

ENVIRONMENT COMMITTEE

TO: *MAYOR AND COUNCILLORS*

SUBJECT: **SOLID WASTE AND RECYCLING 2023 ANNUAL REPORT**

RECOMMENDATION:

THAT the report titled “Solid Waste and Recycling 2023 Annual Report” dated April 22, 2024, be received for information.

REPORT

The Environment Committee, at its meeting held on April 22, 2024 received and adopted the attached report providing a summary of the City of Burnaby solid waste and recycling collection system performance.

On behalf of the Environment
Committee,

Councillor J. Keithley
Chair

Councillor M. Santiago
Vice Chair

TO: ENVIRONMENT COMMITTEE (EC)
FROM: GENERAL MANAGER ENGINEERING
SUBJECT: **SOLID WASTE AND RECYCLING 2023 ANNUAL REPORT**
PURPOSE: To provide a summary of the City of Burnaby solid waste and recycling collection system performance.

RECOMMENDATION

THAT the report titled “Solid Waste and Recycling 2023 Annual Report” dated April 22, 2024, be received for information.

1.0 POLICY SECTION

The Environmental Management Act of British Columbia requires all jurisdictions to have an approved plan for managing waste. Burnaby is one of twenty-one member municipalities that coordinate with Metro Vancouver on the solid waste plans and initiatives shaping our regional waste management system. The regional Integrated Solid Waste and Resource Management Plan (ISWRMP) was approved by the Ministry of Environment in 2011. Metro Vancouver has since initiated a process of updating the ISWRMP to build off current successes while accelerating waste diversion, reducing GHG emissions, and promoting a circular economy.

In addition, the City of Burnaby waste management system is primarily supported by the following City bylaws:

- The Burnaby Solid Waste and Recycling Bylaw 2010
- The Burnaby Bylaw Enforcement Bylaw 2009
- The Burnaby Consolidated Fees and Charges Bylaw

2.0 BACKGROUND

This annual report provides an overview of the City’s waste management system including an outline of the programs and service elements for the upcoming year to achieve future waste diversion goals. Single family, multi-family, commercial and institutional waste diversion (recycling/green waste collection) and disposal (garbage) volumes are shown from program inception year to 2023 to illustrate waste trends.

3.0 GENERAL INFORMATION

The City of Burnaby provides a comprehensive solid waste and recycling service to its customers. The services offered by the City include the curbside collection of various

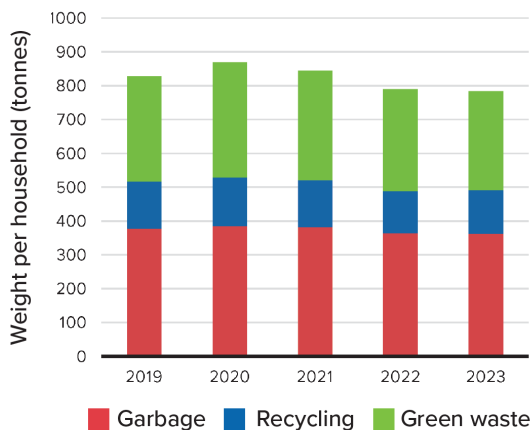
waste streams and sizable items, supplemented by the drop-off of additional recyclables at the Eco Centre.

The City’s solid waste and recycling collection workforce services approximately 34,000 single and two-family households, as well as 40,600 multi-family households and approximately 575 Industrial, Commercial, and Institutional facilities (ICI). In addition, thousands of person hours are devoted each year to keeping streets and public spaces clean through regular litter pick-up, streetscape receptacle servicing, and abandoned waste collection.

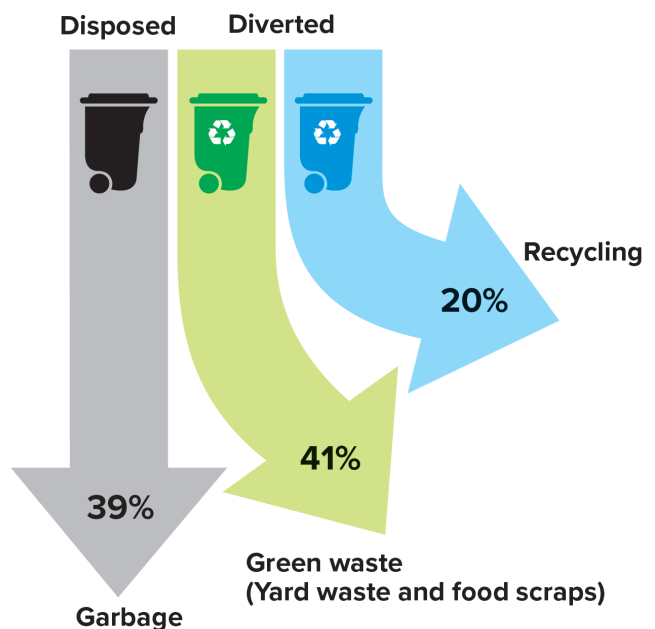
3.1 2023 Performance and Trends

In 2023, the City collected 66,216 tonnes of total materials (garbage, recyclables, and green waste) from residents and businesses, which represented a 1,059 tonne increase from the previous year. However, these increases were observed primarily in the recycling and green waste streams. The overall diversion rate therefore improved to 61%. Additionally, waste generation per household continued to decrease on a year-over-year basis since peaking in 2020.

Figure 1 – Total customer household garbage, recycling and green waste per household serviced, 2019-2023



2023 Breakdown of Disposal/Diversion Achieved by the City System (Single-family, multifamily and industrial/commercial/institutional)



3.2 Highlights from 2023

In 2023, the solid waste and recycling services team focused on building relationships with the community by hosting and attending public events, as well as by supporting the work of many volunteer groups. Examples of this collaboration include:

- Hosting five City Community Cleanup events with the public, including an event in each of Burnaby's quadrants.
- Building up our Adopt-A-Street program with over 100 volunteers and improving volunteer database.
- Updating the volunteer webpage, application and interactive street map to support volunteers interested in helping clean up litter along City boulevards and streets.
- Working with a non-profit organization on recycling education presentations for new Canadians and increasing the number of languages in which our Curbside Collection Calendar is provided.

Further highlights from our 2023 workplan included:

- Reducing paper waste in our own operation by up to 47,000 sheets per year following the switch from printed dispatching to electronic dispatching of collection crews.
- Adding pole-mounted waste collection receptacles at bus stops and space limiting walking areas where recycling stations are not feasible.
- Expanding the number of categories accepted for recycling at the Eco-Centre to include light bulbs, thermostats, and electronics while at the same time consolidating the formerly separated recycling categories of flexible plastics and film plastics into a single category for ease of sorting.
- Continuing to work on bear-resistant steel container bin toppers and bear-resistant receptacles for multifamily properties in the designated Bear Area.
- Receiving another \$128,000 in program incentive bonuses from Recycle BC for demonstrating high diversion rates in the residential curbside collection program.
- Reaching the highest levels of drop-off volumes for materials like used oil (since 2022), household batteries (since inception in 2022) and clothing donations.
- Replacing 3 diesel collection trucks with compressed natural gas (CNG) vehicles to reduce fleet emissions.
- Adding a commercial Styrofoam™ separate drop-off location at the Eco-Centre to service our business customers.

3.3 Looking Ahead to the Future

The City has successfully met service delivery challenges over the years by developing innovative solutions while maintaining our commitment to environmental protection. Looking ahead to the future, we hope to bring forward enhancements to Burnaby's waste reduction programs that will further strengthen our diversion goals.

In 2024, we are planning to:

- put into the production the first Battery Electric Collection Vehicle. This vehicle will help the City reach its climate action goals for carbon neutrality in fleet operations by 2024. This truck can reduce carbon dioxide tailpipe emissions by sixty tonnes annually;

- explore development of bin-level sensor technology in the streetscape receptacles to enhance collection efficiently. These sensors will help us to optimize servicing frequency and allocate pickup resources;
- continue to test and pilot various streetscape bin enclosure designs that will promote diversion while at the same time allow for efficiency and flexibility in collection;
- further expand the Adopt-a-Street Program – with signs dedicated to the volunteers – encouraging more community members to get involved and draw attention to their hard work;
- further enhance the Bear Area Program to reduce opportunities for waste associated wildlife encounters;
- continue to conduct waste composition audits and use our findings to set priorities for contamination and diversion focusing on the multi-family and ICI sectors; and
- increase the number of streetscape receptacles throughout the City, specifically at/near transit stops, to include additional recycling options where feasible.

4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT

In keeping with the goal of reducing waste, only a limited number of hard copies of the 2023 Annual Solid Waste and Recycling Report will be printed. An electronic copy of this report, as in previous years, will be available on the City website for viewing.

5.0 FINANCIAL CONSIDERATIONS

This report is provided for information purposes only. There are no financial considerations currently.

Respectfully submitted,

May Phang, P.Eng., General Manager Engineering

ATTACHMENTS

Attachment 1 – Solid Waste and Recycling 2023 Annual Report

REPORT CONTRIBUTORS

This report was prepared by Zac Der, Environmental Services Officer and Alex Tonin, Communications and Marketing Coordinator. Reviewed by Erik Schmidt, Director Public Works, SWR, Fleet, and Signs and Markings.