

**METRO VANCOUVER REGIONAL DISTRICT
ZERO WASTE COMMITTEE**

MEETING

Thursday, September 11, 2025

1:00 pm

28th Floor Committee Room, 4515 Central Boulevard, Burnaby, British Columbia

Webstream available at <https://www.metrovanancouver.org>

A G E N D A

A. ADOPTION OF THE AGENDA

1. September 11, 2025 Meeting Agenda

That the Zero Waste Committee adopt the agenda for its meeting scheduled for September 11, 2025 as circulated.

B. ADOPTION OF THE MINUTES

1. July 3, 2025 Meeting Minutes

That the Zero Waste Committee adopt the minutes of its meeting held July 3, 2025 as circulated.

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C. DELEGATIONS

D. INVITED PRESENTATIONS

E. REPORTS FROM COMMITTEE OR CHIEF ADMINISTRATIVE OFFICER

1. Multi-Family Residential Waste Reduction Initiatives Update

pg. 13

Executive Summary

A summary of multi-family recycling Metro Vancouver and member jurisdiction initiatives was provided to the Zero Waste Committee at its January 9, 2025, meeting. Zero Waste Committee members had several questions related to the report. This report provides additional information with respect to multi-family recycling specifically comparing disposal quantities for multi-family and single-family sources, providing examples of tenant engagement programs, multi-lingual resources, building design and operations, and innovative programs and technologies within the Metro Vancouver region and other jurisdictions. Multi-family home residents have lower recycling rates and higher per capita disposal

rates than single family home residents. This data reflects that organic recycling systems are more convenient for single-family home residents, and single-family homes generate large quantities of yard trimmings that increase recycling rates. Engagement with multi-family building managers and tenants, culturally relevant education, contamination detection technology and updated building design requirements are among the many action options being considered in the updated solid waste management plan to close this performance gap.

Recommendation

That the Zero Waste Committee receive for information the report dated September 2, 2025, titled “Multi-Family Residential Waste Reduction Initiatives Update”.

2. Waste-to-Energy Facility District Energy System Project Update

pg. 23

Executive Summary

The Waste-to-Energy Facility District Energy System will provide heat and hot water for up to 50,000 homes and reduce greenhouse gas emissions by up to 70,000 tonnes per year. Agreements are now in place with River District Energy and the City of Burnaby for the sale of heat from the District Energy system. A street access agreement is now in place with the City of Burnaby, and a similar agreement is being finalized with the City of Vancouver.

Project procurement initiatives have begun with a contract awarded for the preloading of the energy centre site with work expected to begin in coming weeks. Completion of the construction of the infrastructure to provide heat to River District is expected in mid-2028.

The expected cost of the district energy system is within the approved funding allocation of \$217 million, with the cost-recovered over the life of the infrastructure through energy sales. The \$2.5 million funding from the Federal Low Carbon Economy Fund will assist with the project’s debt financing needs ultimately lowering the cost of energy to the City of Burnaby and River District energy utilities.

Recommendation

That the Zero Waste Committee receive for information the report dated September 4, 2025, titled “Waste-to-Energy Facility District Energy Project Update”.

3. Waste-to-Energy Facility 2024 Financial Update

pg. 32

Executive Summary

This report provides the annual financial update for the Metro Vancouver Waste-to-Energy Facility. The facility continues to be an environmentally sound, cost-effective disposal option. In 2024 the Waste-to-Energy Facility processed 243,168 tonnes of municipal solid waste at an overall net unit cost of \$99 per tonne for operation,

maintenance and debt service. Waste-to-Energy Facility electrical revenues in 2024 continued to be impacted by the 2023 generator failure because the generator was not back in service until July 2024. Insurance claims related to the generator failure were resolved in 2024 with the insurance recoveries roughly balancing out the combination of the cost of the generator repair plus lost electrical revenue.

Waste-to-Energy Facility unit costs are consistent with the cost of managing waste at the Vancouver Landfill and roughly half the cost of managing waste through Metro Vancouver's contingency disposal contracts. Waste-to-Energy Facility costs are funded through garbage tipping fees paid by all solid waste system users.

Recommendation

That the Zero Waste Committee receive for information the report dated September 2, 2025, titled "Waste-to-Energy Facility 2024 Financial Update".

4. Programs and Policies for Waste Reduction at Public Events

pg. 36

Executive Summary

At its April 3, 2025 meeting, the Zero Waste Committee requested information on the work of Metro Vancouver and member jurisdictions to reduce waste at community public events. This report is a summary of Metro Vancouver initiatives, member jurisdiction programs and policies, and emerging trends across Canada that support event organizers in waste prevention and recycling. Metro Vancouver and member jurisdictions support waste reduction at events through a variety of programs, policies and resources, including event planning guidance and support, setting recycling requirements as part of municipal permitting, and supplying zero waste stations and vendor education. Further support for waste reduction at events includes a move towards reusable cups and containers at event venues, and additional actions are being considered as part of an updated solid waste management plan.

Recommendation

That the Zero Waste Committee receive for information the report dated September 3, 2025, titled "Programs and Policies for Waste Reduction at Public Events".

5. Updated Extended Producer Responsibility Five-Year Action Plan

pg. 44

Executive Summary

British Columbia is a leader in extended producer responsibility, and the Province's Advancing Recycling in B.C. Extended Producer Responsibility Five-Year Action Plan 2021-2026, identified priority product categories for addition to the program including automotive products, compressed canisters, additional battery categories, medical sharps used at home, and mattresses and foundations. In July 2025 Metro Vancouver was advised that due to consumer affordability challenges, the Ministry

of Environment and Parks are not recommending inclusion of mattresses and foundations in the program at this time, but that the other product categories are expected to be added as originally proposed.

If mattresses and foundations are not added to the extended producer responsibility program, municipalities and users of the regional solid waste system will continue to subsidize management of the mattresses and foundations. As part of the 2026 budget phased increases in the fee charged for mattress and foundations at regional solid waste facilities will be recommended, starting with an increase from \$15 to \$20 per unit for January 2026.

This report recommends the Board Chair write to the Minister of Environment and Parks reiterating the importance of including mattresses and foundations in the extended producer responsibility program.

Recommendation

That the GVS&DD Board authorize the Chair to send a letter, in substantially the same form as Attachment 1 of the report dated September 2, 2025, titled “Updated Extended Producer Responsibility Five-Year Action Plan”, to the Minister of Environment and Parks highlighting the benefits that will be achieved through the inclusion of new products such as small compressed gas containers and medical sharps used at home in the extended producer responsibility program, and reiterating the importance of the inclusion of mattresses in the program along with the impact on municipalities and users of the regional solid waste system if mattresses are not added.

6. 2025 Textiles Waste Reduction Campaign Results

pg. 50

Executive Summary

The 2025 “Repair and Re-Wear” campaign ran from March 24 to May 18, 2025. The objective was to reduce textiles waste by encouraging people to do small, easy repairs to their clothing so that they last longer. The new creative platform, “Repair and Re-Wear,” harnessed the feeling of pride felt from bringing clothes back to life. It ran across the region through paid media placements. The campaign performed strongly, with 22.4 million impressions, 3.7 million video views, and over 22,000 website visits. Compared to the previous version, the updated campaign received a 650% higher volume of click throughs on Facebook/Instagram and website sessions more than doubled.

Recommendation

That the Zero Waste Committee receive for information the report dated September 4, 2025 titled “2025 Textiles Waste Reduction Campaign Results”.

7. Single-Use Item Waste Composition Results

pg. 60

Executive Summary

Since 2018, the quantity of single-use items disposed in Metro Vancouver including bags, cups, straws, utensils and takeout containers, has been estimated using waste composition studies. Data from 2024 indicated:

- A measured significant increase in single-use items disposal in 2024 compared to 2023 and a probable upward trend in single-use item disposal since 2020
- A shift from plastic bags to paper
- Emergence of a new single-use item category - molded fiber utensils
- A decrease in foam takeout containers

In 2024, overall single use items made up approximately 3.0 per cent of the total waste stream compared to 2.1 per cent in 2023. Given the small overall portion of the waste stream, there is more potential for data collection anomalies to significantly affect the relative quantities. On this basis, it will be important to understand to what extent the 2024 data is representative of the overall portion of single use items in the waste stream, by comparing to data from 2025 and subsequent years. Despite various actions to reduce single use items, it is reasonable to expect single use items are increasing in the waste stream given the increased use of food delivery services.

Recommendation

That the Zero Waste Committee receive for information the report dated September 3, 2025, titled "Single-Use Items Waste Composition Results".

8. Manager's Report

pg. 72

Recommendation

That the Zero Waste Committee receive for information the report dated September 3, 2025, titled "Manager's Report".

F. INFORMATION ITEMS

G. OTHER BUSINESS

H. RESOLUTION TO CLOSE MEETING

Note: The Committee must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

I. ADJOURNMENT

That the Zero Waste Committee adjourn its meeting of September 11, 2025.

Membership:

Kirby-Yung, Sarah (C) – Vancouver
Hodge, Craig (VC) – Coquitlam
Calendino, Pietro – Burnaby
Darling, Steve – Port Coquitlam

Ferguson, Steve – Langley Township
Locke, Brenda – Surrey
Muri, Lisa – North Vancouver District
Wallace, Rosemary – Langley City

Weverink, Paul – Anmore
Wolfe, Michael – Richmond
Zhou, Lenny - Vancouver

**METRO VANCOUVER REGIONAL DISTRICT
ZERO WASTE COMMITTEE**

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Zero Waste Committee held at 1:02 pm on Thursday, July 3, 2025 in the 28th Floor Committee Room, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Chair, Director Sarah Kirby-Yung, Vancouver (arrived at 1:07 pm)
Vice Chair, Director Craig Hodge, Coquitlam (departed at 2:48 pm)
Director Pietro Calendino, Burnaby*
Councillor Steve Darling, Port Coquitlam
Director Steve Ferguson, Langley Township
Director Lisa Muri, North Vancouver District*
Councillor Rosemary Wallace, Langley City
Councillor Paul Weverink, Anmore
Councillor Michael Wolfe, Richmond
Director Lenny Zhou, Vancouver* (departed at 3:00 pm)

*denotes electronic meeting participation as authorized by the *Procedure Bylaw*

MEMBERS ABSENT:

Director Brenda Locke, Surrey

OTHERS PRESENT:

Celena Benndorf, Engagement Panel Member, Solid Waste Management Plan Independent Consultation and Engagement Panel
Veronika Bylicki, Engagement Panel Member, Solid Waste Management Plan Independent Consultation and Engagement Panel
Peter Fassbender, Engagement Panel Member, Solid Waste Management Plan Independent Consultation and Engagement Panel
Komal Fatima, Engagement Panel Member, Solid Waste Management Plan Independent Consultation and Engagement Panel
Andrea Reimer, Chair, Solid Waste Management Plan Independent Consultation and Engagement Panel
Ryan Williams, Engagement Panel Member, Solid Waste Management Plan Independent Consultation and Engagement Panel

STAFF PRESENT:

Paul Henderson, General Manager, Solid Waste Services
Christine Zhao, Legislative Services Coordinator, Board and Information Services
Kelly Du, Project Engineer, Zero Waste Planning Implementation
Terry Fulton, Senior Project Engineer, Solid Waste Services
Sonu Keilley, Director, Financial Planning & Analysis
Julie Saxon, Program Manager, Environmental Regulation and Enforcement Division
Sarah Wellman, Senior Engineer, Solid Waste Services

A. ADOPTION OF THE AGENDA**1. July 3, 2025 Meeting Agenda****It was MOVED and SECONDED**

That the Zero Waste Committee adopt the agenda for its meeting scheduled for July 3, 2025 as circulated.

CARRIED

B. ADOPTION OF THE MINUTES**1. June 5, 2025 Meeting Minutes****It was MOVED and SECONDED**

That the Zero Waste Committee adopt the minutes of its meeting held June 5, 2025 as circulated.

CARRIED

C. DELEGATIONS

No items presented.

D. INVITED PRESENTATIONS

- 1. Andrea Reimer, Chair; and Celena Benndorf, Veronika Bylicki, Peter Fassbender, Komal Fatima, and Ryan Williams, Engagement Panel Members; Solid Waste Management Plan Independent Consultation and Engagement Panel**
Subject: Solid Waste Management Plan Update – Idea Generation Engagement Summary Report

Andrea Reimer, Celena Benndorf, Veronika Bylicki, Peter Fassbender, Komal Fatima, and Ryan Williams introduced themselves to the Committee and provided an overview of the Engagement Panel's history, its role as an independent consulting organization for the Solid Waste Management Plan and noted the tests for evaluating engagement process. They noted that they had provided a section to item E2 on the agenda.

1:07 pm Chair Kirby-Yung arrived at the meeting.

E. REPORTS FROM COMMITTEE OR CHIEF ADMINISTRATIVE OFFICER**1. Solid Waste Management Plan Goals and Hierarchy**

Report dated June 20, 2025 from Terry Fulton, Senior Project Engineer, Solid Waste Services, seeking approval from the GVS&DD Board on the draft goals and hierarchy for an updated Solid Waste Management Plan ("SWMP").

Terry Fulton, Paul Henderson and Julie Saxon, Program Manager, Environmental Regulation and Enforcement Division gave a presentation titled “Solid Waste Management Plan Update”, providing an overview of the SWMP, discussing evaluation criteria, the draft revised hierarchy and goals of the SWMP, highlighting key changes from the current plan.

It was MOVED and SECONDED

That the GVS&DD Board approve the goals and hierarchy for an updated regional solid waste management plan as presented in the report dated June 20, 2025, titled “Solid Waste Management Plan Goals and Hierarchy”.

CARRIED

Councillor Wolfe voted against.

2. **Solid Waste Management Plan Update – Idea Generation Engagement Summary**
Report dated June 24, 2025 from Stephanie Liu, Program Manager, Community Engagement, Solid Waste Services, providing the Committee and GVS&DD Board with information on engagement feedback from the idea generation phase in 2024, related to updates on the regional SWMP.

2:12 pm Director Muri departed the meeting.

It was MOVED and SECONDED

That the GVS&DD Board receive for information the report dated June 24, 2025, titled “Solid Waste Management Plan Update – Idea Generation Engagement Summary”.

CARRIED

3. **DRAFT Five Year Capital Plan (2026-2030) Solid Waste Services**
Report dated June 24, 2025 from Paul Henderson, presenting to the Committee the DRAFT Solid Waste 2026 - 2030 Capital Plan.

Paul Henderson and Sonu Keilley, Director, Financial Planning & Analysis gave a presentation entitled “Solid Waste Services – DRAFT five year capital plan (2026-2030)”, providing an overview of the DRAFT capital plan and seeking feedback from members, which will be reflected during budget deliberations in the fall.

2:17 pm Director Muri returned to the meeting.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated June 24, 2025, titled “DRAFT Five Year Capital Plan (2026-2030) Solid Waste Services”.

CARRIED

Councillor Darling voted against.

2:48 pm Vice Chair Hodge departed the meeting.

- 4. Award of RFP 24-509 for North Shore, United Boulevard, and North Surrey Recycling and Waste Centres Operating and Maintenance Services Agreement**
Report dated June 24, 2025 from Chris Allan, Director, Solid Waste Operations, Solid Waste Services and George Kavouras, Director, Procurement, Procurement & Real Estate Services, seeking GVS&DD Board approval of the award of RFP 24-509 for North Shore, United Boulevard and North Surrey Recycling and Waste Centres Operating and Maintenance Services Agreement in the amount of \$281,007,000 (excluding taxes) to Halton Recycling Ltd dba. Emterra Environmental for a term of seven years.

Paul Henderson walked members through the procurement process, advising that a prequalification process was followed that resulted in 3 proposals for the large facilities and 2 for small facilities and that to increase resilience the contracts would be awarded to two companies.

It was MOVED and SECONDED

That the GVS&DD Board:

- a) approve the award of RFP 24-509 for North Shore, United Boulevard and North Surrey Recycling and Waste Centres Operating and Maintenance Services Agreement in the amount of up to \$281,007,000 (excluding taxes) to Halton Recycling Ltd. dba. Emterra Environmental, for a term of seven (7) years, subject to final review by the Commissioner; and
- b) authorize the General Manager, Procurement, and Real Estate to execute the required documentation once the General Manager, Procurement, and Real Estate are satisfied that the award should proceed.

CARRIED

- 5. Award of RFP 24-510 for Maple Ridge and Langley Recycling and Waste Centres Operating and Maintenance Services Agreement**
Report dated June 24, 2025 from Chris Allan and George Kavouras, seeking GVS&DD board approval of the award of RFP No. 24-510 for Maple Ridge and Langley Recycling and Waste Centres Operating and Maintenance Services Agreement in the amount of \$38,778,000 (excluding taxes) to GFL Environmental Inc for a term of seven years.

It was MOVED and SECONDED

That the GVS&DD Board:

- a) approve the award of RFP No. 24-510 for Maple Ridge and Langley Recycling and Waste Centres Operating and Maintenance Services Agreement, in the amount of up to \$38,778,000 (exclusive of taxes) to GFL Environmental Inc., for a term of seven (7) years, subject to final review by the Commissioner; and
- b) authorize the General Manager, Procurement and Real Estate to execute the required documentation once the General Manager, Procurement and Real Estate are satisfied that the award should proceed.

CARRIED

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6. **Waste-to-Energy Facility Environmental Monitoring and Reporting 2024 Update**
Report dated June 20, 2025 from Sarah Wellman, Senior Engineer, Solid Waste Services, providing the Waste-to-Energy Facility environmental performance update for 2024.

Sarah Wellman gave a presentation entitled “Waste-to-Energy Facility Environmental Monitoring and Reporting – 2024 Update”, providing an overview of the emissions 2024 monitoring program at the Waste-to-Energy Facility. It was highlighted that the Waste-to-Energy Facility was a very small contributor to regional emissions, accounting for 0.03% of Particle Matter emissions and 0.6% of Nitrogen Oxides emissions in 2024, and emissions have decreased over time since the Facility was first commissioned due to upgrades to the air pollution control equipment.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated June 20, 2025, titled “Waste-to-Energy Facility Environmental Monitoring and Reporting 2024 Update”.

CARRIED

3:00 pm Director Zhou departed the meeting.

7. **2024 Waste Composition Data**
Report dated June 23, 2025 from Kelly Du, Project Engineer, Zero Waste Planning Implementation, updating the Committee on the results of waste composition studies completed in 2024.

Kelly Du walked members through a presentation entitled “2024 Waste Composition Monitoring Program”, bringing forward the results of a full-scale study showing that the top four components of waste has remained constant as composable organics, paper, plastic and non-composable organics such as wood, tires and textiles.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated June 23, 2025, titled “2024 Waste Composition Data”.

CARRIED

8. **2024 Disposal Ban Program Update**
Report dated June 17, 2025 from Brandon Ho, Senior Project Engineer, Solid Waste Services, providing an annual update to the Zero Waste Committee on the 2024 results of the Metro Vancouver disposal ban program.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated June 17, 2025, titled “2024 Disposal Ban Program Update”.

CARRIED

9. Manager's Report

Report dated July 3, 2025 from Paul Henderson, updating the Zero Waste Committee on the Home Demolition Waste Prevention Forum, capital spending at the Waste-to-Energy Facility, Recycle BC's flexible plastic packaging collection, the workshop held in June to improve multi-family building educational resources and tools to reduce waste, and the 2025 Work Plan.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated June 24, 2025, titled "Manager's Report".

CARRIED**F. INFORMATION ITEMS****1. Metro Vancouver's 2025 Financial Performance Report No. 1****G. OTHER BUSINESS**

No items presented.

H. RESOLUTION TO CLOSE MEETING

No items presented.

I. ADJOURNMENT**It was MOVED and SECONDED**

That the Zero Waste Committee adjourn its meeting of July 3, 2025.

CARRIED

(Time: 3:16 pm)

Christine Zhao,
Legislative Services Coordinator

Sarah Kirby-Yung,
Chair

To: Zero Waste Committee

From: Adriana Velázquez, Senior Project Engineer, Solid Waste Services

Date: September 2, 2025

Meeting Date: September 11, 2025

Subject: **Multi-Family Residential Waste Reduction Initiatives Update**

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated September 2, 2025, titled “Multi-Family Residential Waste Reduction Initiatives Update”.

EXECUTIVE SUMMARY

A summary of multi-family recycling Metro Vancouver and member jurisdiction initiatives was provided to the Zero Waste Committee at its January 9, 2025, meeting. Zero Waste Committee members had several questions related to the report. This report provides additional information with respect to multi-family recycling specifically comparing disposal quantities for multi-family and single-family sources, providing examples of tenant engagement programs, multi-lingual resources, building design and operations, and innovative programs and technologies within the Metro Vancouver region and other jurisdictions. Multi-family home residents have lower recycling rates and higher per capita disposal rates than single family home residents. This data reflects that organic recycling systems are more convenient for single-family home residents, and single-family homes generate large quantities of yard trimmings that increase recycling rates. Engagement with multi-family building managers and tenants, culturally relevant education, contamination detection technology and updated building design requirements are among the many action options being considered in the updated solid waste management plan to close this performance gap.

PURPOSE

The purpose of this report is to update the Zero Waste Committee on Metro Vancouver and member jurisdictions’ waste reduction initiatives and best practices for recycling and waste management in multi-family buildings.

BACKGROUND

On January 9, 2025 the Zero Waste Committee received for information the report titled “Multi-Family Residential Waste Reduction and Recycling”, which summarized programs delivered by Metro Vancouver and member jurisdictions designed specifically for apartments, condominiums and other multi-family residential properties. The Zero Waste Committee requested more details on current single-family vs. multi-family recycling performance and programs provided by members to reduce waste in this sector, and opportunities to improve performance through tenant engagement, multi-lingual resources, building design and operations, and innovative technologies. Interest was also expressed in example leading practices in other jurisdictions to improve multi-family waste reduction and recycling.

MULTI-FAMILY WASTE REDUCTION AND RECYCLING INITIATIVES IN METRO VANCOUVER

As population and housing demand grows, multi-family residential developments account for an increasing proportion of new construction in Metro Vancouver. According to the 2024 *Metro Vancouver Housing Data Book*, 78 per cent of all housing starts in the region were multi-family units. Over the past five years, multi-family unit starts increased by 53 per cent alongside a decrease in construction of single-family homes. This report summarizes various initiatives aimed at increasing waste reduction and recycling in the multi-family residential sector. Findings will inform an updated solid waste management plan.

Multi-Family vs. Single-Family Waste Management Trends

The 2023 Metro Vancouver Solid Waste Management Annual Summary showed multi-family buildings contributed to 30 per cent (285,904 tonnes) of the total 942,705 tonnes of residential and commercial garbage disposed at regional facilities. Historically, single-family homes generally achieve higher recycling rates and lower per capita disposal rates than multi-family residences (Table 1). Single-family recycling rates include a high percentage of yard waste whereas multi-family buildings have much less yard waste therefore the rates are not directly comparable. Per capita disposal rates highlight the higher amount of organic waste disposed of by multi-family home residents compared single-family home residents, likely driven by more convenient recycling systems for organics for single-family home residents.

Table 1: Historical Residential Recycling and Solid Waste Quantities in Metro Vancouver

Year	Multi-Family Recycling Rate (%)	Single-Family Recycling Rate (%)	Multi-Family Disposal per Capita (kg/capita)	Single-Family Disposal per Capita (kg/capita)	Multi-Family Total Disposal (tonnes)	Single-Family Total Disposal (tonnes)
2023	34	62	210	160	285,904	252,993
2022	36	64	210	150	256,842	248,750
2021	37	63	210	160	243,337	266,999

Over the past few years, Metro Vancouver's *Food Scraps Aren't Garbage* campaign has had a focus on multi-family residents. But there is still more work to be done in the multi-family sector to overcome challenges for multi-family residents including diversion of compostable organics, proximity to recycling depots, transportation of bulky items, and the decreased individual accountability associated with the anonymity of disposal in shared garbage bins.

Multi-family residential buildings may offer single-stream or multi-stream recycling collection systems. Single-stream recycling is typically selected to make recycling and collection easier, while multi-stream programs improve the recycling commodity value of material collected through reduced contamination. Collecting recycling materials in separate streams may also provide residents with more confidence that the materials will be properly recycled. Recycle BC reports that single-stream recycling systems have contamination rates approximately double those of multi-stream systems.

Available data on contamination and disposal rates by building and ownership type (e.g. strata vs. non-strata) from recent waste composition studies is inconclusive. Improved methodologies are being considered to get better insights into the key drivers of multi-family recycling performance.

Multi-Family Residential Programs and Policies in Metro Vancouver

Metro Vancouver and member jurisdictions are actively working on programs and policies to encourage waste reduction and recycling in the multi-family residential sector, and this sector has been identified as a key focus area for an updated solid waste management plan. A summary of member jurisdiction programs and policies to encourage multi-family waste reduction is included in Attachment 1.

Tenant Engagement Programs

Multi-family recycling tenant engagement programs have shown benefits, such as improved communication methods information feedback. Example programs include:

- The City of Vancouver's Outreach & Education team deployed a Zero Waste Ambassador program in 2024 designed to increase multi-family residential waste diversion. The program is ongoing and delivers multiple cohorts per year that involve volunteers progressing through a comprehensive training module. Graduating ambassadors focus on improvements to their building's waste management system and are provided with a toolkit that includes links to Metro Vancouver resources. Another key focus includes resident education/engagement where ambassadors leverage staff delivered educational webinars and lobby talk events.
- The City of Richmond provides training and resource materials to community members to help increase and improve recycling in multi-family complexes through its Recycling Champion program. Recycling Champions are residents who share the City's goals for supporting a circular economy through recycling and are interested in helping others in their building recycle correctly and consistently.

Multilingual Resources

Metro Vancouver, member jurisdictions and the waste hauling industry collectively address language barriers through adaptable education materials, direct support channels, and localized depot information.

Multilingual resources developed and made available for multi-family building recycling programs include:

- Recycling and green bin guides in different languages
- Waste room signage
- Customizable recycling signage templates (can add text in different languages)
- Websites with language selection options
- Municipal multilingual communications strategies
- Private companies servicing multi-family buildings may offer language support

Industry representatives have suggested that keeping educational resources as visual as possible, connecting desired behaviours to user values, and creating communications with specific, tailored and tangible actions are effective approaches to deal with language barriers. These suggestions will be taken into consideration in the development of new or revised resources.

Building Design and Operations of Recycling and Waste Areas

Metro Vancouver developed guidance documents for member jurisdictions, on the design of recycling and waste areas in multi-family residential developments. Key considerations include the overall layout (size, location and design) of garbage and recycling rooms, accessibility for both residents and service vehicles, and compliance with local municipal standards for space and access. As the types of recycling collected expands to include soft plastics and other materials, there is an opportunity to review the current guidance on space and access and update them to accommodate more materials.

Some members have adopted requirements for space in buildings dedicated to solid waste management. For example, the City of Burnaby includes its solid waste and recycling requirements into the development review process ensuring all new developments meet the most current standards. In addition to space and access there is a requirement for dedicated bulky item storage and all collection to be done onsite. Once a building is occupied, Burnaby's *Solid Waste and Recycling Bylaw* stipulates what is expected in terms of waste diversion, information distribution for residents and required services.

Improving Recycling through Innovative Technology

Metro Vancouver continues to track emerging uses of technology such as artificial intelligence, container sensors, and digital education platforms that are helping communities monitor recycling practices more efficiently and reduce contamination. A recent pilot project in the Central Okanagan region demonstrated how AI-powered visual recognition and GPS tracking can support targeted education and streamline operations. The project used visual recognition technology for contamination and GPS on recycling trucks to identify contamination such as books, foam and soft plastics and send personalized feedback to residents. The initiative led to a 23 per cent reduction in contamination rates and reduced the need for manual reporting. While Metro Vancouver does not provide direct recycling collection to multi-family residents, a pilot to see if this technology could produce similar results for multi-family recycling could be explored in collaboration with member jurisdictions and the local hauling industry, as part of an updated solid waste management plan.

Multi-Family Residential Educational Resources and Tools Workshop Results

Metro Vancouver hosted a workshop on June 23, focusing on waste reduction and recycling educational resources and tools for the multi-family sector with local governments, industry representatives, non-profit and non-government organizations. The workshop included presentations from Landlord BC, City of Burnaby, Condominium Home Owners Association of BC, Waste Management Association of BC, and Recycle BC. The panel discussed actions to improve educational and communication tools focused on reducing waste, increasing recycling, and minimizing contamination in multi-family building recycling. Feedback was collected from a diverse range of participants to identify strengths, weaknesses, and gaps in current educational resources. Workshop participants identified key priority actions for Metro Vancouver leadership, including updated recycling room design guidelines, building trust and transparency in recycling systems,

increasing resident participation through behavioural insights, and implementing regional training programs for tenant engagement. A detailed summary of insights and suggestions was compiled and will be shared with workshop participants to guide future improvements.

Best Practices Scan

A scan of sample leading North American cities working on multi-family waste reduction revealed approaches similar to those provided by Metro Vancouver member jurisdictions:

- The City of Vancouver, District of Squamish, City of Burnaby, and the City of Calgary mandate in their solid waste bylaws that multi-family building managers must provide education on material sorting and preparation for collection to residents at least once per year and whenever a new resident moves in.
- Halifax Regional Municipality offers workshops and training sessions, including the Master Composter Recycler program, to help property managers and residents understand proper waste sorting, recycling procedures, and why waste diversion is important. These sessions aim to build knowledge and encourage better participation in local waste programs.
- Seattle, Washington and City of Burnaby use a combined approach that includes driver training on contamination, driver tagging, letters sent for repeat contamination and, if contamination is not resolved, follow-up by an inspector with the potential of a fine. Recycling container labels also included the four most common languages spoken in Seattle.
- SeaTac, Washington reduced contamination in commercial and multi-family recycling containers with a strategy that combines inspections, technical assistance, contamination charges, and chute lid openings (container lids with openings that allow only certain shapes or sizes of materials to enter, such as flattened cardboard or round cans and bottles and keep out large items, such as bagged materials).

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report. Programs and initiatives to support programs and policies to encourage waste reduction and recycling are carried out within existing regional budgets.

CONCLUSION

Metro Vancouver and member jurisdictions continue to explore new ideas and learn from local efforts and best practices from other jurisdictions to further reduce waste and improve recycling in the multi-family residential sector. As the region's housing stock continues to shift toward higher-density developments, targeted strategies are essential to support effective waste management in multi-family buildings. The multi-family residential sector is a key focus area of the solid waste management plan update to advance towards the region's waste reduction goals.

ATTACHMENTS

1. Municipal Programs and Policies to Encourage Multi-Family Residential Waste Reduction and Recycling.

Municipal Programs and Policies to Encourage Multi-Family Residential Waste Reduction and Recycling

The information included in this summary table is based on data provided by member jurisdictions who responded to a municipal survey shared with Regional Engineers Advisory Committee Solid Waste Sub-Committee and Regional Waste Reduction Coordinators Committee members.

Municipality	Summary of Education/Outreach Programs ¹ and Policies ²
Burnaby	<ul style="list-style-type: none"> - Community events and outreach tent - Admin team dedicated to answering inquiries - Contamination letters along with educational brochures - Free presentations to and meetings with groups and strata upon request - Free tours of Burnaby Eco Center - Recycling and Green Bin guide in different languages - Annual education material sent to buildings - Inside-bin stickers and above-bin laminated material - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage o Provide education to tenants and post signage
Coquitlam	<ul style="list-style-type: none"> - Metro Vancouver resources for multi-family - ReCollect app and Waste Wizard - Online information on recycling depot and donation recommendations - Social media posts on waste reduction and recycling - Staff provide education during public events - Presentations to groups upon request - Free food waste drop-off for all Coquitlam residents at the Town Centre Recycling Depot and United Boulevard Recycling and Waste Centre - City Wide Garage Sale and Swap Events - Coquitlam's Zoning Bylaw sets out minimum space requirements for garbage and recycling rooms/enclosures
Delta	<ul style="list-style-type: none"> - Shared Recycling Toolkit - Shared Recycling Guide - Recycle Coach App - Social media (e.g., Recycle It Right YouTube video) - Waste room signage - Public outreach at events - Buildings serviced by the City are required to pay a recycling fee - Recycling storage space requirements (Delta Zoning Bylaw) enforced through planning stages of new multi-family developments
City of Langley	<ul style="list-style-type: none"> - Metro Vancouver resources for multi-family - Multi-family buildings are required to: <ul style="list-style-type: none"> • Separate recycling and organics from garbage • Recycling storage space requirements

Municipality	Summary of Education/Outreach Programs ¹ and Policies ²
Township of Langley	<ul style="list-style-type: none"> - Recycling Ambassador Program - Recycle Coach 'What Goes Where' tool (centralized collected) - Printed sorting guide (multiple languages) - Waste room signage and cart decals - Reusable tote bags for sorting and transporting materials provided to each new unit - Free beverage containers lockable cart provided to each complex upon request (to be emptied by strata) - Free presentations/information sessions, site visits and mail outs available upon request - Regular visual recycling audits to address contamination and overflowing carts - Recycling and garbage storage and pickup space requirements for new multi-family developments - Multi-family buildings are required to: <ul style="list-style-type: none"> - Separate recycling and organics from garbage - Utilize municipal recycling service - Annual Household Hazardous Waste and Township-Wide Garage Sale and Giveaway events - Waste reduction and diversion outreach and education at community events and through school programming - Social media and traditional marketing campaigns targeting recycling contamination and waste reduction targeting recycling contamination and waste reduction.
Maple Ridge	<ul style="list-style-type: none"> - Ongoing education (e.g., free presentations, workshops and notices on board) provided by Ridge Meadows Recycling to strata or management - Summer students site visit - Apartment Sort Poster - Free tote bags provided to each unit - Recycling Pickup Map - Customizable pickup frequency - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling from garbage o Implement District's Recycling Program
New Westminster	<ul style="list-style-type: none"> - Lobby events for new programs and new buildings through contracted hauler - Waste room posters - Contamination Reduction Campaign - Oops tags - Multi-family audits planned for 2025/2026 - How to Line Your Kitchen Catcher information - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage o Use City's (agent) recycling and organics collection system

¹ Program – Any initiative which supports multi-family waste reduction.

² Policy – Typically a bylaw or written requirement for multi-family building properties, which aims to reduce multi-family waste.

Municipality	Summary of Education/Outreach Programs ¹ and Policies ²
North Vancouver City	<ul style="list-style-type: none"> - Lobby events and zero waste building champions (program on hold now as staffing resources are limited) - Multi-family Buildings Recycling Guide - Multi-family What Goes Where Poster and Flyer - Metro Vancouver's Food Scraps Recycling How-To Guide for Apartments and Condos - Multi-family waste room signage - List of private organics haulers - Municipal collection for organics limited to buildings with nine units or less - Location and placement of recycling bins and types of recyclables - Satisfactory location, number, signage, cleanliness, and collection frequency of green bins - Multi-family buildings may utilise private organics collection or City's service, which is limited to buildings with nine units or less
North Vancouver District	<ul style="list-style-type: none"> - On-the-ground education upon request - Organics diversion education at events and public spaces a focus for 2024/2025 public education - Education materials via print-out and by email - Metro Vancouver waste room signage - Municipal collection for recycling limited to separated cardboard and organics - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage o Utilize private collection or District's service - Location and placement of recycling and organics bins defined through design guidelines
Pitt Meadows	<ul style="list-style-type: none"> - Paper brochures for garbage, organics and recycling are mailed out annually. - Letters along with educational brochures are sent out to residents with repeated contamination infractions. - Posting information on City website (e.g., collection schedules and location of Return-it) - Recycling Guide - Garbage, organics & recycling packages are sent out to new residents which include information about garbage, organics and recycling pick up schedules with lists of accepted/unaccepted items. Return-it and Ridge Meadows Recycling locations and contact details are also included. - Informative waste reduction and recycling posts are periodically put on City's social media channels. - Recycle Coach app and Recycle BC App are available on the City's website for collection schedules and accepted/unaccepted item information. - The City provides recycling and organics servicing to multi-family complexes/units. - 'Multi-family organics cart audit 2025' to determine organics disposal options for common use by multi-family residents. Details and photos of carts were requested. - Multi-family complexes require a centralized collection area designated for collection carts and for common use by residents for disposal and separation of garbage, organics and recycling materials. - Multi-family residents are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage and avoid contamination

¹ Program – Any initiative which supports multi-family waste reduction.

² Policy – Typically a bylaw or written requirement for multi-family building properties, which aims to reduce multi-family waste.

Port Coquitlam	<ul style="list-style-type: none"> - Ambassador Program - PoCo Sort & Report app - Sort it Right Guide - Zone map and collection schedule - Recollect app - Sorting guide posters in waste rooms - Multi-family buildings are required to separate recycling and organics from garbage and may opt for City's service or private collection
Port Moody	<ul style="list-style-type: none"> - Lobby events as requested by City and in case of high recycling contamination - Waste collection calendar - Solid Waste app - Handouts, flyers, and mail outs - Correction cards - Multi-family buildings serviced by the City are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage - Enforced through planning stages of new multi-family developments
Richmond	<ul style="list-style-type: none"> - Recycling Champion Program - Customer service information line 276-4010 - Staff outreach through lobby events, information sessions, in-person/virtual workshops and depot tours - Back to Recycling School Campaign for Glass and Hazardous Materials - Rethink Waste Campaign - Ads in elevators, transit shelters, Skytrain stations, City facility screens, YouTube videos, and material in other languages - Collection calendar and utility inserts - Recycling guides, brochures, posters, cart decals and contamination notice/letters - Richmond Recycling App - Reuse and Repair Cafe - Shred a Thon events - Youth education through Green Ambassadors Program - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage o Utilize City services <ul style="list-style-type: none"> ▪ Possible exemption for organics upon approval of alternate plan - Storage and placement of bins defined through design guidelines and reviewed by City staff

¹ Program – Any initiative which supports multi-family waste reduction.

² Policy – Typically a bylaw or written requirement for multi-family building properties, which aims to reduce multi-family waste.

Municipality	Summary of Education/Outreach Programs ¹ and Policies ²
Surrey	<ul style="list-style-type: none"> - Rethink Waste Guide - Waste Wizard and Rethink Waste Game - Collection schedule by property type - What Goes in Organics Poster - Translatable website and council-approved multilingual communications strategy - What Goes in Recycling Poster - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage o Utilize private collection or City's service
Vancouver	<ul style="list-style-type: none"> - Zero Waste Ambassadors Program - Monthly Recycling and Reuse Drop-off Events - Monthly Repair Cafes - Free Swap Events and Toolkit - Staff outreach at public events - Staff presentation and lobby talks offered - Social Media Campaigns throughout the year aimed at promoting diversion programs - Zero waste education program for K-12 students - City green bin program education – program brochures, acceptable/unacceptable posters, and welcome package including bin lid stickers and welcome posters - Collection calendar - City webpage with information such as list of private haulers and consideration when selecting one - Multi-family buildings are required to: <ul style="list-style-type: none"> o Have both an organic waste and a recyclable materials diversion plan - Design guidelines for multi-family developments - Rezoning Policy for Sustainable Large Developments – requirements to go above and beyond having the standard waste and recycling room - City crews provide collection to a small number of multi-family buildings with the rest serviced by private collection - Recollect App and Waste Wizard
West Vancouver	<ul style="list-style-type: none"> - Metro Vancouver waste room signage - How-to-guide for organics diversion - Metro Vancouver resources for multi-family - Letter to building managers where organics or recycling collection is not provided - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage o Have a diversion plan - Design guidelines for new multi-family developments
White Rock	<ul style="list-style-type: none"> - Web links to recycling information, resources, and drop-off locations - Municipal collection limited to buildings with up to 15 units - Multi-family buildings are required to: <ul style="list-style-type: none"> o Separate recycling and organics from garbage - Have a diversion plan

¹ Program – Any initiative which supports multi-family waste reduction.

² Policy – Typically a bylaw or written requirement for multi-family building properties, which aims to reduce multi-family waste.

To: Zero Waste Committee

From: Nathan Jamieson, Senior Project Engineer, Solid Waste Services

Date: September 4, 2025

Meeting Date: September 11, 2025

Subject: **Waste-to-Energy Facility District Energy System Project Update**

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated September 4, 2025, titled "Waste-to-Energy Facility District Energy Project Update".

EXECUTIVE SUMMARY

The Waste-to-Energy Facility District Energy System will provide heat and hot water for up to 50,000 homes and reduce greenhouse gas emissions by up to 70,000 tonnes per year. Agreements are now in place with River District Energy and the City of Burnaby for the sale of heat from the District Energy system. A street access agreement is now in place with the City of Burnaby, and a similar agreement is being finalized with the City of Vancouver.

Project procurement initiatives have begun with a contract awarded for the preloading of the energy centre site with work expected to begin in coming weeks. Completion of the construction of the infrastructure to provide heat to River District is expected in mid-2028.

The expected cost of the district energy system is within the approved funding allocation of \$217 million, with the cost-recovered over the life of the infrastructure through energy sales. The \$2.5 million funding from the Federal Low Carbon Economy Fund will assist with the project's debt financing needs ultimately lowering the cost of energy to the City of Burnaby and River District energy utilities.

PURPOSE

The purpose of this report is to provide the Zero Waste Committee with an update on the status of the Waste-to-Energy Facility District Energy System Project.

BACKGROUND

On October 27, 2023, the GVS&DD Board approved entering into agreements with the City of Burnaby and the City of Vancouver related to the district energy system. The Board previously approved entering into an agreement for heat sales with River District Energy. This report provides an update on agreements reached with the City of Vancouver, the City of Burnaby, and River District Energy, upcoming procurements and project schedule.

WASTE-TO-ENERGY FACILITY DISTRICT ENERGY SYSTEM PROJECT

The Waste-to-Energy Facility District Energy System provides an opportunity to triple the energy recovery efficiency of the Waste-to-Energy Facility, by providing heat and hot water for up to 50,000 homes and reducing greenhouse gas emissions by up to 70,000 tonnes per year.

Energy is recovered from the combustion of garbage through the hot water and steam that circulates through the Waste-to-Energy Facility. District energy involves using some of the steam to heat water that is delivered through an underground hot water piping network to nearby developments. The initial stage of the Waste-to-Energy Facility District Energy System includes building an energy centre adjacent to the Waste-to-Energy Facility, as well as a hot water pipe network from the facility to the River District Energy system located immediately west of Boundary Road at Marine Way in Vancouver. Once this is complete, the project will be extending the hot water pipe to Metrotown and Edmonds where the City of Burnaby is developing a district energy utility (Attachment 1).

Agreements

The following agreements are now in place:

- A thermal energy purchase agreement with River District Energy
- A thermal energy purchase agreement with the City of Burnaby
- A street access agreement with the City of Burnaby
- An encroachment agreement with the City of Burnaby for the construction of the energy centre adjacent to the Waste-to-Energy facility within a City of Burnaby street allowance

A street access agreement with the City of Vancouver similar to the City of Burnaby agreement is now being finalized. The thermal purchase agreements provide for the purchase of heat from the district energy system, with the purchase price set to allow recovery of infrastructure costs over the life of the agreements. The street access agreements describe the conditions for use of the City of Burnaby and City of Vancouver streets for installation of the hot water piping infrastructure.

Engagement

Metro Vancouver continues to engage with First Nations, periodically providing project updates and soliciting feedback as the project progresses. First Nations are invited to observe preparatory utility locate works as well and monitor construction activities as the project progresses. Metro Vancouver is also engaging with the public and stakeholders around the project area, keeping them informed of anticipated construction activities and their potential impacts. Engagement activities are led by Metro Vancouver in coordination with the City of Burnaby.

Procurement

The completion of this project involves multiple procurement initiatives. A contract is now in place for the construction services for site preparation at the energy centre, including construction of a new vehicle turnaround as well as pre-loading the energy centre building site. The next anticipated major procurement will be for construction of the buried piping that will carry hot water from the energy centre to the River District Energy System, scheduled for spring 2026. Procurement for construction of the energy centre is scheduled for summer 2026.

Schedule

As noted above, procurement processes are underway for the construction of the district energy system. Work on the energy centre site preparation is expected to begin in coming weeks once the contractor has obtained construction-related permits from Burnaby. The expected completion of construction of the energy centre and pipe network to deliver heat to River District is anticipated to be mid-2028.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The \$217 million for the Waste-to-Energy Facility District Energy System Capital Project is within the existing approved 2025-2026 Financial Plan and to be funded from new borrowing. The project is expected to be cost neutral over its life as energy sale revenues will fund capital and operating expenditures. To date there are secured contracts and customers with the City of Burnaby and River District.

Metro Vancouver has received \$2.5 million in funding from the Federal Low Carbon Economy Fund that will assist with the project's debt financing needs and to the overall cost of the system ultimately lowering the cost of energy to the City of Burnaby and River District energy utilities.

CONCLUSION

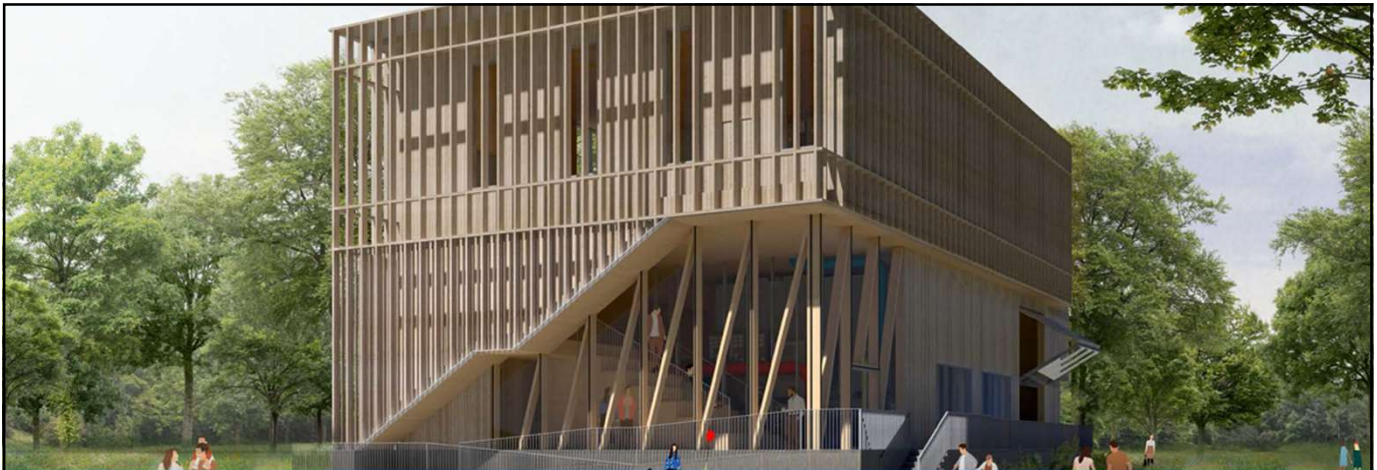
In October 2023, the Board approved entering into agreements related to the Waste-to-Energy District Energy System with the City of Burnaby and City of Vancouver. This report updates the Zero Waste Committee on various aspects of the project progress. Metro Vancouver has now finalized all necessary agreements to provide thermal energy to River District and the City of Burnaby. During the efforts to date, Metro Vancouver has continually engaged with First Nations, the public, and stakeholders around the project area. Some project procurement initiatives have begun, with procurement of major construction elements planned for 2026. Future updates will be provided as the project continues to advance.

ATTACHMENTS

1. Waste-to-Energy Facility District Energy System – Metrotown-Edmonds Conceptual Expansion.
2. Presentation re: Waste-to-Energy Facility District Energy System.

WASTE-TO-ENERGY FACILITY DISTRICT ENERGY SYSTEM Metrotown-Edmonds Conceptual Expansion





Waste-to-Energy Facility District Energy Centre design

Waste-to-Energy Facility District Energy System

Paul Henderson, P.Eng.

General Manager, Solid Waste Services

Zero Waste Committee Meeting, September 11, 2025

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WASTE-TO-ENERGY FACILITY DISTRICT ENERGY SYSTEM

- No change in Waste-to-Energy Facility emissions or amount of waste processed
- Triples energy recovery
- Heat and hot water for up to 50,000 homes
- Up to 70,000 tonnes per year of GHG emission reduction
- Self-funded over life of project



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COMPLETION OF AGREEMENTS

- Street access agreements with Burnaby
- Thermal energy sale and purchase agreements with Burnaby and River District
- Burnaby agreements executed on July 16, 2025
- Vancouver agreement on street access being finalized.



River District Energy Centre – Pump House

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RIVER DISTRICT CONNECTION

- Connection to River District Energy
- Construction includes 6-kilometres of hot water piping from the Waste-to-Energy Facility in Burnaby
- Expected in-service date: July 2028



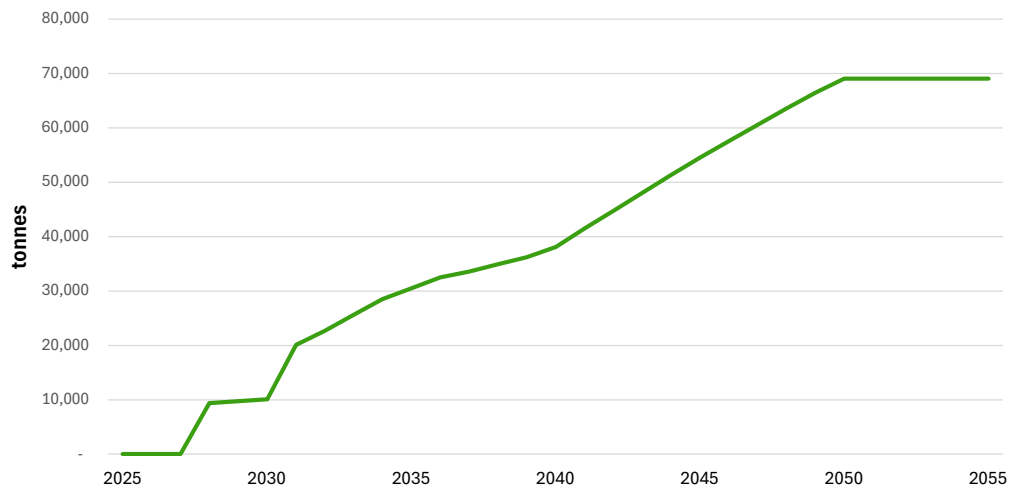
River District Energy Centre – Pump House

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PROJECTED ANNUAL GHG EMISSION REDUCTIONS



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FUTURE EXPANSION

- Connect to the Burnaby District Energy Utility
- Deliver to Metrotown and Edmonds neighbourhoods



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ENERGY CENTRE ADDITIONAL FEATURES

- an educational space
- public amenities, including two universal washrooms, and electric vehicle charging stations
- features that provide education on waste reduction, recycling, and the Waste-to-Energy Facility

Construction begins in 2025 with site pre-loading



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PROJECT BUDGET AND FUNDING

- Project budget: \$217 million
- Cost neutral over infrastructure life through energy sales.
- Received \$2.5 million Federal Low Carbon Energy Fund



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To: Zero Waste Committee

From: Brent Kirkpatrick, Lead Senior Engineer, Solid Waste Operations,
Solid Waste Services

Date: September 2, 2025

Meeting Date: September 11, 2025

Subject: **Waste-to-Energy Facility 2024 Financial Update**

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated September 2, 2025, titled "Waste-to-Energy Facility 2024 Financial Update".

EXECUTIVE SUMMARY

This report provides the annual financial update for the Metro Vancouver Waste-to-Energy Facility. The facility continues to be an environmentally sound, cost-effective disposal option. In 2024 the Waste-to-Energy Facility processed 243,168 tonnes of municipal solid waste at an overall net unit cost of \$99 per tonne for operation, maintenance and debt service. Waste-to-Energy Facility electrical revenues in 2024 continued to be impacted by the 2023 generator failure because the generator was not back in service until July 2024. Insurance claims related to the generator failure were resolved in 2024 with the insurance recoveries roughly balancing out the combination of the cost of the generator repair plus lost electrical revenue.

Waste-to-Energy Facility unit costs are consistent with the cost of managing waste at the Vancouver Landfill and roughly half the cost of managing waste through Metro Vancouver's contingency disposal contracts. Waste-to-Energy Facility costs are funded through garbage tipping fees paid by all solid waste system users.

PURPOSE

The purpose of this report is to provide the Zero Waste Committee with the annual financial update for the Metro Vancouver Waste-to-Energy Facility located in Burnaby.

BACKGROUND

Annually, results of the operation of the Waste-to-Energy Facility and contract with Covanta Burnaby Renewable Energy, ULC (Covanta), including tonnages, expenditures, revenues, service level and performance, and unit costs, are provided to the Zero Waste Committee for information.

2024 WASTE-TO-ENERGY FACILITY FINANCIALS

Table 1 provides the past three years of expenditures for the Waste-to-Energy Facility. Total expenditures include operations and maintenance of the Waste-to-Energy Facility, ash management costs, and capital project debt service costs. 2024 operating costs include the cost of the generator repair, equal to \$3.9 million. Total ash management costs in 2024 were comparable to 2023. Capital project debt service costs have increased as a result of new capital projects. The majority of the capital costs from the past three years have been associated with the feed hopper construction project, fly ash silo refurbishment and the primary economizer replacement project.

Table 1: 3-Year Expenditures for the Waste-to-Energy Facility

	2022	2023	2024
Operating Cost	\$20,226,031	\$21,932,040	\$27,301,951
Fly Ash Disposal Costs	\$1,455,819	\$1,514,159	\$1,873,316
Bottom Ash Disposal Costs	\$1,767,871	\$2,219,025	\$1,752,556
Capital Project Debt Service Costs	\$859,075	\$1,021,203	\$2,689,123
Total Expenditure	\$24,308,868	\$26,686,427	\$33,616,947
Tonnage	233,052	236,278	243,168
Unit Cost / Tonne	\$104.31	\$112.95	\$138.25

Table 2 outlines Metro Vancouver's portion of offsetting revenues. Electrical revenue in 2024 continued to be reduced due to the generator failing in September 2023, with approximately \$2 million less electrical revenue compared to 2022. The generator has now been repaired and back in service as of early July 2024. Insurance claims related to the generator failure have been resolved with the insurance providers. Metal revenues are tied to the commodity value of the metal at any given time. Incremental revenue associated with Special Handle Waste destruction has been included in 2024. The majority of this waste is international marine and airline waste designated by the Canadian Food and Inspection Agency designates for destruction.

Table 2: Metro Vancouver's Portion of Electrical and Metal Revenues for the Waste-to-Energy Facility

	2022	2023	2024
Electrical Revenue	\$5,705,028	\$4,597,068	\$3,649,146
Metals Revenue	\$360,428	\$309,482	\$291,476.77
Special Handle Waste Increment	Not Included	Not Included	\$1,620,343
Tonnage	233,052	236,278	243,168
Unit Revenue / Tonne	\$26.03	\$20.77	\$22.87

Table 3 shows the net cost per tonne for the generator repair, including repair costs and insurance claim settlements for business interruption insurance and property insurance.

Table 3: Generator Repair Costs Settlement

Generator Repair Costs	(\$3,940,867)
Business Interruption Insurance	\$5,015,317
Property Insurance	\$2,902,474
Net Generator Repair Revenue	\$3,976,924
Net Generator Repair Revenue / Tonne	\$16.35

For 2024, the overall financial impact of the generator failure is approximately cost neutral in that electricity revenue loss plus the cost of the generator repair was approximately \$6 million, and the insurance recovery was \$7.9 million.

Table 4 shows net cost per tonne for the Waste-to-Energy Facility from 2022 to 2024. An approximate \$7 per tonne increase in net costs was observed between 2023 and 2024.

Table 4: 3-Year Net Unit Cost for Operation and Maintenance of the Waste-to-Energy Facility

	2022	2023	2024
Unit Cost / Tonne (from Table 1)	\$104.31	\$112.95	\$138.25
Unit Revenue / Tonne (from Table 2)	\$26.03	\$20.77	\$22.87
Generator Repair Revenue / Tonne (Table 3)			\$16.35
Net Unit Cost / Tonne	\$78.28	\$92.18	\$99.02

Comparative Disposal Costs

Garbage is disposed primarily at the Waste-to-Energy Facility or the Vancouver Landfill. Garbage in excess of the local disposal capacity is managed through contingency disposal contracts where garbage is shipped to remote landfills. Table 5 shows disposal costs associated with the three disposal options. Each of the costs include disposal along with recycling and waste centre and transportation costs. Recycling and waste centre and transportation costs are different for each option because of the differences in the relative amount of garbage initially received at a recycling and waste centre. The Waste-to-Energy Facility has low relative cost because the facility is located close to the urban core, and a large portion of the garbage received at that facility is direct hauled there. Comparatively, all garbage sent to contingency disposal is initially received at a recycling and waste centre.

Vancouver landfill costs include all operating and capital costs allocated to Metro Vancouver, estimated closure and post closure costs, and royalties along with recycling and waste centre and transportation costs. The Waste-to-Energy Facility costs are as noted above with the addition of recycling and waste centre and transportation costs. Contingency disposal costs are average contingency disposal contract costs plus recycling and waste centre costs.

Looking into the future, Waste-to-Energy Facility capital projects over the next five years are expected to add approximately \$55 per tonne in debt service costs by 2030. District energy and biosolids capital are not included in that calculation given those projects will be funded through new revenues. Capital and operating costs will continue to be reviewed with the goal of minimizing costs wherever possible.

Table 5: Metro Vancouver Disposal Costs

	Vancouver Landfill	Metro Vancouver Waste-to-Energy Facility	Contingency Disposal
Total Costs / Tonne	\$123.1	\$122.9	\$230.6

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The net cost per tonne of operation, maintenance and debt servicing for the Waste-to-Energy Facility for 2024 was \$99.02 per tonne. Comparing the Waste-to-Energy Facility unit cost for 2024 to 2023 is challenging due to the implications of the generator repair and associated insurance recoveries. Additionally, incremental revenues for Special Handle Waste (difference between the amount charged for Special Handle Waste such as international waste and the amount charged for regular garbage) have not previously been included in the revenue calculations for the Waste-to-Energy Facility.

The Waste-to-Energy Facility continues to be a cost-effective disposal option. Unit costs are comparable to managing garbage at the Vancouver Landfill and approximately half the cost of managing garbage through contingency disposal contracts, where garbage is shipped to remote landfills for disposal. Both the Waste-to-Energy Facility and the Vancouver Landfill are operated to their maximum annual capacity.

Consistent with rest of the solid waste system, Waste-to-Energy Facility costs are funded through garbage tipping fees paid by all solid waste system users.

CONCLUSION

Expenditures in 2024 for the Waste-to-Energy Facility totaled \$30.9 million, resulting in an expenditure of \$138.25 per tonne. Metro Vancouver's portion of electrical revenue, metals revenues, and Special Handle Waste incremental revenue totaled \$5.6 million or \$22.87 per tonne. Based on the plant processing 243,168 tonnes of municipal solid waste in 2024, the net unit cost was \$99.02 per tonne for operation and maintenance of the Waste-to-Energy Facility.

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To: Zero Waste Committee

From: Sahar Ahmadvand, Assistant Project Engineer, Solid Waste Services

Date: September 3, 2025

Meeting Date: September 11, 2025

Subject: **Programs and Policies for Waste Reduction at Public Events**

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated September 3, 2025, titled "Programs and Policies for Waste Reduction at Public Events".

EXECUTIVE SUMMARY

At its April 3, 2025 meeting, the Zero Waste Committee requested information on the work of Metro Vancouver and member jurisdictions to reduce waste at community public events. This report is a summary of Metro Vancouver initiatives, member jurisdiction programs and policies, and emerging trends across Canada that support event organizers in waste prevention and recycling. Metro Vancouver and member jurisdictions support waste reduction at events through a variety of programs, policies and resources, including event planning guidance and support, setting recycling requirements as part of municipal permitting, and supplying zero waste stations and vendor education. Further support for waste reduction at events includes a move towards reusable cups and containers at event venues, and additional actions are being considered as part of an updated solid waste management plan.

PURPOSE

The purpose of this report is to provide the Zero Waste Committee with an overview of available resources, programs and policies in member jurisdictions, and initiatives led or supported by Metro Vancouver aimed at preventing and reducing waste at public events. This report supports ongoing collaboration and knowledge exchange with members, helping to strengthen collective efforts toward regional waste reduction goals.

BACKGROUND

At its April 3, 2025 meeting, the Zero Waste Committee requested information on actions that member jurisdictions are taking to reduce waste and encourage recycling at public events permitted by member, and how Metro Vancouver supports this work.

WASTE REDUCTION PROGRAMS, POLICIES, AND RESOURCES FOR PUBLIC EVENTS IN METRO VANCOUVER

Public events face a range of waste management challenges, including a high volume of single-use items, specialized temporary waste receptacles and recycling stations, and cross-contamination of waste streams. Member jurisdictions have a range of programs and policies in place or under development to address these issues, and the permitting public events is under the jurisdiction of the host municipality. While Metro Vancouver is not involved with setting requirements for waste management at public events generally, it does require large events held in regional parks to

manage their waste as part of the Special Event/Use Permit process. Event organizers are encouraged to follow the *Green Best Practices for Events in Regional Parks* guide (Reference 1), which outlines strategies such as developing a waste management plan, using clearly labeled bins for multiple waste streams, training staff and volunteers, and promoting reusable and compostable food service items. Metro Vancouver also supports event waste reduction and recycling through best practices information sharing, data collection, and advocacy.

Member Jurisdiction Programs, Policies, and Resources

Findings from interviews with municipal staff and a desktop review of programs and policies in the region that target waste reduction and recycling at public events indicate a range of approaches, from voluntary guidelines to mandatory permitting requirements. These are summarized in Table 1 (Attachment 1). Example highlights include:

- *Event planning guidance and support*
The City of Vancouver provides event organizers a comprehensive Green Event Planning Guide and a Sustainable Event Toolkit, which provide information and a checklist on event zero waste planning, volunteer/employee training, and expectations regarding proper waste management, including litter-free commitments and options to reduce waste such as by using reusable dishware. Completion of a green event form is required prior to the City's approval of the event.
- *Recycling planning requirements*
Several member jurisdictions require recycling management planning, especially for larger events. For example, North Vancouver City and District require Zero Waste Management Plans for events held in parks. Organizers are encouraged to hire specialized recycling service providers, and may be charged in accordance with Metro Vancouver Disposal Ban Program if recyclables are found in garbage bins. The City of Surrey has similar requirements and ensures compliance at large events by conducting site visits before and after.
- *City-supplied zero waste stations and outreach support*
The City of Richmond and City of Coquitlam provide access to clearly labeled bins, and support outreach at events. The City of Burnaby does the same for city-led events. The City of Richmond also provides hands-on support for event organizers through their Green Ambassadors youth program.
- *Food vendor education*
Food trucks are popular at events. The City of Coquitlam provides educational materials, including information for food vendors on how to properly dispose of fats, oils and grease.

Metro Vancouver Programs and Resources

A recent example of how Metro Vancouver supports waste reduction and recycling for events is a contract with the not-for-profit organization, Ocean Ambassadors Canada. In 2024, outreach and education was provided by Ocean Ambassadors Canada at 15 different community events across the region. Their focus in 2024 was to work with event organizers most interested in implementing a reusable cup and container sharing platform at their events. Thousands of people attended the 2025 Hyack Festival, which was a successful event using reusable food service ware for the second year in a row. Food vendors were acquainted with the return of reusable food service ware to the event. Ocean Ambassadors Canada provided support in planning the initiative, dispersed reusable containers to food trucks periodically, and provided education to residents and assisted with hands-on sorting of the reusable cups and containers.

Metro Vancouver is also responding to interest in zero waste events in the region by prioritizing the development of a zero-waste events guide in 2025. Resources for event planners have historically focused on recycling, while lacking information on reuse and reduction. The new guide will act as a convenient resource that event organizers can refer to at their own pace to implement waste reduction strategies.

In 2022 Metro Vancouver contracted Dillon to review waste management practices at the PNE Fair. The review found opportunities to further reduce waste at the PNE, particularly organics as it was determined to be the largest component of the overall pre-sorted material (80%). Based on the study results, in 2023 the PNE prioritized enhancing vendor education on waste sorting, began reviewing the opportunity of a reusable cup pilot, and increased back-of-house organics diversion.

Other examples of how waste reduction and recycling for events is supported include:

- Metro Vancouver participates in the Canada Plastics Pact. Through the Reuse Working Group, staff have been involved with the development of a reuse accelerator pod and reuse case studies, and advocating for prioritizing reuse infrastructure development in Canada. This work will benefit event organizers.
- Through the University of British Columbia Scholars Program, Metro Vancouver hired a business student to identify and report on best practices and lessons learned to guide the large-scale implementation and promotion of reusable food service ware. The report titled *Toward Zero Waste: Case Studies and Policy Guidelines for Reusable Food Service Ware* is available online through the UBC Sustainability Scholar Project Library (Reference 2). It highlights successful local examples, such as Bard on the Beach, where a reusable cup program was implemented effectively in a 2022 public gathering with up to 1,000 attendees a night.
- To support the adoption of reuse across sectors, the National Zero Waste Council through its Reuse Working Group, has produced a series of case studies, a video, and a national webinar that features reuse system providers. Together, these knowledge-sharing pieces are intended to demystify how reuse can work. Businesses that use reuse systems, as well as businesses providing reuse solutions, share how they are involved in scaling reuse and refill for food and beverage containers, transportation packaging, and cleaning products.

Emerging Trends and Opportunities

A variety of resources and services are available to support waste reduction and recycling at public events across the region. A number of waste reduction and recycling specialty companies offer tailored support to event organizers, including pre-event consulting, on-site waste sorting, on-site composting technologies, and post-event diversion reporting. In addition, research from UBC highlights the role of trained volunteers in improving recycling accuracy at events (Reference 3). Volunteers stationed at waste sorting stations assist attendees in correctly separating materials, helping reduce contamination and increase recycling rates. These examples reflect the range of tools and partnerships available throughout the region that contribute to more effective waste management at community and public events.

There is growing movement in other Canadian jurisdictions to support reuse at public events through planning resources, partnerships, and operational models. The City of Victoria's *Zero Waste Event Guide* encourages organizers to use reusable cups, dishes, and cutlery, and to share sustainable packaging guidelines with vendors (Reference 4). The City of Edmonton provides a *Single-Use Best Practices Guide* for event organizers, which promotes the use of reusable alternatives at festivals, block parties, and community events (Reference 5). The Toronto Zoo, in partnership with various private sector organizations, has launched a reusable packaging program that allows visitors to use reusable containers and cups with a refundable deposit system. Returned items are professionally sanitized and recirculated, with the initiative expected to divert over 120,000 single-use cups annually (Reference 6).

Several draft action options for the updated solid waste management plan include updates policies, programs and resources to help the region adopt these emerging trends and opportunities for waste reduction at events.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report. Programs and initiatives to support and encourage waste reduction and recycling at major public events are carried out within existing regional budgets.

CONCLUSION

This report provides an overview of diverse programs, policies, and resources in place across Metro Vancouver municipalities and example best practices in other Canadian jurisdictions to support waste reduction and recycling at public events. Improved recycling sorting and increasing the use of reusable cups and containers at event are expected to be an area of focus in the updated solid waste management plan.

ATTACHMENTS

1. Municipal programs, policies, and resources for waste reduction at public events.

REFERENCES

1. Metro Vancouver. (2025). *Green Best Practices for Events in Regional Parks*.
<https://metrovanancouver.org/services/regional-parks/Documents/green-best-practices-for-events-in-regional-parks.pdf>.
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3. UBC Science. (2018). "Recycling may be confusing but volunteers help get it right".
<https://science.ubc.ca/news/recycling-may-be-confusing-volunteers-help-get-it-right>.
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5. City of Edmonton. (2024, May). *Reducing Single-Use Items: Best Practices for Event Organizers*.
6. City of Toronto. (2025, July 15). "Your Toronto Zoo Launches Reusable Packaging Program in Partnership with Friendlier & Coca-Cola".
<https://www.torontozoo.com/mediaroom/press2025/20250715>.

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Member jurisdiction*	Public events** programs, policies, and resources
Burnaby	<ul style="list-style-type: none"> - For all City-led events and any community event that City is invited to, which is directed towards Burnaby residents, City provides: <ul style="list-style-type: none"> • Physical bins for recycling and food scraps • Posters • City's outreach tent - For rental of community facilities: <ul style="list-style-type: none"> • Parks, Recreation and Culture have policies and staff dedicated to the rental of fields and community spaces inside and out. • Solid Waste and Recycling division of Engineering provides garbage, recycling and food scrap bins, litter clean-up and removal services as requested. • Solid Waste and Recycling division of Engineering provides physical barriers in the form of large and small collection vehicles in coordination with RCMP to ensure public spaces are protected during large events such as Canada Day.
Coquitlam	<ul style="list-style-type: none"> • All outdoor events over 100 people: organizers are required to review and complete the waste form in advance of securing a permit/booking. • At City Hall or for indoor events, staff may use the civic facility recycling stations for sorting waste. • City loans out four stream waste stations to encourage waste diversion at events. • City Events Staff utilize a guideline document, which lists key event recycling and waste reduction considerations. • Events involving food vendors are also provided with the City's fats, oils and grease disposal education brochure. • Some organizers bring in a supplier who staffs each station to encourage diversion and then sorts the waste piece-by-piece before it goes into the yard bins for disposal. • City provides advice on occasion, and sometimes attend meetings, mainly for larger events such as Canada Day.
Delta	<ul style="list-style-type: none"> • City promotes and supports recycling at several community events. • Sorting games and educational outreach twice monthly at community events promoting proper waste sorting. • City collects recycling from parks/facilities and also has a dog-waste component at certain parks. More dog-waste bins expected in the near future. • Waste sorting station for some events. • Upcoming free workshops on waste prevention.
Langley Township	<ul style="list-style-type: none"> • Township provides smaller event recycling and waste stations (x-frames) for small to mid-sized third-party community events and larger event multi-stream waste stations for large third-party community events. • Event multi-stream waste stations are set-up at Township-organized events • Permanent multi-stream waste bins are provided in parks, along trails, and in public streetside locations across the Township.
Maple Ridge	<ul style="list-style-type: none"> • The City encourages easy-to-use solutions by providing recycling and waste stations for third-party community festivals. • Permanent multi-stream waste bins are provided in parks, along trails, and in public street side locations across the City. • Event organizers are required to indicate how they will manage garbage and recycling by completing and submitting the Waste & Recycling Plan Template • Some community and City-led festivals hire specialized companies to provide education and direct support managing garbage and recycling. • Smaller community and City-led events make use of portable sorting equipment.

*Public events led by member jurisdiction or (permitted) events held by other organizers

**Some municipalities with relevant programs and policies may not be listed due to unconfirmed updates for 2025.

Member jurisdiction*	Public events** programs, policies, and resources
North Vancouver City	<ul style="list-style-type: none"> Organizers of all public or private events held in municipal parks are required to provide a Zero Waste Management Plan, found at North Vancouver Recreation and Culture Event Planning Guide <ul style="list-style-type: none"> The guide requires event organizers to provide on-site recycling to ensure recyclables do not enter the garbage. They are encouraged to hire an organization that specializes in Recycling as organizers may be charged if recyclables are found in the garbage.
North Vancouver District	<ul style="list-style-type: none"> North Vancouver Recreation and Culture Event Planning Guide <ul style="list-style-type: none"> The guide requires the organizers of events held in parks to provide on-site recycling to ensure recyclables do not enter the garbage. They are encouraged to hire an organization that specializes in Recycling as organizers may be charged if recyclables are found in the garbage.
Pitt Meadows	<ul style="list-style-type: none"> Recycling bins made available for events such as Pitt Meadows Day, Easter, and Christmas For private and public events it's required that food vendors use certified compostable food ware
Port Coquitlam	<ul style="list-style-type: none"> City provides labelled carts for City events and encourages proper diversion City ambassadors provide educational sessions and take-away materials via pop-up tent at select city events City staff removes waste, litter picks event sites, and does final cleanup
Port Moody	<ul style="list-style-type: none"> The City of Port Moody provides the following guides: <ul style="list-style-type: none"> Festival and Special Events Handbook, Sustainable Events Policy (and special event waste management planning tool). Find more information at: Hosting a Festival or Special Event City of Port Moody
Richmond	<ul style="list-style-type: none"> Organizers of all special events held in Richmond are required to submit a waste management/ recycling plan for City approval through the Richmond Event Application Coordination Team. Provide free garbage/recycling bin rentals with clearly labelled special events bins for community events. Material is collected at the end of the event and recycled accordingly. - http://cms.richmond.ca/Page13430.aspx?PageMode=Hybrid Green Ambassadors – youth volunteers that assist with outreach, education and sorting at City and some community events Referral from Public Works and Transportation Committee on January 2025 “to accelerate the reduction of plastic pollution, by directing staff to research the feasibility of implementing the use of reusable food containers at restaurants and large events” 7 Step Quick Guide including the Sustainable Food Service Guide Richmond Sustainable Event Toolkit Event Planning Resources – Richmond.ca/Event Planning
Surrey	<ul style="list-style-type: none"> City contracts out waste management services for the City's major annual festivals. The contractor works closely with City of Surrey's Special Events Section: Special Events – Waste Management City of Surrey Third party hosted events are required to share a Waste Management Plan. Larger events hire a Waste Management Company. Site visits are done before and after major events. Free litter picking equipment and education around safe community clean ups are available through Our City and Partners in Parks A condition for approval for large, outdoor events is for proper disposal of oil/grease produced at events.
Vancouver	<ul style="list-style-type: none"> The Park Board Special Events Office manages events held in Park and on the seawall, and City Special Events Office (FASE) manages events held on streets, sidewalks, and public plazas. A permit must be obtained from the city to host a public event. This includes the requirement of managing waste created from the event and keeping the area litter-free. City has a Green event planning guide to help organizers with greening their event – http://vancouver.ca/doing-business/greening-your-event.aspx Organizers can choose to have the City or hire their own private hauler to remove waste from the event. Use of reusable cups/containers at some civic facilities that host events such as Queen Elizabeth, Orpheum

*Public events led by member jurisdiction or (permitted) events held by other organizers

**Some municipalities with relevant programs and policies may not be listed due to unconfirmed updates for 2025.

Member jurisdiction*	Public events** programs, policies, and resources
West Vancouver	<ul style="list-style-type: none"> • District has a set of green event guidelines, but no official policy. • The list of green event guidelines for third party events are on the special events webpage - https://westvancouver.ca/arts-culture/festivals-special-events/special-events • Additionally, the District provides contracted waste sorting services (Green Chair) at major District-led events, including Persian New Year, Harmony Arts, Community Cultural Festival, Canada Day. • No specific waste management policy for the rental of community facilities, but all facility users are encouraged to use the civic garbage and recycling program, which includes garbage, paper, container, and organics recycling.
UBC and UNA	<ul style="list-style-type: none"> • For several major annual campus events (held by the university or it's associated organizations), the Zero Waste / Sustainability planning team engages and collaborates with the event organizers to ensure waste sorting bins are provided with accompanying signage. We also occasionally provide guidance on compostable and recyclable food ware. This is not a requirement, but often happens due to past collaborations and close working relationships with organizers. • On campus waste collection for events is managed by UBC Waste Management. Organizers must get in touch with them, and this also allows us to require organizers to order organics and recycling bins, not just garbage. • Sustainability and campus planning staff are occasionally engaged to assist the public in waste sorting for certain events. • We have a "Zero Waste Events Guide", available for public use. https://sustain.ubc.ca/resources/take-action-tips/green-your-events • Contingent on priority and staff capacity, we may organize and deploy "Zero Waste Squad" volunteers to guide and educate the public at large events
Bowen Island	<ul style="list-style-type: none"> • For permitted events on municipal property the event permit states that any garbage, debris, or other foreign material resulting of the parade, event or procession be removed by the Permittee at their own expense. • The Bowen Island Community Centre has several rental spaces, including meeting/multipurpose rooms, a small kitchen/concession, a theatre space, and outdoor spaces. For room rentals at the Community Centre the Municipality requires garbage and recycling to be taken away by the Event Organizers. • For Municipal events out of the Community Centre such as Canada Day the Municipality provides garbage and recycling receptacles. Municipal staff are responsible for sorting and washing and removal is done by the Municipal waste contractor.

*Public events led by member jurisdiction or (permitted) events held by other organizers

**Some municipalities with relevant programs and policies may not be listed due to unconfirmed updates for 2025.

To: Zero Waste Committee

From: Andrew Doi, Environmental Planner, Solid Waste Services

Date: September 2, 2025

Meeting Date: September 11, 2025

Subject: **Updated Extended Producer Responsibility Five-Year Action Plan**

RECOMMENDATION

That the GVS&DD Board authorize the Chair to send a letter, in substantially the same form as Attachment 1 of the report dated September 2, 2025, titled "Updated Extended Producer Responsibility Five-Year Action Plan", to the Minister of Environment and Parks highlighting the benefits that will be achieved through the inclusion of new products such as small compressed gas containers and medical sharps used at home in the extended producer responsibility program, and reiterating the importance of the inclusion of mattresses in the program along with the impact on municipalities and users of the regional solid waste system if mattresses are not added.

EXECUTIVE SUMMARY

British Columbia is a leader in extended producer responsibility, and the Province's *Advancing Recycling in B.C. Extended Producer Responsibility Five-Year Action Plan 2021-2026*, identified priority product categories for addition to the program including automotive products, compressed canisters, additional battery categories, medical sharps used at home, and mattresses and foundations. In July 2025 Metro Vancouver was advised that due to consumer affordability challenges, the Ministry of Environment and Parks are not recommending inclusion of mattresses and foundations in the program at this time, but that the other product categories are expected to be added as originally proposed.

If mattresses and foundations are not added to the extended producer responsibility program, municipalities and users of the regional solid waste system will continue to subsidize management of the mattresses and foundations. As part of the 2026 budget phased increases in the fee charged for mattress and foundations at regional solid waste facilities will be recommended, starting with an increase from \$15 to \$20 per unit for January 2026.

This report recommends the Board Chair write to the Minister of Environment and Parks reiterating the importance of including mattresses and foundations in the extended producer responsibility program.

PURPOSE

To inform the Zero Waste Committee and GVS&DD Board of a change in the *Advancing Recycling in B.C. Extended Producer Responsibility Five-Year Action Plan 2021-2026*, and to provide the opportunity to consider writing a letter to the Province.

BACKGROUND

Advancing Recycling in B.C. Extended Producer Responsibility Five-Year Action Plan 2021-2026, was published by the Province in 2021 to outline B.C.'s priorities to continue to advance as a leader in extended producer responsibility and waste prevention. These priorities included the development of policy options along with the proposed regulation of mattresses and moderate risk products, such as automotive products, compressed canisters, batteries, and medical sharps used at home. In September 2024, the Zero Waste Committee and GVS&DD Board received a report titled "Expanding Product Categories in Extended Producer Responsibility" which communicated a notification from the Province of a delay in regulating the product categories identified in the *Advancing Recycling in B.C. Extended Producer Responsibility Five-Year Action Plan 2021-2026*. The Chairs of the GVS&DD Board and Zero Waste Committee sent a letter to the Minister of Environment and Parks to request expedited amendments to the *B.C. Recycling Regulation* to include mattresses, compressed canisters, fire extinguishers, medical sharps, and other priority products.

In July 2025, Metro Vancouver staff and other interested parties were informed that due to consumer affordability challenges, the Ministry will not be recommending the inclusion of mattresses as a new product category at this time. For consideration by the Provincial government this year, the Ministry is still proposing to regulate other moderate risk products, such as automotive products, compressed canisters, batteries, and medical sharps used at home.

LOCAL GOVERNMENT APPROACH TO EXTENDED PRODUCER RESPONSIBILITY

For over two decades, extended producer responsibility has been a key policy in B.C. for the management of end-of-life products. The Province of B.C. is a recognized leader in extended producer responsibility, and local governments have been long-standing proponents of adding new product categories to these programs to help achieve waste reduction goals (e.g., packaging and paper products), abate littering (e.g., beverage containers), or address problematic (e.g., tires) or hazardous waste (e.g., used oil and antifreeze). Since many extended producer responsibility programs charge advance-disposal fees (i.e., eco-fees) to support program operation and administration, this approach to end-of-life management of products helps to promote greater equity among consumers, since those who consume more products, pay more of the costs of the collection and recycling system. In the absence of regulated extended producer responsibility programs, these systems are funded by ratepayers and taxpayers, with the corresponding tax and utility bills being de-linked from the consumption rate of products.

Extended Producer Responsibility for Mattresses, Foundations and Moderate Risk Products

The continued consideration of moderate risk products is encouraging, for items such as automotive products, compressed canisters, batteries, and medical sharps used at home. The uncertainty regarding the implementation timeline for mattresses and foundations is challenging for Metro Vancouver and member jurisdictions, who continue to request that this category be regulated as soon as possible.

Metro Vancouver implemented a disposal ban for mattresses and foundations in 2011. This key decision helped to establish mattress recycling collection and processing infrastructure throughout the province. Metro Vancouver's Board has communicated the importance of shifting the financial responsibility to producers for the recycling mattresses and foundations in 2012, 2016, 2020, and 2024. This request is largely due to the mattress and foundation product category's compatibility with an extended producer responsibility approach — given the limited number of producers, the recyclability of materials in mattresses and foundations, and mattresses being expensive to manage, problematic and undesirable as municipal solid waste.

Several jurisdictions in North America — including California, Connecticut, Oregon and Rhode Island — have already enacted regulations and implemented extended producer responsibility programs for mattresses. Lessons learned from these jurisdictions, which include some long-standing programs spanning over a decade, could help inform the development of a new, best-in-class mattress program in British Columbia.

ALTERNATIVES

1. That the GVS&DD Board authorize the Chair to send a letter, in substantially the same form as Attachment 1 of the report dated September 2, 2025, titled "Updated Extended Producer Responsibility Five-Year Action Plan", to the Minister of Environment and Parks highlighting the benefits that will be achieved through the inclusion of new products such as small compressed gas containers and medical sharps used at home in the extended producer responsibility program, and reiterating the importance of the inclusion of mattresses in the program along with the impact on municipalities and users of the regional solid waste system if mattresses are not added.
2. That the Zero Waste Committee receive for information the report dated September 2, 2025, titled "Updated Extended Producer Responsibility Five-Year Action Plan".

FINANCIAL IMPLICATIONS

Without an extended producer responsibility program in place for mattresses and foundations, recycling costs for these items are paid on disposal. Metro Vancouver receives a large number of mattresses and foundations at its recycling and waste centres. In 2024, for example, 90,573 units were collected at Metro Vancouver recycling and waste centres. On-site handling, transportation and processing costs for collected mattresses and foundations exceeded \$3.5 million in 2024, producing a per unit total cost of over \$38, more than double the \$15 per unit fee charged to individuals dropping off the mattresses and foundations. The resulting subsidy by the users of the regional solid waste system is between \$1.5 to \$2.0 million per year to fund the gap between the drop-off fee and the cost of recycling.

Aside from Metro Vancouver's costs for managing mattresses and foundations, member jurisdictions expended additional costs for large-item pick-up services for residents, illegal dumping clean-up costs, and hauling to Metro Vancouver recycling and waste centres. Although it is not possible to isolate costs for mattresses and foundations only, the overall costs for the services were over \$6 million in 2023.

With the expectation that mattresses and foundations will not be added to the extended producer responsibility program in the near term, Tipping Fee Bylaw changes will be recommended to gradually increase the recycling cost for mattresses and foundations to pay for the full cost of recycling. Beginning in 2026, the current \$15 per unit fee will be recommended to increase to \$20 per unit through proposed amendments to the Tipping Fee Bylaw which will be presented at upcoming Zero Waste Committee and GVS&DD Board meetings. The current \$15 fee has been in place for more than 10 years with no adjustments.

CONCLUSION

Metro Vancouver and member jurisdictions have collected and recycled mattresses and foundations since the disposal ban was enacted in 2011. Although the Province's continued consideration of moderate risk products, such as automotive products, compressed canisters, batteries, and medical sharps used at home, is encouraging, the uncertainty regarding the implementation timeline for mattresses and foundations remains challenging. As a result, continued advocacy through a letter to the Minister of Environment and Parks is important to reiterate the need for swift action and address the significant taxpayer/ratepayer subsidy towards the costs of managing mattresses and foundations that could be managed and paid for by producers. Accordingly, Alternative 1 is recommended.

ATTACHMENTS

1. Metro Vancouver. (2025). Draft letter to the Honourable Tamara Davidson, Minister of Environment and Parks. "Updated Extended Producer Responsibility Five-Year Action Plan".



Office of the Chair
Tel. 604-432-6215 or via Email
CAOAdministration@metrovancover.org

Click or tap to enter a date.

File: File Number
Ref: Reference Number

The Honourable Tamara Davidson, M.L.A.
Minister of Environment and Parks
PO Box 9047 Stn Prov Gov
Rm 112, Parliament Buildings
Victoria, BC V8W 9E2
VIA EMAIL: ENV.Minister@gov.bc.ca

Dear Minister Davidson:

Updated Extended Producer Responsibility Five-Year Action Plan

Metro Vancouver is encouraged that the Province is considering adding new moderate risk products, such as automotive products; compressed canisters; emerging electronic products with batteries; and medical sharps used at home, to the *Recycling Regulation* as previously identified in Ministry's document *Advancing Recycling in B.C., Extended Producer Responsibility Five-Year Action Plan 2021-2026*. Based on communications from Ministry of Environment and Parks staff, we understand that mattresses and foundations are not anticipated to be added to the *Recycling Regulation* at this time although they were included in the 2021-2026 Five-Year Action Plan. Mattresses and foundations remain a priority for Metro Vancouver and its member jurisdictions, and we continue to request that they be added to the *Recycling Regulation* as soon as possible.

Metro Vancouver implemented a disposal ban for mattresses and foundations in 2011. This key decision helped to establish mattress recycling collection and processing infrastructure throughout the province. Metro Vancouver's Board has communicated the importance of shifting the financial responsibility to producers for the recycling mattresses and foundations in 2012, 2016, 2020, and 2024. This request is largely due to the mattress and foundation product category's compatibility with an extended producer responsibility approach — given the limited number of producers, the recyclability of materials in mattresses and foundations, and mattresses being expensive to manage, problematic and undesirable as municipal solid waste.

In 2024 alone, Metro Vancouver collected over 90,000 mattresses and foundations at its regional recycling and waste centres. Customers have been charged a fixed mattress fee of \$15 per unit (mattress and foundations each count as one unit) for more than ten years to help reduce the potential for illegal dumping. The cost of managing those mattresses and foundations has increased

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to nearly \$40 per unit, resulting in a subsidy by the users of the regional solid waste system of between \$1.5 to \$2.0 million per year to fund the gap between the drop-off fee and the cost of recycling. In addition, member jurisdictions spend millions of dollars annually on illegal dumping clean-up and bulky item pick-up programs, with mattresses representing a key product category in both initiatives. The cost of managing end-of-life mattresses should not be borne by users of the regional solid waste system, member jurisdictions, or others cleaning up illegal dumping on public and private lands.

Several jurisdictions in North America — including California, Connecticut, Oregon and Rhode Island — have already enacted regulations and implemented extended producer responsibility programs for mattresses. Lessons learned from these jurisdictions, which include some long-standing programs spanning over a decade, could help inform the development of a new, best-in-class mattress program in British Columbia. Metro Vancouver and its member jurisdictions, along with many local governments across the province, are united in calling for producers to begin the successful implementation of a mattress program, consistent with models applied to electronics, packaging, tires, and other product categories.

Metro Vancouver sincerely appreciates the Ministry's efforts to expand extended producer responsibility programs to include automotive products, compressed canisters, emerging electronic products with batteries, and medical sharps used at home. However, to build upon these important efforts, we continue to request that mattresses and foundations be included in the *Recycling Regulation* as soon as possible.

We appreciate your attention to this matter and would be pleased to discuss any aspect of our letter with you at your convenience. Ministry staff are welcome to contact Paul Henderson, General Manager, Solid Waste Services, by phone at 604-432-6400 or by email at paul.henderson@metrovancover.org to discuss this matter in more detail.

Yours sincerely,

Mike Hurley
Chair, Metro Vancouver Board

Sarah Kirby-Yung
Chair, Zero Waste Committee
Metro Vancouver

MH/SKY/PH/ad

Cc: Trish Mandewo, President, Union of British Columbia Municipalities

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To: Zero Waste Committee

From: Alison Schatz, Senior Communications Specialist, External Relations

Date: September 4, 2025

Meeting Date: September 11, 2025

Subject: **2025 Textiles Waste Reduction Campaign Results**

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated September 4, 2025 titled "2025 Textiles Waste Reduction Campaign Results".

EXECUTIVE SUMMARY

The 2025 "Repair and Re-Wear" campaign ran from March 24 to May 18, 2025. The objective was to reduce textiles waste by encouraging people to do small, easy repairs to their clothing so that they last longer. The new creative platform, "Repair and Re-Wear," harnessed the feeling of pride felt from bringing clothes back to life. It ran across the region through paid media placements. The campaign performed strongly, with 22.4 million impressions, 3.7 million video views, and over 22,000 website visits. Compared to the previous version, the updated campaign received a 650% higher volume of click throughs on Facebook/Instagram and website sessions more than doubled.

PURPOSE

To update the Committee on the results of the 2025 regional textiles waste reduction campaign, "Repair and Re-Wear."

BACKGROUND

The textiles waste reduction campaign is part of a suite of education, policy, regulatory, and facility investments by Metro Vancouver to reduce waste in the region. It supports the waste reduction objectives in the *Integrated Solid Waste and Resource Management Plan*. Metro Vancouver has run a textiles waste reduction behaviour change campaign since 2018, and updated the campaign strategy and creative in 2025. This report provides an update on the results of the 2025 campaign as identified in the 2025 Zero Waste Committee Work Plan.

2025 TEXTILES WASTE REDUCTION CAMPAIGN

The 2025 "Repair and Re-Wear" campaign ran from Monday, March 24 to Sunday, May 18, 2025. In order to reduce the amount of textiles disposed in the garbage, and, indirectly, the amount of textiles waste overall, the campaign encouraged women aged 45–64 to do small, easy repairs to their clothing so that they last longer.

Strategy and Creative Update

Research showed that the main reasons Metro Vancouverites say they get rid of fabrics are because they are worn or stained (72%), have holes in them (65%), or no longer work (e.g., broken buttons or zippers; 47%). A large portion of these fabrics end up in the garbage.

Table 1 – Textiles Disposed (kg per capita)

	2018	2020	2021	2022	2023	2024
Clothing	6.29	7.71	6.24	7.75	3.57	5.58
Household	6.29	5.80	7.51	4.02	10.34	5.74
Shoes	1.05	2.81	1.24	2.59	2.03	1.48
Leather	0.35	1.34	0.00	0.22	0.57	0.39
Reusable Bags	0.00	0.76	0.32	0.41	0.51	1.05
Other ¹	3.84	5.68	2.02	2.03	5.84	6.27
Total	17.82	24.10	17.33	17.02	22.84	20.52

¹Other consists of items such as stuffed toys and animals, masks, pet collars and leashes made of synthetic materials

When Metro Vancouverites were asked about behaviours to reduce textiles waste, there was an intention-action gap for “Repair”: 66% of respondents said they would be likely to repair their clothes, but only 28% currently do.

Survey data also showed that women aged 45–64 generate the most textile waste and are more likely to put clothes in garbage (versus donation). They are also more likely to say they do or want to do repairs.

Previous campaign messaging encouraged donating textiles rather than disposal. Donating textiles is better than disposing of them in the garbage. But, repairing and continuing to use textiles has greater environmental benefits: it helps extend their life and realize their maximum value better than donation.

The campaign strategy was to highlight the rush of pride that comes from repairing your clothes as a driving force to encourage the audience to repair their clothes instead of donating or throwing them away. It also leveraged social diffusion by using quotes from the people who repair their clothing to show just how proud one can be of this small, but important, accomplishment. (The strategy is described in detail in the report titled “2025 Textiles Waste Reduction Campaign Update” dated April 3, 2025, Reference 1.)

The creative showed diverse women from the target audience wearing everyday clothes. The look and feel were influenced by modern fashion ads, with aesthetic appeal, clean visuals, and straightforward messages. The campaign website (Reference 2), repairandrewear.ca, features how-to repair/alteration videos, a stain removal guide, and laundry tips.

Regional Media Placements

The media plan reached the audience (women aged 45–64 in Metro Vancouver) via radio (Z95.3FM, Move 103.5, Virgin Radio, and CFOX), television PSA, connected TV, Facebook, Instagram, Pinterest, digital banner ads, and search ads (Google and Bing).

Engagement of Metro Vancouver Members

Campaign materials were made available to all Metro Vancouver members, including social media content and co-branded assets like transit shelter ads and digital message boards. Several members used the materials on their social media channels and throughout their municipalities.

Results

Paid Media Performance

- The paid media delivered a total of 22.4 million impressions.
- Videos were viewed 3.7 million times across connected TV, Facebook/Instagram, and Pinterest.
- There were nearly 22,000 clicks to the website, indicating that the ads effectively motivated people to find repair tips/instructions.
- Though they are not directly comparable, the refreshed textiles waste reduction creative (“Repair and Re-Wear”) appeared to be more effective at driving traffic to the website than the past creative (“Think Thrice About Your Clothes”). For example, on Facebook/Instagram, the click-through rate was 650% higher (0.53% versus 0.07%) and the cost per click was 70% lower (\$1.20 versus \$4.00).
- The “Shirt” creative was the top performing version across all tactics.

Website

- Sessions more than doubled from the previous campaign — 22,544 sessions in 2025 versus 10,087 sessions in 2024 (120% increase).
- After the landing page, the most popular pages were “Clothing Donation and Recycling,” “Repairs and Alterations,” and “Stain Removal.”
- On average, users spent 1:22 on the site, indicating they were taking the time to read and engage with the content. Time on page was highest for the “Life Cycle of Unwanted Clothes” infographic (4:01), “Repairs and Alterations” page (3:56), and the Donation and Recycling page (2:42).
- The most common sources of website traffic were display ads and social media, and there were also significant amounts of search and direct traffic. This suggests that both the digital and traditional placements were effective at capturing attention and driving action.

A post-campaign survey, which measures recall and audience response, was not conducted in 2025. A survey will be conducted in 2026, after the second year of the campaign.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The 2025 textiles waste reduction campaign has a budget of \$178,975.00, supported under the Zero Waste Communications Program of the 2025 General Government budget.

CONCLUSION

2025 was the first year of the refreshed textiles waste reduction campaign. The objective and strategy were refined to reduce textiles waste by encouraging women aged 45–64 to do small, easy repairs to their clothing so that they last longer. The creative platform, “Repair and Re-Wear,” harnessed the rush of pride felt from bringing clothes back to life. The campaign performed strongly, with 22.4 million impressions, 3.7 million video views, and over 22,000 website visits. Compared to the previous version of the campaign, the updated campaign received a 650% higher click through rate on Facebook/Instagram and website sessions more than doubled, indicating that the creative was effectively capturing attention and motivating people to find repair tips. The “Repair and Re-Wear” campaign will run again in 2026.

ATTACHMENTS

1. Presentation: 2025 Textile Waste Reduction “Repair and Re-Wear” Results.

REFERENCES

1. Schatz, A. (2025). *2025 Textiles Waste Reduction Campaign Update* [Staff report to Metro Vancouver Zero Waste Committee on 2025, April 3].
<https://metrovancover.org/boards/ZeroWaste/ZWA-2025-04-03-AGE.pdf#page=54>.
2. Metro Vancouver. (2025). Repair and Re-Wear campaign website.
<https://metrovancover.org/repair-and-rewear>.

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2025 Textiles Waste Reduction Campaign Results

Alison Schatz
Senior Communications Specialist
Zero Waste Committee, September 11, 2025

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BACKGROUND

Regional Textile Waste Reduction Campaign

Timing	March 24 to Sunday, May 18, 2025
Objective	Reduce the amount of textiles disposed in the garbage and, indirectly, the amount of textiles waste overall
Behaviour	Do small, easy repairs to clothing
Target Audience	Women aged 45 – 64 <ul style="list-style-type: none"> • Generate the most textile waste • More likely to put clothes in garbage (versus donation) • More likely to say they do or want to do repairs

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STRATEGY

Highlight the **feeling of pride** that comes from repairing your clothes to encourage the audience to repair their clothes instead of donating or throwing them away.

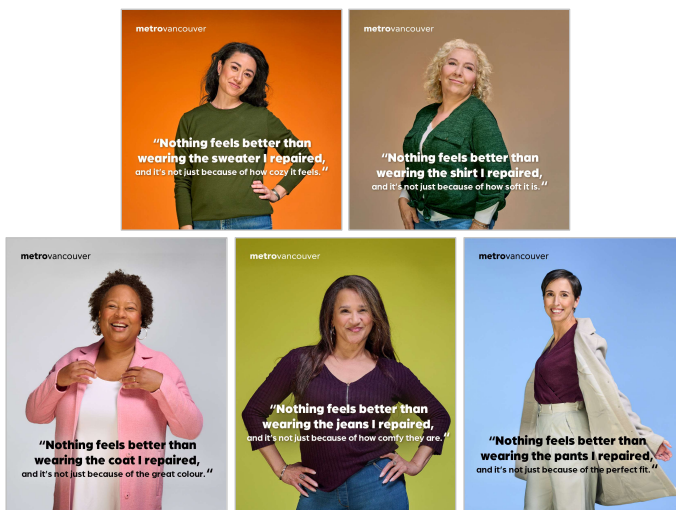
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CREATIVE DIRECTION

"Repair and Re-Wear"



Sample social media images

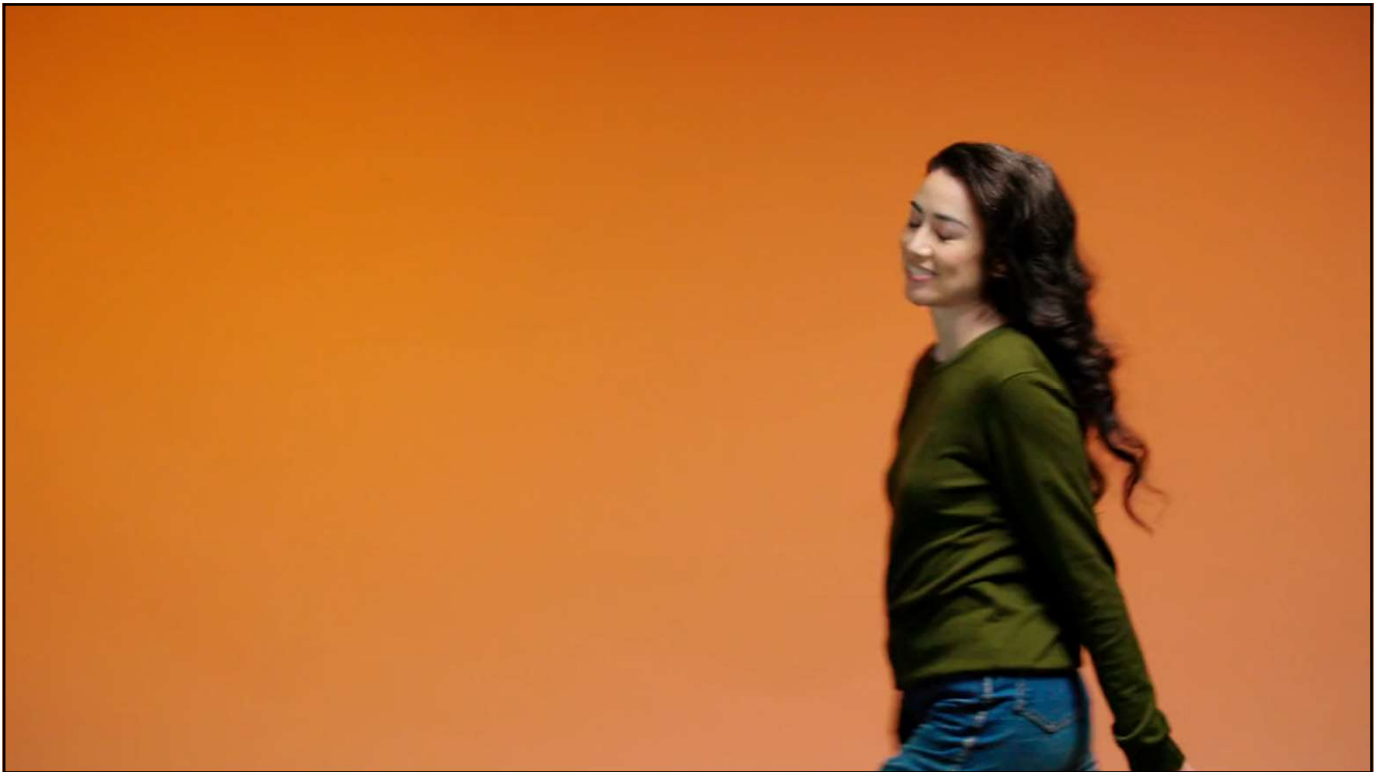


Sample poster

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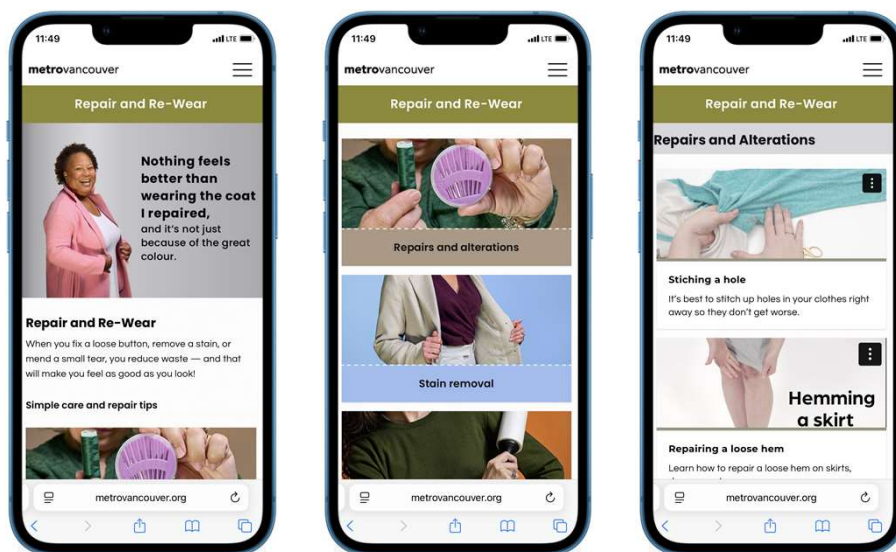
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WEBSITE

repairandrewear.ca



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REGIONAL MEDIA PLACEMENTS

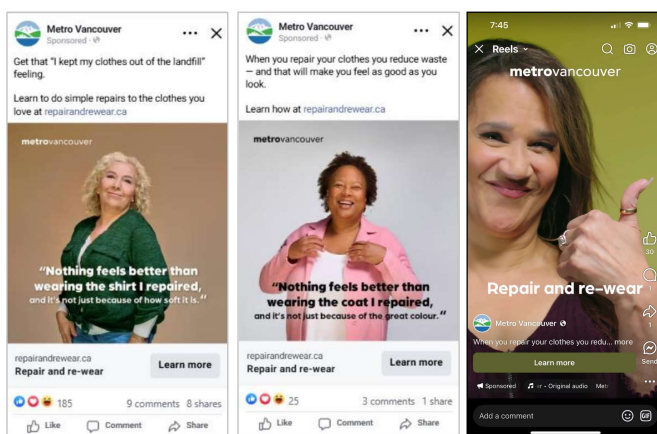
- Radio (Z95.3FM, Move 103.5, Virgin Radio, and CFOX)
- Television PSA
- Connected TV
- Social media (Facebook, Instagram, Pinterest)
- Digital banner ads
- Search ads (Google and Bing)

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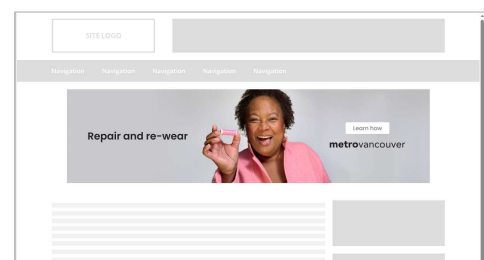
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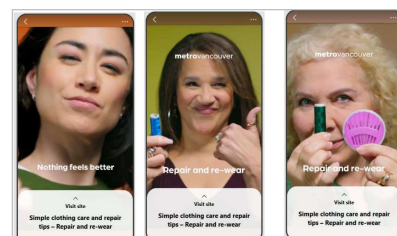
IN-MARKET EXAMPLES



Facebook and Instagram



Digital banner ad



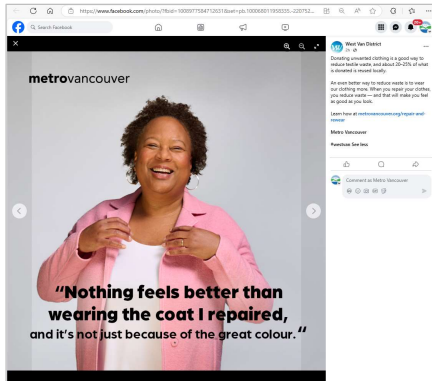
Pinterest

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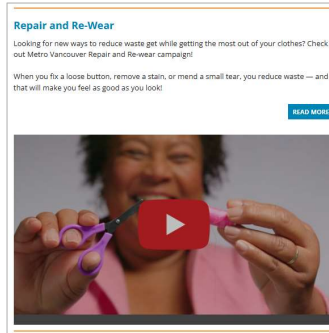
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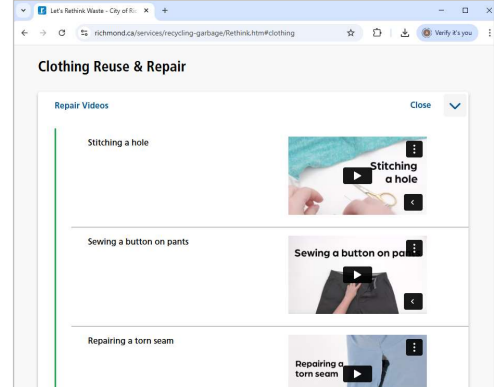
METRO VANCOUVER MEMBERS



Sample member
social media share



Sample member newsletter



Screenshot from richmond.ca/rethink
showing the campaign videos

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RESULTS

22.4 million

impressions

3.7 million

video views

22,000+

website sessions



top performing version

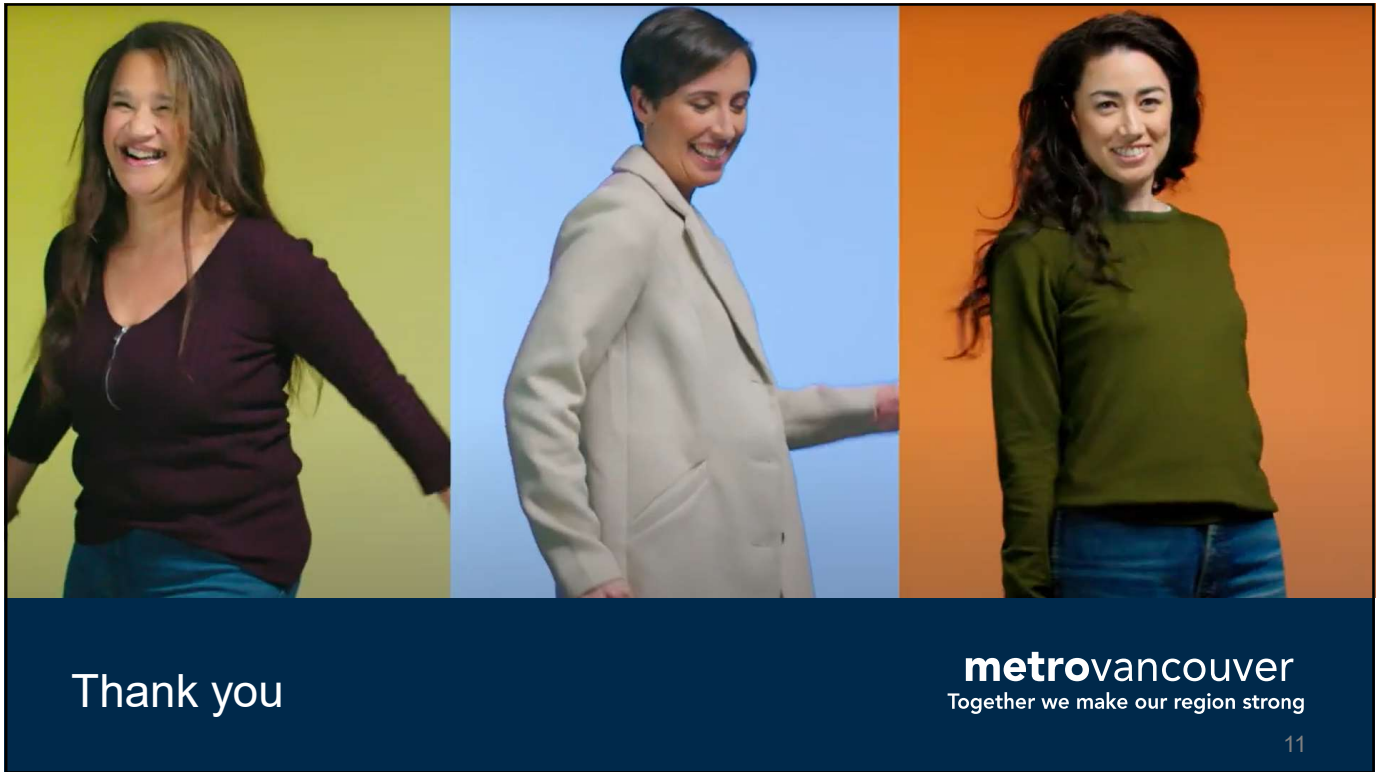
650%

increase in
click through rate on
Facebook/Instagram

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11

To: Zero Waste Committee

From: Kelly Du, Project Engineer, Solid Waste Services

Date: September 3, 2025

Meeting Date: September 11, 2025

Subject: **Single-Use Item Waste Composition Results**

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated September 3, 2025, titled "Single-Use Items Waste Composition Results".

EXECUTIVE SUMMARY

Since 2018, the quantity of single-use items disposed in Metro Vancouver including bags, cups, straws, utensils and takeout containers, has been estimated using waste composition studies. Data from 2024 indicated:

- A measured significant increase in single-use items disposal in 2024 compared to 2023 and a probable upward trend in single-use item disposal since 2020
- A shift from plastic bags to paper
- Emergence of a new single-use item category - molded fiber utensils
- A decrease in foam takeout containers

In 2024, overall single use items made up approximately 3.0 per cent of the total waste stream compared to 2.1 per cent in 2023. Given the small overall portion of the waste stream, there is more potential for data collection anomalies to significantly affect the relative quantities. On this basis, it will be important to understand to what extent the 2024 data is representative of the overall portion of single use items in the waste stream, by comparing to data from 2025 and subsequent years. Despite various actions to reduce single use items, it is reasonable to expect single use items are increasing in the waste stream given the increased use of food delivery services.

PURPOSE

At the July 3, 2025 Zero Waste Committee meeting, 2024 Waste Composition Data was presented, excluding single-use items disposed as garbage, since this data required further analysis (Reference 1). The purpose of this report is to present the results of this additional analysis.

BACKGROUND

Metro Vancouver follows a waste composition program that involves assessing materials disposed from different sectors and at certain frequencies. These include full-scale and sector-specific studies. Waste composition analysis provides valuable estimates of the types and quantities of materials disposed in the region, and baseline information to help gauge solid waste management plan performance. "Single-use items" is a specific category of materials assessed during waste composition studies due to the interest in these materials with respect to waste reduction policy and planning.

SINGLE-USE ITEMS

The quantity of single-use items disposed in small garbage loads and loads of residential and commercial/institutional garbage has been estimated annually since 2018, except for 2019.

To improve the accuracy of data used to estimate total annual tonnes of single-use items disposed, the calculation methodology was reviewed and refined in 2025. Unit weights of single-use items were updated based on current materials and products, and a process for analyzing data outliers was developed. The updated methodology was then applied across data from prior years for consistency. This resulted in slight changes to the historical single-use item data, however overall trends remain the same. The updated data is shown in Figure 1, Table 1 and Table 2.

Single-use item disposal trends

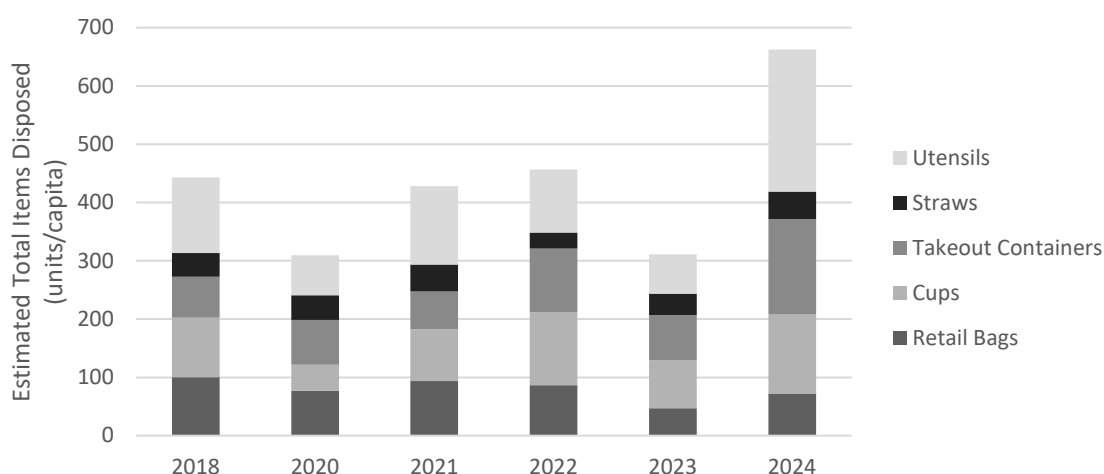


Figure 1. Estimated Total Single-Use Items Disposed Per Capita by Unit Weight

Table 1: Estimated Single-Use Items (SUI) Per Capita by unit weight						
SUI	2018	2020	2021	2022	2023	2024
Retail Bags ¹	100	77	94	87	47	72
Cups	102	45	89	125	83	136
Containers	70	77	65	109	77	163
Straws	40	43	46	28	37	48
Utensils	130	69	134	108	68	243
Total	443	310	428	457	311	662

¹ Retail bags consist of checkout bags.

Table 2: Estimated Total Single-Use Items (millions of units) by unit weight						
SUI	2018	2020	2021	2022	2023	2024
Retail Bags ¹	256	210	259	243	134	215
Cups	261	122	246	351	236	406
Containers	179	209	179	307	220	488
Straws	103	116	127	78	105	142
Utensils	330	187	372	303	193	727
Total	1129	844	1184	1282	888	1979

¹ Retail bags consist of checkout bags.

Data from the 2024 waste composition study indicates a significant rise in single-use item usage throughout Metro Vancouver compared to 2023. In 2023, single-use items represented 2.1 per cent of the waste stream by weight, and in 2024 it increased to 3.0 per cent. Upon analysis, the increase in 2024 may correspond to:

- A potential increase in single-use item generation following the COVID-19 pandemic. Additional data in the coming years will be critical in understanding the degree to which 2024 data accurately reflects the overall presence of single-use items in the waste stream.
- Given the small size of the waste stream category, minor inconsistencies in data collection can disproportionately influence the reported quantities.
- For data points involving newer materials, available information on average unit weights is limited, making the estimates more approximate. These unit weights will be refined over time as additional data becomes available.
- While all sectors showed increases in 2024, the most pronounced growth occurred in the commercial sector. This may be attributed to a higher number of samples collected from businesses that generate large volumes of single-use items. Furthermore, 2023 results are significantly lower than both 2022 and 2024, suggesting a potential data anomaly requiring further data to confirm. More annual data is needed to better understand emerging trends, and Metro Vancouver will continue to investigate single-use items during future waste composition studies.

General Shifts and Trends in the Market

A market shift toward home food delivery gained momentum following the COVID-19 pandemic. According to a report by Agriculture and Agri-Food Canada written in 2023, when comparing eat-in, home food delivery, takeout and drive-through options in Canada, home food delivery sales increased from 27.0 per cent in 2019 to 38.1 per cent in 2022, while sales of takeout food orders rose from 6.5 per cent to 18.4 per cent (Reference 2). Statistics Canada tracks annual sales from “limited-service eating places” (includes fast-food or quick-service restaurants that often use single-use items) and reported a 6.0 per cent increase in sales in British Columbia from 2023 to 2024. (Reference 3). In 2024, limited-service eating places held the largest subsector share of total restaurant sales (46.4 per cent).

Retail Bags

As shown in Figure 2, data from 2018 to 2024 suggests a potential decrease in checkout bag disposal, particularly for plastic bags. Plastic bags increased from 2023 to 2024, which may be due to the potentially anomalously low single-use items in 2023. Continuing to collect new annual data will help to confirm if there is a consistent downward trend in checkout bag disposal.

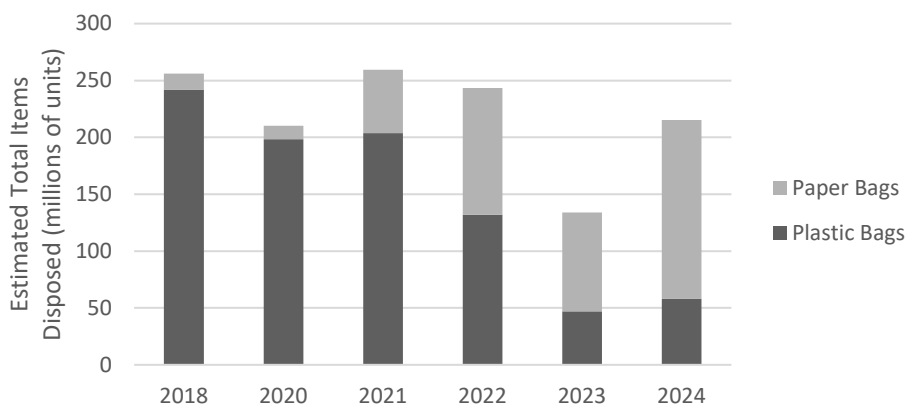


Figure 2. Estimated Total Paper vs. Plastic Bags Disposed (millions of units) by unit weight

In general, the proportion of retail bags made from paper compared to plastic has increased, likely reflecting the shift away from plastic bags in the market. The overall decrease in the disposal of plastic retail bags is likely due to restrictions on plastic shopping bags now in place across the province. In 2023, a province-wide *Single-Use and Plastic Waste Prevention Regulation* was approved by the Government of BC. Single-use plastic shopping bags were banned effective January 15, 2024.

Utensils

It was observed that in 2024 utensils accounted for the largest proportional increase in estimated single-use items disposed per capita per year, compared to the years 2018 – 2023 (Figure 3). Molded fibre utensils began appearing in the waste stream in 2023 in negligible amounts; however, in 2024, their presence had increased enough to justify the creation of a new waste composition study material category for tracking purposes. Analysis of utensil-related single-use item data from 2018 to 2024 reveals no consistent trend. Some of the samples contributing to this increase likely originated from businesses with high food waste generation, including what appears to be a restaurant undergoing a clean out as there were unused bags of single-use utensils in the sample.

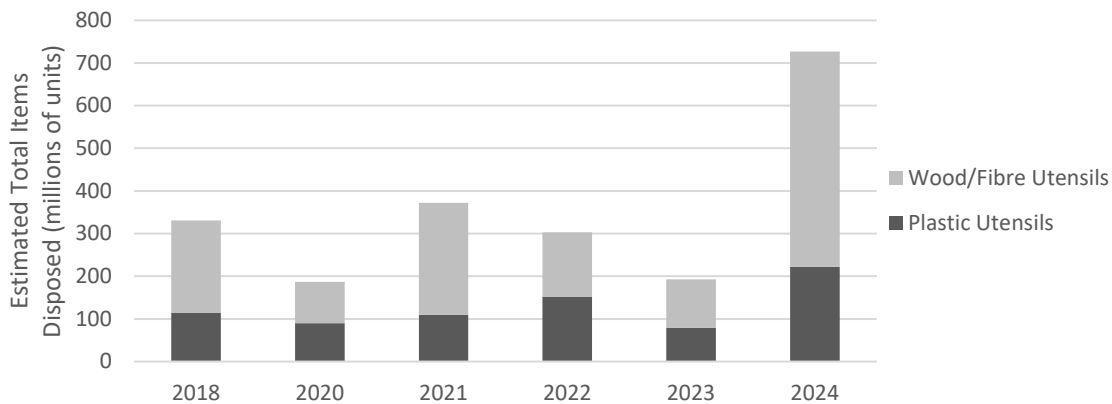


Figure 3. Estimated Total Wood/Fibre vs. Plastic Utensils Disposed (millions of units) by unit weight

Takeout Containers

Analysis of the takeout containers' material does not show a consistent trend between paper and plastic. As per Figure 4, however, the number of foam containers disposed has clearly declined since 2018. Several communities in Metro Vancouver banned expanded foam containers in advance the province-wide restrictions on food service ware made of foam which came into effect July 15, 2024. The data demonstrates its effectiveness in reducing the use of foam takeout containers. And similar to utensils, unused takeout containers were found in the same sample where a restaurant was likely undergoing a clean out.

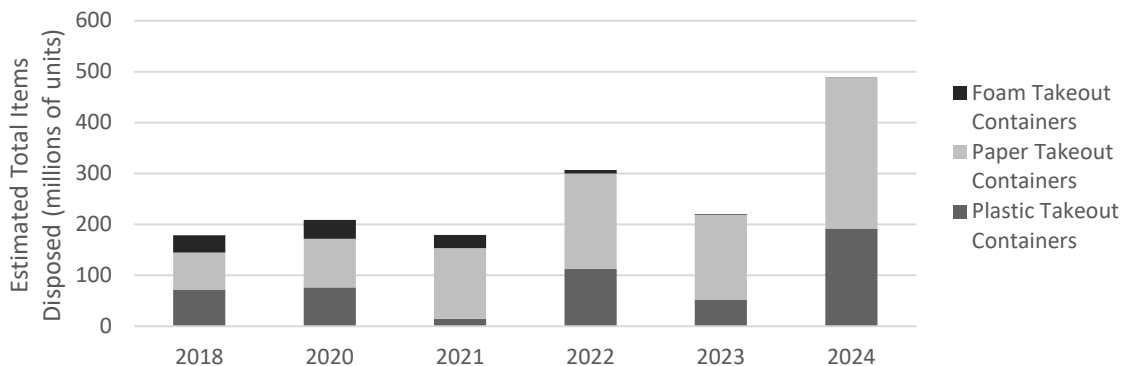


Figure 4. Estimated Total Foam/Paper/Plastic Takeout Containers Disposed (millions of units) by unit weight

Single-Use Item Regulatory Measures

Metro Vancouver does not have jurisdiction over the sale or distribution of single-use items. To support consistency across the region, Metro Vancouver and its members have historically advocated for harmonized regulations.

In 2023, the Government of British Columbia introduced a phased provincial regulation to reduce single-use and plastic waste (Table 3). This regulation complements municipal bylaws, which may be stricter and include local enforcement and education. For items not covered by the provincial regulation, municipalities may seek ministerial approval if the municipality does not have the governing authority.

Table 3. Summary of B.C. Provincial <i>Single-Use and Plastic Waste Prevention Regulation</i>	
Effective Date	Items and Requirements
Dec 20, 2023	<ul style="list-style-type: none"> - Single-use plastic utensils banned - Food service accessories such as non-plastic utensils, straws, napkins, condiment sachets, garnishes, and drink cup lids/sleeves can only be provided upon customer request
Jan 15, 2024	<ul style="list-style-type: none"> - Single-use plastic shopping bags banned (including compostable ones) - Minimum fees required for recycled paper bags and reusable shopping bags - To-go food service ware made from certain plastics including polystyrene foam and compostable plastics banned - All other food packaging (e.g., chip bags, egg cartons, instant noodle cups) must be free of biodegradable plastics, oxo-degradable plastic, PVC, PVDC, and polystyrene foam
July 1, 2028	<ul style="list-style-type: none"> - PVC film wrap banned
July 1, 2030	<ul style="list-style-type: none"> - Polystyrene foam meat trays banned

As part of Canada's goal to achieve zero plastic waste by 2030, the federal government is implementing a lifecycle-based strategy to manage plastics. This plan includes the Federal Plastics Registry, which requires manufacturers, importers, and producers to annually report the types and quantities of plastic they place on the Canadian market.

Metro Vancouver Initiatives

Metro Vancouver has implemented initiatives to reduce single-use plastics, including the "What's Your Superhabit?" behaviour change campaign, and pilots aimed at identifying reuse strategies and business support opportunities for complying with single-use item regulations. Collaboration with Ocean Ambassadors Canada has also helped deliver reuse education at offices, events, and festivals encouraging reduction in plastic waste. At a national level, Metro Vancouver participates in the Canada Plastics Pact, contributing to policy considerations and studies aimed at reducing the disposal of single-use plastic products and packaging.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The waste composition program is ongoing and is included in the solid waste services annual operating budget.

CONCLUSION

Metro Vancouver's waste composition program provides valuable information on the progress of various waste reduction and recycling initiatives and identifies potential target materials for future waste reduction programs and policies. Single-use items are regularly tracked in Metro Vancouver's waste composition studies. The 2024 waste composition study highlighted a probable upward trend in single-use item disposal, a shift from plastic to paper bags, emergence of fiber utensils as a new single-use item category, and a decrease in foam takeout containers. It also highlights the potential for data anomalies to disproportionately impact reported quantities and how 2023 may reflect an anomaly but requires further data collection to confirm. Continuing to collect new annual data will help identify trends in the disposal of single-use items.

ATTACHMENTS

1. Presentation re: Single-Use Item Waste Composition Results.

REFERENCES

1. Metro Vancouver. (2024, June 24). *Full-scale Waste Composition Study 2024*. <https://metrovancover.org/services/solid-waste/Documents/full-scale-waste-composition-study-2024.pdf>.
2. Agriculture and Agri-Food Canada. (2023). *Foodservice in Canada*. Government of Canada. <https://agriculture.canada.ca/en/international-trade/market-intelligence/reports-and-guides/foodservice-canada>.
3. Statistics Canada. (2025, February 25). *The Daily — Food services and drinking places, December 2024*. Government of Canada. <https://www150.statcan.gc.ca/n1/daily-quotidien/250225/dq250225c-eng.htm>.

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2024 single-use item samples from waste composition study

Single-Use Item Waste Composition Results

2018 – 2024

Kelly Du
Project Engineer, Solid Waste Services

Zero Waste Committee Meeting, September 11, 2025

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SINGLE-USE ITEMS WASTE COMPOSITION RESULTS

Overview

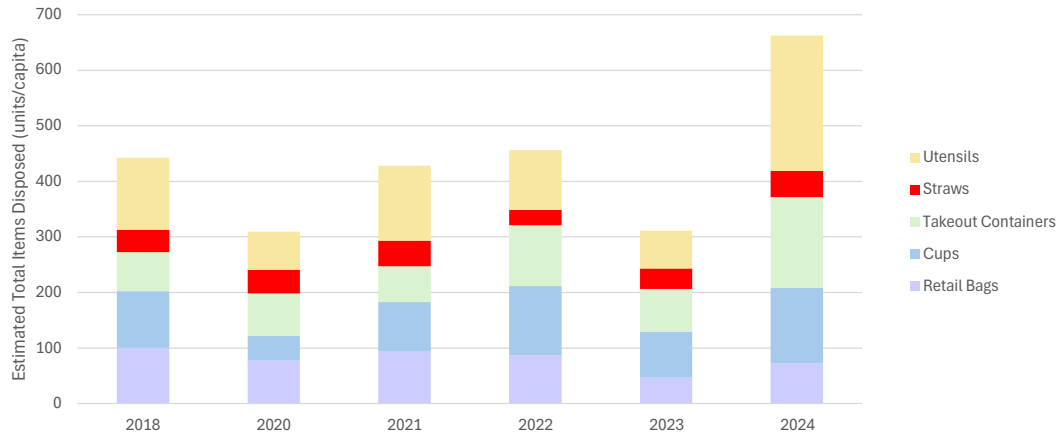
- 2018 - First year tracking Single-Use Items (SUI):
 - Retail Bags
 - Cups
 - Takeout Containers
 - Straws
 - Utensils
- 2025 - Methodology improvements for estimating annual tonnes SUI disposed

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HISTORICAL COMPARISON OF ESTIMATED SUI ITEMS DISPOSED

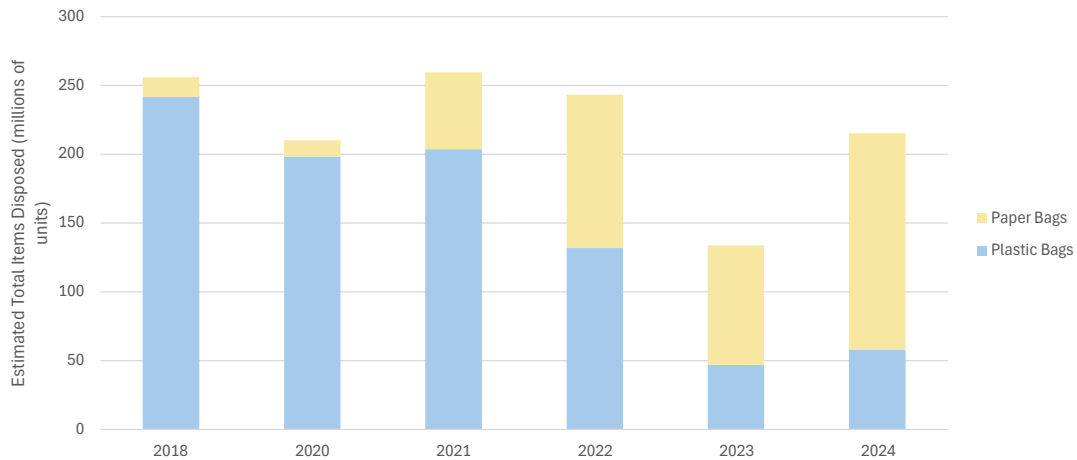


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PAPER VS. PLASTIC BAGS

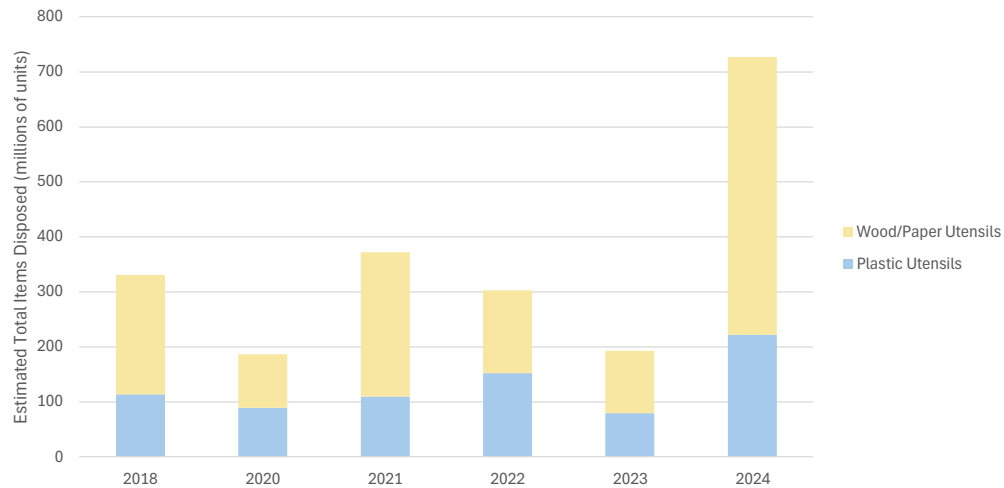


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WOOD/PAPER VS PLASTIC UTENSILS



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PAPER (MOLDED FIBRE) UTENSILS

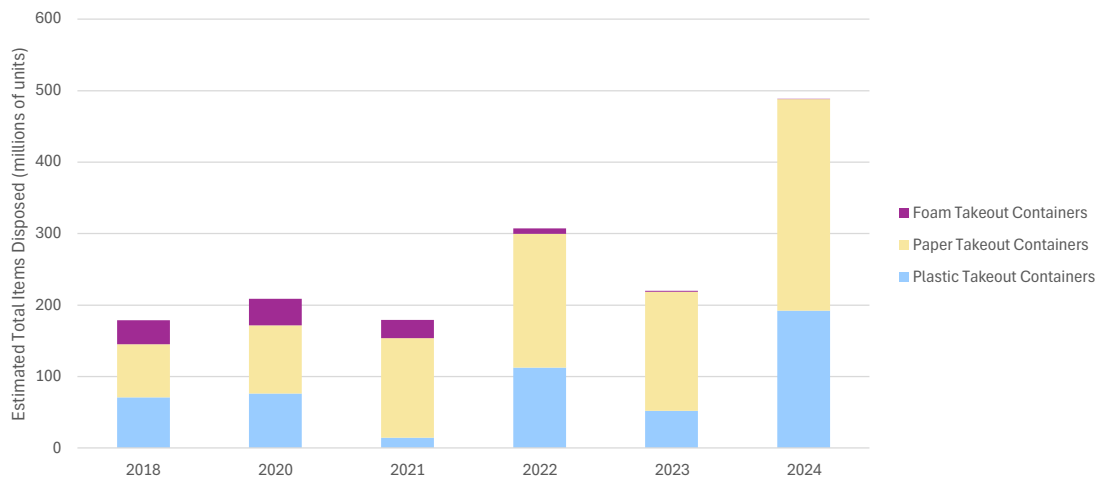


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TAKEOUT CONTAINERS



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CONCLUSIONS

- Probable upward trend in single-use items
- Shift from plastic bags to paper
- New single-use item category: paper utensils
- Decrease in foam takeout containers
- Potential for data collection anomalies
 - Continue to collect annual data to update trends

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To: Zero Waste Committee

From: Paul Henderson, General Manager, Solid Waste Services

Date: September 3, 2025

Meeting Date: September 11, 2025

Subject: **Manager's Report**

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated September 3, 2025, titled "Manager's Report".

2025 Smart Waste Program Report

The *Smart Waste Program 2025 Annual Testing Report* is now published on the Metro Vancouver website (available by visiting metrovancover.org and searching for '2025 smart waste report') (Reference 1).

The Smart Waste Program involves depositing location-based electronic devices in publicly accessible, multi-family residential and commercial/institutional garbage containers. The program helps assess if the generator levy is being appropriately collected and remitted, and enhances the understanding of the movement of waste around the region. The Smart Waste Program commenced in 2024, with the 2025 report being the second annual report on the program.

Concrete and Asphalt Recycling Opportunities Review

Over 1.5 million tonnes of concrete and asphalt were recycled in 2023 and new opportunities continue to be considered.

In 2024, as part of updating the *Solid Waste Management Plan*, Metro Vancouver retained Stantec to complete a study of challenges and opportunities for concrete and asphalt recycling that can result in financial and environmental benefits by avoiding greenhouse gas emissions, maximizing waste diversion, and offsetting the need for virgin aggregates. As part of this work, Metro Vancouver engaged with local government and industry representatives on this issue.

On January 22, 2025 Metro Vancouver hosted a webinar to share knowledge on proven and future applications for recycling concrete and asphalt aggregates. The webinar was a success and attracted 107 attendees from a range of sectors including government staff, consultants and contractors in civil engineering and construction, material suppliers and testing labs, and industry associations involved in road construction and transportation infrastructure.

Since April 2024, staff participated in the Master Municipal Construction Documents (MMCD) Civil Committee, comprised of public and private sector stakeholders involved in road and transportation infrastructure design and construction, to review and prepare recommended updates to the MMCD specifications for recycled concrete and asphalt. The updates are expected to proceed this year and should address regulatory uncertainty faced by some decision-makers regarding these materials, in terms of application, performance and testing requirements.

The study is now complete and posted on Metro Vancouver's website (available by visiting metrovanancouver.org and searching for 'concrete and asphalt recycling opportunities review') (Reference 2). The study concluded that, given the significant volumes of available recycled aggregates sourced and processed in the region in proximity to urban areas, this material presents numerous opportunities for increased use.

Solid Waste Climate 2050 Primer Update

On May 9, 2025, the Air Quality and Climate Committee received the report "Climate 2050 Roadmap Update", dated April 9, 2025. The report presented a revised approach for the remaining four *Climate 2050* areas of focus, including solid waste, which integrates climate policy and actions into existing planning processes and strategic plans. Rather than creating a stand-alone solid waste climate roadmap, a *Solid Waste Climate 2050 Primer* has been developed, and climate actions will be integrated in an updated solid waste management plan. This approach optimizes and streamlines engagement resources and efforts, and responds to Board direction that climate actions are aligned with other plans and policies. The *Solid Waste Climate 2050 Primer* can be found on Metro Vancouver's website (available by visiting metrovanancouver.org and searching for 'solid waste 2050 primer') (Reference 3).

New Recycling Depots at Langley and North Surrey Recycling and Waste Centres

Two new recycling depots at Metro Vancouver recycling and waste centres are under development. A new recycling depot will be constructed at the Langley Recycling and Waste Centre, with the second depot constructed at the North Surrey Recycling and Waste Centre. The new depots will be constructed ahead of the weigh scales, and allow customers to drop-off a range of recyclables at no cost. The completion of these new recycling depots will bring all of the Metro Vancouver recycling and waste centres to a similar level of free recycling service.

Expansion of the Langley Recycling and Waste Centre to include the recycling depot is now in the permitting phase with the Township of Langley. The Building Permit Application package was submitted to the Township of Langley on July 24, 2025. Once the building permit issued, a request for proposals will be initiated to start construction in early-2026.

Expansion of the North Surrey Recycling and Waste Centre to include the new recycling depot built directly west of the existing facility on land purchased at the end of 2022 from the City of Surrey. The rezoning and development permit application report received first reading from City of Surrey Council on July 28, 2025. The public hearing at city council for the project is scheduled for September 15, 2025.

2025 Zero Waste Conference

Preparations for the November 27, 2025 Zero Waste Conference continue. Several speakers and a program have been announced and are available on Metro Vancouver's website (Reference 4). The opening keynote address from Tom Wujec, World Renowned Expert on Innovation, Former Chief Disruptor at Autodesk, will inspire conference attendees to tackle complex problems in new ways and explore how the dimensions of circularity — the flow of materials, human experiences, and emerging technologies — can converge to redesign the future. This will be followed by panel discussions, and concurrent interactive sessions that will delve into the conference theme: innovation and the business case for waste prevention. Speakers for the morning sessions include a mix of local, national, and international voices. This includes, City of Richmond's Marcos Badra, who is leading the city's circular economy strategy; Wayne Hubbard from ReLondon, guiding waste prevention and circular initiatives in London, UK; and Brittany Gamez, the co-founder of the reuse platform Muuse, who are working with the City of Banff, Evergreen in Toronto, and in other Canadian jurisdictions. The one-day conference is an opportunity to engage with visionaries, innovators, and change-makers who are paving the way to a stronger, cleaner future. Early bird pricing is available until September 27, 2025, after which time the regular rate applies. Zero Waste Committee members can email ZWConference@metrovancover.org to register.

Solid Waste Management Plan Update – Options Analysis Engagement

Metro Vancouver is launching engagement on the options analysis phase of the solid waste management plan update. This phase will run until October 31, 2025. The objective of options analysis is to determine which strategies and actions to include in the draft plan by evaluating the ideas gathered in the previous phase using a set of decision-guiding criteria and engagement feedback. Metro Vancouver is engaging with First Nations, member jurisdictions, neighbouring regional districts, the Solid Waste Management Plan Public/Technical Advisory Committee, the Solid Waste and Recycling Industry Advisory Committee, business and industry associations, not-for-profit organizations, and the public. Opportunities for engagement are posted on the project web page, and include an online questionnaire, community events, or providing feedback via email or phone (Reference 5).

The options analysis phase is the last step before a new plan is drafted. The draft plan, expected in 2026, will be provided to the Zero Waste Committee and Board for consideration prior to submission to the Ministry of Environment and Parks for consideration of approval.



Tariff Impacts

Metro Vancouver has exposure to the tariffs imposed by the Government of Canada on a variety of goods imported from the United States. Staff have conducted a tariff impact assessment across capital and operating programs to understand the financial exposure. The following summarizes efforts made to mitigate and manage the current tariff environment.

Over 98% of tariff exposure is tied to capital projects. To date, approximately \$7,000 in tariffs has been paid, with approximately \$15M in vendor claims under review. The total estimated financial exposure from 2025 to 2029, based on tariffs in place as of September 1, is \$180M. These developments have direct implications for Metro Vancouver's capital projects, which rely heavily on steel-intensive infrastructure components, including steel pipes, valves, and equipment, and to a lesser extent, operational procurement activities. Financial impacts of tariffs are most pronounced in infrastructure-intensive departments such as Water Services, Liquid Waste Services and Housing. Staff are actively monitoring developments and pursuing mitigation strategies to manage financial risk and maintain alignment with approved budgets.

Mitigation strategies to reduce the financial impact of tariffs include sourcing alternative products where feasible, sourcing non-US manufactured equivalent goods, and seeking remission on tariffs paid through the federal Department of Finance. However, there are still many unknowns regarding the full extent and duration of tariff impacts, especially for projects with long procurement timelines or complex supply chains. Realized tariff-related costs will be addressed first through existing contingency budgets within approved capital plans, where possible.

Staff will continue to refine estimates as more information becomes available. Ongoing monitoring and adaptive planning will be essential to ensure continued fiscal responsibility and successful project delivery.

For Solid Waste Services the potential tariff impacts are not expected to be significant as solid waste contracting activities are primarily through operating contracts which are not anticipated to be impacted to any extent by tariffs. For the most significant solid waste capital project, the district energy system development, there will likely be some tariff impacts as some equipment for the system could potentially be provided through U.S. suppliers, but the most significant component of the district energy system, the energy piping, is typically sourced from European suppliers.

2025 Zero Waste Committee Work Plan

The attachment to this report sets out the Committee's work plan for 2025. The status of work program elements is indicated as pending, in progress, or complete. The listing is updated as needed to include new issues that arise, items requested by the Committee, and changes in the schedule.

ATTACHMENTS

1. Zero Waste Committee 2025 Work Plan.

REFERENCES

1. Metro Vancouver. (2025, August). *Smart Waste Program 2025 Annual Testing Report*. <https://metrovancover.org/services/solid-waste/Documents/smart-waste-program-report-aug-2025.pdf>.
2. Stantec. (August, 2025). *Concrete and Asphalt Recycling Opportunities Review*. Metro Vancouver: <https://metrovancover.org/services/solid-waste/Documents/mv-swmp-concrete-and-asphalt%20recycling-opportunities-review.pdf>.
3. Metro Vancouver. (2025). *Solid Waste Climate 2050 Primer*. <https://metrovancover.org/services/air-quality-climate-action/Documents/climate-2050-solid-waste-primer.pdf>.
4. Metro Vancouver. (2025). Zero Waste Conference website. <https://zwc.ca/Pages/default.aspx>.
5. Metro Vancouver. (2025). Solid Waste Management Plan Update web page. <https://metrovancover.org/services/solid-waste/solid-waste-management-plan-update>.

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Zero Waste Committee 2025 Work Plan

Report Date: September 3, 2025

Priorities

Updated from 'in progress to complete'

1st Quarter	Status
2023 Annual Solid Waste and Recycling Statistics	Complete
2025 Food Scraps Recycling Campaign Update	Complete
2025 Textile Waste Reduction Campaign Update	Complete
2024 Holiday Waste Reduction Campaign Results	Complete
Recycling and Waste Centre Reuse Scale-Up	Complete
Repair Events, Reuse Programs, and Regional Food Recovery Network	Complete
Multi-Family Residential Waste Prevention	Complete
2nd Quarter	Status
2024 Waste Composition Program Results	Complete
2024 Disposal Ban Program Results	Complete
Solid Waste Management Plan Goals and Idea Generation Summary	Complete
2025 Food Scraps Recycling Campaign Results	Complete
2024 Year End Financial Report	Complete
2025 Single-Use Item Reduction Campaign Update	Complete
2025 Zero Waste Conference	Complete
2025 Love Food Hate Waste National Campaign Update	Complete
3rd Quarter	Status
North Surrey and Langley Recycling Depot Development Update	Complete
2025 Solid Waste and Recycling Industry Advisory Committee Report	Pending
Source Reduction Incentive Program	Pending
2024 Waste-to-Energy Facility Financial Summary	Complete
Waste-to-Energy District Energy System Update	Complete
2024 Waste-to-Energy Facility Environmental Performance Summary	Complete
2025 Textile Waste Reduction Campaign Results	Complete
4th Quarter	Status
National Zero Waste Council Progress Update	Pending
2026 Tipping Fee Bylaw Revisions	Pending
Financial Performance Report	Pending
Solid Waste Services Annual Budget and 5-Year Financial Plan	Complete
2025 Holiday Waste Reduction Campaign Update	Pending