

METRO VANCOUVER REGIONAL DISTRICT ZERO WASTE COMMITTEE

MEETING

Thursday, June 15, 2023 1:00 pm Meeting conducted electronically/in-person pursuant to the Procedure Bylaw 28th Floor Committee room, 4515 Central Boulevard, Burnaby, British Columbia

A G E N D A¹

1. ADOPTION OF THE AGENDA

1.1 June 15, 2023 Meeting Agenda That the Zero Waste Committee adopt the agenda for its meeting scheduled for June 15, 2023 as circulated.

2. ADOPTION OF THE MINUTES

2.1 May 23, 2023 Meeting Minutes That the Zero Waste Committee adopt the minutes of its meeting held May 23, 2023 as circulated.

pg. 4

- 3. DELEGATIONS
- 4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Extension of Recycling and Waste Centres Operations and Maintenance Services pg. 8 Contracts

That the GVS&DD Board:

- approve an amendment in the amount of \$61,481,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-071 with Halton Recycling Ltd. doing business as Emterra Environmental for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres;
- b) approve an amendment in the amount of \$7,553,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-114 with

¹ Note: Recommendation is shown under each item, where applicable.

GFL Environmental Inc. for operation and maintenance of the Maple Ridge and Langley recycling and waste centres; and c) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendments should proceed. 5.2 Illegal Dumping Update and Gypsum Management in Metro Vancouver pg. 12 That the Zero Waste Committee receive for information the report dated June 8, 2023, titled "Illegal Dumping Update and Gypsum Management in Metro Vancouver". pg. 22 5.3 Waste-to-Energy Facility 2022 Financial Update That the Zero Waste Committee receive for information the report dated June 8, 2023, titled "Waste-to-Energy Facility 2022 Financial Update". 5.4 pg. 25 2023 Regional Clothing Waste Reduction Campaign Results That the Zero Waste Committee receive for information the report dated June 2, 2023, titled "2023 Regional Clothing Waste Reduction Campaign Results". 5.5 Update on Metro Vancouver Engagement with the Love Food Hate Waste Canada pg. 37 Campaign for 2022-2023 That the MVRD Board receive for information the report dated June 8, 2023, titled "Update on Metro Vancouver Engagement with the Love Food Hate Waste Canada Campaign for 2022-2023". pq. 50 5.6 Manager's Report That the Zero Waste Committee receive for information the report dated June 7, 2023, titled "Manager's Report".

6. INFORMATION ITEMS

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. **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.

That the Zero Waste Committee close its meeting scheduled for June 15, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

- 90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
 - (g) litigation or potential litigation affecting the municipality.

10. ADJOURNMENT/CONCLUSION

That Zero Waste Committee adjourn/conclude its meeting of June 15, 2023.

Membership:

Kirby-Yung, Sarah (C) – Vancouver Hodge, Craig (VC) – Coquitlam Calendino, Pietro – Burnaby Darling, Steve – Port Coquitlam Ferguson, Steve – Langley Township Fry, Pete – Vancouver Kruger, Dylan – Delta Muri, Lisa – North Vancouver District Wallace, Rosemary – Langley City Weverink, Paul – Anmore

METRO VANCOUVER REGIONAL DISTRICT ZERO WASTE COMMITTEE

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Zero Waste Committee held at 1:01 pm on Thursday, May 23, 2023 in the 28th Floor Committee Room, 4515 Central Boulevard, Burnaby British Columbia.

MEMBERS PRESENT:

Chair, Councillor Sarah Kirby-Yung*, Vancouver Vice Chair, Craig Hodge, Coquitlam Councillor Pietro Calendino*, Burnaby Councillor Steve Darling*, Port Coquitlam Councillor Steve Ferguson*, Langley Township Councillor Peter Fry*, Vancouver Councillor Dylan Kruger*, Delta Councillor Rosemary Wallace*, Langley

MEMBERS ABSENT:

Councillor Lisa Muri, North Vancouver District Councillor Paul Weverink, Anmore

STAFF PRESENT:

Jerry W. Dobrovolny‡, Chief Administrative Officer Paul Henderson, General Manager, Solid Waste Services Morgan Mackenzie, Legislative Services Coordinator, Board and Information Services

Vice Chair Hodge assumed the role of Chair.

1. ADOPTION OF THE AGENDA

1.1 May 23, 2023 Meeting Agenda

It was MOVED and SECONDED

That the Zero Waste Committee adopt the agenda for its meeting scheduled for May 23, 2023 as circulated.

CARRIED

*denotes electronic meeting participation as authorized by section 3.6.2 of the *Procedure Bylaw* ‡denotes electronic meeting participation

2. ADOPTION OF THE MINUTES

2.1 April 13, 2023 Meeting Minutes

It was MOVED and SECONDED

That the Zero Waste Committee adopt the minutes of its meeting held April 13, 2023 as circulated.

CARRIED

3. DELEGATIONS

No items presented.

4. INVITED PRESENTATIONS No items presented.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Solid Waste Management Plan Independent Consultation and Engagement Panel Report dated May 12, 2023, from Stephanie Liu, Senior Engagement Specialist, Solid Waste Services, providing the Zero Waste Committee with a summary of the Solid Waste Management Plan Independent Consultation and Engagement Panel's role, membership, timeline, and work to date.

Andrea Reimer, Chair of the Solid Waste Management Plan Independent Consultation and Engagement Panel (Engagement Panel), provided the Zero Waste Committee with a verbal update regarding the role of the Engagement Panel, the work to date, and the membership.

Cheryl Brooks, President and CEO, Indigenuity Consulting Group, and Veronika Bylicky, Executive Director and Co-Founder, CityHive, who are members of the Engagement Panel, were also present to respond to questions from the committee.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated May 12, 2023 titled "Solid Waste Management Plan Independent Consultation and Engagement Panel".

CARRIED

5.2 2022 Waste Composition Data

Report dated May 15, 2023, from Terry Fulton, Senior Project Engineer, Solid Waste Services, providing the Zero Waste Committee with the results of waste composition studies completed in 2022.

Members were provided with a presentation on the results of the waste composition studies completed in 2022, highlighting the reasons for waste composition studies, sector specific studies, the waste composition program plan,

the full scale study results, actions to reduce single-use items, multi-family waste composition, and the conclusions from the data collected.

Presentation material titled "2022 Waste Composition Monitoring Program" is retained with the May 23, 2023 Zero Waste Committee agenda.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated May 15, 2023, titled "2022 Waste Composition Data".

CARRIED

5.3 Extended Producer Responsibility in British Columbia

Report dated May 15, 2023, from Andrew Doi, Environmental Planner, Solid Waste Services, providing the Zero Waste Committee with information on the extended producer responsibility policy and programs in British Columbia.

Members were provided with a presentation on the extended producer responsibility programs in British Columbia highlighting detailed information on the schedules, including beverage containers, residuals, electronics, tires and packaging, and the future products to be added to the program.

Presentation material titled "Extended Producer Responsibility in British Columbia" is retained with the May 23, 2023 Zero Waste Committee agenda.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated May 15, 2023, titled "Extended Producer Responsibility in British Columbia".

CARRIED

5.4 2023 Food Scraps Recycling "Food Scraps Aren't Garbage" Results

Report dated May 15, 2023, from, Larina Lopez, Division Manager, Corporate Communications, External Relations, and Alison Schatz, Senior Communications Specialist, Corporate Communications, External Relations, providing the Zero Waste Committee with the results of the 2023 regional food scraps recycling campaign, "Food Scraps Aren't Garbage."

Members were provided with a presentation on the 2023 Food Scraps Recycling Campaign results highlighting background, updates to creative materials, strategies used, key messages, regional media placement, audience segments, samples of the creative materials used, and result highlights.

Members were shown a Metro Vancouver video promoting food scraps recycling. This video is not retained with the agenda.

Presentation material titled "2023 Food Scraps Recycling Campaign" is retained with the May 23, 2023 Zero Waste Committee agenda.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated May 15, 2023, titled "2023 Food Scraps Recycling "Food Scraps Aren't Garbage" Results".

CARRIED

5.5 Manager's Report

Report dated May 16, 2023, from Paul Henderson, General Manager, Solid Waste Services, providing the Zero Waste Committee with updates on the Bylaw Notice Authority for GVS&DD and GVWD, the single-use item reduction campaign titled, "What's Your Superhabit?", the Reuse Day expansions and bulky item reuse options study, and the 2023 Zero Waste Committee Work Plan.

It was MOVED and SECONDED

That the Zero Waste Committee receive for information the report dated May 16, 2023, titled "Manager's Report".

CARRIED

6. INFORMATION ITEMS

No items presented.

- 7. OTHER BUSINESS No items presented.
- 8. BUSINESS ARISING FROM DELEGATIONS No items presented.
- 9. RESOLUTION TO CLOSE MEETING No items presented.

10. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the Zero Waste Committee conclude its meeting of May 23, 2023.

CARRIED

(Time: 2:07 pm)

Morgan Mackenzie, Legislative Services Coordinator Craig Hodge, Vice Chair

60121647 FINAL

Subject:	Extension of Recycling and Waste Centres Operatio Contracts	ns and Maintenance Services
Date:	June 8, 2023	Meeting Date: June 15, 2023
From:	George Kavouras, Director, Procurement Paul Henderson, General Manager, Solid Waste Serv	ices
То:	Zero Waste Committee	

RECOMMENDATION

That the GVS&DD Board:

- approve an amendment in the amount of \$61,481,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-071 with Halton Recycling Ltd. doing business as Emterra Environmental for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres;
- approve an amendment in the amount of \$7,553,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-114 with GFL Environmental Inc. for operation and maintenance of the Maple Ridge and Langley recycling and waste centres; and
- c) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendments should proceed.

EXECUTIVE SUMMARY

Operation and maintenance contracts for five of Metro Vancouver's recycling and waste centres expire on December 31, 2023. The contracts allow for extension for up to two additional years. Staff recommend that the Board approve amendments to Contract 16-071 with Halton Recycling Ltd. doing business as Emterra Environmental for operation and maintenance of North Shore, North Surrey, and United Boulevard recycling and waste centres in the amount of \$61,481,000 (exclusive of taxes) and Contract 16-114 with GFL Environmental Inc. for operation and maintenance of Langley and Maple Ridge recycling and waste centres in the amount of \$7,553,000 (exclusive of taxes) to extend the two contracts until December 31, 2025. Contract extensions provide good value in the near-term, and allow for procurement processes for new long-term contracts that will be effective in 2026. During the extension period Metro Vancouver will work with Emterra Environmental and GFL Environmental to test low carbon/zero emission transport trucks and onsite mobile equipment.

Recycling and waste centre operating and maintenance costs are funded from tipping fees paid by all regional solid waste system users. The cost of the contract extensions can be accommodated within the tipping fee projections included in the 2023-2027 five-year financial plan endorsed by the Board in October 2022.

PURPOSE

The purpose of this report is to recommend that the GVS&DD Board (the Board) approve two-year extensions to agreements with Halton Recycling Ltd. doing business as Emterra Environmental and GFL Environmental Inc. for operation and maintenance of the North Shore, North Surrey, United Boulevard, Maple Ridge, and Langley recycling and waste centres.

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014* and the *Procurement and Real Property Contracting Authority Policy*, procurement contracts that exceed a value of \$5 million require the approval of the Board.

BACKGROUND

Following a competitive procurement process in 2016 the Board approved contracts as follows:

- Contract 16-071 with Emterra Environmental for operation and maintenance of the North Shore, North Surrey, and Coquitlam recycling and waste centres; and
- Contract 16-114 with SSG Holdings (subsequently acquired by GFL Environmental) for operation of Maple Ridge and Langley recycling and waste centres.

These contracts expire on December 31, 2023, but allow for an extension of up to two additional years.

RECYCLING AND WASTE CENTRE OPERATION AND MAINTEANCE SERVICES CONTRACTS Original Contract Details

The contract with Emterra Environmental for the operation and maintenance of the North Shore, North Surrey, and Coquitlam recycling and waste centres, had an original contract value of \$115,608,000 (exclusive of taxes). The Board subsequently approved amending the contract to include operation and maintenance of the United Boulevard Recycling and Waste Centre that replaced the Coquitlam Recycling and Waste Centre in 2022. The contract with GFL Environmental for the operation and maintenance of Langley and Maple Ridge recycling and waste centres had an original contract value of \$17,677,000 (exclusive of taxes). Each contract includes escalation provisions tied to price indexes.

Proposed Contract Extensions

Emterra Environmental submitted a proposal to extend Contract 16-071 for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres by two years. The Emterra Environmental proposal includes a one-time price adjustment of approximately 7.4%, in addition to contract specified increases tied to price indexes. The increase is largely due to increased costs for garbage transportation subcontractors: subcontractors integral to the operation of the recycling and waste centres.

GFL Environmental also submitted a proposal to extend Contract 16-114 for operation and maintenance of the Maple Ridge and Langley recycling and waste centres by two years. The GFL Environmental proposal includes a one-time price adjustment of approximately 4.1%, in addition to contract specified increases tied to price indexes. The GFL Environmental contract increase is less than the Emterra Environmental increase as the proportion of garbage transportation costs for the

GFL Environmental contract is less than the Emterra Environmental contract. Maple Ridge and Langley recycling and waste centres receive only hand-unloaded small loads; as such, the quantities of garbage requiring transportation are proportionally less than for the larger facilities operated by Emterra Environmental.

Extending the current contracts provides good value in the near term, and allows for procurement processes that will be initiated in 2024 for new long-term contracts for the operation and maintenance of the recycling and waste centres. The process is expected to be designed to continue to have at least two contractors operating recycling and waste centres on Metro Vancouver's behalf. This approach increases the robustness of the recycling and waste centre network and helps to maximize competition in delivering these services.

Testing of Low Carbon/Zero Emission Transport Trucks and Mobile Equipment

Emissions associated with transporting waste within the region and to remote disposal sites, and from onsite mobile equipment, represent a significant portion of Metro Vancouver's corporate carbon emissions. Extending the Emterra Environmental and GFL Environmental contracts will allow for the testing of low carbon/zero emission trucks and onsite equipment. Heavy duty electric trucks are just coming onto the market and two additional years to test these vehicles along with on-site mobile electric equipment will allow low carbon/zero emission trucking/equipment requirements to be integrated into the next procurement process.

ALTERNATIVES

- 1. That the GVS&DD Board:
 - a) approve an amendment in the amount of \$61,481,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-071 with Halton Recycling Ltd. doing business as Emterra Environmental for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres;
 - approve an amendment in the amount of \$7,553,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-114 with GFL Environmental Inc. for operation and maintenance of the Maple Ridge and Langley recycling and waste centres; and
 - c) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendments should proceed.
- 2. That the GVS&DD Board not approve amendments to Contract 16-071 and Contract 16-114 to extend the contract terms by two years and direct staff to report back to the GVS&DD Board with alternate options.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, amending Contract 16-071 with Emterra Environmental for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres and Contract 16-114 with GFL Environmental for operation and maintenance of the Maple Ridge and Langley recycling and waste centres, the contract terms will be extended by two years, until December 31, 2025.

The estimated value of the two-year extension for Contract 16-071 with Emterra Environmental is \$61,481,000 and the estimated value for the two-year extension for Contract 16-114 with GFL Environmental is \$7,553,000. The estimated contract extension values are based on existing contractual rates, estimated waste tonnages, estimated annual inflation adjustments, and one-time contract price increases.

Recycling and waste centre operating and maintenance costs are funded from tipping fees paid by all regional solid waste system users. The cost of the contract extensions can be accommodated within the tipping fee projections included in the 2023-2027 five-year financial plan endorsed by the Board in October 2022.

CONCLUSION

Operation and maintenance services contracts for five of Metro Vancouver's recycling and waste centres expire on December 31, 2023. Proposals from the two current contractors were received to extend the contracts by two years. Staff recommend that the Board approve and authorize the Commissioner and the Corporate Officer to execute amendments to Contract 16-071 with Emterra Environmental in the amount of \$61,481,000 (exclusive of taxes) and Contract 16-114 with GFL Environmental in the amount of \$7,553,000 (exclusive of taxes) to extend the two contracts until December 31, 2025.



Subject:	Illegal Dumping Update and Gypsum Management i	n Metro Vancouver
Date:	June 8, 2023	Meeting Date: June 15, 2023
From:	Adriana Velázquez, Senior Project Engineer, Solid Wa John Ho, Project Engineer, Solid Waste Services	ste Services
То:	Zero Waste Committee	

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated June 8, 2023, titled "Illegal Dumping Update and Gypsum Management in Metro Vancouver".

EXECUTIVE SUMMARY

Member jurisdictions and Metro Vancouver provide programs and education to help reduce illegal dumping in the region.

Illegal dumping incidents were similar in 2022 compared to 2021 and down from 2020. In 2022, 42,154 illegal dumping incidents were tracked (including 940 incidents of abandoned gypsum), compared to 42,450 incidents in 2021 and 47,050 incidents in 2020. Illegal dumping clean-up costs are generally stable with municipal costs of approximately \$3.4 million in 2022. Municipalities spend an additional \$2.5 million per year on bulky item pick-up programs.

Mattresses continue to be one of the most commonly illegally dumped materials/materials picked up in bulky item pick-up programs. Metro Vancouver has advocated for many years to include mattresses in provincial extended producer responsibility programs. The Province announced in 2021 that mattresses will be integrated into the extended producer responsibility program along with some other materials by 2025.

PURPOSE

This report summarizes illegal dumping trends, initiatives to discourage illegal dumping, and regulatory requirements and management practices for gypsum in Metro Vancouver.

BACKGROUND

Illegal dumping and abandoned gypsum trends in the region are updated based on data provided by member jurisdictions and presented annually to the Zero Waste Committee.

ILLEGAL DUMPING UPDATE

Metro Vancouver provides convenient and accessible recycling and waste drop-off services at its recycling and waste centres, including accepting residential loads of new gypsum for recycling and used gypsum for disposal. Metro Vancouver also:

• Shares messaging on social media channels to educate residents on recycling, donation, and disposal options in their communities for unwanted items.

- Developed a recycling and disposal cost estimator to help customers understand the cost of recycling and disposal at Metro Vancouver recycling and waste centres. The tool was used more than 16,000 times over its first year of operation.
- Supports member jurisdictions by facilitating information sharing and is developing a centralized online portal to collect and monitor regional illegal dumping data.

Member jurisdictions manage the clean-up of illegally dumped items on municipal property and implement a range of prevention initiatives and enforcement actions. Illegal dumping is regulated through municipal bylaws and administrative penalties are typically set in municipal ticketing bylaws. Some members also have monitoring cameras in place and have increased enforcement patrols in areas with many illegal dumping incidents. In addition to enforcement practices, members have implemented initiatives to discourage illegal dumping, such as signage, large item pick-up programs, drop-off events, city-wide garage sales, restricted access to known illegal dumping sites, streetscape recycling bins, education campaigns, and expansion of accepted items at recycling depots.

Illegal Dumping Trends

Illegal dumping incidents were similar in 2022 compared to 2021 and down from 2020. Data tracked for 2022 included 42,154 illegal dumping incidents, including 940 incidents of abandoned gypsum at a collective cost of \$3.43 million to clean up. Illegal dumping clean-up costs are generally stable with municipal costs of approximately \$3.4 million in 2022. Similar to 2021, mattresses, furniture, and household garbage were identified as the most frequently abandoned items in 2022.

Year	Total Number of Illegal Dumping Incidents	Number of Abandoned Gypsum Incidents	Total Cost of Clean-Up	Average Cost Per Incident
2018	43,800	935	\$3.40 million	\$78
2019	43,450	649	\$3.50 million	\$81
2020	47,050	720	\$3.63 million	\$77
2021	42,450	964	\$3.54 million	\$83
2022*	42,154	940	\$3.43 million	\$81

Table 1: Annual Incidents of Illegal Dumping and Abandoned Gypsum in Metro Vancouver

* City of Vancouver data is based on 2021 illegal dumping statistics due to a change in process in 2022.

New Extended Producer Responsibility Programs

Enhanced extended producer responsibility programs for items such as mattresses are expected to help reduce illegal dumping by reducing costs to residents to manage those materials. On September 13, 2021 the Province published its Extended Producer Responsibility Five-year Action Plan. The plan outlines key actions to expand the list of products regulated under the extended producer responsibility program, including mattresses, hybrid and electric vehicle batteries, compressed canisters (e.g. fire extinguishers and single-use camping fuel), medical sharps used by people at home, and additional electric products (e.g. solar panels). In the Action Plan, regulation changes for mattresses and expanded hazardous household waste are expected in 2023 with program implementation by 2025.

Large Item Pick-up Programs

Twelve member jurisdictions provide large item pick-up programs, a residential collection service for unwanted bulky items, at a collective cost of approximately \$2.5 million per year. The majority of programs require residences to be eligible for curbside garbage collection to also be eligible for the large item pick-up program. Multifamily and commercial buildings are eligible in some municipalities. Some of these large item pick-up services are promoted by municipalities but managed by a third-party service provider. Items collected by large item pick-up programs are sent to recycling or disposal.

Gypsum Management in Metro Vancouver

Gypsum is a material used in the manufacture of interior wall and ceiling panels, commonly referred to as drywall. Gypsum board manufactured prior to 1990 may contain asbestos, is expensive to remediate, and can present a health risk to workers and the public.

Different orders of government, as outlined in Attachment 1, enforce regulations and oversee processes to ensure the industrial, commercial/institutional, and residential sectors are properly managing hazardous materials including gypsum containing asbestos.

WorkSafeBC Contractor Licensing and Worker Certification Program

In 2022 the provincial government made amendments to the Workers Compensation Act to require that all asbestos abatement contractors be licensed to operate in British Columbia, and that workers who perform this work complete mandatory safety training and obtain certificates. WorkSafeBC provides asbestos abatement training, through approved training providers, which includes a waste handling core competency. Changes to the Occupational Health and Safety Regulation are expected to occur in 2024 and will require workers to complete approved safety training and obtain a certificate prior to conducting asbestos abatement work.

Recycling and Disposal of Commercial Quantities of Gypsum

Private facilities play a key role in managing large commercial quantities of gypsum from the construction and demolition sector. In 2021 63,533 tonnes of gypsum (including residential and commercial loads) were recycled in the region, compared to 56,782 tonnes in 2020.

A local private recycling facility accepts both commercial and residential gypsum loads and has a material screening and documentation procedure to reject loads of gypsum product that may contain asbestos. The accepted material is separated into its gypsum core and paper backing components, and are recycled into new gypsum or paper products.

Commercial gypsum loads with asbestos-containing materials are typically disposed of by qualified hazardous material abatement companies in out-of-region landfills and tracked via a BC Generator Number as required by the BC Ministry of Environment and Climate Change Strategy.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Metro Vancouver's initiatives related to illegal dumping monitoring, reporting and education are carried out within existing budgets for Solid Waste Services and External Relations. Illegal dumping clean-up costs are borne by municipalities and private land owners.

CONCLUSION

Member jurisdictions and Metro Vancouver continue to work collaboratively to reduce illegal dumping and advocate for expanded producer responsibility programs for commonly dumped materials such as mattresses and furniture. The collection of regional illegal dumping data remains an effective way to identify abandoned materials that pose operational risks and other hazards.

Private facilities collect and process commercial quantities of gypsum from the construction and demolition sector. Regulations are enforced by different orders of governments to ensure proper management of gypsum containing asbestos. Collaboration with member jurisdictions and industry stakeholders is necessary to further address the increases in abandoned gypsum in the region.

Attachments

- 1. Table A Summary of Regulatory Agencies Related to Gypsum Recycling and Disposal
- 2. Presentation re: Illegal Dumping Update and Gypsum Management in Metro Vancouver

References

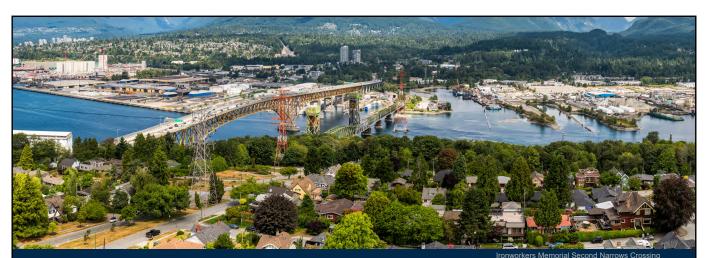
1. Asbestos training & certificates - WorkSafeBC



Table A – Summary of Regulatory Agencies Related to Gypsum Recycling and Disposal

Agency	Role	Regulations/Enforcement
(Activity regulated)		
Environment Canada (Transportation)	 Sets requirements and enforces compliance for inter-provincial and international transportation of hazardous materials. 	 Canadian Environmental Protection Act Transport manifest requirements
BC Ministry of Labour - WorkSafeBC (Worksite; processing and transfer; final disposal)	 Ensures worker safety at work sites, including cases where workers may come into contact with hazardous materials. 	 Occupational Health and Safety Regulation (OHS) Workers Compensation Act Fines and stop-work orders
BC Ministry of Environment and Climate Change Strategy (Transportation; processing and transport; final disposal)	 Licenses haulers and receiving facilities that take hazardous materials, and restrict accepted materials and material quantities. 	 Environmental Management Act Hazardous Waste Regulation Hauler licences
Metro Vancouver (Processing and transfer; recycling; and final disposal)	 Regulates private facilities that manage municipal solid waste and recyclable materials within the region. Collaborates with other jurisdictions to ensure proper handling. Inspects loads at regional disposal facilities. 	 Solid Waste & Recyclable Material Regulatory Bylaw Permits for receiving and processing facilities Solid waste licences Disposal ban program New and used gypsum programs
Municipalities (Worksite)	 Issues business licences to operate within a specific municipality. Sets diversion requirements for building materials and hazardous material abatement. Collaborates with WorkSafeBC in cases of non- compliance. 	 Local bylaws Business licences Building permits

ATTACHMENT 2



2022 Illegal Dumping Update

Adriana Velázquez, P.Eng M.Eng Senior Project Engineer, Solid Waste Services Zero Waste Committee Meeting June 15, 2023

metrovancouver

METRO VANCOUVER INITIATIVES

- Central Surrey Recycling
 and Waste Centre
- Messaging on social channels on options to manage unwanted items
- Recycling and disposal cost estimator



metrovancouver

RECYCLING AND DISPOSAL COST ESTIMATOR

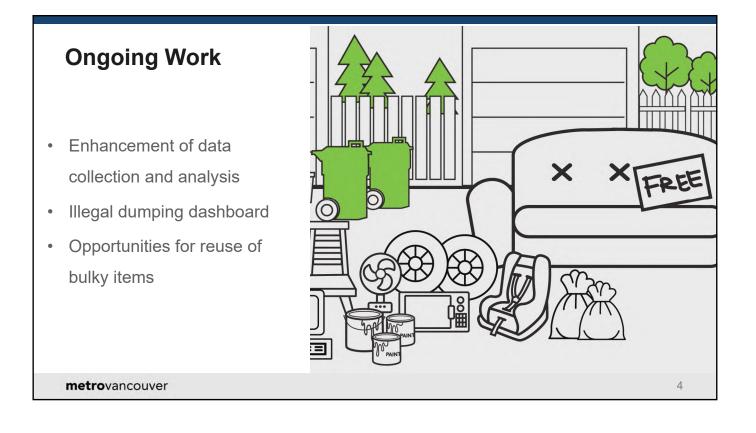
Total queries: Over 16,000 uses on its first year

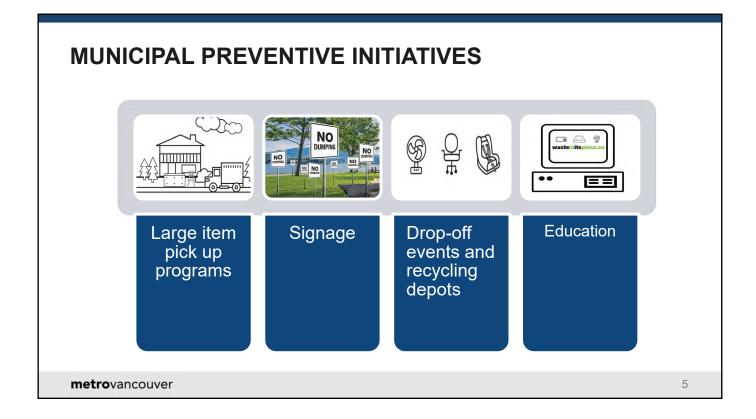
Top three searched material types:

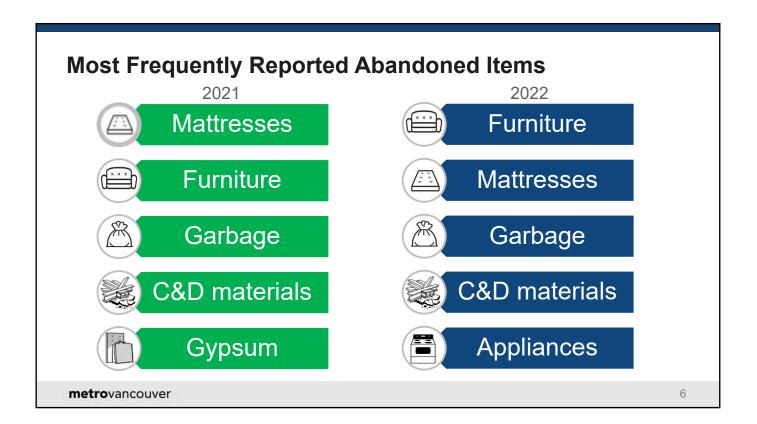
- 1. Furniture (21%)
- 2. Garbage (19%)
- 3. Mattress/box spring (13%)

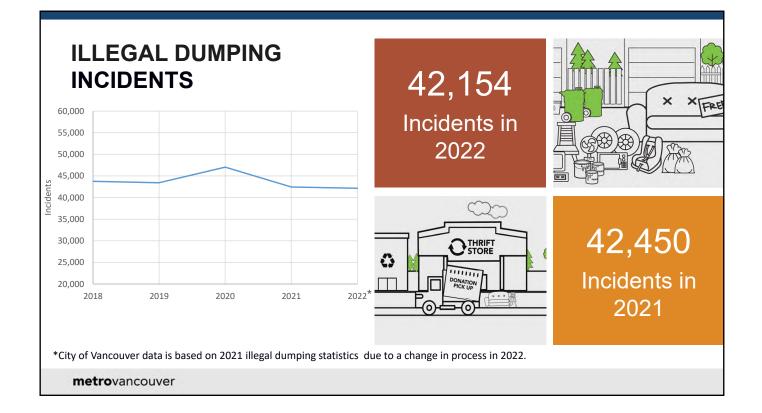
metrovancouver

Recyclin	g and Disposal Cost Estimator	Search m
Home > Servic	es > Solid Waste > Solid Waste & Recycling Facilities > Recycling and Disposal Cost Estimator	
offer a rar help custo	couver's recycling and waste centres, the Vancouver South Transfer Station, and the Vancou ge of free and paid recycling and waste disposal services. This recycling and disposal cost es omers estimate the cost to recycle or dispose accepted materials. Actual costs are based on th as determined by weighing vehicles entering and exiting the facilities.	timator can
	Material Type	
	Gypsum/Drywall, Used	· •
	program bags. Follow the used gypsum disposal instructions. * Used gypsum/drywall is not accepted for disposal at Vancouver South Transfer Station. Estimated Weight	
	Unit of Measure	<u> </u>
	Pounds Vilograms Tonnes	
	Estimate Cost	
	Estimated Cost: \$25	







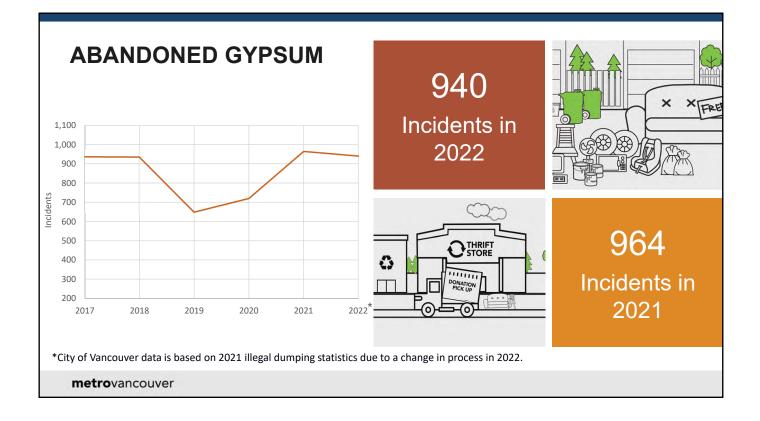


COST OF CLEAN UP

Year	Number of Incidents	Total Clean Up Cost	Average Cost per Incident
2019	43,437	\$3.50 million	\$81
2020	47,038	\$3.65 million	\$78
2021	42,450	\$3.54 million	\$83
2022*	42,154	\$3.43 million	\$81

* City of Vancouver data is based on 2021 illegal dumping statistics due to a change in process in 2022.

metrovancouver







Subject:	Waste-to-Energy Facility 2022 Financial Update	
Date:	June 8, 2023	Meeting Date: June 15, 2023
From:	Brent Kirkpatrick, Lead Senior Engineer, Solid Waste S	Services
То:	Zero Waste Committee	

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated June 8, 2023, titled "Waste-to-Energy Facility 2022 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 2022 the Waste-to-Energy Facility processed 233,052 tonnes of municipal solid waste at an overall at a net unit cost of \$74.59 per tonne for operation and maintenance. The Waste-to-Energy Facility net cost per tonne of waste processed increased in 2022 as compared to 2021, primarily due to increased consumable costs (e.g., chemicals and natural gas), ash management costs, and lower throughput tonnage. Waste-to-Energy Facility unit costs are comparable to 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.

2022 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 and ash management. Ash management costs increased in 2022 due to higher fly ash and bottom ash disposal costs which increased with inflation. A small amount of bottom ash was managed at the Coquitlam Landfill in 2021, reducing costs compared to 2020.

Metro Vancouver has entered into a contract with Birco Environmental Ltd. to conduct a pilot project to process bottom ash for beneficial use as an input material to a local cement plant. If the process is successful it will result in a disposal reduction of approximately 40,000 tonnes per year of bottom ash, or nearly 5% of all of the municipal solid waste requiring disposal in the region. The initiative will also reduce greenhouse gas emissions through reduced mining and transportation of raw materials for the cement plant. The pilot trials are currently underway and scheduled for completion by early 2024. Page 22 of 51

	2020	2021	2022
Operating Cost	\$19,292,506	\$19,283,850	\$20,226,031
Fly Ash Disposal Costs	\$1,256,519	\$1,465,739	\$1,455,891
Bottom Ash Disposal Costs	\$2,016,633	\$1,560,862	\$1,767,871
Total Expenditure	\$22,565,658	\$22,310,451	\$23,449,793
Tonnage	244,362	241,531	233,052
Unit Cost / Tonne	\$92.35	\$92.37	\$100.62

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

Table 2 outlines Metro Vancouver's portion of offsetting revenues. Electrical revenue in 2020 was reduced due to scheduled turbine generator maintenance which occurs every six years. In 2021 and 2022 electrical revenues returned back to normal levels. Metal revenue includes revenue from the non-ferrous metals recovery system that was installed in the fall of 2018 and commissioned in 2019. Metals revenue has remained high reflective of high recycled metals prices.

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

	2020	2021	2022
Electrical Revenue	\$5,308,843	\$5,778,816	\$5,705,028
Metals Revenue	\$191,800	\$436,187	\$360,428
Tonnage	244,362	241,531	233,052
Unit Revenue / Tonne	\$22.51	\$25.73	\$26.03

Table 3 shows net cost per tonne for the Waste-to-Energy Facility from 2020 to 2022. An approximate \$5 per tonne increase in net costs was observed between 2020 and 2022. This increase is primarily due to consumable costs (e.g., chemicals and natural gas), ash management costs, and lower throughput tonnage. The Waste-to-Energy Facility annual tonnage processed is impacted by waste quality, equipment availability, and boiler outages. Over the two past years, approximately 15% of the unscheduled downtime at the facility was due to tube leaks in the primary economizers. This has a direct impact on the waste processing capacity and electricity production of the facility. One boiler was upgraded during the 2023 spring outage and the remaining two boilers will be upgraded during the 2023 fall outages.

	2020	2021	2022
Unit Cost / Tonne (from Table 1)	\$92.35	\$92.37	\$100.62
Unit Revenue / Tonne (from Table 2)	\$22.51	\$25.73	\$26.03
Net Unit Cost / Tonne	\$69.84	\$66.64	\$74.59

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The Waste-to-Energy Facility net unit cost/tonne increased in 2022 relative to 2021 primarily due to increased consumable costs (e.g., chemicals and natural gas), ash management costs, and lower throughput tonnage. Metro Vancouver continues to work with Covanta to minimize facility costs and, overall, the Waste-to-Energy Facility continues to be a cost-effective regional 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 Waste-to-Energy Facility costs are funded through garbage tipping fees paid by all solid waste system users.

CONCLUSION

Expenditures in 2022 for the Waste-to-Energy Facility totaled \$23.5 million, resulting in an expenditure of \$100.62 per tonne. Metro Vancouver's portion of electrical and metals revenues totaled \$6.1 million or \$26.03 per tonne. Based on the plant processing 233,052 tonnes of municipal solid waste in 2022, expenditures of \$100.62 per tonne less revenue of \$26.03 per tonne resulted in a net unit cost of \$74.59 per tonne for operation and maintenance of the Waste-to-Energy Facility. Tipping fee revenues are accounted for separately and are not included in this analysis.

Subject:	2023 Regional Clothing Waste Reduction Campaign Results	
Date:	June 2, 2023	Meeting Date: June 15, 2023
From:	Larina Lopez, Division Manager, Corporate Communications, External Relations Jay Soper, Communications Specialist, External Relations	
To:	Zero Waste Committee	

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated June 2, 2023, titled "2023 Regional Clothing Waste Reduction Campaign Results."

EXECUTIVE SUMMARY

Now in its fifth year, Metro Vancouver's "Think Thrice About Your Clothes" ("Think Thrice") behavior change campaign performed strongly in terms of engagement and the number of Metro Vancouver residents reached. The campaign's goal is to increase diversion of textiles from the waste stream by raising awareness of the textile waste problem and empowering residents to take action. While clothing donation and recycling options were encouraged, the campaign has put additional emphasis on reduction and reuse options. Several new traditional media placements were added this year to expand campaign reach to younger audiences, with the inclusion of on-air host endorsements with Virgin radio, Skytrain platform posters, and digital screens located within 8 post-secondary campuses across Metro Vancouver. The campaign achieved over 43.7 million impressions between digital and traditional media tactics, an increase of over 12 million impressions from the previous year.

PURPOSE

To update the Committee on the results of the 2023 regional clothing waste reduction campaign, "Think Thrice About Your Clothes", as identified in the 2023 Zero Waste Committee Work Plan.

BACKGROUND

Clothing is one of the fastest growing waste streams due to rapidly changing fashion trend cycles and low prices, leading to increased clothing consumption and disposal. Approximately 20,000 tonnes of clothing waste is disposed annually in Metro Vancouver, despite local options to swap, sell, or donate unwanted clothing. Metro Vancouver residents throw out an average of 8 kg of clothing per person per year, equivalent to the weight of 44 t-shirts per person per year.

2023 was the fifth year of the Think Thrice campaign, which supports Metro Vancouver's commitment to zero waste. Overcoming barriers and effecting long-lasting behavior change can take several years to achieve and requires a long term commitment. While tangible results can also take several years to identify, they can be measured through campaign engagement, public attitudes research, and clothing disposal metrics identified through Metro Vancouver's annual waste composition studies.

This report covers results of the Think Thrice campaign from February 27 to April 30, 2023.

2023 REGIONAL "THINK THRICE ABOUT YOUR CLOTHES" CAMPAIGN Campaign Approach

The campaign was in market from February 27 – April 30, 2023 and aimed to:

- Increase diversion of textiles waste from the waste stream
- Empower residents to take action reduce their textiles waste (reduce, repair, reuse)
- Increase awareness among Metro Vancouver residents about the textiles waste problem
- Connect textiles waste reduction to climate action

While the campaign targeted all Metro Vancouver residents, the primary audience was adults aged 18–64, with secondary segments consisting of younger adults (aged 18–34) and women. Additional emphasis has been put on reduce and reuse options for all audience demographics.

Creative Direction and Messaging

The 2023 campaign focused on hopeful and action-oriented messaging, while addressing associated barriers to adopting desired behaviours. The campaign creative platform celebrates the lives of "caring owners" by focusing exclusively on items of clothing and the stories they collect. The platform builds off the premise that if clothes are to be spared from the landfill, they require "caring owners." Audiences were directed to the campaign website URL, <u>www.think-thrice.ca</u>, to learn more about different ways they can reduce their clothing waste.

Website

The campaign website focuses on three main areas of messaging:

- Reduce tips for identifying quality items when purchasing new or second-hand clothing, including rental options
- Repair tips for better care and repair of clothing, including laundry and stain removal, as well as clothing repair and alteration options and ideas
- Donate/Recycle what to do with unwanted clothing, including information on reselling, repurposing, recycling, and donating

Promotional Strategy

A combination of digital and out-of-home targeted placements were employed to reach residents throughout Metro Vancouver. Tactics included digital (YouTube, Facebook, Instagram, search ads (year round)), a television PSA, radio host endorsements with Virgin, Rock 101, and JRFM, out-of-home (Skytrain posters, Metrotown LED Spectacular, super bus kings, campus digital screens). In addition to on-air radio endorsements, the popular radio hosts further amplified campaign messaging through their own social media channels, acting as campaign influencers and contributing significant additional ad value.

New to the 2023 campaign was the inclusion of additional on-air radio host endorsements (Virgin radio), the Metrotown LED Spectacular, digital screens located within 8 post-secondary campuses, and the re-introduction of Skytrain platform posters. The new tactics were introduced to increase awareness among all target audiences, particularly women and younger adults, both of whom tend

to shop more frequently and purchase more clothing on average, according to public attitudes research conducted in 2021 and 2022. All tactics drove residents to the campaign website (www.think-thrice.ca).

Engagement of Metro Vancouver Members

Campaign materials were made available to all Metro Vancouver members, including social media content and co-branded assets like posters and digital transit shelters.

Results

Website Traffic

- The campaign website had over 33,000 visits (approx. 535 hits/day) from February 27–April 30, 2023.
- Digital ads, including Google Search and social media (Facebook and Instagram), were the largest source of website traffic.
- Users viewed an average of three website pages per visit, and the majority of web traffic was from new visitors (approximately 80% new vs. returning visitors).
- The majority of users (79%) accessed the campaign website via a mobile device.
- Besides the landing page, the most visited pages were within the donation and recycling section of the website (i.e. 'Where can I donate or recycle'), indicating there's still a need to focus campaign messaging on providing information about what clothing can be donated and where.

Media Performance

- The campaign delivered over 43.7 million impressions. This is an increase of over 12 million impressions compared to 2022 campaign results.
- Out of home tactics (Skytrain posters, Super Bus Kings and digital screens) delivered over 28.6 million impressions.
- Digital tactics (Google Search, Facebook & Instagram, YouTube video) offered strong reach and delivered 10.4 million impressions.
- The television PSA aired 1,631 times to Shaw and Telus subscribers in the region.
- There were over 255,000 video views on YouTube.
- Radio received an estimated 4.7 million impressions (296 spots).

Earned Media

A supporting <u>Media Release</u> was issued on March 7, and stories mentioning the campaign appeared in radio, TV, print, and digital media. Broadcast coverage included CKNW 980 and Global News, while print and digital stories included the Richmond Sentinel, Delta Optimist, Tri-City News, and MSN Canada. In total, print, online, and broadcast media reached over 22.7 million people, with an estimated ad value equivalent of \$210,000.

Plans for 2023 Regional Campaign

The campaign will run again in early 2024, and will continue to use the "caring owners" platform, with continued evolution of messaging and ad creative. The target audience and key messages are to be determined, but will be based on insights from the 2023 campaign and any additional data from Solid Waste Services.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The 2023 clothing campaign was provided within a budget of \$155,000 supported under the Zero Waste Communications Program of the 2021 General Government budget, managed by the External Relations Department.

CONCLUSION

This is the fifth year of Metro Vancouver's clothing waste reduction behaviour change "Think Thrice" campaign, and the second year using the "caring owners" creative platform. The campaign's objectives were to raise awareness of the clothing waste issue and empower residents to take action to reduce their textiles waste (reduce, repair, donate/recycle).

A range of indicators can be employed to measure campaign efficacy and behavior change over time, including engagement, public attitudes research, and changes in clothing disposal identified through Metro Vancouver's annual solid waste composition studies. The 2023 "Think Thrice About Your Clothes" campaign performed strongly in terms of engagement and the number of Metro Vancouver residents reached. These indicators, along with additional research, will inform future iterations of the Think Thrice campaign and provide the ability to measure behavior change over time.

Attachment

1. Presentation re: 2023 Regional Clothing Waste Reduction Campaign Results

THINK THRICE ABOUT YOUR CLOTHES Reduce, Repair, Reuse.

Think Thrice About Your Clothes

2023 CAMPAIGN RESULTS

Jay Soper

Communications Specialist, Corporate Communications Zero Waste Committee, June 15, 2023 60343682

metrovancouver

OVERVIEW

Background:

- Fifth year of regional clothing waste reduction campaign
- February 27 April 30, 2023

Objectives:

- Increase diversion of textiles from the waste stream
- Empower residents to take action to reduce their textile waste (reduce, repair, reuse)
- · Increase awareness among Metro Vancouver residents about the textiles waste problem

Audience:

- Metro Vancouver residents
 - Primary: Adults aged 18-64
 - Secondary: Women and young adults (aged 18-34)

metrovancouver

CAMPAIGN CREATIVE

- 2nd year of "caring owners" campaign platform
 - Celebrates the lives of various "owners" by focusing on items of clothing and the stories they collect
 - Builds on premise that if clothes are to be spared from the landfill they require "caring owners"
- Campaign URL: <u>www.think-thrice.ca</u>



metrovancouver

CREATIVE EXECUTIONS



PROMOTIONAL STRATEGY

Digital:

- Facebook & Instagram
- YouTube video
- Google Search (year-round)

Broadcast:

- TV PSA
- Radio (Rock 101, JRFM, Virgin)

Out-of-Home:

- Super Bus Kings
- SkyTrain Platform Posters
- Metrotown LED Spectacular
- Campus LED Screens

metrovancouver



LED Spectacular - Metrotown SkyTrain Station

5

CAMPAIGN HIGHLIGHTS

Campaign delivered over 43.7 million impressions

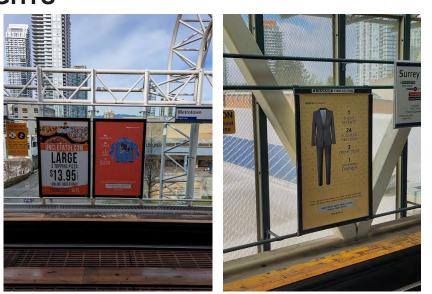
- Out-of-home: 28.6 million
- Digital: 10.4 million
- Radio: 4.7 million (296 spots)
- Television PSA aired 1,631 times to Shaw and Telus subscribers in the region
- 255,000+ video views on YouTube
- Campaign webpages had over 33,000 page views
 - ~535 hits/day pages
 - · Users viewed an average of three website pages per visit
 - Majority of web traffic from new visitors (80% new vs. returning)
 - · Most popular pages within donation and recycling section

metrovancouver

CAMPAIGN HIGHLIGHTS

SkyTrain Posters

- 24 platform locations:
 - Vancouver
 - Burnaby
 - Coquitlam
 - New West
 - Surrey
 - Richmond



metrovancouver

CAMPAIGN HIGHLIGHTS

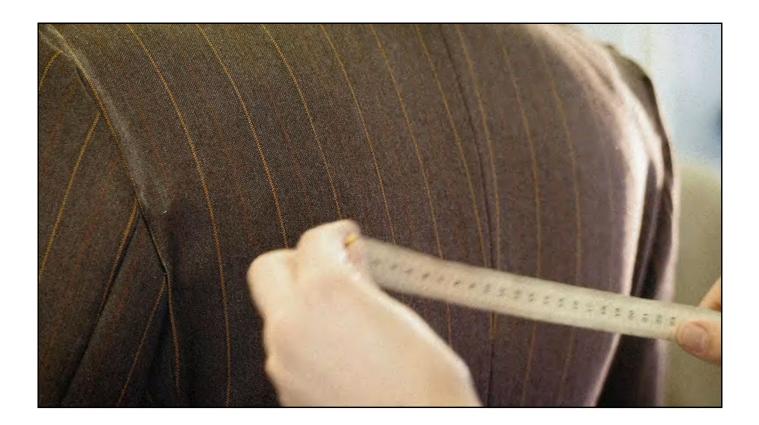
Super Bus Kings

- 12 transit buses:
 - Vancouver, NV, Richmond, Surrey, Delta, PoCo

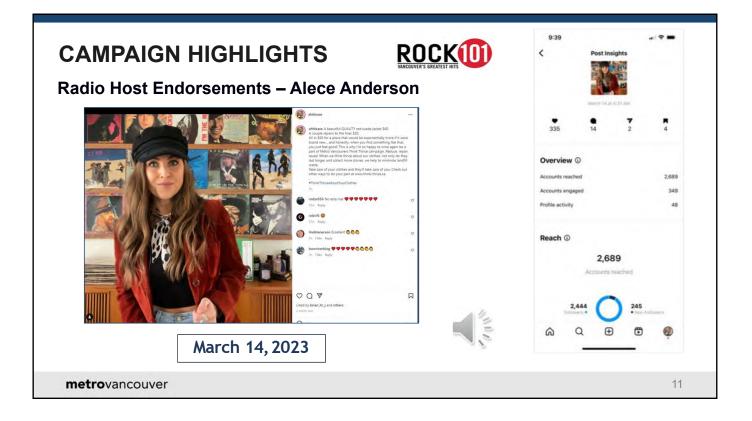


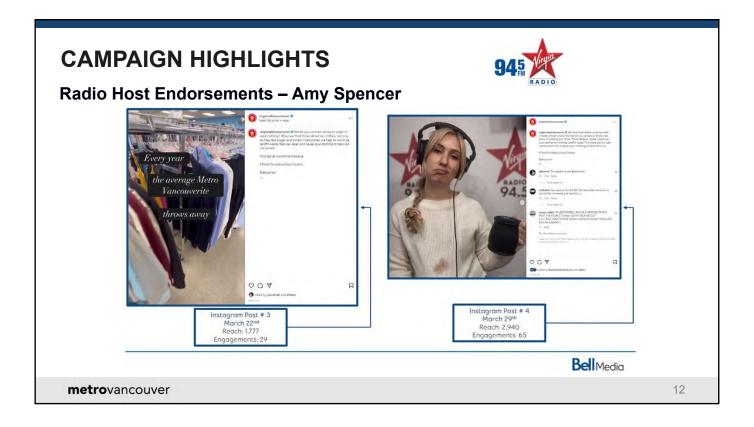


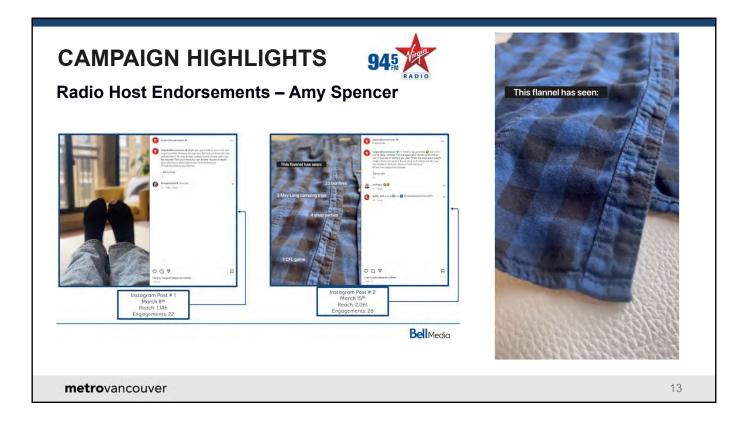
metrovancouver

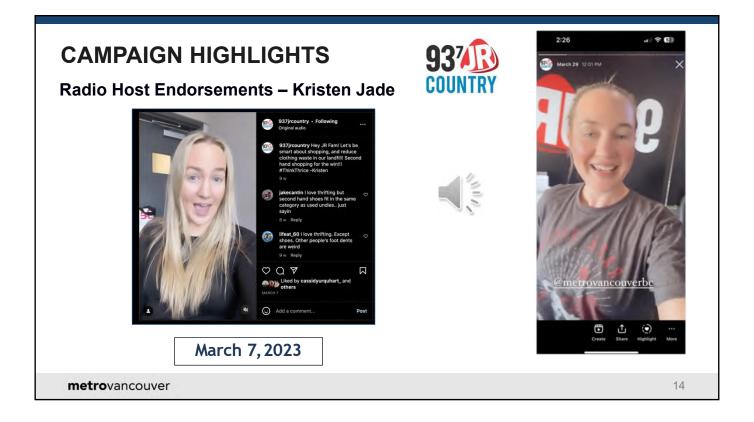












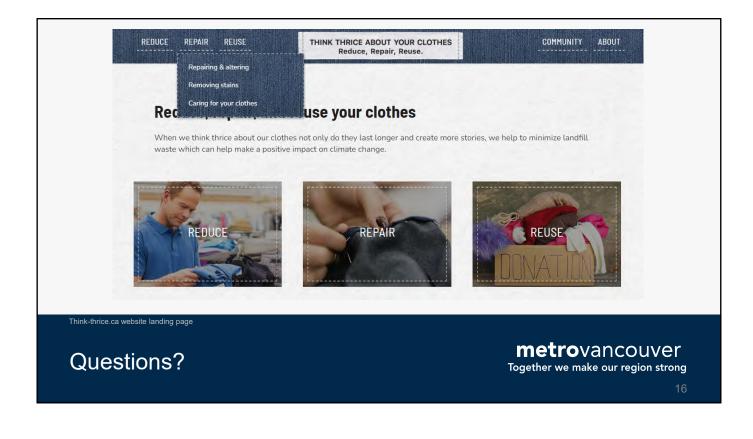
CAMPAIGN HIGHLIGHTS

Earned Media

- Media Release March 7
- Stories appeared in radio, TV, print, and digital media
- Print, online, and broadcast media reached over 22.7 million people, providing estimated ad value equivalent of \$210,000



metrovancouver





То:	Zero Waste Committee	
From:	panne Gauci, Senior Policy Advisor, Collaboration and Engagement, External elations lisha Drinkwater, Communications Specialist, Corporate Communications, External elations	
Date:	June 8, 2023	Meeting Date: June 15, 2023
Subject:	Update on Metro Vancouver Engagement with the Love Food Hate Waste Canada Campaign for 2022-2023	

RECOMMENDATION

That the MVRD Board receive for information the report dated June 8, 2023, titled "Update on Metro Vancouver Engagement with the Love Food Hate Waste Canada Campaign for 2022-2023".

EXECUTIVE SUMMARY

As part of its commitment to waste prevention, Metro Vancouver launched a regional Love Food Hate Waste (LFHW) campaign in 2015 to prevent household food waste. Building on the success of the regional campaign, Metro Vancouver launched the initiative across Canada through the National Zero Waste Council (NZWC) in 2018.

As Canada's leading resource to prevent household food waste, LFHW Canada takes a collaborative, cross-sector approach – offering simple, actionable tips to help Canadians make their food go further and waste less (Reference 1). National and local activations work together to enable citizens to hear consistent messaging through a variety of outreach, communication and media efforts, driving behaviour change over the long-term.

Metro Vancouver is one of eight partners in this national bilingual campaign. As a partner, Metro Vancouver receives creative materials for regional activations, and benefits from national media buys, access to influencers, and press outreach. The regional campaign performed strongly in 2022 and early 2023 with over four million total impressions, a reach of over one million people, and nearly 8,000 social media engagements. The national campaign garnered nearly 18 million impressions.

PURPOSE

To update the Committee on the Love Food Hate Waste Canada behaviour change campaign, which is delivered across Canada by Metro Vancouver through the National Zero Waste Council.

BACKGROUND

LFHW is a globally recognized brand active in the UK, New Zealand, and Australia, as well as Canada. It is backed by a strong evidence base and brings together an international community of practice sharing knowledge on how to prevent household food waste. The campaign was originally developed by the Waste and Resources Action Programme (WRAP) in the UK. Metro Vancouver launched a regional Love Food Hate Waste campaign in 2015 and launched the campaign across Canada through the NZWC in 2018. Through a collaborative, cross-sector approach, LFHW Canada is enabling Canadians to make their food go further and waste less by offering simple actionable tips and strategies.

LFHW Canada is delivered by the NZWC, in French and English, in collaboration with campaign partners and activators. Campaign partners and activators extend the reach and impact of LFHW Canada, and are provided with a suite of campaign materials, guidance documents, and support to activate local campaigns. Campaign partners sub-license the brand and have the opportunity to tailor the campaign to meet their own objectives. Campaign activators are local governments that participate indirectly through a provincial government agency or non-profit partner.

There are currently eight campaign partners with LHFW Canada: the cities of Toronto, Vancouver, and Winnipeg, the Capital Regional District, Metro Vancouver, RECYC-QUÉBEC, the Recycling Council of Alberta (RCA), and Walmart Canada. Strathcona County and the City of Lethbridge participate through the RCA and the following local governments participate through RECYC-QUÉBEC:

- Communauté métropolitaine de Québec (representing 28 municipalities)
- MRC de Memphrémagog (representing 17 municipalities)
- MRC Pierre-de-Saurel (representing 12 municipalities)
- Municipalité d'Amherst
- Municipalité de Notre-Dame-du-Portage
- Municipalité de Saint-Bernard-de-Michaudville

- Régie intermunicipale d'Acton et des Maskoutains (RIAM) (representing 25 municipalities)
- Régie des matières résiduelles du Lac-Saint-Jean (representing 36 municipalities)
- Ville de Chapais
- Ville de Gatineau
- Ville de Léry
- Ville de Montréal
- Ville de Sherbrooke

By working together, the partners to the campaign benefit from pooling resources and expertise, accessing larger media buys than they would be able to secure on their own, and engaging national influencers and ambassadors that raise the profile of the campaign and reach new audiences. This national collaborative approach also reduces consumer confusion in the marketplace by aligning communications on the issue and the actions needed, and it enables the sharing of lessons learned and best practices between practitioners across the country and internationally.

The LFHW campaign aligns with Metro Vancouver's "Food Scraps Aren't Garbage" campaign, which has the related but distinct objective of diverting food waste to the green bin in support of the Organics Disposal Ban. LFHW Canada is a deliverable in the 2022 Zero Waste Committee Work Plan.

This report provides an update on the past year of activity, focusing on highlights from the national campaign and the regional campaign. Activities by the other campaign partners and activators across the country are not included, but are critical to the overall success of the campaign.

2022 HIGHLIGHTS AND 2023 PLANS

National Campaign Activation and Results

Last year was an extremely active year for LFHW Canada and milestone activities for the national campaign are summarized below.

- **Completion of Three-Year Report:** The report, *Making Every Bite Count, Our First Three Years,* was released in June 2022 (Reference 2). The report captures the breadth and depth of activity that occurred in the first three years of the national campaign, including those efforts by partners across the country.
- **Expansion into Alberta:** The Recycling Council of Alberta, the City of Lethbridge, and Strathcona County joined LFHW Canada in April 2022, helping to bring the campaign to Alberta residents.
- Inaugural Global Food Waste Action Week: From March 7-13, 2022, LFHW Canada joined with international partners to deliver the inaugural global Food Waste Action Week. With a focus on *Wasting Food Feeds Climate Change*, LFHW Canada reached approximately 6.5 million Canadians across the country in one week of coordinated activity and amplification.
- Updated Food Statistics to Better Reflect Food Costs and GHG Emissions: Early in 2022 the NZWC engaged researchers to update the 2017 Benchmark Study on Household Food Waste to better reflect the current cost of food and changes in how we measure GHG emissions.
- **Behaviour Change Intervention Project:** Undertaken with WRAP UK, with funding from the Walmart Foundation, this project revealed new insights on interventions that may help households prevent fresh produce from being wasted. A second phase of work for 2023 has been funded by Environment and Climate Change Canada as noted below.

Regional Campaign Activation and Results

Metro Vancouver ran a regional version of the national campaign in summer 2022 that included digital media (Facebook, Instagram, Pinterest, Natural Ads, and Google Search). The campaign leveraged the "5 Ways With" creative platform (Reference 3). This activation included two Metro Vancouver based social media influencers, who created and shared content on Instagram.

Regional performance highlights from 2022 and early 2023 include over four million impressions across social media and Google search, with a reach of over one million. There were over 26,000 video views, over 16,000 clicks to the "Five Ways With" website, and nearly 8,000 likes, comments, and shares on social media.

National Campaign Plans for 2023

Two activities are central to the Work Plan for LFHW Canada for the period of 2023 and early 2024.

Food Waste Action Week 2023: Food Waste Action Week ran for a second time, from March 6 – 12, and focused on the theme: *Win. Don't Bin. Save money and time by making the most of the food you buy.* This theme was intended to respond to the current cost-of-living crisis and, in particular, rising food costs – employing different motivators to encourage households to reduce food waste at home, namely the money-saving and time-saving benefits.

Food Waste Action Week 2023 was the most engaged campaign since LFHW Canada's inception, garnering over 3 million impressions and an estimated reach of 68 million people through a combination of paid and unpaid activities. The campaign's reels, which featured food-saving tips, were top performers, and there was significant national media pick-up including one article that ran in over 80 media outlets including the National Post, the Calgary Sun, the Toronto Sun, and other smaller community newspapers (Reference 4). An amplification kit was also shared with key actors across the country, resulting in over 100 organic amplifications from the broader food waste community on social media. Food Waste Action Week will be held again in 2024 from March 4-10.

Scaling Citizen Interventions: The NZWC has been awarded funding by Environment and Climate Change Canada (ECCC) to scale citizen-based interventions through LFHW Canada. This work builds on the collaborative project with WRAP in 2021 and 2022. The goal is to prevent produce from being wasted – the most commonly wasted food in Canadian households. The project entails two projects as noted below.

- Impact Research & Campaign Development: This research aims to quantify the environmental, economic, and social impact of the food journey of five fresh fruit and vegetables: potatoes, berries, greens, apples and tomatoes, and will inform the development of the national campaign for 2023. This campaign will run from late August into October 2023, and will focus on raising awareness about the need to prevent fresh produce from being wasted by bringing to life the journey of food and emphasizing the role of proper storage in keeping produce fresher for longer.
- **Behaviour Change Pilot:** This project is scheduled for late 2023 and early 2024. It will involve developing and testing a set of key messages and guidance to help citizens prevent fresh produce from being wasted. This pilot will inform the development of an activation toolkit to be developed in 2024.

In addition to these projects, efforts will continue with respect to building out the website as a key resource of information, and sharing food-saving tips and strategies through social media as part of an "always on" strategy. Strategic planning is also a key activity this year in anticipation of the renewal of the national program with WRAP UK, which will take place in July of 2024.

Regional Campaign Plans for 2023

Metro Vancouver participated in the nationwide social media campaign that occurred during Food Waste Action Week 2023 by sharing content on social media and running a paid promotion on Facebook and Instagram. Looking ahead, Metro Vancouver will continue amplifying the national LFHW Canada campaign with regional activations and participating in coordinated partner activity, including launching a regional amplification of the national campaign in August to October 2023.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Revenues for LFHW Canada come from service fees paid by campaign partners and funds from external granting agencies and funders. The national campaign budget for 2023 is \$571,625 which includes external funding from ECCC and WRAP UK.

CONCLUSION

Love Food Hate Waste (LFHW) Canada aims to prevent household food waste by inspiring and empowering Canadians to make their food go further and waste less. The National Zero Waste Council, which is an initiative of Metro Vancouver, runs the national campaign. There are currently eight campaign partners, including two provincial agencies, five local governments (including Metro Vancouver), and one grocery chain (Walmart Canada). Many more communities participate indirectly through the provincial arm of the program. As a campaign partner, Metro Vancouver activates the campaign locally and benefits from national media buys and campaign activities.

The period of 2022 and early 2023 has been a very active time for LFHW Canada. Highlights include: two successful Food Waste Action Week events, completion of a report on the national campaign's first three years in market, and advancement of new research and behavior change intervention work focused on fresh produce, funded separately through grants. Priorities for 2023 and 2024 include: advancing the research and behavior change intervention work already underway, implementing the next national campaign in August to October 2023, and continuing to build the campaign's social media and website presence, which are key to it being recognized as Canada's leading resource on household food waste.

LFHW Canada demonstrates the power of collaboration to create efficiencies and scale up impact to effectively address household food waste, and directly supports Metro Vancouver's priorities to prevent waste and address climate change.

Attachment

1. Presentation re: Update on Metro Vancouver Engagement with the Love Food Hate Waste Canada Campaign for 2022-2023

References

- 1. Love Food Hate Waste Canada website
- 2. Making Every Bite Count: Our First Three Years
- 3. "Five Ways With" website
- 4. Canada's food waste a bitter pill to swallow

60165687

ATTACHMENT 1



Love Food Hate Waste Canada Update 2022-2023

Joanne Gauci Senior Policy Advisor Zero Waste Committee, June 15, 2023 60378366

metrovancouver





Household Food Waste, By the Numbers

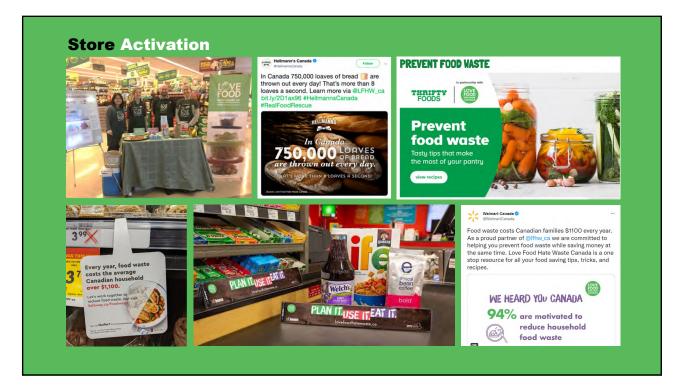
63%	140 kg	\$1,300	6.9 million tonnes	
Amount of food that's thrown away that could have been eaten.	Amount of edible food the average Canadian household wastes each year.	Amount the average household spends every year on food that's wasted.	Amount of greenhouse gas emissions Canada's household food waste produces each year.	

Fortunately, it's an issue we can solve.

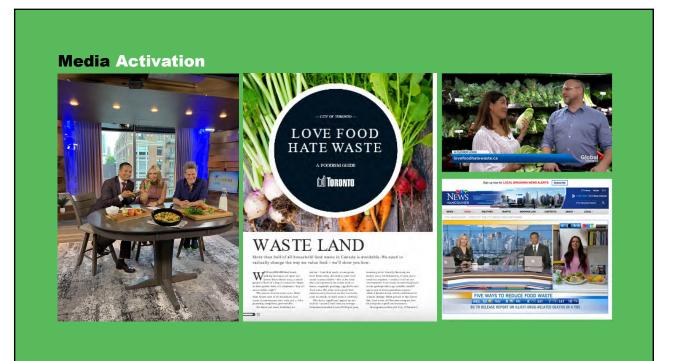
As Canada's leading resource to prevent household food waste, Love Food Hate Waste Canada takes a collaborative, cross-sector approach, offering simple, actionable tips and strategies to help Canadians make their food go further and waste less



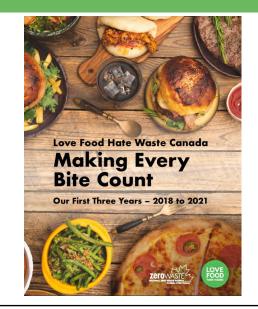






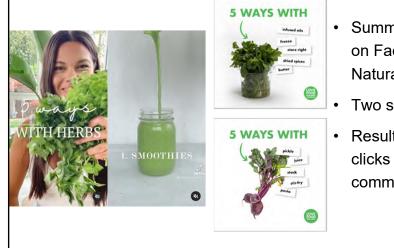


2022 Highlights: National Campaign



- Completion of three-year report
- Expansion into Alberta
- Inaugural Food Waste Action Week, March 7-13, 2022
- Updated data to better reflect food costs and GHG emissions
- Behaviour Change Intervention Pilot

2022 Highlights: Regional Campaign



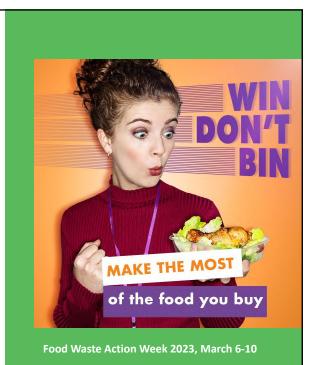
- Summer "Five Ways With" campaign on Facebook, Instagram, Pinterest, Natural Ads, and Google Search
- Two social media influencers
- Resulted in 26,000 video views,16,000 clicks to the website, and 8,000 likes, comments, and shares

12

Food Waste Action Week 2023

We reached an estimated **68 million** people, with our ability to:

- Capture the mood across Canada
- Amplify the message through a network of food waste champions
- Create a national conversation



Scaling Citizen Interventions

Partly funded by Environment and Climate Change Canada, this project aims to prevent fresh produce from being wasted – the most commonly wasted foods in Canadian households.

Project Activities:

- **Impact Research,** outlining the journey of food, and related environmental impacts, for five products: potatoes, berries, greens, apples and tomatoes.
- **Labour of Love Campaign**, bringing to life the journey of the five products from producer to consumer, with a call to action linked to proper storage.
- **Behaviour Change Intervention Pilot**, to test the guidance and key messaging most likely to result in a reduction of fresh fruit and vegetable waste.

14



Questions

metrovancouver Together we make our region strong



Subject:	Manager's Report		
Date:	June 7, 2023	Meeting Date: June 15, 2023	
From:	Pau Henderson, General Manager, Solid Waste Services		
То:	Zero Waste Committee		

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated June 7, 2023, titled "Manager's Report".

Bottom Ash Beneficial Use Pilot

The beneficial use of bottom ash from the Waste-to-Energy Facility could result in a reduction of up to 40,000 tonnes per year of material requiring disposal. At full scale, beneficial use of bottom ash could reduce regional disposal requirements by approximately 5% and reduce greenhouse gas emissions associated with mining and transporting raw materials.

On May 13, 2022 the Zero Waste Committee received information in the Manager's Report on Metro Vancouver engaging Birco Environmental Services to complete pilot testing in support of expanding to full-scale beneficial use of bottom ash. The pilot test will include processing 1,000 tonnes of bottom ash to remove the recyclable metals, crushing the bottom ash to a uniform size, then using it as a feedstock in cement production at the Lehigh Cement Plant in Delta, BC. The pilot is now underway, with testing expected to be completed over the summer. Information on the pilot and opportunities to expand to full-scale will be provided to the Zero Waste Committee on the pilot's completion.

Sustainable Take-Out Food Packaging Guide

A report on waste composition was received by the Zero Waste Committee at its May meeting. Data showed increases in single-use cups and take-out food containers. Committee members suggested exploring opportunities to reduce these materials in the near term. Staff will be working with stakeholders to develop a sustainable take-out food packaging guide to assist businesses and residents in decisions on take-out food packaging. The guide will encourage the use of reusable utensils for eat-in services and reusable containers for take-out. The guide will also identify specific packaging materials that are recyclable in Metro Vancouver, and therefore preferable as replacements for banned materials such as foam containers. More information will be provided to the Zero Waste Committee as the guide is being developed.

2023 Zero Waste Committee Work Plan

The attachment to this report sets out the Committee's work plan for 2023. 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.

Attachment

1. 2023 Work Plan

5.6

Zero Waste Committee 2023 Work Plan

Report Date: June 7, 2023

1 st Quarter		
2021 Solid Waste and Recycling Annual Report	Complete	
2022 Holiday Waste Reduction Campaign Results	Complete	
2022 Zero Waste Conference Report	Complete	
Contingency Disposal Contract(s)	Complete	
Gypsum Management in Metro Vancouver	In Progress	
National Zero Waste Council 2022 Accomplishments and 2023 Projects	Complete	
Recycling and Waste Centre Operating Contracts	In Progress	
2nd Quarter	Status	
2022 Disposal Ban Program Results	Pending	
2022 Waste-to-Energy Facility Financial Summary	In Progress	
2022 Waste Composition Data	Complete	
2022 – 2023 Metro Vancouver Engagement with the Love Food Hate Waste Canada Campaign	In Progress	
2023 Food Scraps Recycling Campaign Results	Complete	
2023 Think Thrice Textiles Waste Reduction Campaign Results	In Progress	
Solid Waste Management Plan Update: Phase 1 Vision and Guiding Principles	Complete	
Workshop		
Solid Waste Services Capital Program Expenditures Update as of December 31, 2022	Complete	
3 rd Quarter	Status	
2022 Waste-to-Energy Facility Environmental Performance Summary	Pending	
2023 National Zero Waste Council Projects	Pending	
Recycling and Waste Centre Reuse Scale-Up	Pending	
Repair Events, Programs, and Regional Food Recovery Network	Pending	
Solid Waste Management Plan	Pending	
Solid Waste Services Capital Program Expenditures Update as of April 30, 2023	Pending	
Zero Waste Conference 2023	Pending	
4 th Quarter	Status	
2022 Solid Waste and Recycling Annual Report	Pending	
2023 Single-Use Item Reduction Campaign Results	Pending	
2024-2028 Financial Plan – Solid Waste Services	Pending	
2024 Tipping Fee Bylaw Revisions	Pending	
Waste-to-Energy Facility District Energy System	Pending	
traste to Energy Facility District Energy System		
Solid Waste Services Capital Program Expenditures Update as of August 31, 2023	Pending	