



# Metro Vancouver Disposal Ban Program

SUBTITLE HERE

Lynne Vidler

Lead Senior Engineer, Solid Waste Services

Solid Waste and Recycling Industry Advisory Committee September 7, 2022 Meeting

<https://orbit.qvrd.bc.ca/orbit/llisapi.dll/properties/54733504>

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# PRESENTATION OVERVIEW

- Solid Waste System Overview
- Banned Materials Categories
- Inspection and Surcharge Process
- eSurcharge Application
- Surcharge Enquiries and Dispute Process
- Program Statistics



# REGIONAL SOLID WASTE FACILITIES

- Six Recycling and Waste Centres
- Waste-to-Energy Facility
- Vancouver Landfill



# BANNED HAZARDOUS AND OPERATIONAL IMPACT MATERIALS

(\$66 Surcharge On Any Single Item)

• Agricultural Waste	• Inert Fill Materials
• Automobile Parts	• Liquids or Sludge
• Barrels or Drums (205 L or greater)	• Loads that contravene OH&S Regulation
• Creosote Treated Wood	• Mattresses
• Dead Animals	• Oversize Objects
• Dusty, Odourous, and Flammable Materials	• Personal Hygiene Products over 10% of the load
• Excrement	• Propane Tanks
• Gypsum	• Toxic Plants
• Hazardous Waste	• Wire, Hosing, Rope or Cable longer than 1m



# BANNED RECYCLABLE MATERIALS

(50% Surcharge On Items Above The Threshold)

5% threshold on any combination of the following:

- beverage containers
- other recyclable plastic, glass, metal, and composite material containers
- corrugated cardboard
- recyclable paper
- green waste
- clean wood

20% threshold on expanded polystyrene packaging  
(100% surcharge above the threshold)

25% threshold on food waste

# BANNED PRODUCT STEWARDSHIP MATERIALS

(\$66 Surcharge On Any Single Item)

• Antifreeze and Containers	• Paint and Containers
• Electronics and Electrical Products	• Pesticides
• Gasoline	• Pharmaceutical Products and Medications
• Lead-Acid Batteries	• Solvents and Flammable Liquids
• Lubricating Oil and Containers	• Tires
• Oil, Oil Filters, and Containers	

# INSPECTION PROCESS

- Disposal Ban Program Manual
- Tipping Fee Bylaw and Disposal Ban Terminology
- Educational Notice (6 months grace period for new banned items)
- Recycling Options and Availability
- Inspector Safety
- Inspection Methodology and Consistency



# ESURCHARGE APPLICATION

- Fully implemented at Metro Vancouver facilities
- Surcharge notice emailed to Account customers with photographs
- Surcharge information is stored in weigh scale database and appears on the weigh scale ticket
- Less equipment to carry around




<b>Surcharge Number</b>	<b>SC-WTEF-100000</b>
<b>Site</b>	Waste-to-Energy Facility
<b>Date and Time</b>	2022-01-11 11:11 AM
<b>Inspector</b>	AA
<b>Autoscale Ticket</b>	Refer to Weigh Scale Ticket
<b>Hauler</b>	Account Customer Name
<b>License Plate</b>	AC1234
<b>Truck Code</b>	AC1234
<b>Banned Material</b>	Electronics & Electrical Product(s)
<b>Charge Type</b>	\$66 Banned Surcharge
<b>Bylaw</b>	306
<b>Section</b>	5.12
<b>Schedule</b>	E2
<b>Additional Banned Material(s)</b>	Paint & Container(s)
<b>Comments</b>	Middle of load
<b>Options Discussed with Driver</b>	Yes
<b>Ticket Comments</b>	Electronics & Electrical Product(s); SC-WTEF-100000; Middle of load



# SURCHARGE ENQUIRY AND DISPUTE PROCESS

## Surcharge Dispute Process:

- 1) Customer may dispute the surcharge by submitting a surcharge dispute form available online.
- 2) Metro Vancouver Solid Waste Operations reviews the dispute form and any relevant information provided by the customer and the inspectors.
- 3) Metro Vancouver makes the decision to uphold or rescind the surcharge after the review process.

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TRUCKS AND SOLID WASTE SERVICES

**Weigh Scale System Dispute Form**  
Must be completed within 30 days of the date on the Weigh Scale Ticket or Surcharge Notice

Date: \_\_\_\_\_

Company Name: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Email Address: \_\_\_\_\_

Weigh Scale Ticket Number: \_\_\_\_\_ Surcharge Notice Number: \_\_\_\_\_

Choose Facility:

☐ United Boulevard Recycling and Waste Centre

☐ North Shore Recycling and Waste Centre

☐ Langley Recycling and Waste Centre

☐ Other: \_\_\_\_\_

☐ North Surrey Recycling and Waste Centre

☐ Maple Ridge Recycling and Waste Centre

☐ Waste-to-Energy Facility

If the dispute is regarding a banned material surcharge, have you been provided with the pictures?  
☐ YES ☐ NO

If NO, please contact Solid Waste Operations at [weighscaleoperations@metrovancover.org](mailto:weighscaleoperations@metrovancover.org) to obtain pictures before submitting the dispute form.

Reason for Dispute: \_\_\_\_\_

Additional Comments: \_\_\_\_\_

Please email completed Dispute Form to [weighscaleoperations@metrovancover.org](mailto:weighscaleoperations@metrovancover.org).  
The Dispute Form will be reviewed by Senior Staff who will provide a response to the email address provided.

Solid Waste Operations Review: \_\_\_\_\_

Decision: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

5480251 (February 2021)

4750 Kingway, Burnaby, BC, Canada V5H 3C4 | 604-432-4500 | [metrovancover.org](mailto:metrovancover.org)  
Metro Vancouver Regional District • Office: Metro Vancouver Solid Waste • Group: Vancouver Development and Environment • Metro Vancouver Planning Commission

# COMMUNICATION STRATEGY

- Surcharge notices emailed to account customers
- Monthly data summary to top 10 haulers
- Zero Waste Committee annual report
- Statistics published annually on Metro Vancouver website

# INSPECTION STATISTICS

Inspection Statistics for Metro Vancouver and City of Vancouver Solid Waste Facilities						
Year	Garbage Loads	Loads Inspected	Inspection Rate	Re-Loads <sup>(1)</sup>	Surcharge Notices	Surcharge Rate <sup>(2)</sup>
2020	782,333	221,875	28%	20,398	6,642	3.0%
2021	822,060	194,329	24%	13,677	3,104	1.6%
(1) Loads with banned materials but not disposed (no surcharge notice issued).						
(2) Surcharge rate equals the number of surcharge notices divided by the number of inspected loads.						

# DISPOSAL BAN PROGRAM PERFORMANCE

2021 Data



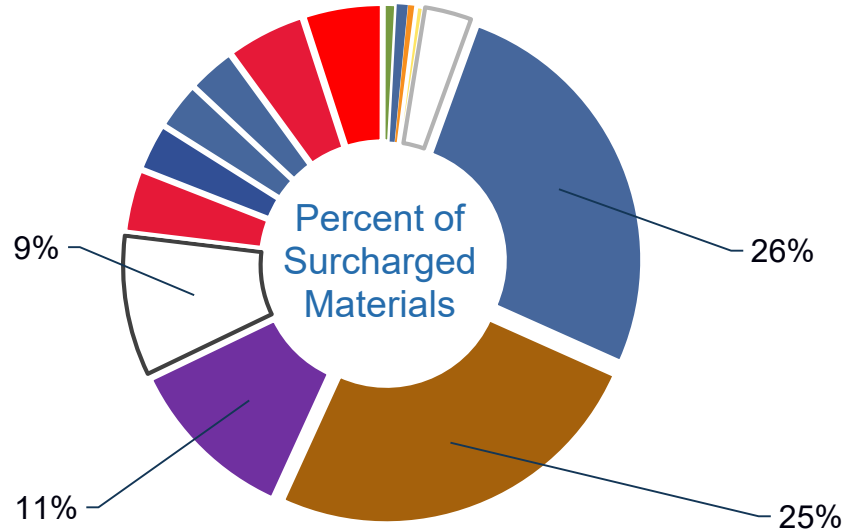
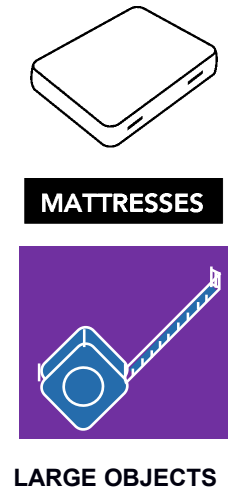
Customer Type	Loads Inspected	Surcharge Notices Issued	Surcharge Rate
Non-account	145,126	257	0.2%
Municipal	6,848	151	2%
Commercial	42,355	2,696	6%
Total	194,329	3,104	1.6%

Total Garbage Loads Received = 822,060

Overall Inspection rate = 24%



# 2021 SURCHARGED MATERIALS



# ADDITIONAL INFORMATION

- Tipping Fee Bylaw:
  - [http://www.metrovancouver.org/boards/Bylaws1/GVSDD\\_Bylaw\\_306\\_Consolidation.pdf](http://www.metrovancouver.org/boards/Bylaws1/GVSDD_Bylaw_306_Consolidation.pdf)
- Disposal Ban Program Manual:
  - <http://www.metrovancouver.org/services/solid-waste/SolidWastePublications/DisposalBanProgramManual.pdf>
- Weigh Scale System Dispute Form
  - <http://www.metrovancouver.org/services/solid-waste/SolidWastePublications/WeighScaleSystemDisputeForm.pdf>

## SUGGESTED DISCUSSION QUESTIONS \*

- What improvements could be made to the disposal ban program?
- What other programs/initiatives could be used in addition to or instead of the disposal ban program?
- What additional or alternative metrics should be considered for gauging the effectiveness of the disposal ban program?
- How could the current reporting and communications systems be improved?

*\* These are only suggested discussion questions, members are encouraged to discuss any areas of interest on the topic*



Thank You

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# Waste Reduction and Recycling Data

## OVERVIEW

Terry Fulton, P.Eng.

Senior Project Engineer, Solid Waste Services

Solid Waste and Recycling Industry Advisory Committee Meeting – September 7, 2022


<https://orbit.qvrd.bc.ca/orbit/llisapi.dll/link/54538132>

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# OUTLINE

- What data do we collect and why?
- How do we collect it?
- What does it tell us?
- Where can I find it?



A photograph of a recycling facility. In the foreground, a large, messy pile of light-colored wood debris, including planks, beams, and pallets, is scattered on the ground. A man wearing a grey long-sleeved shirt, dark pants, and blue gloves is standing in the middle ground, facing away from the camera and looking towards the wood pile. Behind him is a low wall made of large, rectangular concrete blocks. In the background, there is a large industrial building with blue corrugated metal siding. The sky is clear and blue. A dark blue semi-transparent rectangle is overlaid on the left side of the image, containing white text.

# Part 1: What do we collect and why?

North Shore Recycling and Waste Centre


# WHAT DO WE COLLECT?

- Types and quantities of waste generated
  - Generation = Disposal + Recycling
  - Composition of material disposed
  - Tonnage of commodities recycled
- Source of material
  - Residential, Commercial, Small Loads



# WHY DO WE COLLECT IT?

- Track progress of various initiatives
  - Solid waste management plan goals
  - Comparison to other jurisdictions and best practices
  - Overall program effectiveness
- Identify targets for future programs and policies
  - Sectors
  - Materials



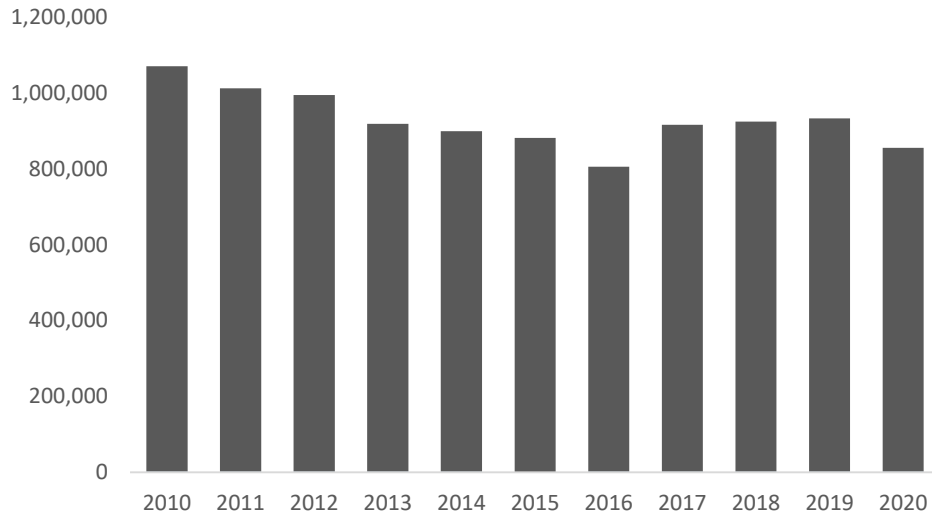
# Part 2: How do we collect it?

North Shore Recycling and Waste Centre

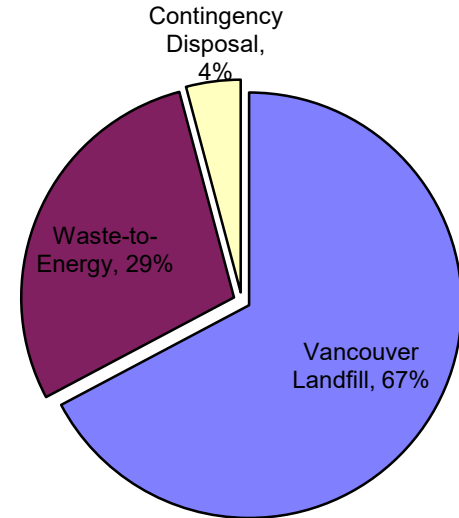
# DISPOSAL QUANTITIES

Source: Scale Data

Disposed Tonnes

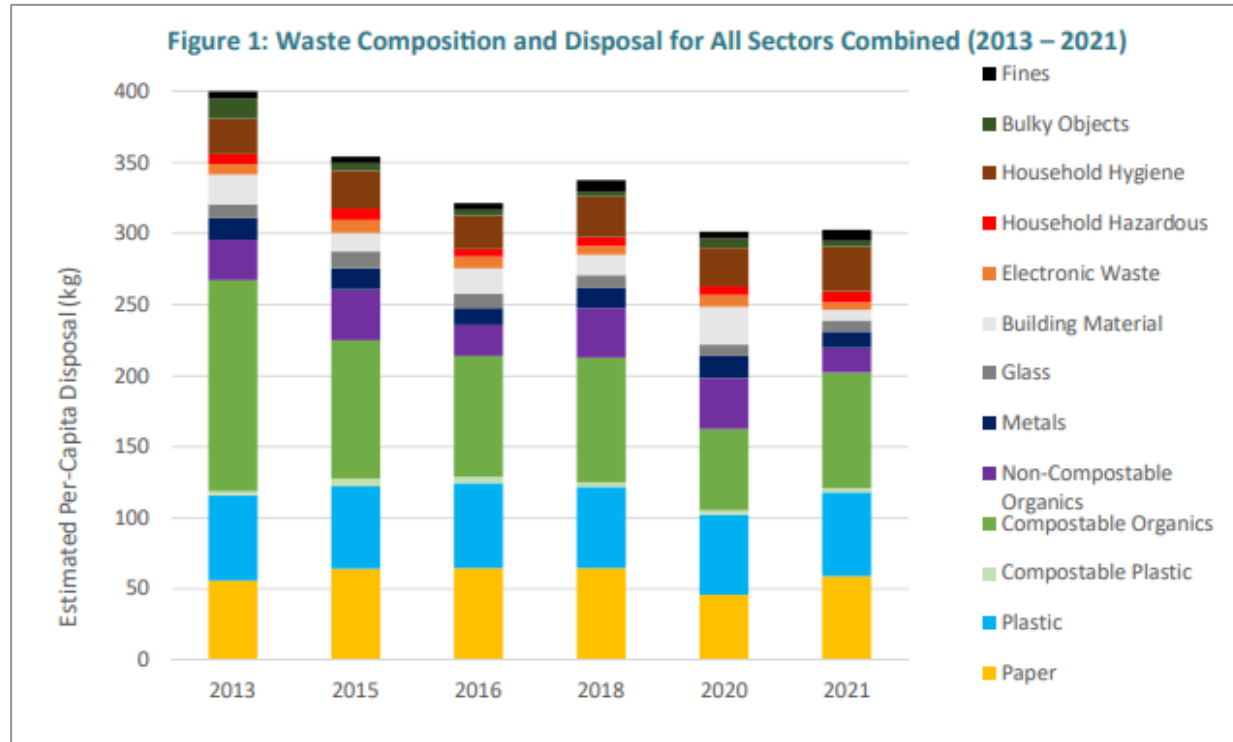


Proportion of Waste Disposed in the Regional Solid Waste Management System, 2020



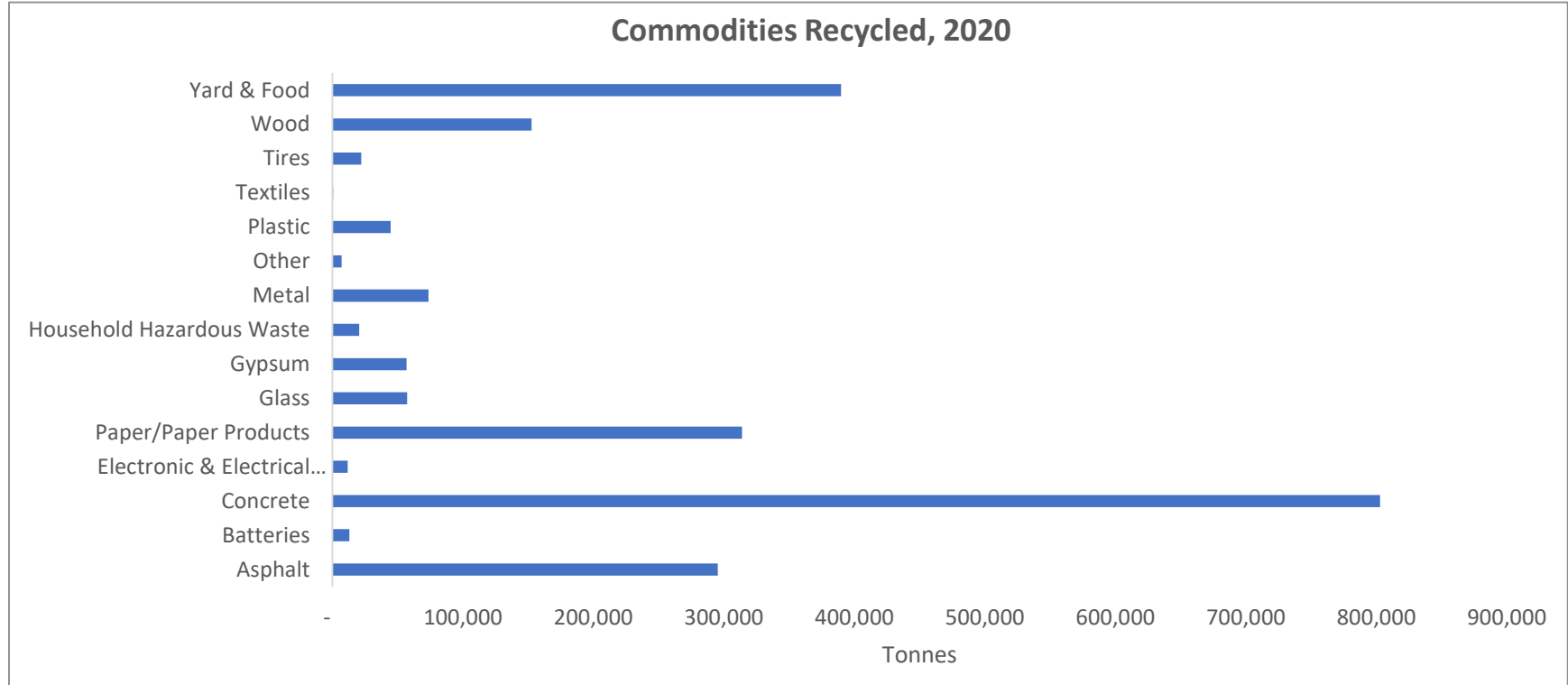
# TYPES OF MATERIAL DISPOSED

Source: Waste Composition Studies



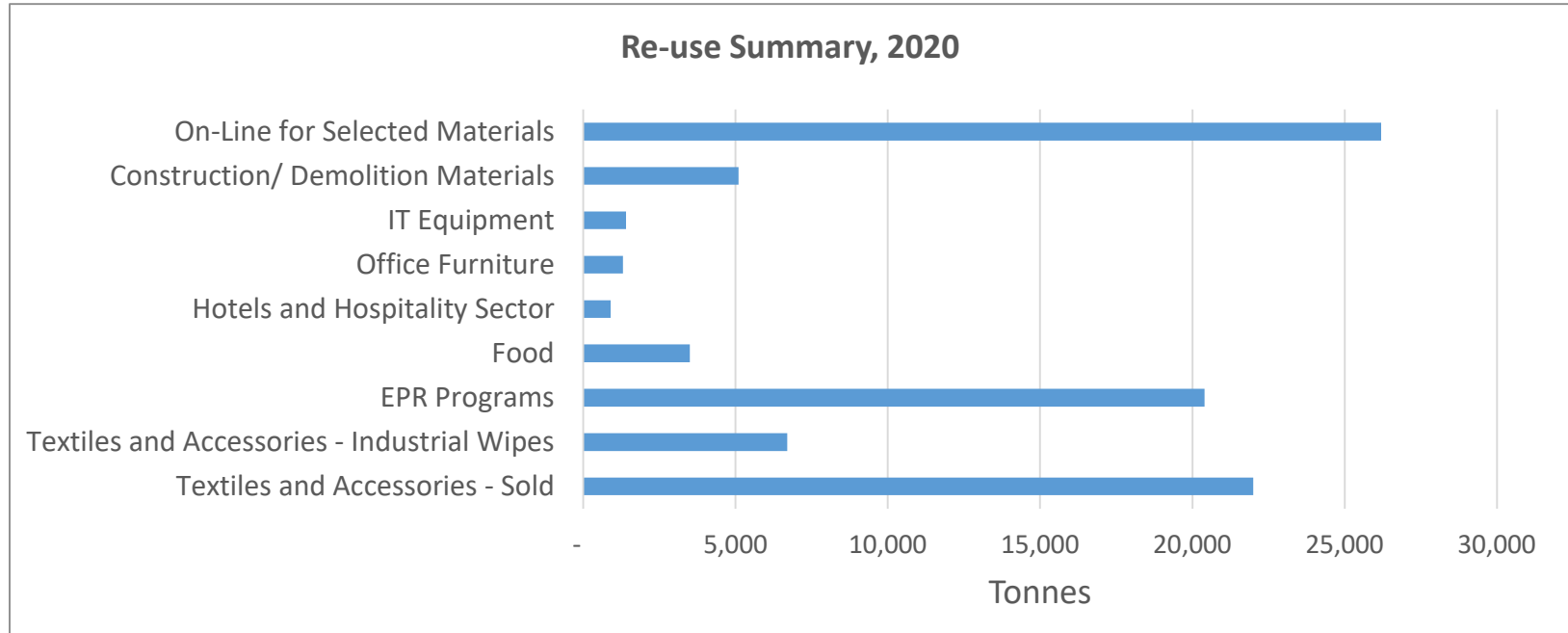
# TYPES OF MATERIAL RECYCLED

Sources: Licensed and Unlicensed Private Facilities, EPR Reports



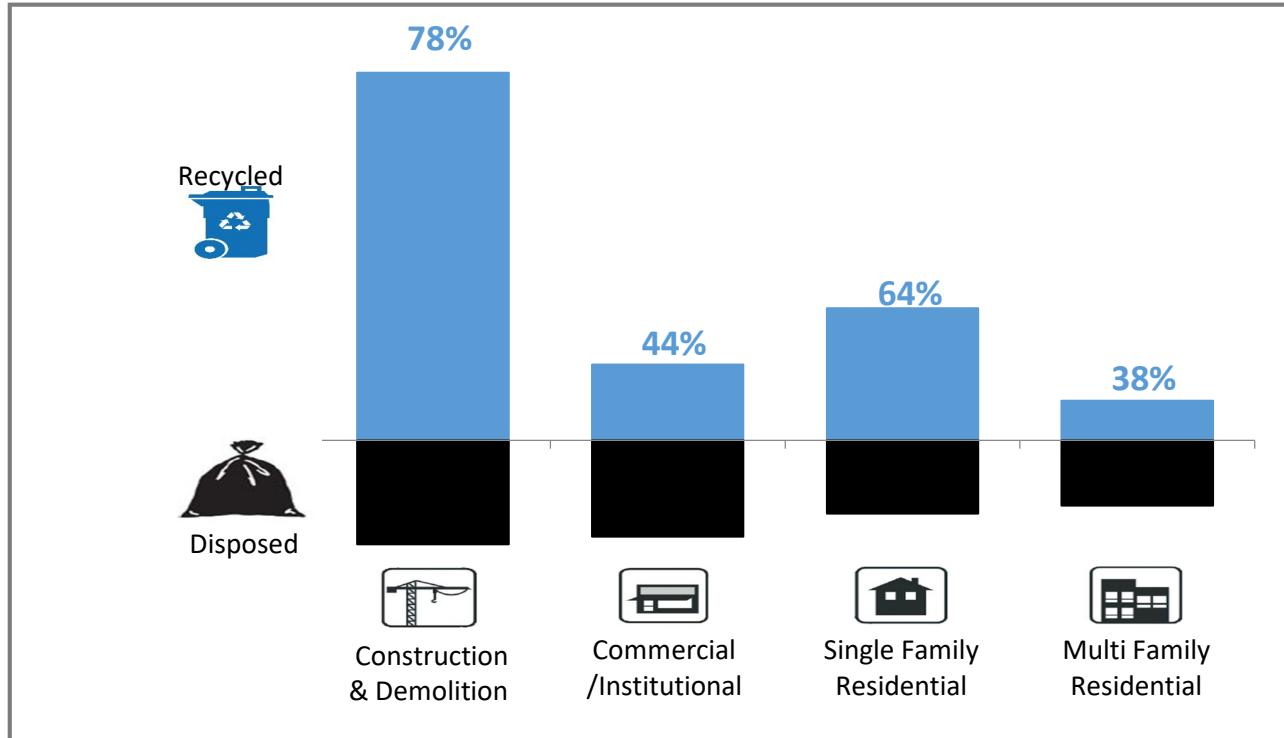
# RE-USE

Source: Re-use and Repair Organizations, Scale Data, Calculations



# SECTOR-SPECIFIC DATA

Source: Municipal Surveys, Scale Data, Waste Composition Studies, Private Facilities





## OTHER DATA

Sources: Scale Data, Disposal Ban Inspectors, Municipalities, Customers, Residents Etc.

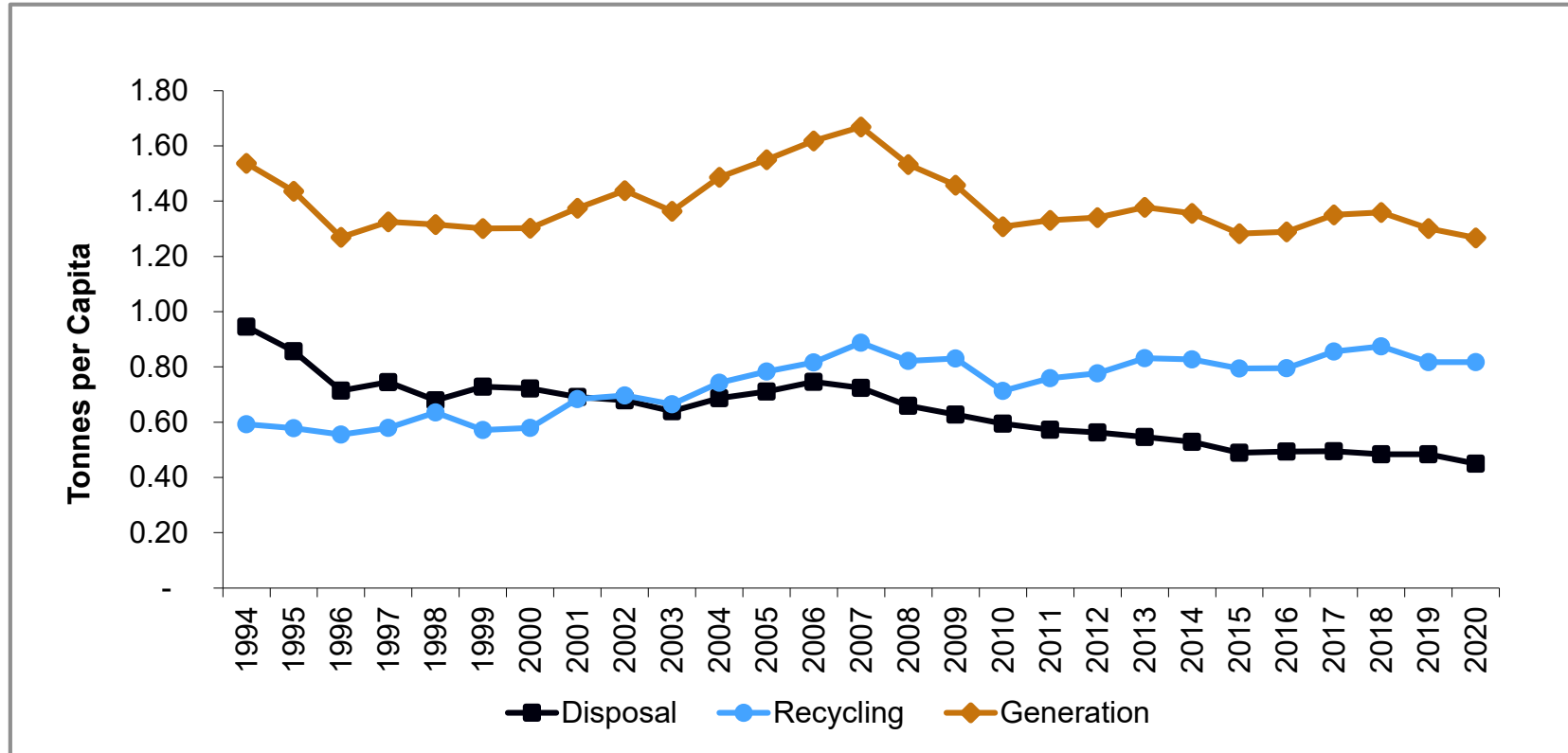
- Banned Material Surcharges
- Illegal Dumping
- Customer Service
- Campaign Analytics
- Etc...

# Part 3: What does it tell us?

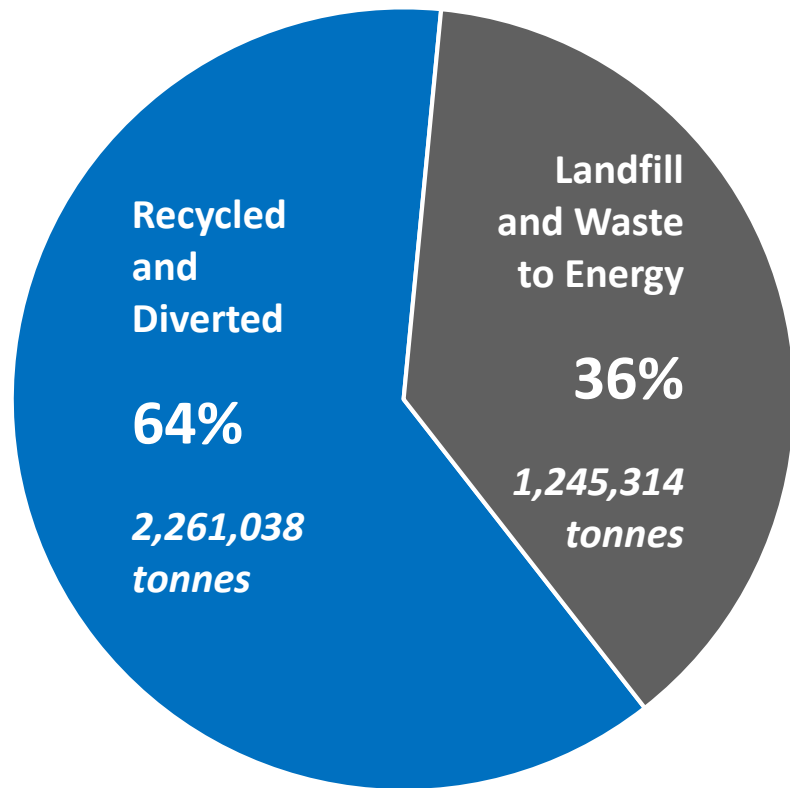
North Shore Recycling and Waste Centre



# GENERATION & RECYCLING OVER TIME



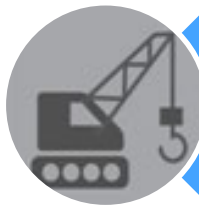
# 2020 RECYCLING RATES



**Residential**  
Single-family 64%  
Multi-family 38%



**Commercial/institutional 44%**



**Construction/Demolition 78%**

# 2011 SOLID WASTE MANAGEMENT PLAN TARGETS



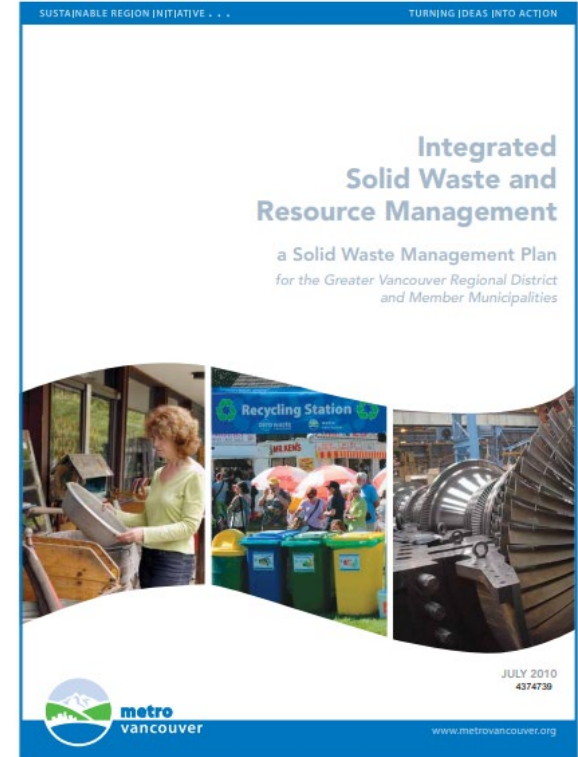
**10% Reduction Waste Generation  
(Achieved 11%)**

Generation = Recycled + Disposed



**80% Recycling Rate  
(Achieved 64%)**

Recycling Rate = Recycled / Generated





# Part 4: Where can I find it?

North Shore Recycling and Waste Centre



# HOW DO WE SHARE DATA?

Two main sources

## Waste Composition Program



## Annual Recycling and Solid Waste Management Report



[Reports & Resources \(metrovancover.org\)](https://metrovancover.org)



## SUGGESTED DISCUSSION QUESTIONS \*

- What improvements could be made to Metro Vancouver's waste and recycling data collection, analysis, and reporting processes?
- What additional information/analysis would be useful?
- What information is available in other communities that could be helpful in Metro Vancouver?

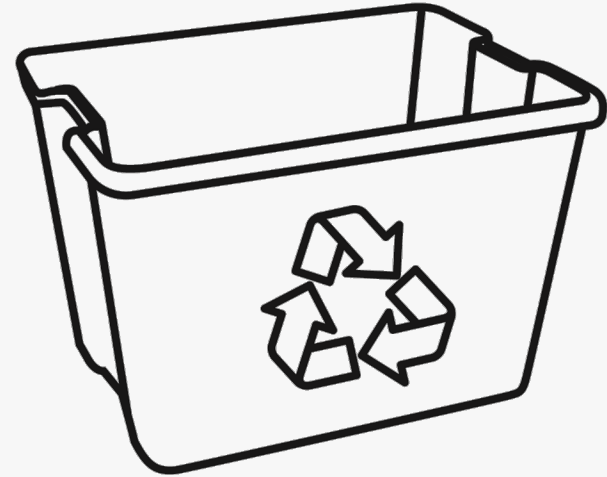
*\* These are only suggested discussion questions, members are encouraged to discuss any areas of interest on the topic.*



North Shore Recycling and Waste Centre

Thank you

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Recycling Bin

# Zero Waste and Circular Economy

METRO VANCOUVER

Karen Storry

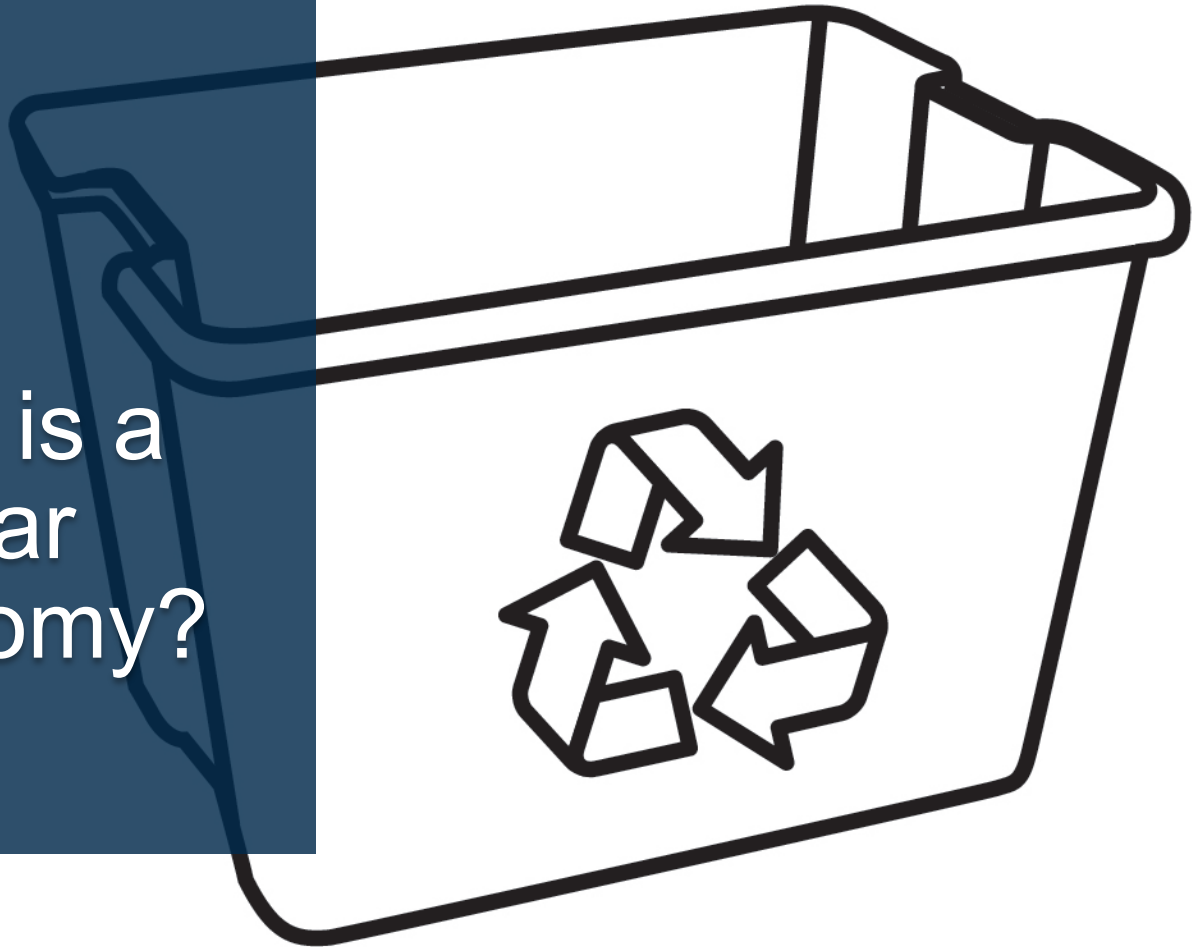
Senior Engineer

Solid Waste and Recycling Industry Advisory Committee Meeting – September 7, 2022

<https://orbit.qvrd.bc.ca/orbit/llisapi.dll/properties/54335927>

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What is a  
circular  
economy?

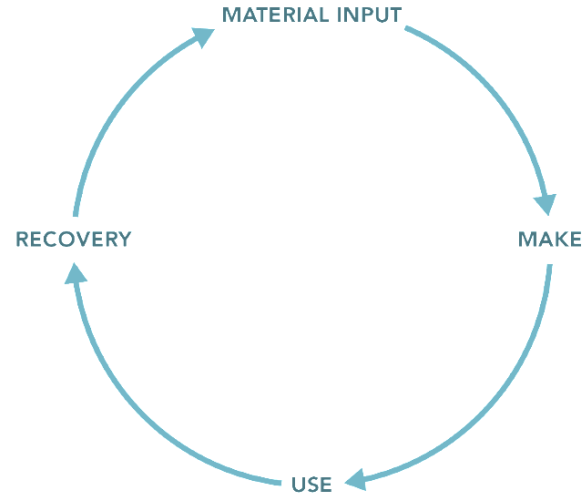


# WHAT IS THE CIRCULAR ECONOMY?

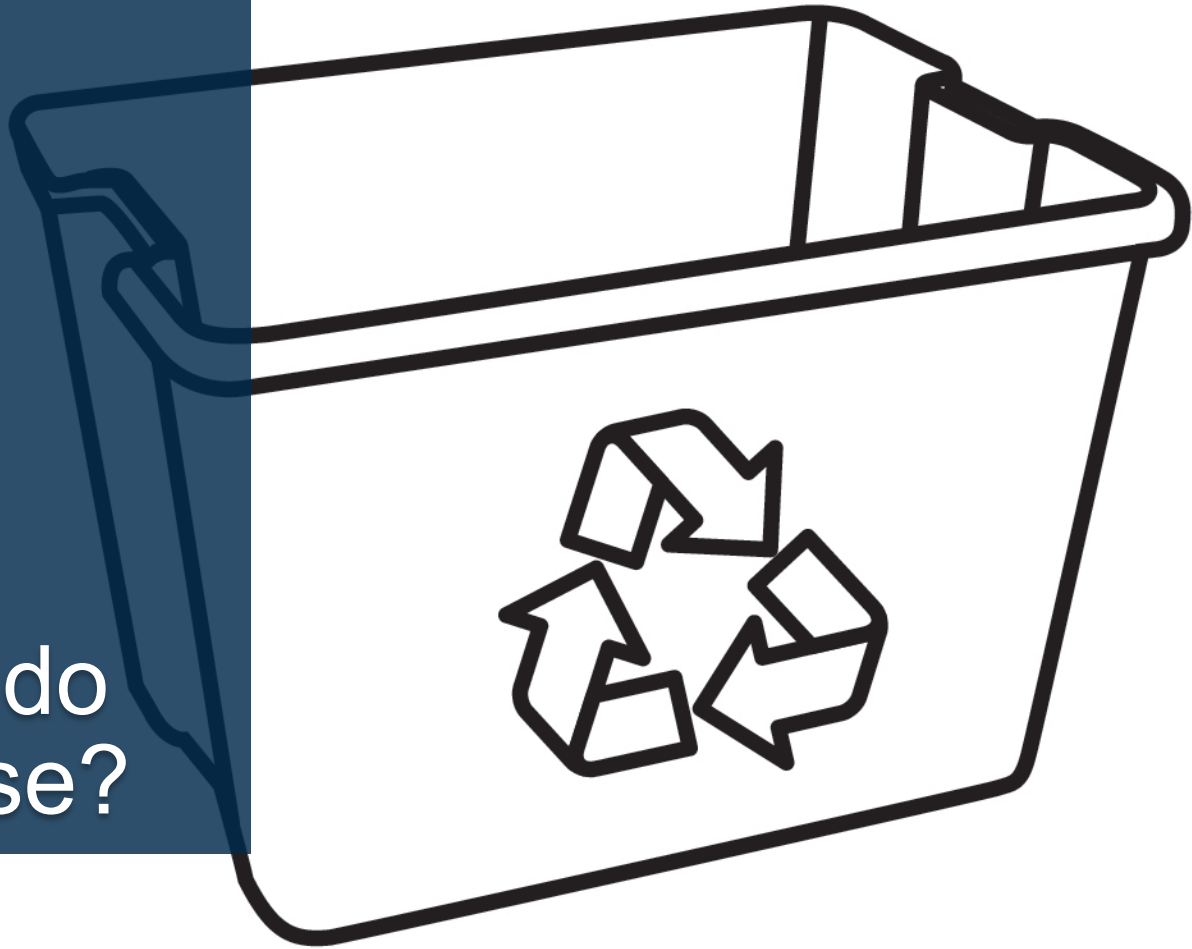
## The Linear Economy



## The Circular Economy



What  
tools do  
we use?

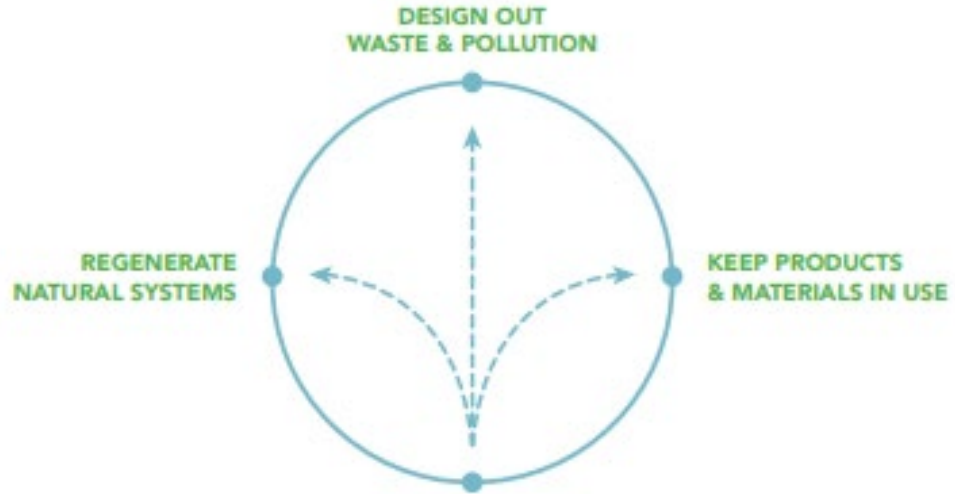




# CIRCULAR ECONOMY

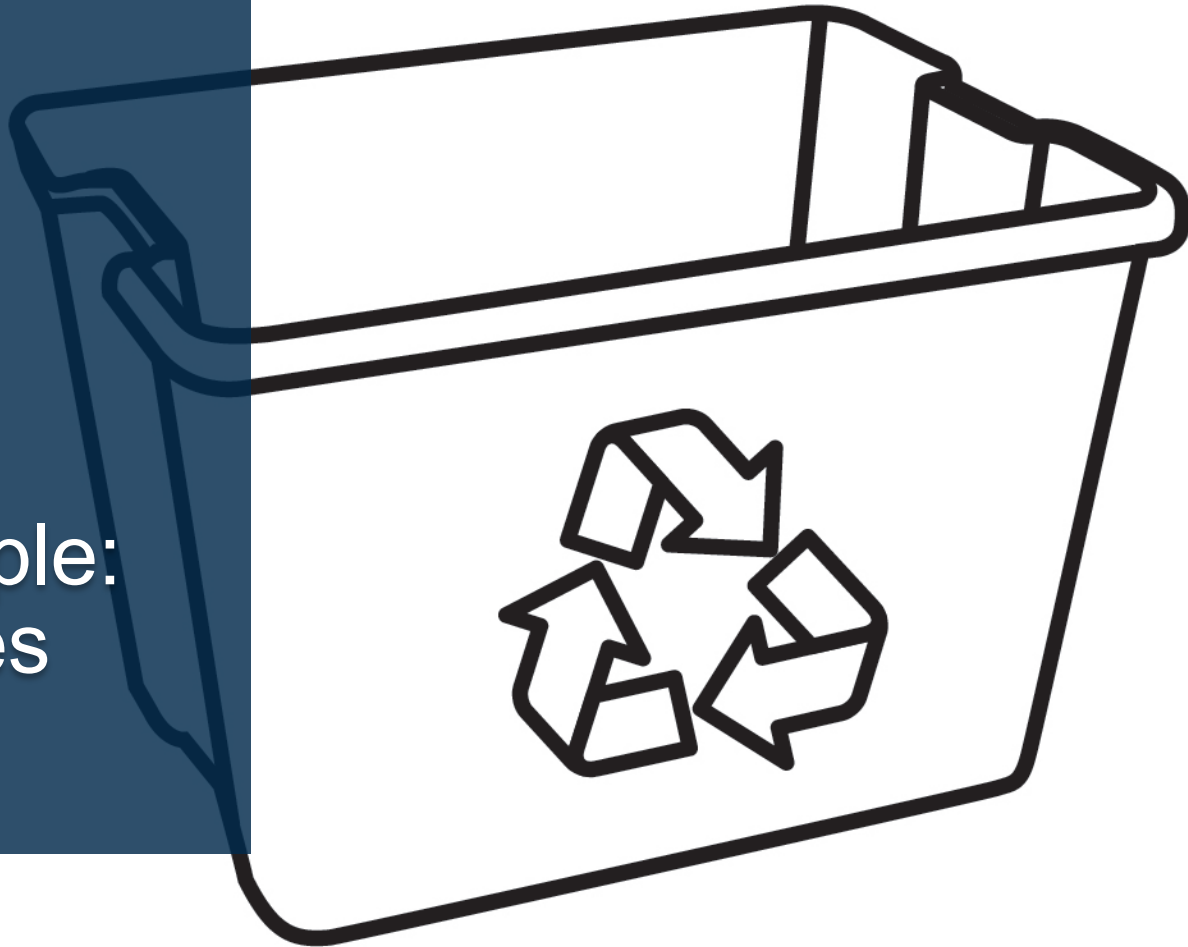
Tools to transition to a circular economy

- Collaboration
- Research
- Policy
- Programs
- Infrastructure
- Public Education



THE 3 PRINCIPLES OF THE CIRCULAR ECONOMY

Example:  
Textiles

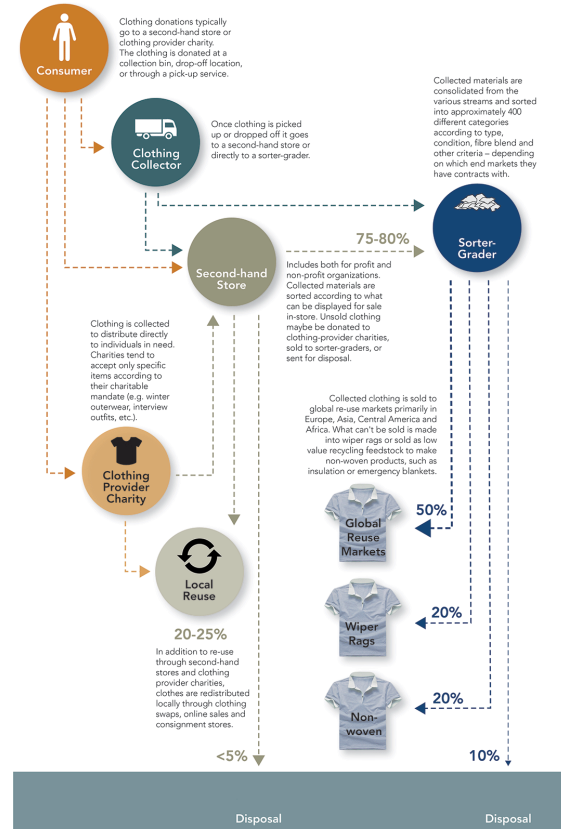


# CAMPAIGNS

## In the Metro Vancouver region

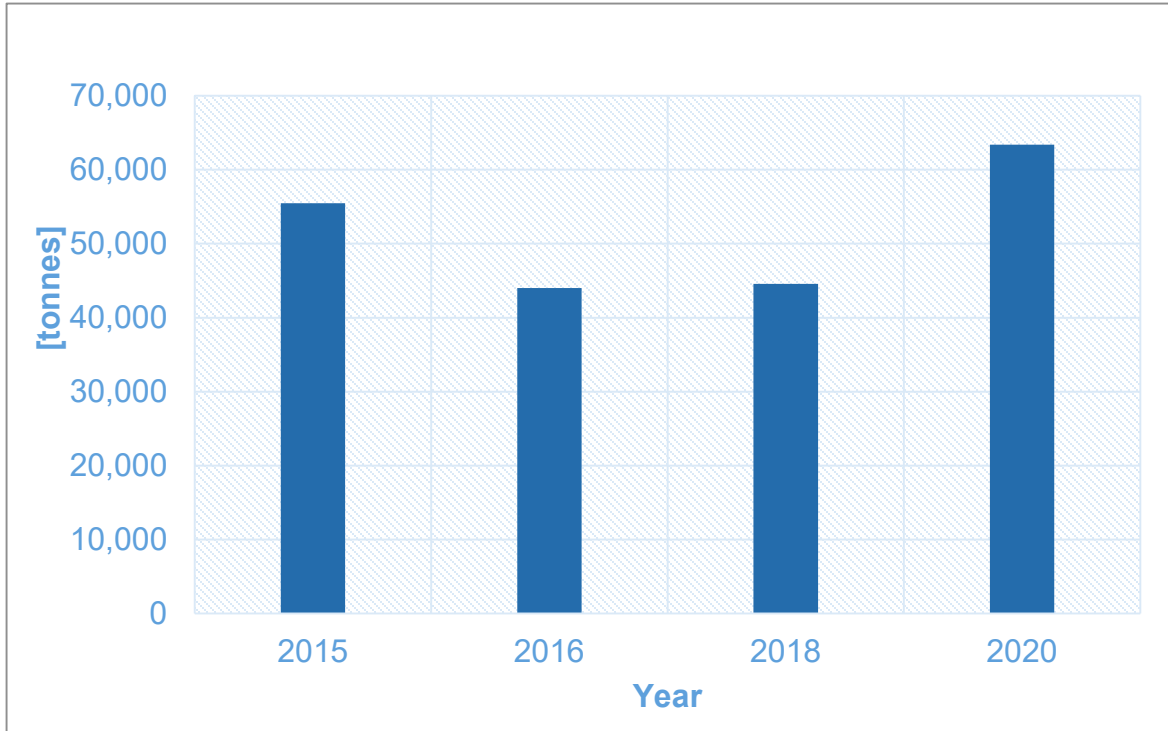


## THE LIFE CYCLE OF UNWANTED CLOTHING WHAT HAPPENS TO YOUR UNWANTED CLOTHING?



# TEXTILES WASTE DISPOSED

In the Metro Vancouver Region



**WE EACH TRASH  
44 T-SHIRTS\* PER YEAR.**



\* According to Metro Vancouver's 2016 waste composition study, on average we each discard 17 pounds of clothing per year – the equivalent weight of 44 t-shirts.

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**1**  
THESIS  
DEFENSE

**24**  
BUSINESS  
MEETINGS

**3**  
PROMOTIONS

**1**  
ENTERPRISING  
OWNER

THINK THRICE ABOUT YOUR CLOTHES  
Reduce, Repair, Reuse.

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**46**  
CONCERTS

**10**  
TOURS

**1**  
FIRST  
DATE

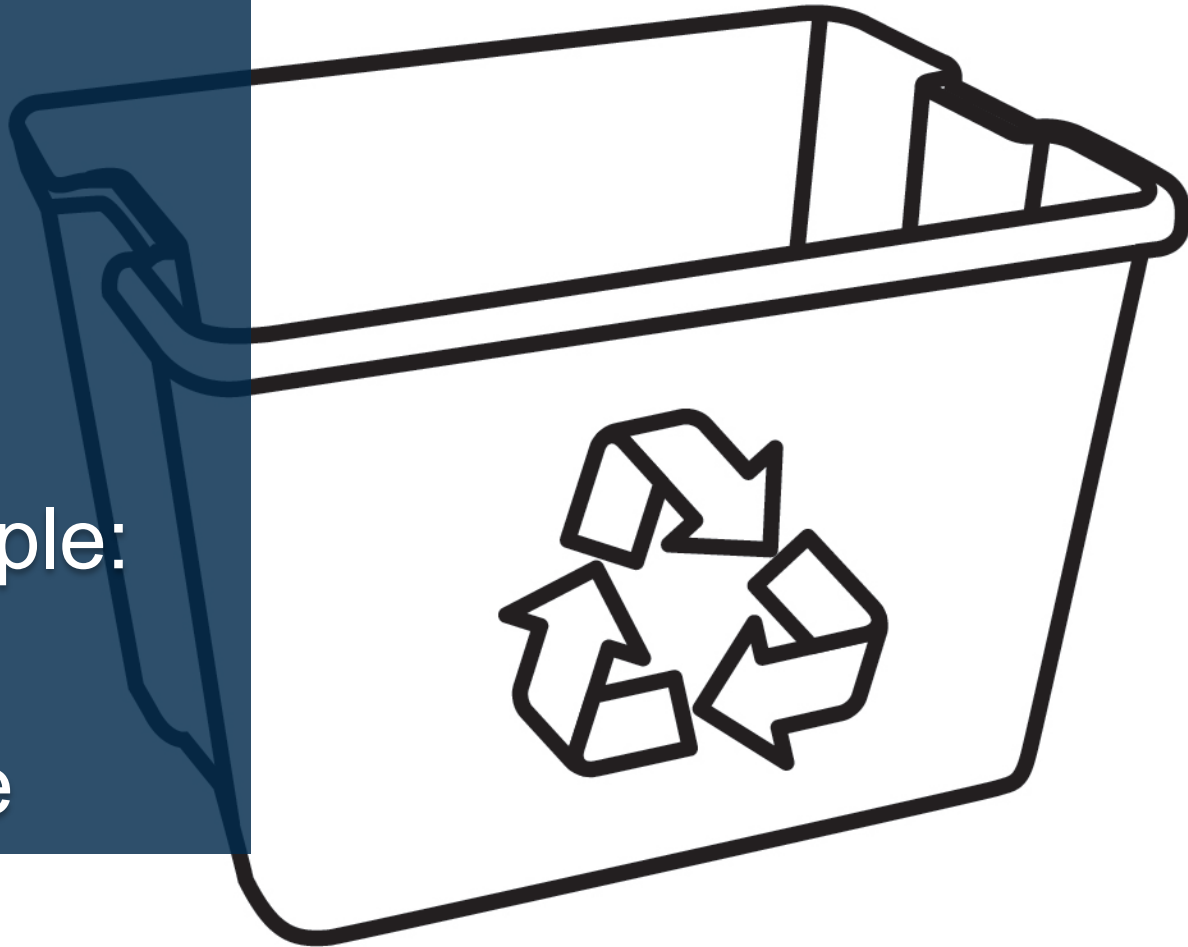
**3**  
DEDICATED  
OWNERS



THINK THRICE ABOUT YOUR CLOTHES  
Reduce, Repair, Reuse.



Example:  
C&D  
Waste



# C&D TOOLKIT



# C&D WASTE REDUCTION AND RECYCLING TOOLKIT

## Alternatives to Demolition

- Adaptive Reuse
- House Moving
- Deconstruction
- Salvage and Reuse



# CALCULATOR

## Demolition Waste Generation Rates Calculator

Search metrovancover.org...

Home > Services > Solid Waste > Waste to Energy & Disposal > Construction & Demolition Waste > Demolition Waste Generation Rates Calculator

All details and material estimates produced by this calculator are intended for informational purposes only. Additional information on specific municipalities' bylaws, procedures and requirements is available through individual municipal websites.

Use this calculator to estimate:

- The weight of each type of waste material generated at your residential demolition site.
- The minimum amount of demolition waste (by weight) that must be recycled or reused to fulfill your municipality's recycling requirements.

### House Floor Area:

Enter a number, then select the unit in sqft or sqm.

sq ft

### Required recycling rate:

Select a preset value (if it exists). The minimum recycling rate depends on the requirements set by each municipality.

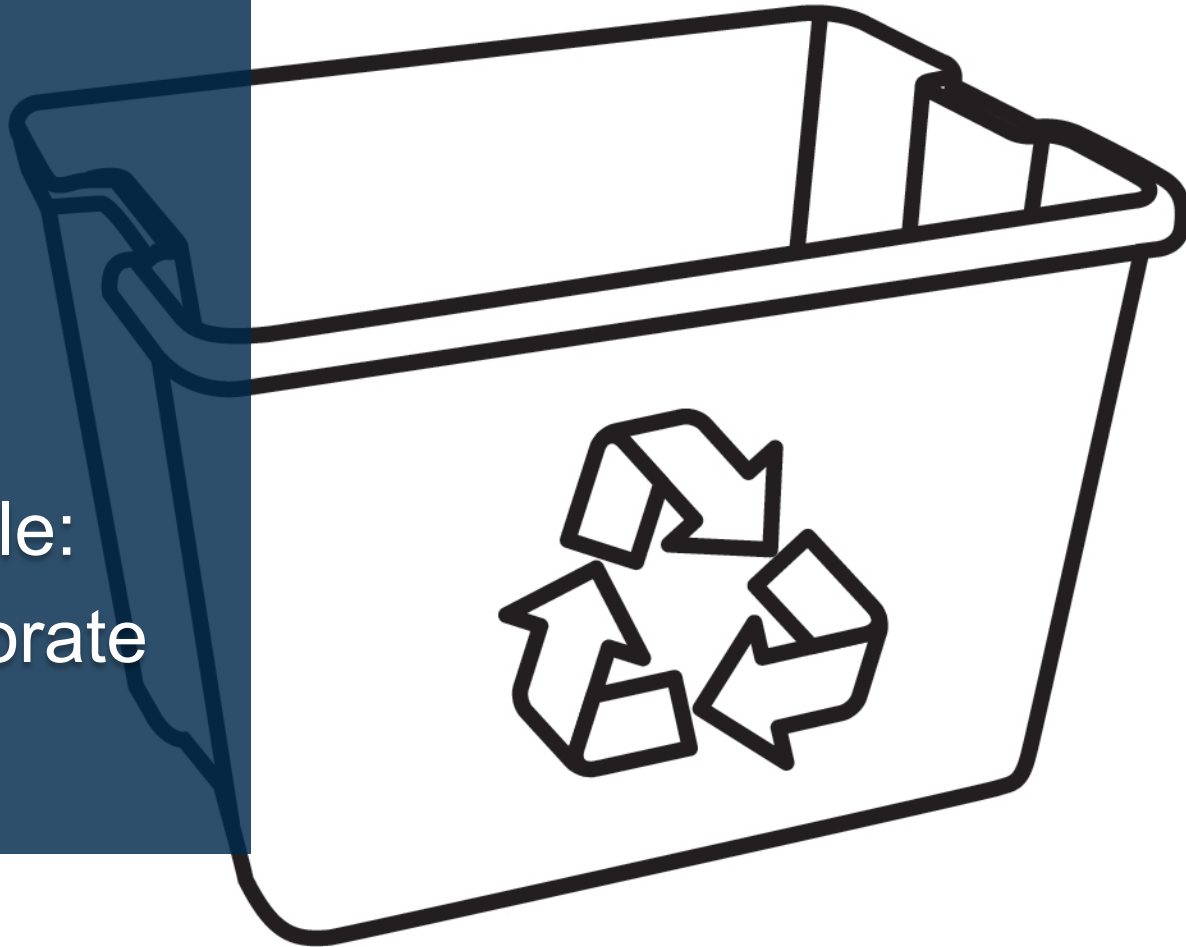
-- Select a municipality --

Which unit do you want to display the results?

kilograms

Calculate

Example:  
Collaborate



# COLLABORATION

## RCBC Recycling Database


- **metrovanancouver** recycles helps residents find recycling options
- Data powered by RCBC

**metrovanancouver** recycles [about us](#)

What are you recycling today?

Where are you recycling?


[Find Locations](#)



Metro Vancouver Recycles is a database and search tool for residents and businesses to find out where to recycle or donate thousands of different materials across the region. The easy-to-use tool allows searches by material and location, and displays a map of recycling drop-off locations and details such as hours of operation and contact information. Materials listed include batteries, electronics, packaging, clothing, and more.

**Report an issue**  
Email: [hotline@rcbc.ca](mailto:hotline@rcbc.ca)  
Phone: 604-RECYCLE

**Learn more about waste management**  
Subscribe: Solid Waste Mailing List  
Phone: 604-432-6200

**Data powered by**  




# COLLABORATION

## Reuse Day at the North Shore Recycling and Waste Centre

- June 2019 Pilot weekend diverted 1565 kg of reusable materials
- Launched end of August 2022



# NATIONAL ZERO WASTE COUNCIL

## Focus Areas:

- Waste prevention
- Circular Economy
- Construction and Demolition
- Food
- Plastics
- Product Design and Packaging



## SUGGESTED DISCUSSION QUESTIONS \*

- What are some of the opportunities for growing the circular economy in our region?
- What additional circular economy and waste reduction research, programs and policies would you like to see in the region?
- Where do you see potential for waste reduction/re-use partnerships and opportunities?
- Thinking about procurement, what are the opportunities in municipal/regional/private sector procurement processes?

*\*These are only suggested discussion questions, members are encouraged to discuss any areas of interest on the topic*





TOGETHER  
WE MAKE OUR REGION  
**STRONG**

**metrovancouver**





# Residential and Commercial/Institutional Residual Garbage Management

Paul Henderson

General Manager, Solid Waste Services

Solid Waste and Recycling Industry Advisory Committee Meeting – September 7, 2022

<https://orbit.qvrd.bc.ca/orbit/llisapi.dll/properties/54515233>

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# RESIDUAL MANAGEMENT IN METRO VANCOUVER REGION

- *Tipping Fee Bylaw includes the “Generator Levy” applicable to all residential and commercial/institutional garbage*
- Some stakeholders do not support Generator Levy approach
- Presentation outlines the rationale and mechanics of Generator Levy
- Discussion questions create opportunity for feedback on the Generator Levy as well as suggestions for improvements/alternatives



# GENERATOR LEVY

- Encourages delivery of garbage to Metro Vancouver and City of Vancouver facilities
- Loads subject to tipping fee bylaw requirements – e.g. disposal bans
- All generators contribute to the cost of the regional solid waste system
- Garbage delivery to Metro Vancouver facilities simplifies tracking diversion goal progress
- Generator Levy supports planning future solid waste system requirements



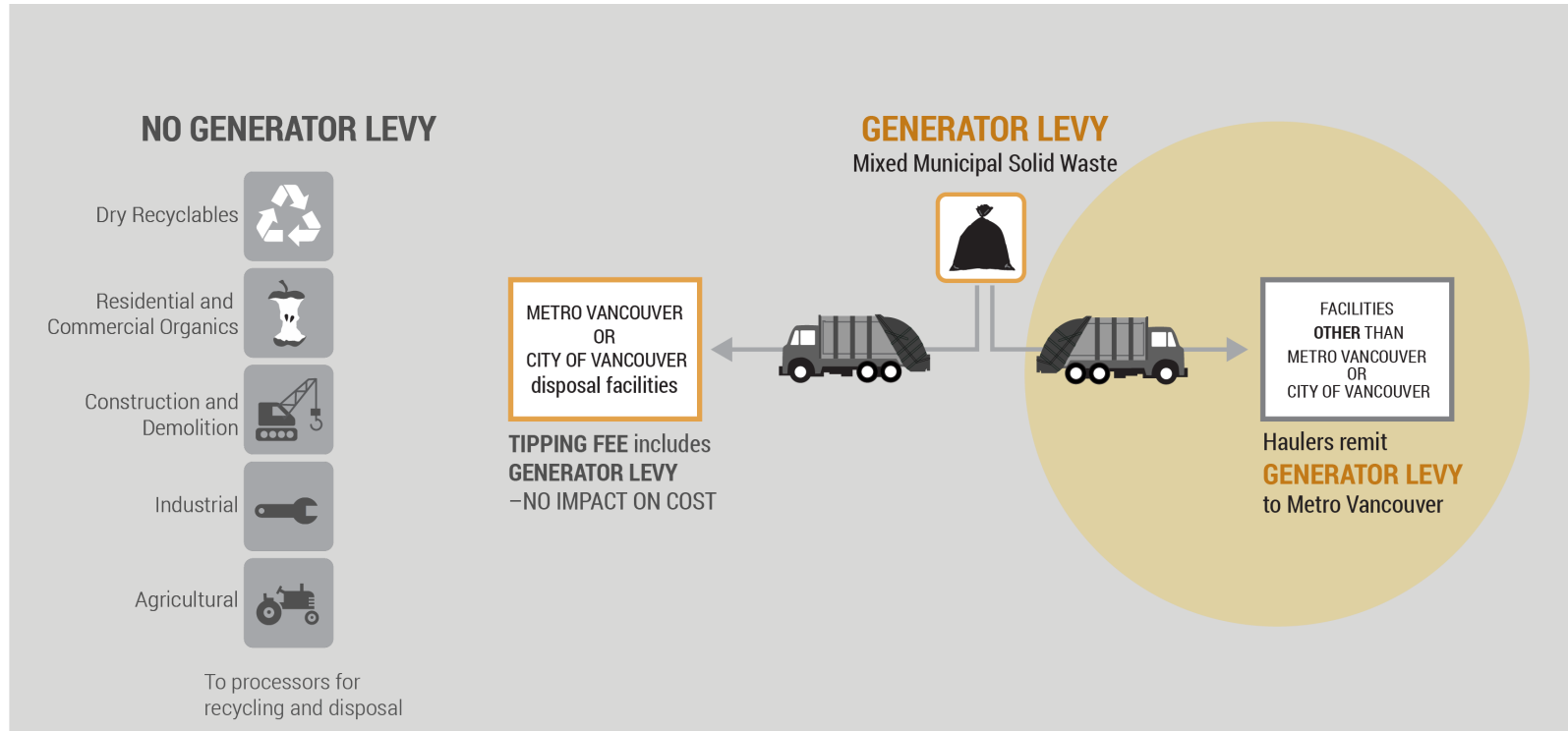
# GENERATOR LEVY HISTORY

- GVS&DD Act amended in 1995 to provide authority to implement Generator Levy
- 1995 Solid Waste Management Plan included Generator Levy
- 2011 *Integrated Solid Waste and Resource Management Plan* included Generator Levy
- Tipping Fee Bylaw amended by *GVS&DD Tipping Fee and Solid Waste Disposal Regulation Amending Bylaw, No. 308, 2017* to include Generator Levy
- February 2018 update – to ensure Generator Levy only paid once for facilities recovering energy or materials

# GENERATOR LEVY OVERVIEW

- Effective January 1, 2018
- \$54/tonne in 2022
- Part of tipping fee at City of Vancouver and Metro Vancouver facilities
- Haulers remit to Metro Vancouver if deliver mixed waste to other facilities

# GENERATOR LEVY



# SUGGESTED DISCUSSION QUESTIONS \*

- What are some examples of best practice solid waste regulatory models to advance zero waste and the circular economy?
- How could the Generator Levy be improved?
- What roles should the private/public sector play in the delivery of garbage and recycling services?

*\* These are only suggested discussion questions, members are encouraged to discuss any areas of interest on the topic*



Thank You

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