

REPORT

Climate Action, Planning and Development

To: Mayor Johnstone and Members of Council
Date: September 25, 2023

From: Jackie Teed
Acting Director of Climate Action,
Planning and Development
File: 09.1742.02

Item #: 2023-595

Subject: Local Government Climate Action Program and 2022 Corporate Greenhouse Gas Emissions Update

RECOMMENDATION

THAT Council receives this report for information.

PURPOSE

To purpose of this report is to provide Council with the City's submission to the Local Government Climate Action Program (LGCAP) and to provide an update on the City's 2022 corporate greenhouse gas (GHG) emissions inventory.

EXECUTIVE SUMMARY

The Local Government Climate Action Program (LGCAP) provides a source of predictable and stable funding for municipalities and Modern Treaty Nations to advance climate action that will reduce greenhouse gas emissions and prepare communities for the impacts of a changing climate. The City received \$285,082 on September 6, 2023. The purpose of these funds is to assist local governments to implement climate action projects which are aligned with the CleanBC Roadmap to 2030 and/or the Climate Preparedness and Adaptation Strategy.

A requirement of the LGCAP is reporting corporate greenhouse gas emissions. As of 2022, the City has reduced annual corporate greenhouse gas emissions by 24.3% (1,029 tCO₂e) from the 2010 baseline year. The City is actively working towards

implementing initiatives outlined in the Corporate Energy Emissions Reduction Strategy (CEERS) to accelerate these reductions and achieve the target set by Bold Step 1: Carbon Free Corporation whereby the City will strive to be net-zero by 2030.

BACKGROUND

The Province introduced the Local Government Climate Action Program (LGCAP) in 2022 to provide local governments and Modern Treaty Nations with predictable and stable funding. The funding is to support climate action that reduces emissions and prepares communities for the impacts of a changing climate. In 2022, the City received \$285,082 through this program.

To support Council's March 11, 2019 Climate Emergency Declaration, the City established 7 Bold Steps for Climate Action with the goal of moving New Westminster towards a zero carbon future by 2050. Through Bold Step #1: Carbon Free Corporation the City pledged to work to exceed its 2030 climate emergency target of 45% below 2010 emissions levels, by striving to be net-zero by 2030.

In 2020, the City updated its ten-year Corporate Energy Emissions Reduction Strategy (CEERS), providing direction as to how the City can accelerate achieving the targets set out by the climate emergency declaration. Included in the CEERS are 25 implementation actions that will save energy and reduce emissions for the City's operations.

ANALYSIS

Local Government Climate Action Program

The City received \$285,082 of LGCAP funding on September 6, 2023.

To receive funding in 2023, the City had to meet the following requirements:

- Be a signatory of the Climate Action Charter – the City has been a signatory since July 2008.
- Measure and report corporate greenhouse gas emissions – The City's 2022 corporate emissions report is detailed below.
- Report on projects linked to one or more objectives from the CleanBC Roadmap to 2030 and the Climate Preparedness and Adaptation Strategy - project details are summarized below.
- Complete an online survey and submit a signed attestation form by the City's Chief Financial Officer confirming that all funds were, or will be, used towards climate action (Attachment 1).
- Post a completed PDF version of the program survey and attestation form publicly – completed through this Council report and will be added to the City's website.

City Projects Aligned with the Program

The purpose of the LGCAP funds is to assist local governments to implement climate action projects which are aligned with the CleanBC Roadmap to 2030 and the Climate Preparedness and Adaptation Strategy. In 2022, the City completed or advanced projects in a number of key sectors:

Transportation:

- The eMobility Strategy was adopted.
- The Active Transportation Network Plan was completed.
- The Zoning Bylaw was updated to include mandatory bicycle maintenance rooms in residential multifamily buildings and mandatory end of trip facilities in buildings with commercial uses that are greater than 1000 m².

Buildings:

- Through the City's Energy Save New West Program, 127 community members engaged with the program, and completed 88 pre retrofit energy evaluations and 36 Heat Pump retrofits to access a top-up incentive.
- There were two builder and designer breakfasts in 2022 and the City continued to provide subsidies to support eligible BCIT Zero Energy building courses for local builders, architects and designers.

Communities:

- The City adopted an undated Community Energy and Emissions Plan 2050 (CEEP).
- In 2022, the City became a member of the Climate Disclosure Project (CDP). CDP in partnership with ICLEI Local Governments for Sustainability is a global platform for cities to measure, manage and report their environmental data.

Climate resilience:

- The Emergency Management Office is preparing for extreme heat events and has initiated a three-step heat response strategy.
- The Flood Resilience Plan was updated to include climate based risk data that projects a 1m sea level rise by 2100.
- A Biodiversity and Natural Area Strategy was completed. 22,500 native tree/plant seedlings were planted in four of the City's natural areas and 300 trees were sold at the City's annual tree events for planting on private lands.

2022 Corporate GHG Emissions Update

The City tracks emissions related to corporate operations including emissions from contracted services. The emissions reported to the Province through the LGCAP program are limited to those they identify as "Traditional Services" provided by a local

government and do not include emissions related to Policing. The City's corporate inventory detailed below is broader than what is reported to LGCAP, as it includes emissions from all services provided by the City.

The City's 2022 total corporate GHG emissions were 3,198 tCO₂e, approximately 24.3% below the baseline year of 2010. The blue line in Figure 1 shows the actual annual corporate emission since the baseline year in 2010. The orange and gray lines illustrate the required change in emissions to 2030 to meet the original CEERS reduction target of 45% from 2010, and the subsequent Bold Step #1 target of zero corporate emissions, respectively. The ongoing general downward trend continues to be observed.

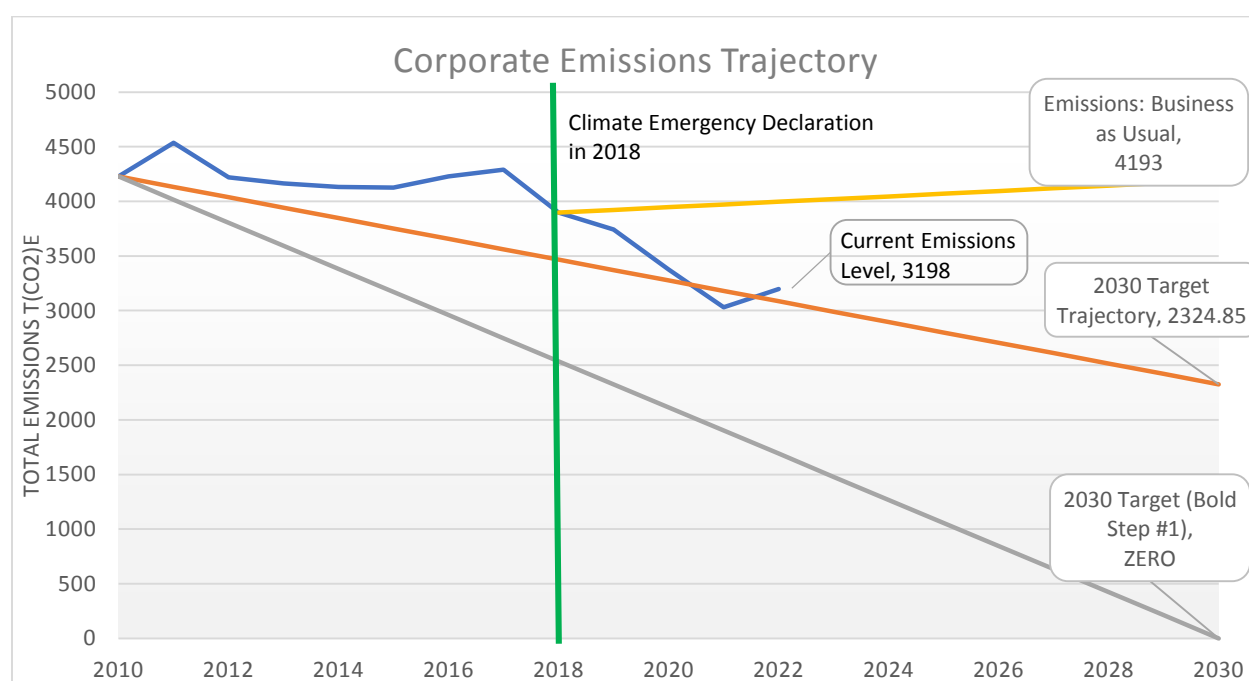


Figure 1: Corporate GHG Emission and Reduction Targets

Though corporate emission in 2022 increased by 5.5% compared with 2021, when comparing emissions from one year to another, it's important to know that the data feeding the final results may not match up exactly. This happens because data can be influenced by various factors that introduce "noise". For example, the data collection or measurement can change, the fuel emission intensity factor (the amount of emissions contained in a single unit of fuel) is prescribed and reviewed annually, and even fluctuations in weather can have an impact. So, while we use these comparisons to understand trends, it is crucial to recognize that small variations can occur, and the data might not always show an exact year-to-year match. To better understand how 2021 emission levels compare to 2022, they are broken down by different sectors in the following section of this report.

2022 Corporate Emissions by Sector

To monitor the City's annual corporate GHG emissions, energy consumption is tracked for five key sectors: buildings, lighting, fleet, water/wastewater, and contracted out services. The resulting GHG emissions are calculated for each sector and aggregated to produce the City's total corporate GHG emissions.

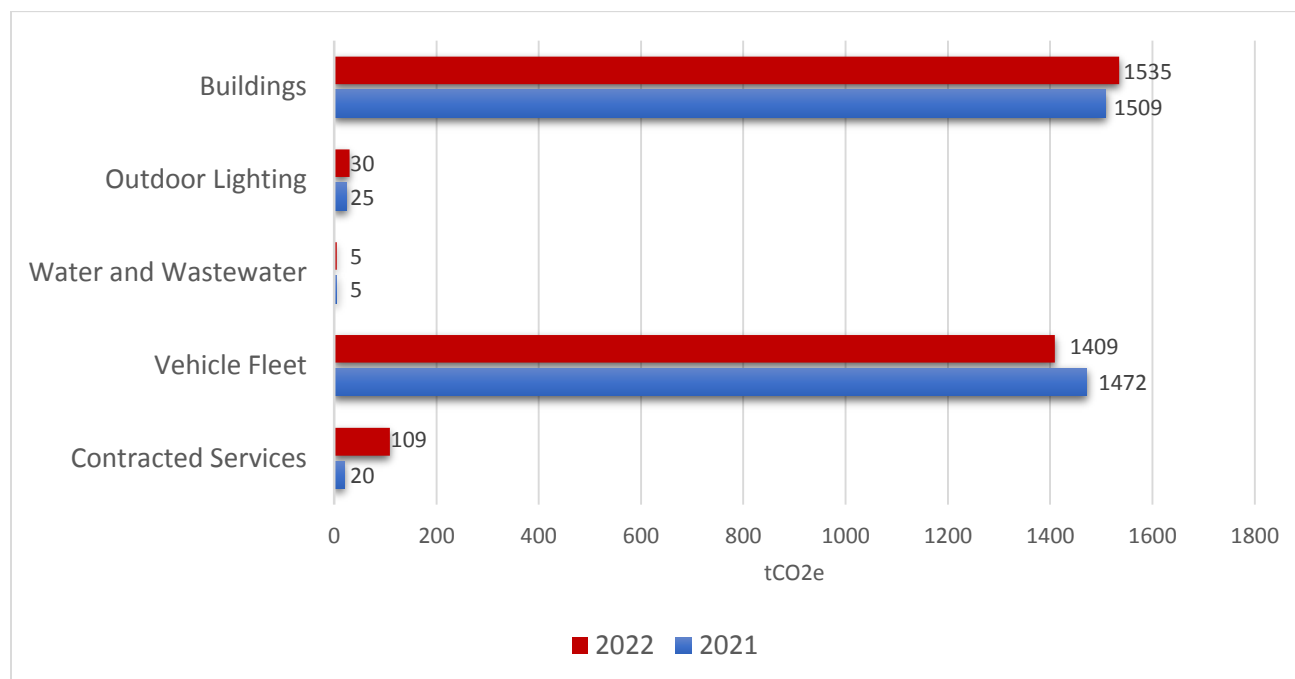


Figure 2: Comparison of the City's 2021 and 2022 GHG emissions

Figure 2 shows a comparison of the City's GHG emissions between 2022 and 2021, for buildings, outdoor lighting, water and wastewater, vehicle fleet and contracted emissions. The comparison illustrates that buildings, outdoor lighting and contracted emissions increased, while all other categories decreased or stayed the same. Overall GHG emission for the City are on a general downward trajectory. There were four major drivers for emission changes in 2022:

- Increase to the Provincial electricity GHG emissions intensity factor
- Additional contracted services being reported
- Addition of low carbon vehicles to the vehicle fleet
- Addition of new buildings or services being offered by the city

Attachment 2 provides energy consumption and GHG emissions inventories for baseline year 2010 and years 2021 and 2022 and a detailed description of activities impacting 2022 emissions by sector.

NEXT STEPS

The City is actively working towards implementing the initiatives outlined in the CEERS and is making progress towards achieving its corporate emissions reduction targets. Attachment 3 provides a summary of energy conservation, efficiency and measures that are currently underway or were completed in 2022.

Additional action and measures will be required for the City to meet the GHG reduction targets set out in the CEERS and in the Bold Step #1 Carbon Free Corporation.

FINANCIAL IMPLICATIONS

The LGCAP funding has been placed in the City's Climate Action Reserve, as described in the associated bylaw (attachment 4). Use of the funds is at the discretion of the City, but the projects must align with the CleanBC roadmap and the Climate Preparedness and Adaptation Strategy objectives. Eligible expenditures can include staffing, contracts, investments to improve energy efficiency, climate infrastructure, matching funds to leverage federal government and other third-party funding, and engagement.

A requirement of the program is that funding received in 2022, 2023 and 2024 is spent by March 31, 2025. The City received \$285,082 in 2022, \$285.082 on September 6, 2023 and anticipates receiving the same amount again in the fall of 2024. The City is developing a climate action decision making framework to aid climate action project prioritization and allocation of funds. The framework will support the existing budget framework which guides the City's work planning and budget process through a climate action lens; which in turn will support identifying appropriate expenditures for the LGCAP funding.

The climate action related projects described in this report were part of the 2022 budget process and work plans. Allocation of the LGCAP funds will be supported by the Climate Action Decision Making Framework that is currently under development (attachment 5).

INTERDEPARTMENTAL LIAISON

This report has been developed by the Climate Action, Planning and Development Department in consultation with the Engineering Department and the Electrical Utility.

OPTIONS

The following options are presented for Council's consideration:

1. That Council receive this report for information; or
2. That Council provide alternative direction to staff.

Staff recommends Option 1.

ATTACHMENTS

Attachment 1: Local Government Climate Action Program Completed Survey and Signed Attestation Form.

Attachment 2: 2010, 2021 and 2022 Corporate Energy and Emissions Inventories and 2022 Corporate Emissions by Sector

Attachment 3: Summary of Energy Conservation and Efficiency Measures by Sector

Attachment 4: Climate Action Reserve Fund Bylaw

Attachment 5: Climate Action Decision Making Framework July 10, 2023 Council Report

APPROVALS

This report was prepared by:

Penny Page-Brittin, Community Energy and Emissions Specialist

This report was reviewed by:

Leya Behra, P.Eng., Manager of Climate Action

Jacqueline Dairon, Acting Chief Financial Officer/Director of Finance

Lynn Roxburgh, Supervisor of Land Use Planning

Tobi May, Manager of Civic Buildings & Properties

Derek Bickerstaffe, Manager of Electrical Services

Greg Ellis, Superintendent, Fleet Services

Mike Anderson, Manager of Transportation

Gabe Beliveau, Manager of Engineering Operations

Cory Hansen, Emergency Management Coordinator

This report was approved by:

Jackie Teed, Acting Director, Climate Action, Planning and Development

Lisa Spitale, Chief Administrative Officer