



**Comox Valley Airport
Commission (CVAC)
Greenhouse Gas Inventory
Report**

July 2026

Greenhouse Gas (GHG) Inventory Report

Reporting Period: 2024–2025 Fiscal Year

Airport Overview

Comox Valley Airport (YQQ) is located on the east coast of Vancouver Island, British Columbia, and serves the Comox Valley and surrounding communities. The airport provides scheduled passenger service, charter operations, military support activities, general aviation, and limited cargo services. YQQ is strategically positioned to support regional connectivity throughout British Columbia and Western Canada while contributing to the economic development of the region.

The airport is operated by the Comox Valley Airport Commission under a long-term lease agreement with the Government of Canada. Airside infrastructure, including the runways and air traffic control services, are operated by the Department of National Defence through 19 Wing Comox under an established operating agreement. The Airport Commission is responsible for the operation and maintenance of the terminal building, groundside infrastructure, commercial activities, parking facilities, and airport administration.

During the 2024–2025 fiscal year, Comox Valley Airport employed 27 staff members responsible for airport operations, custodial duties, maintenance, and administration. Total employees working at the airport from airlines, support and concessionaires were 136.

Key operational metrics for the reporting period are summarized below.

Comox Valley Airport Staff	27
Direct Employees of All Airport Tenants	136
Aircraft Movements	6,487
Passengers Served	412,781
Cargo Handled (tonnes)	20

As a regional airport, Comox Valley Airport recognizes its responsibility to minimize greenhouse gas (GHG) emissions associated with its operations while maintaining safe and efficient airport services. This inventory has been prepared to support the Airport Carbon Accreditation (ACA) program by quantifying emissions associated with airport operations under the Airport Commission's operational control.

Data Collection

Reporting Period

This inventory covers from April 1, 2024, through March 31, 2025. The inventory represents emissions generated from assets and operations under the operational control of the Comox Valley Airport Commission during this reporting period.

Organizational Boundary

The organizational boundary includes all facilities, infrastructure, vehicles, and equipment operated or controlled by the Comox Valley Airport Commission.

Included within the inventory are:

- Air Terminal Building
- Administrative offices
- Airport maintenance facilities
- Airport-owned or operated fleet vehicles and equipment
- Exterior lighting and associated electrical infrastructure
- Groundside parking facilities

Infrastructure owned and operated by external organizations, including Department of National Defence facilities, aircraft operations, and other third-party activities, are excluded from this inventory.

Operational Boundary

The inventory includes Scope 1 and Scope 2 emissions in accordance with the GHG Protocol.

Scope 1 emissions consist of direct emissions resulting from fuel combustion in airport-owned vehicles and equipment and other stationary fuel combustion sources under airport operational control.

Scope 2 emissions consist of indirect emissions associated with purchased electricity consumed by airport-operated facilities.

No Scope 3 emissions are included within this inventory, as they fall outside the current Airport Carbon Accreditation reporting boundary for this submission.

Data Collection

Data was collected throughout the reporting period using commercial invoicing, log keeping, and website data.

Consumption data was obtained on a monthly or invoice basis depending upon the source. Utility consumption and fuel purchases were reviewed for completeness and checked via delivery logs prior to inclusion within the inventory.

Data Sources

The following data sources were used to prepare the inventory.

Emission Source	Primary Data Source
Purchased Electricity	BC Hydro utility invoices
Fleet Fuel Consumption	Fuel consumption logs
Natural Gas	Fortis Gas utility invoices
Water Consumption	Town of Comox
Trash Disposal	Emterra Group
Compost Disposal	Earth Warriors Composting

Original invoices and supporting documentation are retained in accordance with the Airport Commission's document retention practices and are available for audit if required.

Types of Data

The inventory includes measured activity data associated with:

- Electricity consumption
- Gasoline/Diesel consumption
- Natural Gas consumption
- Water consumption
- Waste Generation

Where available, actual utility invoices and supplier records were used in preference to estimate values. The following table summarizes the annual consumption by the airport over the reporting period.

Resource	Consumed
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Electricity	729,360 kWh
Gasoline (fleet vehicles)	198 L
Diesel (fleet vehicles)	4,620 L
Natural Gas	2,261 GJ
De-icing Chemical (Formate-Solid)	200 kg
Water	3,252 m ³
Solid Waste	224,700 kg

The Comox airport utilizes a solar array to generate electricity to offset the electricity supplied by BC Hydro. During the reporting period the solar panels produced 144,310 kwh, thereby reducing our electricity requirement from BC Hydro.

Data Management

The GHG inventory is maintained using Microsoft Excel calculation worksheets supported by electronic copies of invoices and operational records.

Data quality is maintained through:

- Review of monthly invoices for completeness
- Verification of fuel purchase records and logs
- Cross-checking annual consumption totals against financial records
- Internal management review of calculations prior to submission

These procedures provide reasonable assurance that the inventory accurately represents airport operations during the reporting period.

Methodology

The inventory has been prepared in accordance with the Airport Carbon and Emissions Reporting Tool (ACERT) Version 7.2532 and the Airport Carbon Accreditation program requirements.

Where assumptions were required, conservative estimates were applied to avoid understating emissions. No material estimates were required for significant emission sources during the reporting period.

Inventory Adjustments

No organizational, operational, or boundary changes occurred during the 2024–2025 reporting period.

There were no acquisitions or disposals of buildings or land that materially affected the inventory boundary. Similarly, no significant changes were made to airport-controlled infrastructure requiring recalculation of the inventory.

No data corrections to previous claims have been made.

Data Analysis

The completed inventory identified total greenhouse gas emissions of **146.5 tons of carbon dioxide equivalent (tCO₂e)** during the 2024–2025 fiscal year.

Emission Scope	Emissions (tCO ₂ e)
Scope 1	139.3
Scope 2	7.2
Total	146.5

Scope 1 emissions accounted for approximately **95 percent** of total reported emissions and represents the largest source of greenhouse gases under the Airport Commission’s operational control. These emissions primarily result from the consumption of natural gas for heating the Air Terminal Building.

Scope 2 emissions accounted for approximately **5 percent** of total emissions and are associated with purchased electricity used within airport-operated buildings and infrastructure. Due to British Columbia’s predominantly hydroelectric electricity generation, indirect emissions associated with purchased electricity remain comparatively low.

The inventory demonstrates that natural gas consumption continues to represent the most significant opportunity for future emissions reductions. Opportunities such as boiler modernization, electrification and sustainable buildings improvements, and continued energy management initiatives may further reduce greenhouse gas emissions over time.

Trend Analysis

Over the four-year reporting period, the airport demonstrated consistent progress in reducing greenhouse gas (GHG) emissions, achieving a total reduction of approximately 14%, from 171 tonnes CO₂e in 2021 to 147 tonnes CO₂e in 2024. This sustained downward trend reflected in Figure 1 shows the effectiveness of ongoing efforts to improve operational efficiency and reduce the environmental impact of business activities.

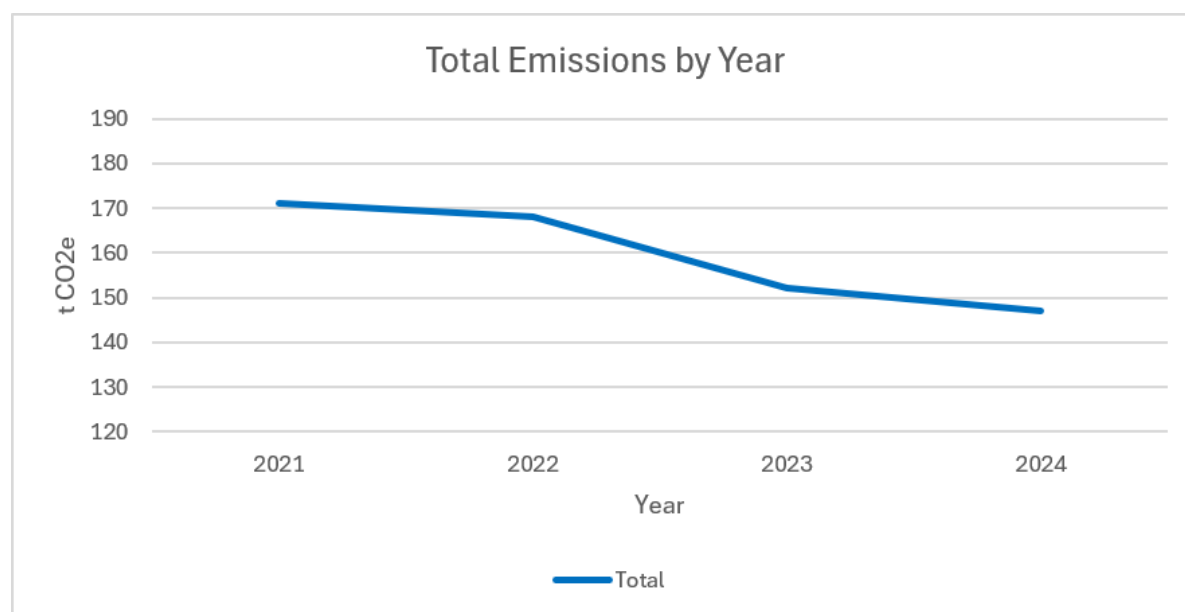


Figure 1: Total Emissions by Year.

The most significant annual improvement occurred between 2022 and 2023, when total emissions decreased by approximately 9.5%, falling from 168 to 152 tonnes CO₂e. As noted above, natural gas consumption for building heat is the most significant source of CO₂e and the reduction across 2022-2023 was due in part to a mild winter. To a lesser degree, a major maintenance overhaul of the heating system took place to improve efficiency of the boiler system.

A further 3.3% reduction was recorded in 2024. This reduction was largely due to the newly installed solar array on the roof of the air terminal building. Also, during this period, the airport adopted a near total electrification of ground maintenance equipment, reducing the dependency on diesel and gasoline.

These results indicate that the CVAC has successfully implemented measures that have reduced both direct and indirect emissions. The continued year-over-year decline highlights a strong commitment to environmental stewardship and supports broader sustainability goals. Maintaining this momentum through ongoing efficiency

initiatives and emissions management practices will further strengthen the organization's environmental performance in future years.

Conclusion

The Comox Valley Airport Commission has completed its greenhouse gas inventory for the 2024–2025 fiscal year in accordance with the principles of the ACERT and ACA program.

The inventory quantifies all relevant Scope 1 and Scope 2 emissions under the Airport Commission's operational control and has been prepared using verifiable activity data supported by utility invoices, fuel records, and operational documentation.

The total reported emissions for the reporting period were **146.5 tCO₂e**, comprising **139.3 tCO₂e** from Scope 1 emission sources and **7.2 tCO₂e** from Scope 2 electricity consumption.

The Airport Commission remains committed to improving the accuracy of its greenhouse gas inventory, maintaining robust data management practices, and identifying opportunities to reduce emissions while continuing to provide safe, reliable, and efficient airport operations.