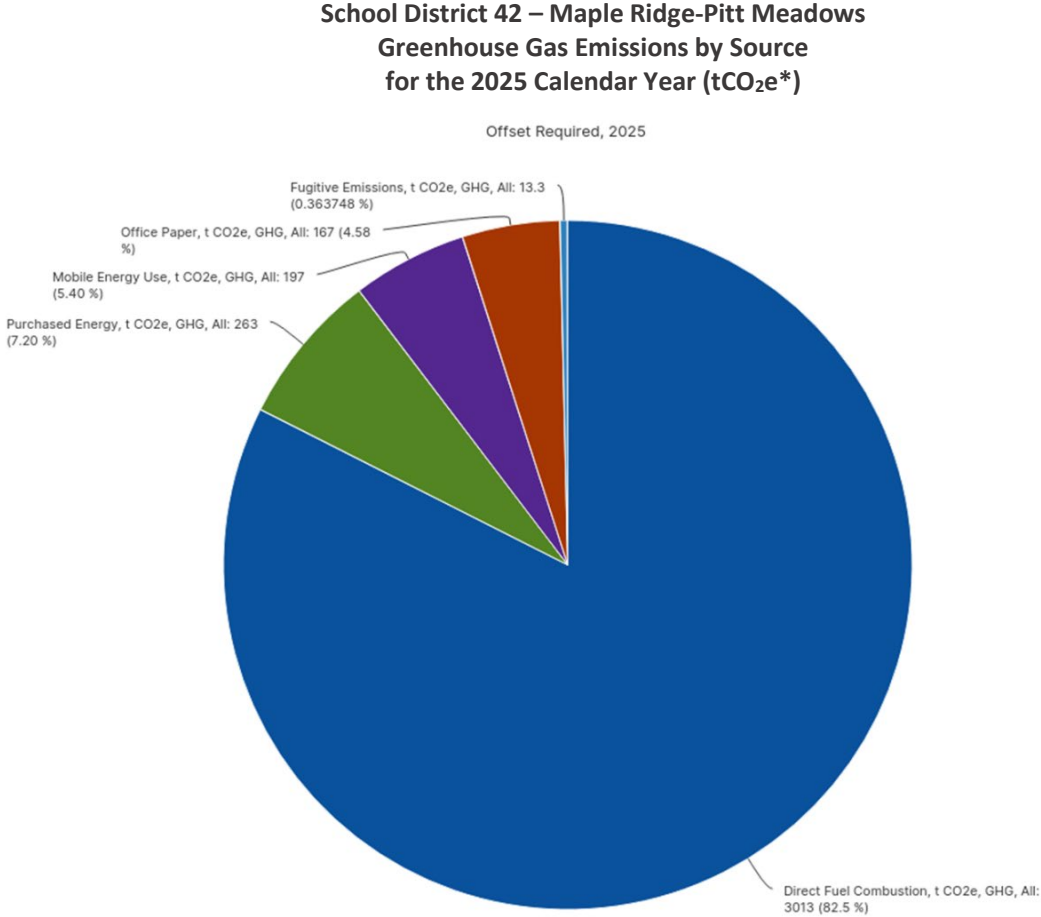


Figure 3: Greenhouse gas emissions source breakdown 2025

**Offsetable Emissions: 3,654 tCO<sub>2</sub>e\*\***

**Offsets Applied to Become Carbon Neutral in 2025 (Generated on April 9th, 2026, 10:27 M)**

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

\*\* Under the *Carbon Neutral Government Regulation of the Climate Change Accountability Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions, such as biogenic emissions) do not require offsets. SD42 has reported refrigerant emissions of 13.3 tCO<sub>2</sub>e.

## OFFSETS APPLIED TO BECOME CARBON NEUTRAL IN 2025

The total offsets required for 2025, including adjustments, are 3,654 tCO<sub>2</sub>e. At the government offset price of \$25/tCO<sub>2</sub>e, the total offset investment is \$91,350, enabling the district to achieve carbon neutrality.

## ANNUAL EMISSIONS YEAR OVER YEAR

Since 2010, the district has reported its carbon emissions and focused its efforts at strategic and operational levels to achieve carbon neutrality. The graph below shows the district’s annual carbon emissions.

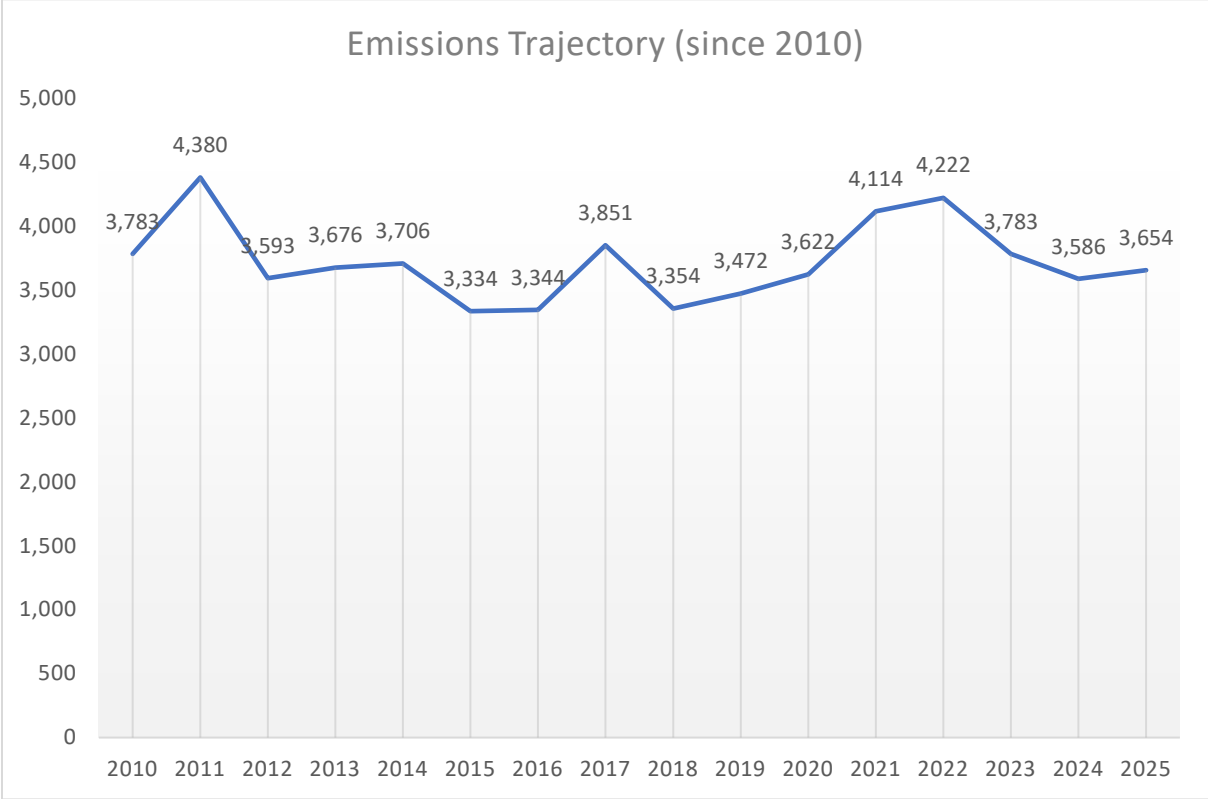


Figure 4: Emissions Trajectory since 2010

### Key observations and considerations:

1. The emissions trajectory underscores the efficacy of the district’s energy management program in meeting provincial reduction targets. A detailed breakdown of 2024 vs 2025 emissions by source category is available in [Appendix A: Annual Comparison – All Category Sources \(tCO<sub>2</sub>e and % change\)](#).
2. The year-over-year energy consumption trends indicate a reduction in both electricity and natural gas and propane use, with electrical consumption decreasing by approximately 0.81% (from 9,050,818 kWh to 8,977,295 kWh) and natural gas and propane consumption decreasing by approximately 1.64% (from 62,497 GJ to 61,469 GJ). Despite these reductions, the district’s offsetable emissions increased by 1.89%, from 3,586 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) in 2024 to 3,654 tCO<sub>2</sub>e in 2025, despite a reduction in overall energy consumption. This increase reflects both the inclusion of refrigerant emissions as a new reporting requirement and changes in the emissions intensity of grid-supplied electricity, associated with BC Hydro importing power from non-renewable sources, rather than increased overall energy use.
3. The emissions from natural gas and propane decreased by 4% compared to last year as the district undertook various GHG reduction strategies such as Continuous Optimization, Direct Digital Control (DDC) upgrades, operating schedule reviews, boiler plant upgrades, and the installation of heat pumps where feasible, all critical steps in preparing schools for a low-carbon future.

4. Carbon emissions from fleet have increased by 14% partially offset by a 14% decrease in emissions from office paper. The district is taking steps to reduce overall emissions, including replacing aging fleet vehicles with ZEVs and expanding EV charging infrastructure, with resulting reductions expected to be reflected in the 2026 reporting period.
5. Emissions from office paper use decreased by 14% due to the transition from conventional paper to sugar sheet paper. At present, emissions from sugar sheet paper are treated as equivalent to those of 100% recycled paper; however, the Ministry is expected to update this methodology in 2026.

## ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2025

In 2025, the district implemented a range of carbon-reduction initiatives, including lighting retrofits, HVAC upgrades, DDC improvements, energy studies, and behavioural and educational programs.

### INCENTIVE SUPPORT

For the year ended December 31, 2025, the district received \$194,904 in energy efficiency incentives, including \$191,904 from BC Hydro and \$3,000 from FortisBC. These incentives are separate from and in addition to the ongoing annual savings in energy costs and GHG emissions achieved through the associated projects.

### ALTERNATIVE PAPER USE

Paper remains a significant contributor to SD42’s greenhouse gas emissions and continues to be a key focus area for reduction initiatives. After successful testing of sugar sheets at the maintenance office in 2024, SD42 implemented a district-wide transition to sugar sheets in 2025 to reduce emissions and align with the district’s sustainability commitment. Climate Solutions Division’s recent research on sustainable paper selection for B.C. Public Sector Organizations confirmed that sugarcane bagasse paper and 100% recycled wood pulp paper have the lowest carbon footprint. As per the recorded paper consumption data, 54% of the 8.5” x 11” size paper consumed was sugar sheets, resulting in overall cost savings of \$21,183 (compared to the cost of 100% recycled paper), including emissions cost savings. The transition to sugar sheets began in April 2025, with existing inventory used during the changeover period. As a result, sugar sheets accounted for approximately 54% of total paper consumption, representing roughly six months of implementation. This partial-year adoption led to an estimated reduction of 34 tCO<sub>2</sub>e for 8.5” x 11” paper. Increased consumption of 8.5” x 14” and 11” x 17” paper partially offset these gains; however, overall paper-related emissions still decreased by a net 27 tCO<sub>2</sub>e (14%).

### HEATING PLANT UPGRADES

In 2025, the district implemented mechanical upgrades across multiple facilities. Unit ventilator upgrades were completed at Highland Park Elementary and boiler plant upgrade at Golden Ears Elementary, with support from the School Enhancement Program (SEP), Annual Facilities Grant (AFG), and the Carbon Neutral Capital Program (CNCP). A low-carbon electrification upgrade was also completed at Edith McDermott Elementary. These projects improved occupant comfort, enhanced system performance, and reduced energy consumption and associated emissions.

SCHOOL	PROJECT SCOPE	STATUS	Funding Source	Cost (\$)	Estimated Energy Savings (GJ)
Highland Park Elementary	Replacement of ten-unit ventilators with heat pump capability (Phase 1)	Implementation	AFG & SEP	\$1,040,000	110 GJ
Golden Ears Elementary	Boiler plant upgrade	Implementation	CNCP	\$550,000	302 GJ
Edith McDermott Elementary	Boiler, DHW, HVAC controls, and heat pump upgrades	Completed	SEP&CNCP	\$1,450,000	277 GJ

Table 2: Heating plant upgrades in 2025

## DIRECT DIGITAL CONTROLS (DDC) UPGRADES

The district continues to implement DDC upgrades to improve building performance, address operational issues, and enhance energy efficiency and occupant comfort.

In 2025, the district initiated a DDC upgrade at Thomas Haney Secondary as part of the School Enhancement Program to address HVAC control issues. This project is still underway and funded by both SEP and AFG (~\$760k) and is expected to deliver annual energy savings of 982 GJ.

## LIGHTING UPGRADES

Lighting upgrades were completed across most district facilities between 2015 and 2019. The district continues to implement lighting and controls upgrades annually, supported by the Annual Facilities Grant (AFG) and BC Hydro incentives. These projects typically involve replacing existing High-Intensity Discharge (HID), incandescent, and fluorescent lights with high-efficiency LED lighting and incorporating classroom dimming controls.

In 2025, SD42 completed lighting and controls upgrades at Glenwood Elementary with AFG funding, resulting in estimated electrical energy savings of approximately 30,000 kWh. Before-and-after images illustrate the improvements achieved at this school.



Figure 5: Lighting and Controls Upgrade at Glenwood Elementary

## NEW CONSTRUCTION AND BUILDING ADDITIONS

SD42 received funding approval in November 2022 for the seismic replacement and expansion of [Eric Langton Elementary School](#), a neighbourhood learning centre and a dedicated and expanded childcare space. Construction began in May 2024. The new building is expected to be completed in July 2026, after which the existing school will be decommissioned and demolished.

SD42 received funding approval in August 2024 for the seismic replacement of [Pitt Meadows Secondary School](#), which will include a neighbourhood learning centre. This project is now in the design and development phase, with construction anticipated to start in 2026.

SD42 received funding approval in September 2024, for the following:

- A five-classroom prefabricated addition at [Blue Mountain Elementary](#).
- An eight-classroom prefabricated addition at [Golden Ears Elementary](#).

The use of prefabricated construction means students will soon be learning in modern classrooms that look just like regular schools. With sustainable and energy-efficient designs, the additions align with the Province's CleanBC targets and meet B.C.'s enhanced energy requirements.

## CONTINUOUS OPTIMIZATION (C.O.P.) STUDIES

As building systems age, performance declines and energy consumption increases. Continuous Optimization (C.Op.) is a BC Hydro-supported program that improves system efficiency through operational adjustments and low-cost measures. Through a retro-commissioning or recommissioning process, the focus is first on identifying opportunities and then implementing simple, low-cost solutions without a significant capital investment. In 2025, the district completed three C.Op. studies at Yennadon Elementary, Maple Ridge Secondary and Westview Secondary and implemented all the identified energy conservation measures. SD42 initiated C.Op. studies at Kanaka Creek Elementary, Davie Jones Elementary and Pitt Meadows Elementary.

The studies are in progress; however, the expected energy and emissions savings are as follows:

School	Funding Source	Cost(\$)	Thermal Savings (GJ)	Electrical Savings (kWh)	Expected emission reduction (tCO <sub>2</sub> e)
<b>Kanaka Creek Elementary</b>	Local Capital Reserve	\$12,933	670 GJ	8387 kWh	334
<b>Davie Jones Elementary</b>	Local Capital Reserve	\$13,765	322 GJ	15293 kWh	16
<b>Pitt Meadows Elementary</b>	Local Capital Reserve	\$13,495	378 GJ	48,170 kWh	19

Table 3: Continuous Optimization Studies with projected energy and emissions savings

BC Hydro also introduced the C.Op. Lite program, which enables direct implementation of energy conservation measures without completing full optimization studies. The district participated in this pilot program across six schools. The total implementation cost was \$50,769, with expected savings of 33,377 kWh and 481 GJ.

## ELECTRIC VEHICLE (EV) CHARGERS

In 2025, SD42 continued expanding its charging network by adding two EV chargers at Edith McDermott Elementary. SD42 added a Ford F-150 Lightning for Grounds operations and an E-Transit van to support the Food Infrastructure Program (FIP). These vehicles support operational feasibility while reducing emissions and fuel costs. The F-150 Lightning is expected to generate approximately \$2,400 in annual fuel savings, while the E-Transit van is expected to save approximately \$2,500 per year, with lower maintenance needs and zero emissions. To support the food program vehicle, an EV charger is being installed at Riverside Centre.



Figure 6: Fleet Electrification (Ford F-150 Lightning)

SD42 operates 11 EV chargers. SD42 also participates in the Low Carbon Fuel Standard (LCFS) as a Part-3 fuel supplier by offering EV charging to employees. To support the sale of these credits, SD42 signed an agreement with the Association of School Transportation Services of BC (ASTSBC) in 2024 to act as the aggregator. The district has accumulated 42 credits, which are saleable in the provincial credit market.

## BEHAVIOURAL PROGRAMS

Staff and student engagement is critical to the success of sustainability initiatives. Behavioural programs supporting sustainability are described in [additional sustainability initiatives](#).

## PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS IN 2026 AND BEYOND

The district continues to prioritize energy management and environmental sustainability as part of its strategy to reduce greenhouse gas emissions. Planned initiatives include HVAC and lighting upgrades, improved building design practices, and ongoing engagement with energy modelling to ensure optimal performance in new construction projects.

To support long-term emissions reduction, the district will transition its current framework into a Low Carbon Strategic Action Plan (LCSAP). This plan will establish formalized pillars and actions to guide energy management, sustainability initiatives, and climate action, aligned with provincial targets and available funding.

The following projects are planned for implementation in 2026:

### MECHANICAL UPGRADES

#### Maple Ridge Elementary Boiler Plant Upgrade

- Replacement of existing boilers with four 399 MBH IBC boilers.
- Replacement of existing domestic hot water (DHW) systems with tankless units
- Funded under CNCP 2026–27 with a budget of \$675,000
- Estimated Energy savings: 220 GJ/year

#### District Education Office Boiler Plant Upgrade

- Replacement of existing boiler with 399 MBH boiler
- Funded under AFG 2026-27 with a budget of \$96,000
- Expected Energy savings: 79 GJ/year

#### Highland Park Elementary

- Replacement of Unit Ventilators (Phase 2) with heat pump capability in Classroom 11 to 21
- Funded under SEP 2026-27 with a budget of \$1,400,000
- Expected Energy Savings: 110 GJ/year

### HEATING SYSTEM EFFICIENCY IMPROVEMENT – ENDOTHERM PILOT

The district will undertake a pilot to evaluate EndoTherm, a hydronic additive designed to improve energy efficiency in closed-loop heating systems. The additive enhances heat-transfer performance in boiler systems, reducing energy consumption and associated greenhouse gas emissions.

The pilot will be implemented at Davie Jones Elementary, Fairview Elementary, Glenwood Elementary, Hammond Elementary, and Pitt Meadows Elementary, with an estimated implementation cost of \$12,100. Projected annual savings are 752 GJ, resulting in approximately \$9,225 in utility cost savings and 38 tCO<sub>2</sub>e emissions reduction. Performance will be monitored using pre- and post-implementation energy data to validate results and inform future expansion.

## LIGHTING UPGRADES

Based on a BC Hydro-funded feasibility study on lighting upgrades completed at six schools, SD42 completed a lighting and controls upgrade at Glenwood Elementary in the summer of 2025. SD42 plans to undertake lighting and controls upgrades at Webster’s Corners Elementary and Yennadon Elementary in the summer of 2026, depending on financial feasibility under local capital reserve.

School	Energy Savings (kWh/year)	Estimated Material & Labour Cost (\$)
<b>Webster's Corners Elementary</b>	19,728	\$89,515
<b>Maple Ridge Secondary Annex</b>	24,551	\$81,963
<b>Yennadon Elementary</b>	23,032	\$133,697
<b>Samuel Robertson Technical</b>	81,751	\$352,800
<b>Thomas Haney Secondary</b>	117,896	\$794,442

Table 4: Planned Lighting Upgrade Projects (2026)

## ELECTRIC VEHICLES AND CHARGING INFRASTRUCTURE

In 2026, the district is continuing its fleet electrification efforts by replacing four end-of-life gasoline vehicles with electric vehicles, which are scheduled to arrive in summer 2026 and installing two additional chargers at the Maintenance Office to support the additional electric vehicles.

The new Eric Langton Elementary will include four EV chargers, as required by building code. By the end of 2026, the district will operate approximately 17 EV chargers to support fleet and community use.

## CONTINUOUS OPTIMIZATION (C.OP.) STUDIES

The district will continue to expand participation in Continuous Optimization (C.Op.) programs to improve building performance and reduce emissions.

Planned sites for 2026 include Glenwood Elementary, Blue Mountain Elementary, Webster’s Corners Elementary, Harry Hooge Elementary, Maple Ridge Elementary and, Maple Ridge Secondary. Additional schools will be evaluated for inclusion based on energy use intensity and operational priorities.

## BEHAVIOURAL CAMPAIGNS

In 2026, the district will implement targeted behavioural initiatives to support sustainability and energy conservation across schools:

- **Eco-Challenge Week**

The district will organize a five-day eco-challenge week in the week of February 2026 as part of BC Hydro’s Energy Wise Network campaign to promote energy conservation and sustainability among students and staff. The event included daily themes: Reduce Electricity, Reduce Natural Gas, Reduce Waste, Power Smart for Schools, and a Climate Action Commitment.

- **Waste Management Training**

To support continuous improvement, a district-wide waste management survey will be conducted in 2026 to assess waste sorting practices, contamination levels, and staff awareness.

The results from the assessment and survey will be used to create a Waste Management Assessment Report in 2026. This report will recommend ways to improve waste collection, signage, education, and day-to-day operations. These improvements will help guide the development of a district-wide Waste Management Plan.

The district will conduct waste management workshops and training at schools to raise awareness of best practices.

- **Training on sustainability, climate change, and waste management for custodial staff:**

The district plans to provide sustainability training for custodial staff to promote sustainable behaviour. The objective is to share lessons learned and highlight successful initiatives implemented across the district.

- **Energy and Sustainability Mascot:**

The district will focus on developing an Energy and Sustainability Mascot to support environmental education and awareness across schools. The mascot will serve as an engaging tool to reinforce key messages on energy conservation, waste reduction, and climate action. It will be integrated into campaigns and school activities to help foster a culture of sustainability among students and staff.

- **Summer Holiday Shutdown Campaign:**

The Holiday Shutdown Campaign for summer 2026 focuses on teaching students to unplug switches and lamps before summer break.

- **Tree Planting Drive and Outdoor Learning Spaces:**

The district plans to continue working with the City of Pitt Meadows to provide schools with an opportunity to participate in a tree plantation drive that will focus on the importance of trees, maintaining a balanced environment, and the effects and remedies for climate change.

## CONCLUSION

The district continues to advance its commitment to reducing greenhouse gas emissions through a combination of capital investments, operational improvements, and behavioural initiatives.

With sustained executive support and ongoing engagement from staff and students, the district is well-positioned to make meaningful progress toward its provincial GHG reduction targets and transition toward a low-carbon future.

APPENDIX: EXTRACT FROM PORTAL FOR REPORTING

APPENDIX - A: CCAR REPORT

<b>CCAR Total GHG &amp; Bio GHG</b>	
	<b>School District 42 - Maple Ridge</b>
	<b>2025</b>
<b>t Bio CO<sub>2</sub>e, GHG, All</b>	
GHG Inventory Activity Data	83.9
GHG Inventory Estimates	0.0
<b>Total</b>	<b>83.9</b>
<b>t CO<sub>2</sub>e, GHG, All</b>	
GHG Inventory Activity Data	3,654
GHG Inventory Estimates	0.0
<b>Total</b>	<b>3,654</b>
<b>Total</b>	<b>3,738</b>
<i>Calculated: 2026.04.18 09:35</i>	

Table 5: CCAR Total GHG and Bio-GHG

<b>CCAR Total Offsets</b>	
	<b>2025</b>
	<b>Offset Required</b>
	<b>t CO<sub>2</sub>e, GHG, All</b>
GHG Inventory Activity Data	3,654
GHG Inventory Estimates	
<b>Total</b>	<b>3,654</b>
<i>Calculated: 2026.04.18 09:35</i>	

Table 6: CCAR Total Offsets

## ANNUAL COMPARISON ORG - ALL CATEGORY SOURCES (tCO<sub>2</sub>e & % Change)

School District 42 - Maple Ridge	t CO <sub>2</sub> e, GHG, All		Decrease(%) / Increase(%)
	2024	2025	
Natural Gas & Propane	3,130	3,013	-4%
Electricity	89.6	263	194%
Mobile Energy Use	173	197	14%
Office Paper	194	167	-14%
Fugitive Emissions		13.3	Added in CY 2025

Table 7: Annual Emissions Comparison (All Categories)

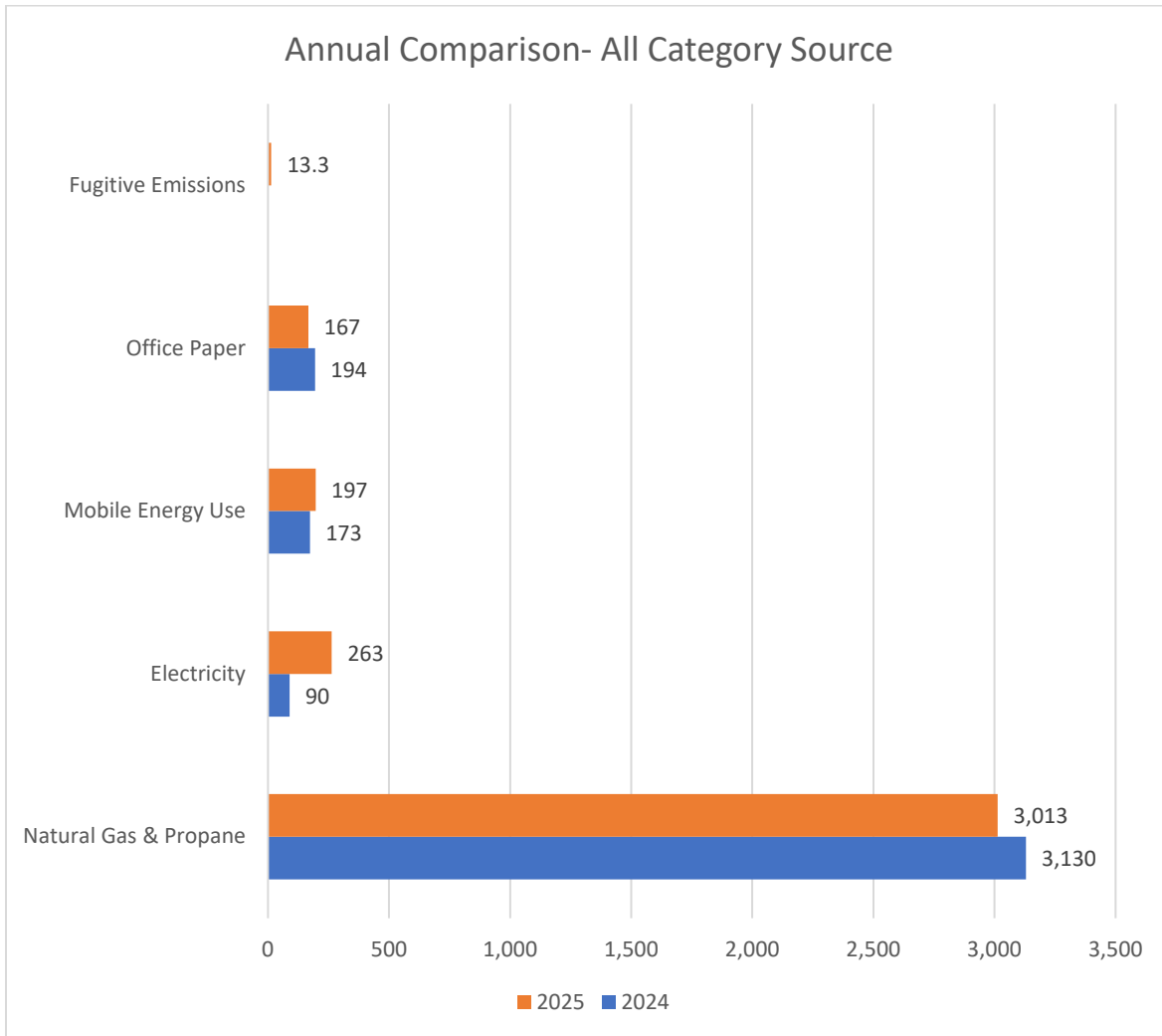


Figure 7: Annual Comparison- All Category Source

The category-level comparison indicates that reductions in natural gas and paper-related emissions were offset by increases in electricity-related emissions and fleet emissions. The increase in electricity-related emissions is attributable to changes in grid emission factors rather than increased consumption, while fleet emissions reflect transitional impacts as the district continues to electrify its fleet.

APPENDIX - B. GHG EMISSION SOURCE DETAILS REPORT FOR 2025

2025					
	GJ	kg	Unit (PKs)	l	t CO <sub>2</sub> e, GHG, All
<b>Direct Fuel Combustion</b>					
<b>Offset Exempt</b>					
<b>Offset Required</b>	60,675	4,178		1,556,455,582	3,013
<b>Total</b>	60,675	4,178		1,556,455,582	3,013
<b>Purchased Energy</b>					
<b>Offset Exempt</b>					
<b>Offset Required</b>					263
<b>Total</b>					263
<b>Mobile Energy Use</b>					
<b>Offset Exempt</b>					
<b>Offset Required</b>	197			88,600	197
<b>Total</b>				88,600	197
<b>Office Paper</b>					
<b>Offset Exempt</b>					
<b>Offset Required</b>			32,200		167
<b>Total</b>			32,200		167
<b>Fugitive Emissions</b>					
<b>Offset Exempt</b>					
<b>Offset Required</b>		6.93			13.3
<b>Total</b>					
<b>Total</b>	<b>60,910</b>	<b>4,185</b>	<b>32,200</b>	<b>1,556,544,182</b>	<b>3,654</b>

Table 8: GHG emissions source details report for 2025

## APPENDIX - C. ACRONYMS AND ABBREVIATIONS

AFG	Annual Facilities Grant
AHU	Air Handling Unit
ASTSBC	Association of School Transportation Services of British Columbia
BAS	Building Automation System
BCH	BC Hydro
CSD	Climate Solutions Division
CCAR	Climate Change Accountability Report
CNCP	Carbon Neutral Capital Program
CO <sub>2</sub>	Carbon Dioxide
C.Op.	Continuous Optimization
CNG Regulation	Carbon Neutral Government Regulation
DDC	Direct Digital Control
DHW	Domestic Hot Water
DX Unit	Direct Expansion Unit
EMA	Energy Management Assessment
EUI	Energy Use Intensity
EV	Electric Vehicle
ZEV	Zero Emission Vehicle
EWN	Energy Wise Network
ekWh	Equivalent kilowatt-hour
FIP	Food Infrastructure Program
GHG	Greenhouse Gas
GJ	Gigajoule
HFCs	Hydrofluorocarbons
HID	High-Intensity Discharge
HVAC	Heating, Ventilation and Air Conditioning
ICE	Internal Combustion Engine
LCSAP	Low Carbon Strategic Action Plan
LCFS	Low Carbon Fuel Standard
LED	Light-Emitting Diode
ODS	Ozone Depleting Substances
RCx	Recommissioning
RTU	Rooftop Unit
SD42	School District No. 42 (Maple Ridge–Pitt Meadows)
SEP	School Enhancement Program
SEMP	Strategic Energy Management Plan
tCO <sub>2</sub> e	Tonnes of Carbon Dioxide Equivalent
UV	Unit Ventilator
VFD	Variable Frequency Drive