

metrovancouver

Welcome



metrovancouver

Agenda



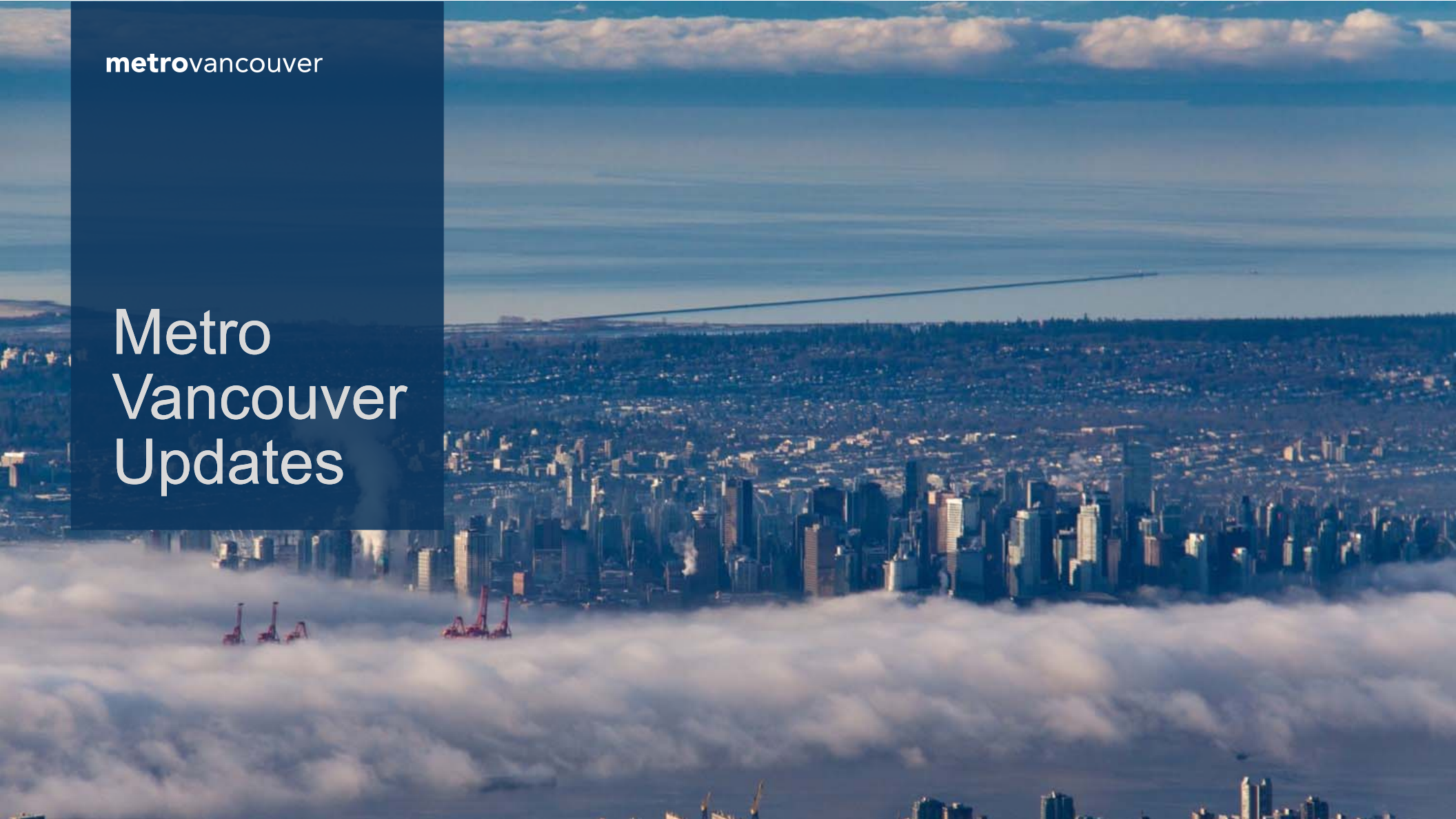
metrovancover

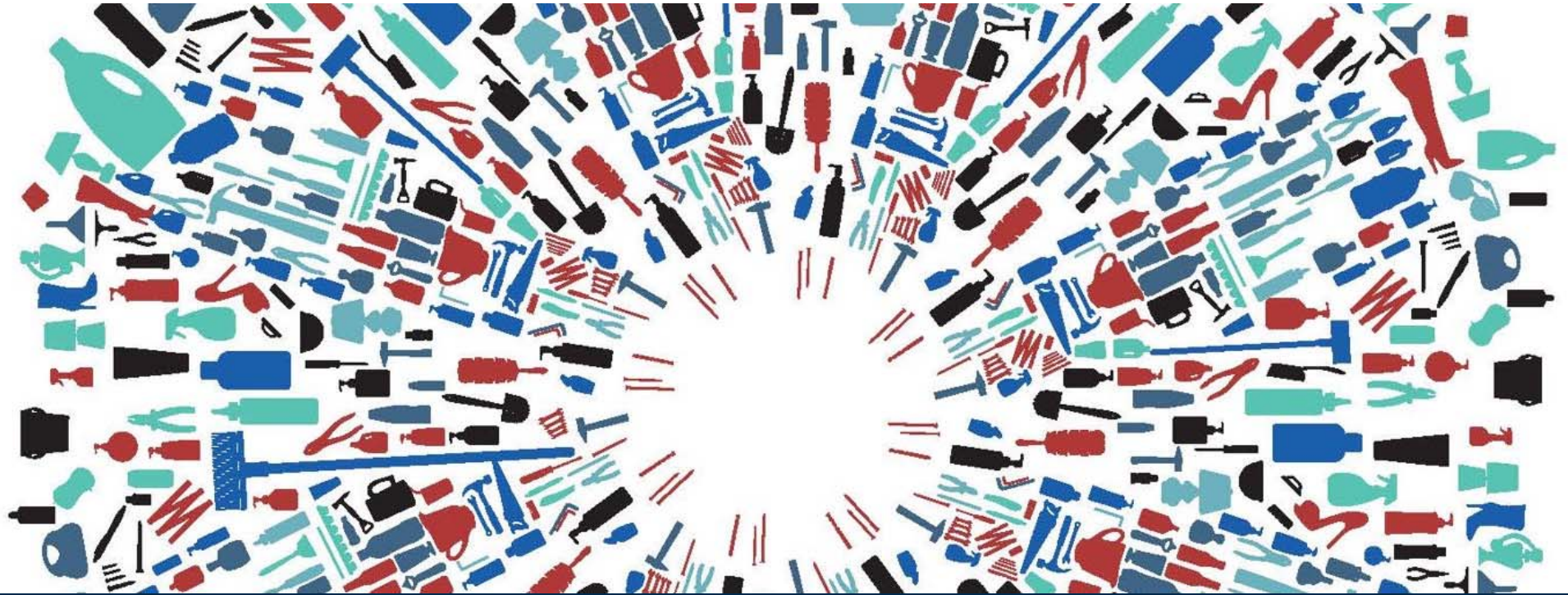
Meeting Notes



metrovancouver

Metro Vancouver Updates





Vision and Guiding Principles Engagement Update

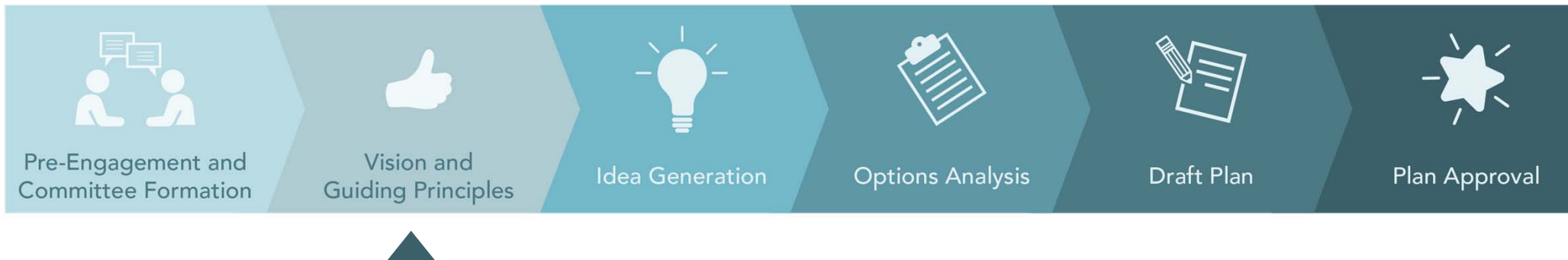
Stephanie Liu

Senior Engagement Specialist

Public Technical Advisory Committee June 1, 2023

metrovancouver

SOLID WASTE MANAGEMENT PLAN UPDATE



VISION AND GUIDING PRINCIPLES ENGAGEMENT

Timeline



GATHERING FEEDBACK

Guiding Principles: Values

Consider values of everyone in the region

Values, interests, and priorities related to the handling of products, packaging, and materials that are no longer needed

Vision: Destination

Important waste reduction, recycling, and garbage disposal topics, now and into the future

What could be better in the future

WHAT WE'VE HEARD

Accessibility, equity and societal improvements

Member staff, PTAC

All groups have equal access to information, education and services.

Accountability

Member staff, PTAC

Ownership of responsibility from producers and consumers to reduce waste. Report regularly on progress and improve metrics.

Affordability

PTAC, WMABC, member staff

Consider cost of accessing recycling and waste services; cost of durable goods that last.

Circular economy

PTAC, Member staff

Repair, reuse and thrifting. Facilitate circular product design, support circular industries, and build public understanding about circular economy.

COMMITTEE FEEDBACK

Climate action

ZWC/CAC, member staff, PTAC

Invest in systems that have the lowest climate impact. Align with corporate GHG emission goals

Convenience and consistency

Member staff, PTAC, ZWC/CAC

Convenient, accessible, and harmonized services across communities

Education and behavior change

Member staff, PTAC, ZWC/CAC, WMABC

Clear and consistent messages to encourage a cultural shift for sustainable consumption and to foster confidence in recycling systems.

Incentives

PTAC, member staff

Incentivize diversion over disposal (e.g. taxation, recycling deposits)

COMMITTEE FEEDBACK

Innovation

Member staff, PTAC

Utilizing new technologies to reduce plastics and reduce GHG emission

Integrate Indigenous values

Member staff, PTAC

Embed Indigenous knowledge and values such as environmental stewardship; reduce pollution which also impacts health.

Policy and regulation

WMABC, PTAC

Regulatory framework that allows for innovation within the industry.

Product design and innovation

PTAC, member staff, ZWC/CAC

Produce items to make them more circular and regenerative.

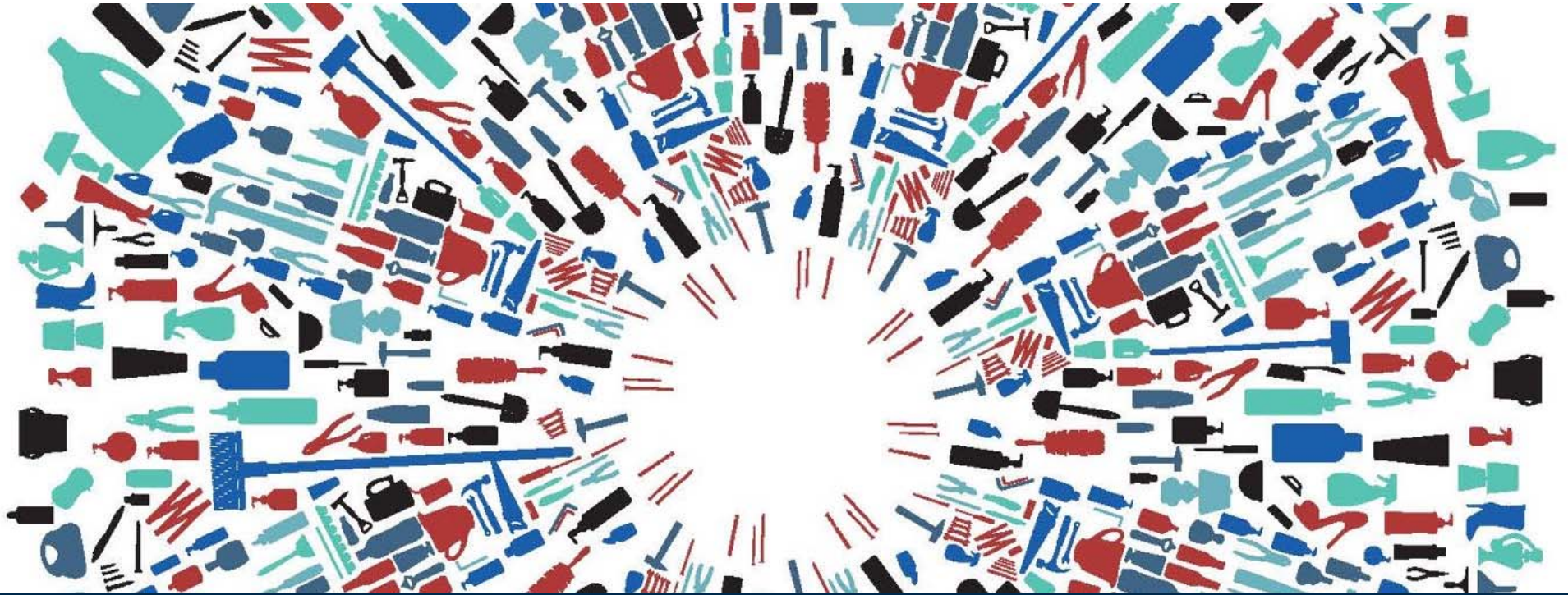
NEXT STEPS

- Industry Advisory Committee workshop (June 6)
- Report to Zero Waste Committee
- Launch public engagement
- Collaborative Engagement
- Vision and guiding principles engagement report
- Draft vision statement and guiding principles to the Zero Waste Committee and Board for consideration
- Next phase of engagement: Idea generation



Questions?

metrovancouver



Circular Economy and 3R Study

JUNE 2023 UPDATE

Karen Storry, P.Eng

Senior Engineer

Public Technical Advisory Committee June 1, 2023

metrovancouver

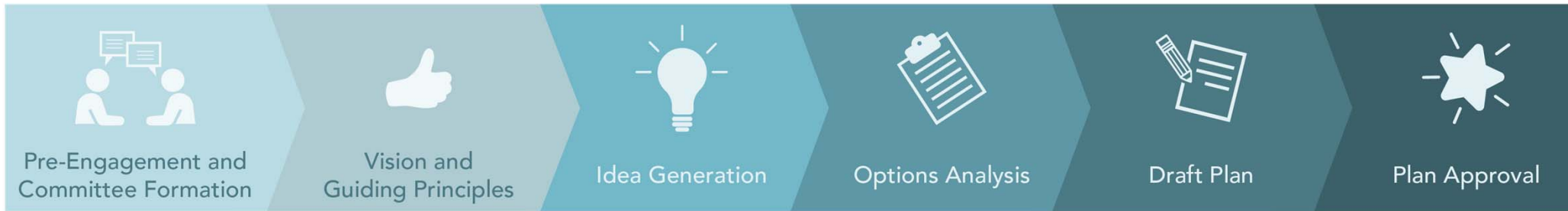
PURPOSE OF THE STUDY

- Identify global and local initiatives to spark ideas on how to advance the circular economy and 3Rs
- Screening level business case of potential initiatives
- Develop a model to help assess the benefits of initiatives suggested during the solid waste management plan update

SWMP DEVELOPMENT PHASES

How the CE & 3Rs project fits into the SWMP update process

Case studies:
spark ideas



Model: provide insights
into benefits of options

evaluating benefits

Primary Benefits

Greenhouse Gases

Waste Disposal

Jobs and Economic Growth

Waste Diversion Potential

Biodiversity & Ecological Health

Resilient Economy

Social

Co-Benefits

FOOD WASTE EXAMPLES

Organization	Description	GHG	Waste	Co-benefits
City of Charlotte, NC	“Remanufacture”: Business case for food waste fed to soldier flies to make low-carbon animal feed from the larvae and fertilizer from the castings	86,000 tCO2e/yr	50,000 t/yr	-green innovation -collaboration -water efficiency -restores ecosystems -150 to 250 jobs
Food Mesh, Metro Vancouver	Food reuse: Network to diverts surplus food to organizations that can put that food to its highest-end use	9,800 tCO2e/yr	3,800 t/yr	-6.4M meals -community cohesion -12 employees

BUILT ENVIRONMENT EXAMPLES

Organization	Description	GHG	Waste	Co-benefits
Unbuilders, Metro Vancouver	Reuse: Deconstruct homes and finds end markets for the salvaged lumber and other building materials	500 t/y	500 t/y	<ul style="list-style-type: none"> -innovative green economy -economic resilience -socially inclusive jobs
City of Rotterdam	Reuse: Looking to encourage the use of material passports through building regulations.	N/A	204,250 t/y	<ul style="list-style-type: none"> -support the transition to circular economy -green jobs -collaboration between public/private/academic

CONSUMER GOODS – TEXTILES EXAMPLES

Organization	Description	GHG	Waste	Co-benefits
FABCYCLE (Vancouver, BC)	Reuse: Textiles reuse business that takes deadstock from textiles businesses and sells it to DIY sewers.	21.6 t/y C02e	6 t/y	-small business carbon solutions -innovation -culture of stewardship -community cohesion
Advanced Clothing Solutions (UK)	Reuse and refurbish: Clothing rental and refurbishment specialist that helps clothing stores rent their clothes. They also clean and refurbish retail returns.	59,139 t/y C02e	5,475 t/y	-ozone cleaning reduces ecosystem risk -supports small business carbon innovation -respect planetary boundaries

CONSUMER GOODS – ELECTRONICS EXAMPLES

Organization	Description	GHG	Waste	Co-benefits
Votechnik (EU)	Recycle: WEEE compliant fully automated system to recycle LCD screens which neutralizes hazardous chemicals and maximize material recovery	0.6 t CO ₂ e/tonne of LCD screens	N/A	<ul style="list-style-type: none"> -innovative green economy -increased local economic resilience -thrive within planetary boundaries
Public Employment Service to Vienna (EU)	Repair: The Reparatur- und Service-Zentrum (RUSZ) electronic waste repair centre to reduce unemployment. Runs repair cafes weekly and does home visits.	1,625 t CO ₂ e/y	125 t/y	<ul style="list-style-type: none"> -job skills -improved quality of life for economically challenged -culture of responsibility -affordability -barrier-free access

KEY OBSERVATIONS

- Many leading examples already exist within our region
- Many initiatives are the result of collaboration between the private sector, government, non-profits, academia
- Embodied carbon data (e.g. textiles reuse) is an emerging field and it will take some time to refine

NEXT STEPS

- Refine the model assumptions and update data
- Identify potential 'quick wins' and through a local context including early engagement with Public and Technical Advisory Committee
- Prepare case studies in a user-friendly format to spark more ideas
- Use the model as a tool to assess potential initiatives based on solid waste management plan feedback



Thank you

metrovancouver



Burnaby Eco-Centre

Performance Metrics Review

Jessica Yamamoto, EIT

Assistant Project Engineer, Solid Waste Services

Terry Fulton, P.Eng.

Senior Project Engineer, Solid Waste Services

Public and Technical Advisory Committee, June 1 2023

metrovancouver

PERFORMANCE METRICS REVIEW – SCOPE OF WORK

- Morrison Hershfield will be conducting a study consisting of the following tasks
 - Jurisdictional Review of a Broad Range of Metrics and Targets (triple bottom line)
 - Develop List of Potential Performance Metrics and Targets to consider for an updated SWMP
 - Review of MV's Existing Performance Metrics and Targets
- The detailed draft scope of work will be brought to PTAC at a later meeting for feedback



North Shore Recycling & Waste Centre

Questions?

metrovancouver
Together we make our region strong



Unsorted Sample

2022 Waste Composition Monitoring Program

RESULTS

Terry Fulton, P.Eng.

Senior Project Engineer, Solid Waste Services

Solid Waste Management Plan Public/Technical Advisory Committee

metrovancouver

WHY DO WE DO WASTE COMPOSITION STUDIES?

- Gauge progress of recycling campaigns and initiatives
- Identify materials to target for future programs
- Learn more about specific sectors
- **Baseline for solid waste management plan update**



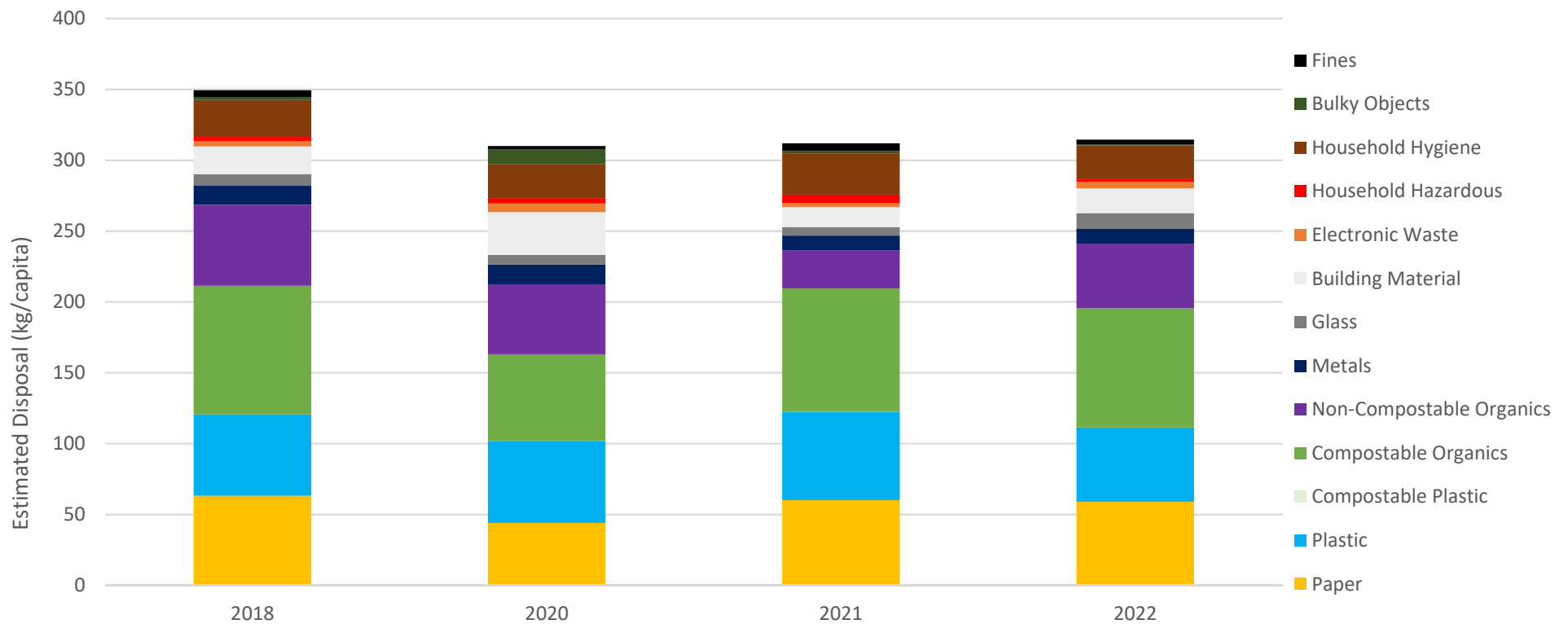
Sorting waste

FULL-SCALE STUDY



FULL-SCALE STUDY RESULTS

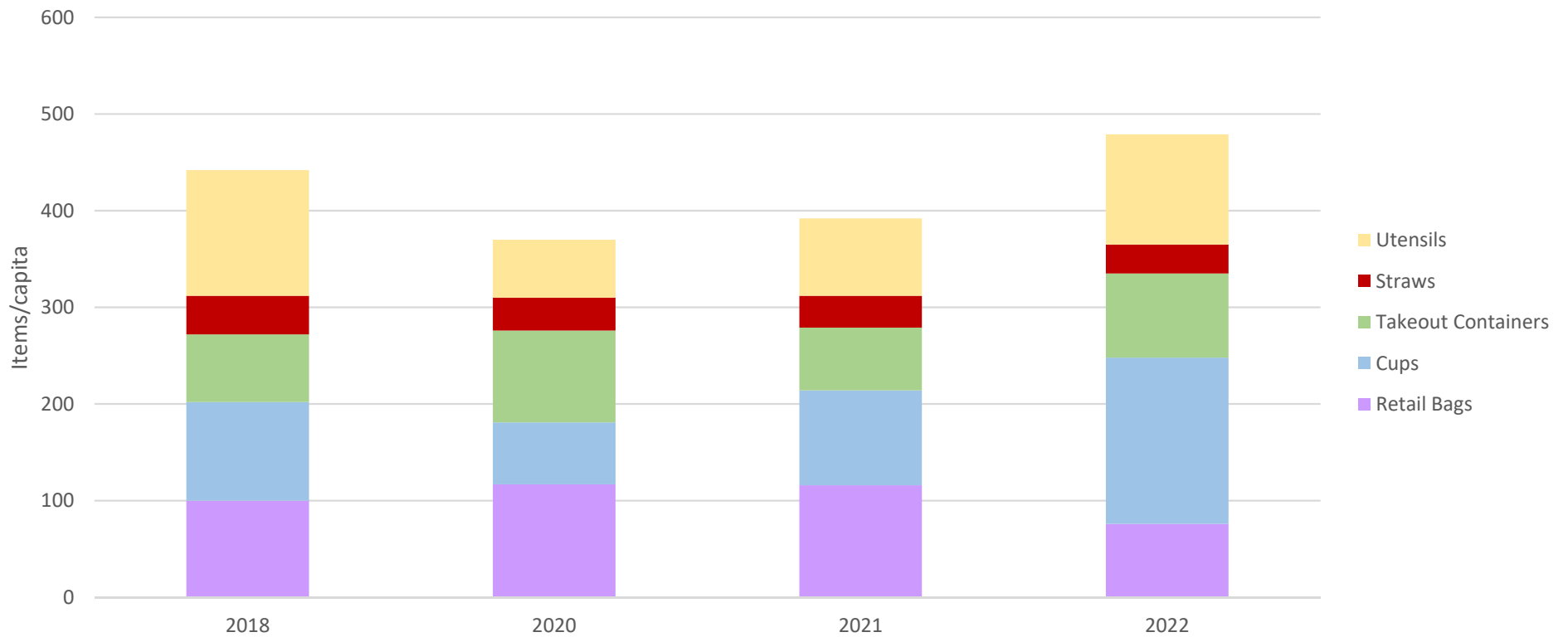
Per Capita Tonnes (Residential, Commercial/Institutional and Small Load Waste)



FULL-SCALE STUDY RESULTS

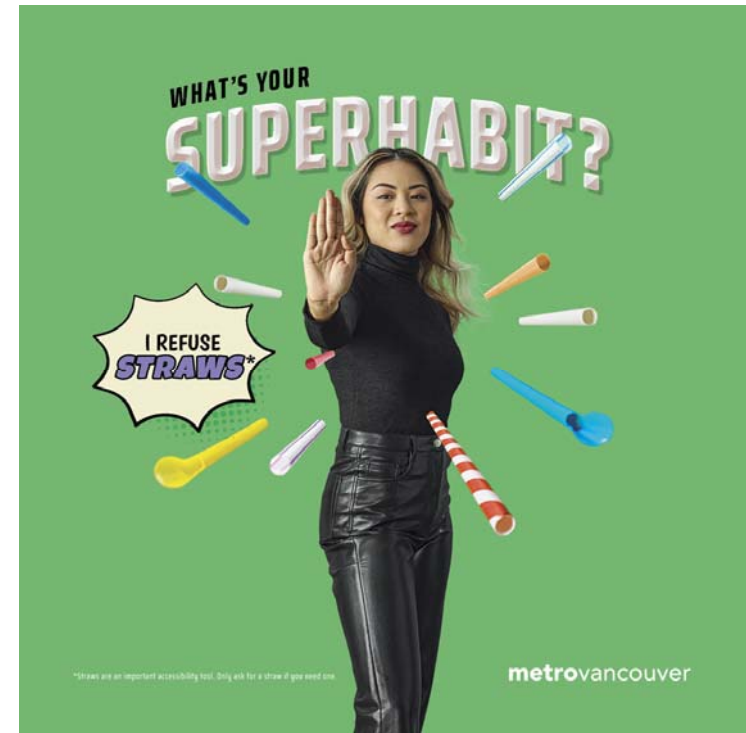
*3.5% of waste stream by weight

Single-use Items Counts*



ACTIONS TO REDUCE SINGLE-USE ITEMS

- Metro Vancouver's Superhabits campaign
- Member jurisdiction single-use item bylaws
- Federal single-use item prohibitions, recycling labelling and minimum recycled content legislation
- Provincial plastics recycling and re-use funding



NEXT STEPS

- Develop resources for businesses on reducing single-use items
- Support workplaces to implement reusable cup and container programs
- Work with non-profits to raise awareness of the single-use item problem
- Continue to monitor single-use items in waste stream



CONCLUSIONS

- 2022 closely resembles pre-pandemic composition
- Organics, plastic, paper and wood are the largest components of the waste stream
- Bags and straws have decreased, cups and takeout containers have increased
- Waste composition study provides baseline data for plan update



Sorted Plastic-Lined Paper Cups



Questions?

metrovancouver

metrovancouver

Zero Waste Committee Updates



An aerial photograph of Vancouver, British Columbia, Canada. The image shows the city's dense urban core, including the downtown skyline with numerous high-rise buildings. The city is situated along the coast, with the Burrard Inlet and False Creek visible. In the background, the North Shore Mountains are visible under a clear blue sky with some light clouds. The foreground shows a mix of residential areas and green spaces.

metrovancover

Invited Presentations at Future Meetings

metrovancouver

Information Items

