

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, NOVEMBER 19, 2025**

SUBJECT **2024 Regional Greenhouse Gas Emissions Inventory**

ISSUE SUMMARY

To present the results of the 2024 Capital Regional District (CRD) regional community greenhouse gas (GHG) emissions inventory.

BACKGROUND

The CRD's 2018 Regional Growth Strategy (RGS) targets a reduction in community greenhouse gas (GHG) emissions of 61% from 2007 levels by 2038. In October 2021, the CRD Board approved the CRD Climate Action Strategy, which includes a commitment to prepare a regional GHG inventory every two years. This report presents the outcomes and implications of the regional GHG emissions inventory for 2024.

Inventory Framework

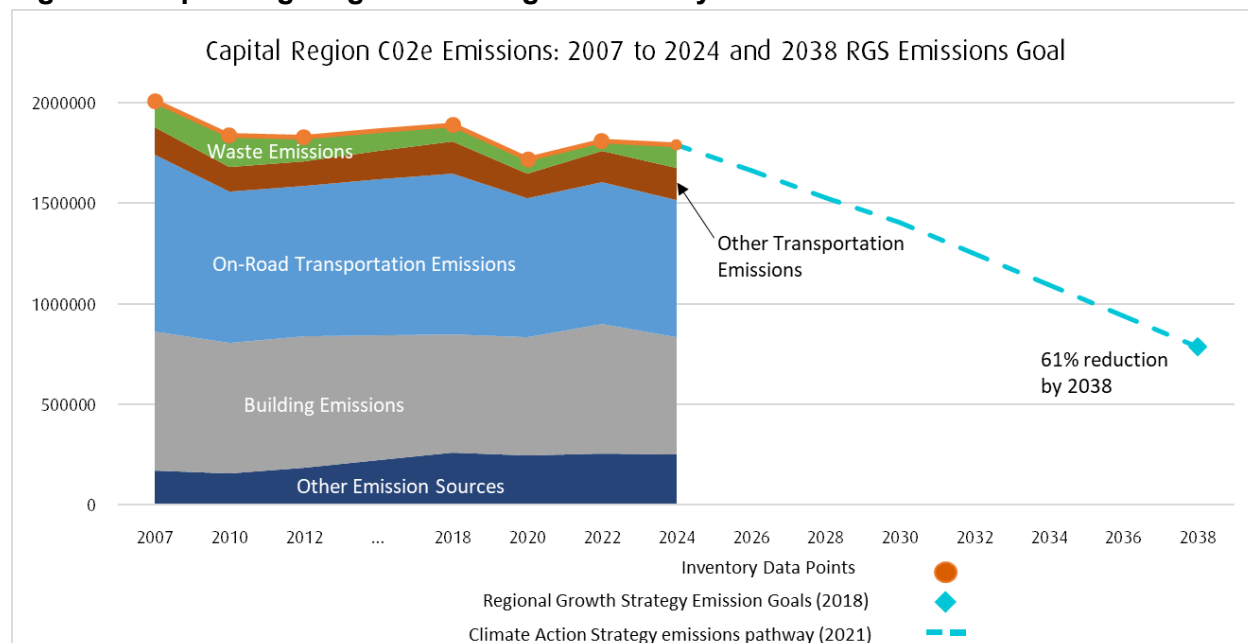
The CRD has adopted the international standard for local government GHG inventorying and reporting: the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) for Cities Basic+ framework. The GPC Basic+ framework includes GHG emission sources from on-road transportation, buildings, waste, as well as estimates for off-road transportation, agriculture, industrial production and product use across the region. The GPC Basic+ framework does not include emissions associated with consumption of consumer products like food and textiles in the region. While the inventory discloses an estimate of emissions associated with land use changes, this number is not included in the calculation of the CRD's GHG emissions reductions target. The regional and CRD member local government emission inventories were completed for the 2024 calendar year and are included as Appendix A and B respectively.

Results

Figure 1 below charts the results of regional GHG emission inventories since the target baseline year of 2007. The 2024 inventory indicates that the capital region emitted approximately 1.8 million tonnes of CO₂e (a measure of various greenhouse gases converted into a common unit based on their global warming potential relative to carbon dioxide). GHG emissions in 2024 were approximately 11% (215,000 tonnes CO₂e) below the 2007 baseline and decreased approximately 1% (21,000 tonnes CO₂e) since 2022. The capital region's population has grown by almost one-third since 2007 (105,000 people). On a per capita basis, regional GHG emissions have decreased by 30% since 2007 (Appendix C), which indicates that growth is decoupling from GHG emissions.

As part of the Climate Action and Adaptation Service provided by the CRD, greenhouse gas inventories have also been prepared for the capital region's thirteen municipalities and three electoral areas (Appendix B).

Figure 1: Capital region greenhouse gas inventory results since 2007



Source-specific trends from the inventory are noted as follows:

- On-road regional transportation.** The GHG emissions from on-road transportation continue to contribute the greatest share (38%) of regional emissions. However, this emissions source decreased by 22% since 2007 driven by greater adoption of electric and hybrid vehicles and increased use of renewable fuels. Since the last inventory in 2022, on-road vehicle emissions have decreased by 3% (19,000 tonnes CO₂e).
- Buildings.** Buildings account for 33% of regional GHG emissions, with natural gas used for space and water heating contributing roughly two-thirds of building-related emissions. The remaining one-third is comprised of heating oil, propane, wood and other fuels. Natural gas use decreased in 2024 by approximately 3% since 2022 despite a 2% increase in natural gas user connections over the same period. Overall, emissions from buildings in 2024 were 16% (111,000 tonnes CO₂e) below 2007 levels. This decrease is attributed to reductions in heating oil use and the decarbonization of the electricity grid in BC.
- Waste.** Waste-related GHG emissions are an anomaly in the 2024 inventory due to significant construction activities for the new phase of the Hartland Landfill which restricted the CRD's ability to capture methane gas. As a result, emissions specific to waste sources were more than double those of 2022, which accounts for 6% (115,000 tonnes CO₂e) of the total regional inventory. Waste emissions in future inventories will decrease significantly below 2022 levels from ongoing gas-capture and upgrading at the landfill.
- Other.** Other emission sources include Industrial Processes and Product Use, Agriculture, Forestry and other Land Use categories. These emission estimates are derived from the Canadian National Inventory Report and have increased by almost 50% (81,000 tonnes CO₂e) since 2007 because of refrigerant use in an increasing number of air conditioning applications, and other halocarbons used in foam blowing agents and aerosols. These items are regulated federally by the Ozone-depleting Substances and Halocarbon Alternatives Regulations with limited authority for local government intervention.

Implications

Overall, regional emissions continue to trend downward, with a modest reduction in GHG emissions since 2022. The emissions reductions observed since the baseline year of 2007 can be attributed to climate action policies implemented at all levels of government including those that have supported the adoption of low- or zero-emission technologies by residents and businesses, such as heat pumps, electric and hybrid vehicles, and the decarbonization of the BC electrical grid.

Although the current inventory indicates that the region is sustaining its trend of absolute and per capita GHG reductions, significant work remains to maintain progress toward the 2038 target, especially given the recent elimination of the consumer carbon tax, which had been demonstrated to be an effective and impactful policy tool contributing to significant GHG reductions in BC.

To meet the GHG target in the CRD Regional Growth Strategy, the capital region will need to achieve an additional 50% (1,000,000 tonnes CO₂e) reduction in annual emissions by 2038. Together, building and transportation-related carbon emissions comprised 71% of the region's total emissions in 2024, emphasizing the need for continued reductions in natural gas use and an accelerated shift to zero-emission transportation to meet the regional target.

Next Steps

Throughout 2025, CRD staff have been working to update the Climate Action Strategy. The goal of the update is to provide the CRD with a strategy that focuses on initiatives with a material impact on corporate and regional GHG emissions and resilience. The updated strategy will continue critical programs that support GHG reduction, including electric vehicle charging and building energy and emissions benchmarking, while also focusing to new initiatives identified as strategic opportunities to have a demonstrable impact on regional GHG emissions. The updated Climate Action Strategy will be presented to the CRD Board in early 2026.

Starting in 2026, the CRD will publish its GHG inventory through a new interactive dashboard creating clear, engaging and accessible GHG emissions information for local governments and the public. This dynamic tool will allow staff, elected officials, and communities to explore results and understand methodologies with the objective of strengthening collaboration across the region and driving informed, collective climate action.

CONCLUSION

The Capital Regional District completes regional and local government greenhouse gas emission inventories every two years. Results for the regional inventory for the 2024 calendar year indicate an 11% decrease in emissions since 2007 and a 1% decrease from 2022. Significant work remains for the capital region to meet its 2038 emissions target. The CRD, through the Climate Action and Adaptation Service and an updated Climate Action Strategy, will continue to work with local governments and the community to advance climate action initiatives towards meeting the ambitious greenhouse gas reduction targets established in the CRD's Regional Growth Strategy.

RECOMMENDATION

There is no recommendation. This report is for information only.

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ATTACHMENTS

Appendix A: The Capital Regional District 2024 GPC Basic+ Community Greenhouse Gas (GHG) Emissions Inventory Report, Stantec Consulting Ltd. (October 15, 2025)

Appendix B: Capital Regional District – Municipalities and Electoral Areas, 2007 Base Year and 2024 Reporting Year Energy & GHG Emissions Inventory, Stantec Consulting Ltd. (October 15, 2025)

Appendix C: Capital Region CO₂e Emissions Per Capita (October 2025)

Presentation: 2024 GHG Inventory, Environmental Services Committee (November 19, 2025)