

STAFF REPORT

To: Regional and Corporate Services Committee Date: 2025-09-04

From: Elias Ross, Environmental Services Coordinator

Subject: FVRD Corporate Greenhouse Gas Emissions Reporting from 2024

Reviewed by: Lance Lilley, Manager of Environmental Services

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RECOMMENDATION

This report is being brought forward for the Board's information and there is no staff recommendation.

BACKGROUND

The Fraser Valley Regional District (FVRD), as a signatory of the Climate Action Charter, is eligible for funding through the Local Government Climate Action Program (LGCAP), which supports efforts to reduce greenhouse gas (GHG) emissions and to advance climate action initiatives. In 2024, the FVRD received three years of funding totaling \$331,338 for 2024 to 2026. These funds have been allocated to energy efficiency upgrades at the Hope and Area Recreation Centre, specifically as part of a heat recovery initiative.

As a condition of receiving LGCAP funding, the FVRD is required to calculate and report its annual corporate GHG emissions. The corporate GHG emissions for 2024 have been compiled and are summarized below.

DISCUSSION

The FVRD generates GHG emissions through the consumption of natural gas, diesel, propane, gasoline, and electricity. Gasoline and diesel use is typically associated with vehicle operations, while natural gas, electricity, and propane usage is mainly associated with building or facility operations. Table 1 provides a summary of the GHG emissions associated with each fuel type.

Energy Source	Energy used by FVRD (gigajoules)	Emission per unit of energy (KgCO2/GJ)	Total tonnes of CO2 equivalent
Natural Gas	6,052	55.4	335.4
Electricity	9,865	2.8	27.1
Gasoline	2,803	67.8	189.9
Diesel	460	71.3	32.8
Propane	1,150	61.2	70.4
	_	Total	655.6

The FVRD's total GHG emissions for 2024 was calculated to be 656 tonnes of carbon dioxide equivalent (tCO2e). Figure 1 outlines the percentage of GHG emissions from each energy source for the FVRD from 2024. Over 50% of the FVRD's GHG emissions are from natural gas, primarily associated with heating for FVRD buildings and facilities. The next largest contributor (29%) is from gasoline associated with fleet vehicle usage.

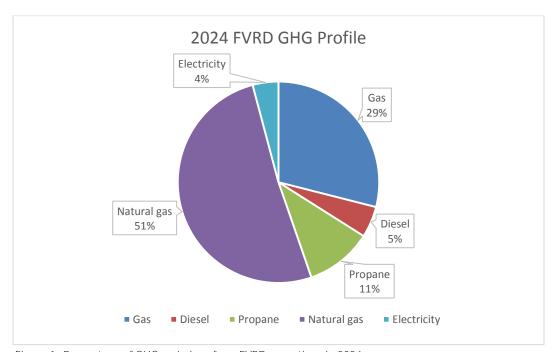


Figure 1. Percentage of GHG emissions from FVRD operations in 2024.

The FVRD's 2024 GHG emissions remain below levels between 2017 and 2020 but were slightly higher than 2023 levels. The increase is, in part, due to a malfunctioning pool heater at the Hope and Area Recreation Centre that resulted in an increase in natural gas use at the facility in 2024. This heater has since been replaced however, which appears to have lowered natural gas usage for 2025.

Figure 2 shows the GHG emissions associated with the FVRD's corporate activities from 2017 to 2024. Through a combination of initiatives, including facility upgrades and the introduction of electric vehicles, there continues to be a general downward trend in corporate GHG emissions, despite expansion of FVRD services and facilities over the same time period. With continued efforts, such as the recent energy upgrades at the Hope and Area Recreation Centre, the downward trend in GHG emissions is expected to continue in the coming years.



Figure 2: FVRD corporate GHG emissions from 2017 to 2024.

COST

The FVRD received \$331,338 in LGCAP funding for 2024-2026, all of which was allocated to the Hope and Area Recreation Centre heat recovery initiative. The LGCAP program is being reviewed by the Province and no update has yet been provided with funding for 2027 and beyond.

CONCLUSION

The FVRD's total GHG emissions for 2024 was calculated to be 656 tonnes of carbon dioxide equivalent (tCO2e). While slightly higher than 2023 due to a malfunctioning pool heater that has since been replaced, GHG emissions are expected to decline in the future due to recent upgrades to the Hope and Area Recreation Centre - the FVRD's largest corporate source of GHG emissions.