



metrovancouver | SOLID WASTE

ZERO WASTE

2024-11-21

**Metro Vancouver PTAC
Plastics Working Group**



Plastics Working Group Meetings

PTAC members involved

Brianne De Man

Doug Schell

John Doherty

Kevin Huang 黃儀軒

Louise Schwarz

Michael Zarbl

Sue Maxwell

Tara Immell



Metro Vancouver staff provided support and data


On most items, we came to consensus but we will flag the areas with differing view points with this symbol



6 meetings conducted

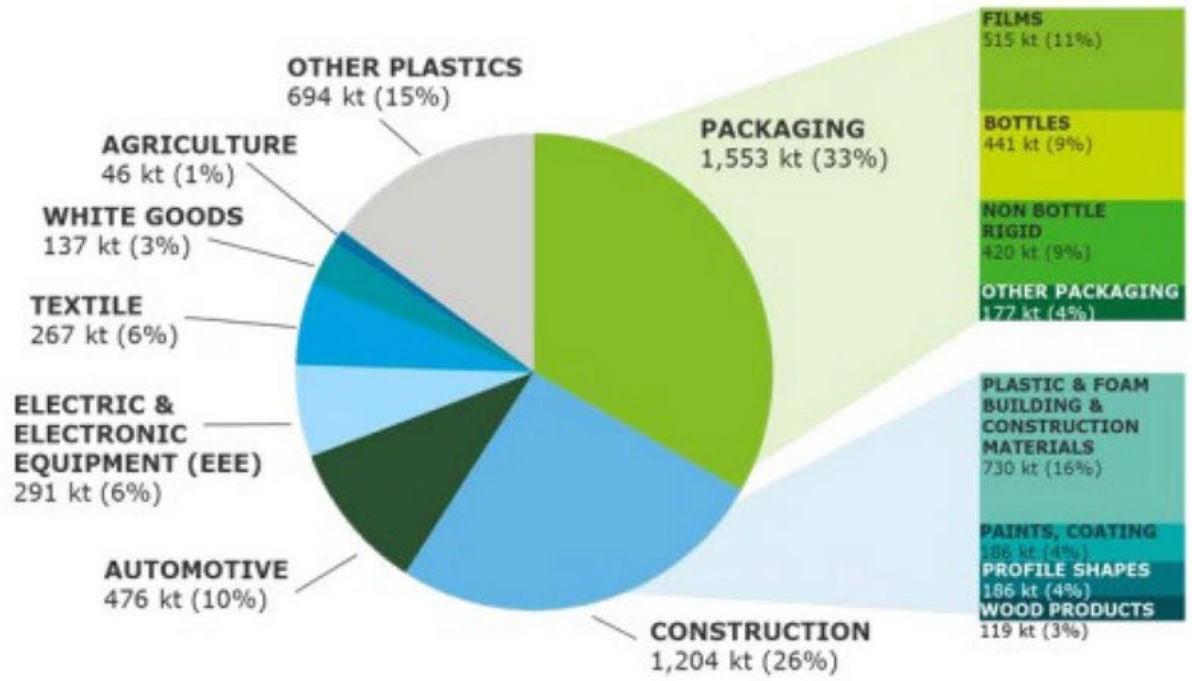
142,287 tonnes of Plastic Waste / Year

(2022)

An underwater photograph showing various pieces of plastic waste, including bags and fragments, floating in clear blue water. The scene is used as a background for the data table.

Primary Category	Combined Composition ¹
Disposed Tonnes	889,292
Paper	17%
Plastic	16%

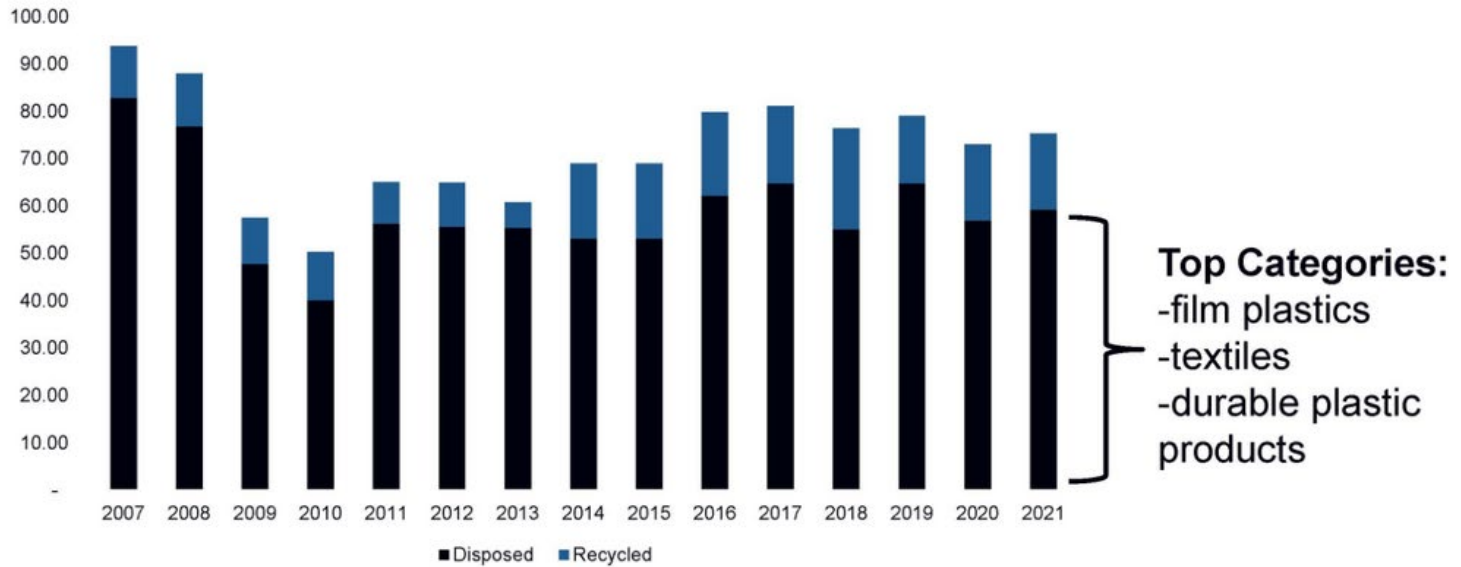
END-MARKETS FOR PLASTIC PRODUCTS IN CANADA (KT, 2016)



Source: ECCC Economic Study of the Canadian Plastics Industry, Markets and Waste

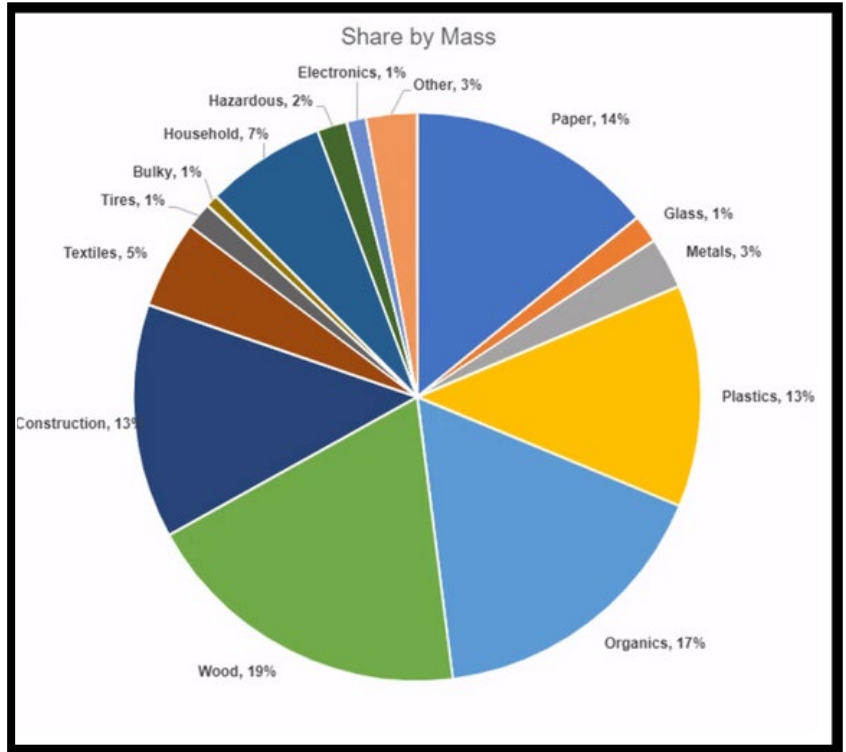
PLASTICS RECYCLED AND DISPOSED

Kg per person in the Metro Vancouver Region

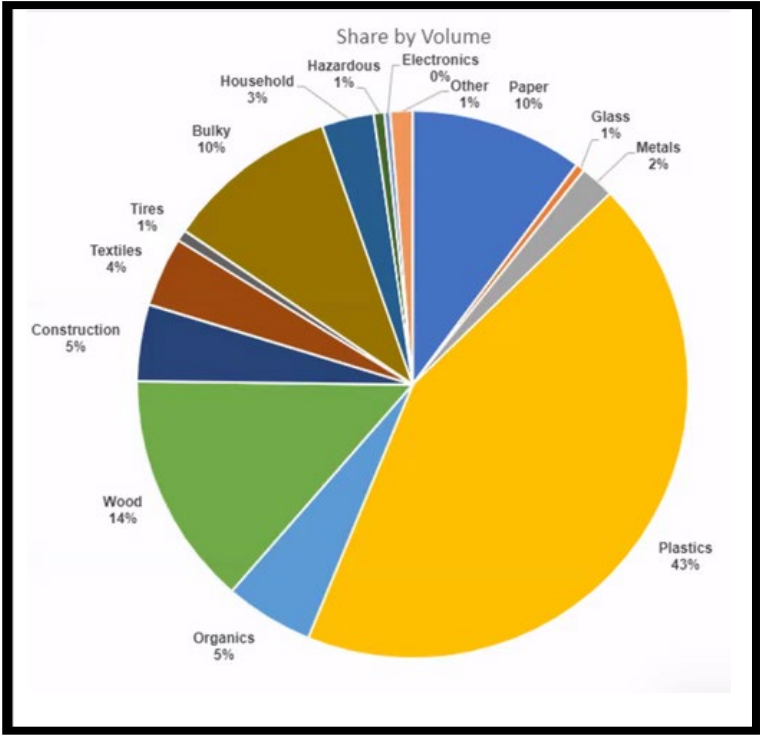


Plastics take up space

Mass



Volume

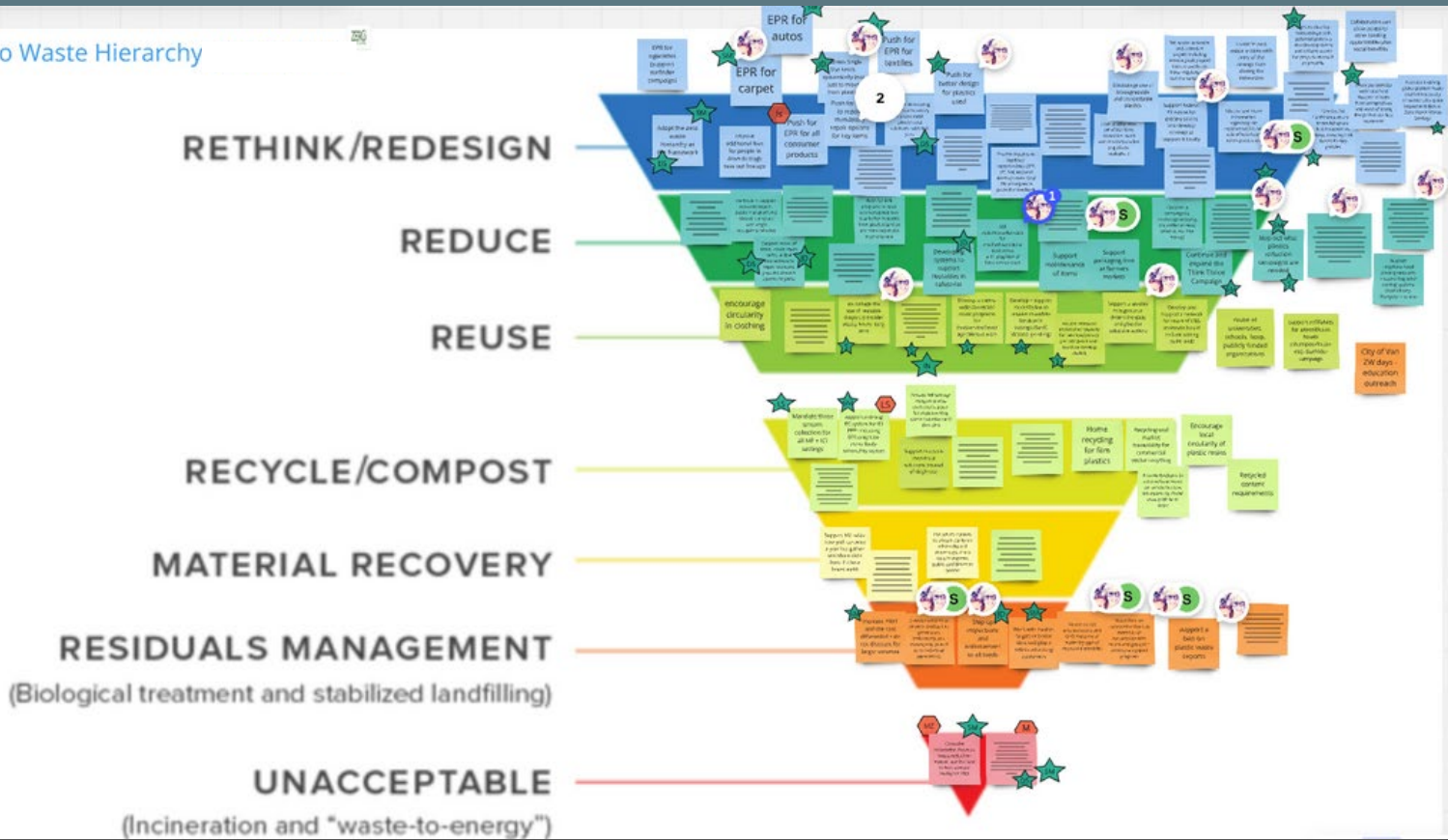


Hartland Landfill Waste Audit,

Info Rory Tooke

Waste Hierarchy & Brainstorming


Zero Waste Hierarchy



- Pursue Zero Waste
- Advocate
- Reduce
- Create & Support Sharing Networks
- Make Reuse, Maintain and Repair the Norm
- Support Reusables in Food Services
- Tackle Textiles
- Education and Communication

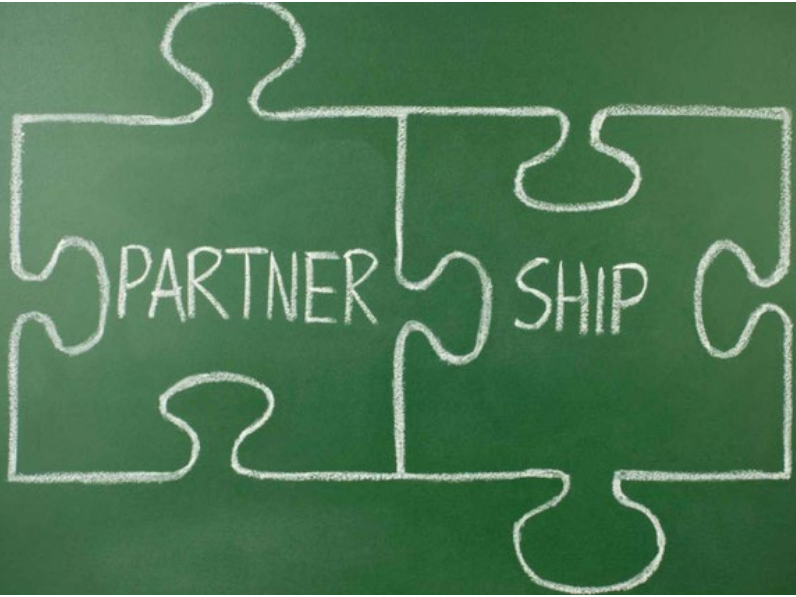


Enhance Accountability

- Improve EPR 
- Business Accountability
- Hauler Accountability
- System Accountability



Leverage Knowledge and Expertise...Collaboration




- Educate on impacts
- Model policies
- Build support
- Workshop solutions
- Partnerships including with First Nations
- Ongoing PTAC



Recycling & Organics



- Mandate streams -source separation -MF, ICI, CRD, streetscape
- Support BC system for ICI PPP in c EPR 
- Collection for residential film plastics (+ glass)
- Tools and support for ICI settings



Inclusion

- SUI reduction -education for small ethnocultural businesses and suppliers
- Campaigns in key languages
- Collaboration with diverse communities (meet where they are)



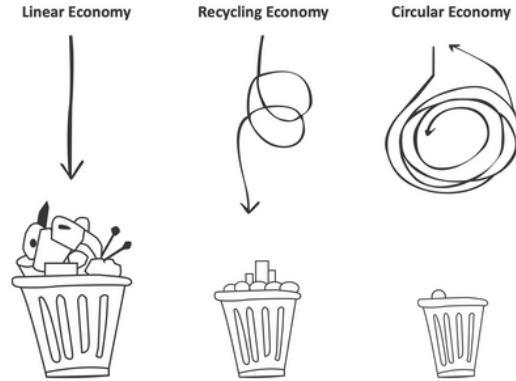


Infrastructure and systems

- Local circularity of resins
- Reuse of large items (pickup)
- Litter clean ups/brand audits
- Facility to process auto shredder fluff
- Close the incinerator and focus on waste prevention



- Use land for C&D +R reuse
- Enact a policy to prevent use of destructive thermal waste management





Goals in Canada

- Federal -Zero Plastic Waste by 2030
- Provincial -EPR for textiles, carpet, all PPP, autos (CCME 2009)
- Canada Plastics Pact
 - 100% of plastic packaging being designed to be reusable, recyclable or compostable by 2025
 - 50% recycled/composted by 2050
 - 30% recycled content by 2025



Waste Policies around the world

- Global Plastics Treaty
- EU
 - 5% less packaging by 2030, 10% by 2035, 15% by 2040
 - reduce empty space in pkg -max 50% space
 - banning pkg for fresh fruit/veg and beverages in cafes/restaurant by 2030
 - banning individual portion condiments and toiletries plus light plastic bags by 2030
 - reuse targets for certain beverages -10% must be in reusables, customers can bring their own containers by 2030;
 - all pkg recyclable by 2030, m in recycled content for plastic pkg, m in recycling targets by wt; by 2029 90% single use beverage containers must be collected separately



Helpful Resources

- Federal goals -Government of Canada's plan to achieve zero plastic waste by 2030. <https://www.canada.ca/en/environment-climate-change/news/2020/10/canada-one-step-closer-to-zero-plastic-waste-by-2030.html>
- European union goals -<https://www.europarl.europa.eu/news/en/press-room/20240419IPR20589/new-eu-rules-to-reduce-reuse-and-recycle-packaging>
- Canada Plastics Pact /EMF Goals: <https://plasticspact.ca/the-solutions/>
- Unnecessary or Problematic Materials https://plasticspact.ca/wp-content/uploads/2024/04/PPP_UnnecessaryProblematic_GuidanceDoc.pdf
- Zero Waste Hierarchy <https://www.zerowastebc.ca/wp-content/uploads/2022/09/ZWIA-Zero-Waste-Hierarchy-8.0-final.pdf>
- UN EP Plastic Report -<https://www.unep.org/plastic-pollution>

References

- CCME (2009). Canada-wide Action Plan for EPR https://ccme.ca/en/res/cap-epr_e.pdf
- ECCC Economic Study of the Canadian Plastic Industry, Markets and Waste https://publications.gc.ca/collections/collection_2019/eccc/En4-366-1-2019-eng.pdf

Summary: Focus on Prevention

Prevention

THE ZERO WASTE HIERARCHY

- ✓ RETHINK/REDESIGN
- ✓ REDUCE
- ✓ REUSE
- RECYCLE/COMPOST
- MATERIAL RECOVERY
- RESIDUALS MANAGEMENT
(Biological treatment and stabilized landfilling)
- UNACCEPTABLE
(Incineration and "waste-to-energy")



The following document was submitted by the Public/Technical Advisory Committee Plastics Working Group. These recommendations represent the range of diverse perspectives among the working group members. As a result, there are some points presented that do not have consensus among all members.

Metro Vancouver Public Technical Advisory Committee -Plastics Working Group Recommendations

These recommendations represent the range of diverse perspectives within the working group members. As a result, there are some points presented that do not have consensus among all members.

These recommendations were developed over a series of monthly meetings. The aim was to provide general direction and allow Metro Vancouver staff to further develop actions as early ones are completed given the ten-year length of the plan. The intent is to have staff continue to work on the areas until the targets are met rather than ticking off the early steps and considering it sufficient. With the direction, it is hoped that Metro Vancouver will endeavour to implement the actions and work in that general direction, whether it is by implementing actions that it can take directly, working with its member municipalities to have them take actions, working with partner organizations or advocating for change with other governments.

1. Rethink and prevent waste in the first place?

Pursue Zero Waste

- Adopt the [Zero Waste Hierarchy](#) as the underpinning framework
- Set waste reduction and collection targets including interim goals (report back to public on these regularly with communications campaigns)
- Invest in zero waste actions with most of the savings from closing the incinerator (note concern was raised that the district energy system was locking Metro Vancouver into long term use of the incinerator and a question about the timing)
- Use public procurement/METRO procurement to support ZW (for example. do not purchase problematic plastics; choose reuse, maintain, repair, quality) and encourage other organizations to do the same. Support the keen innovators that are delivering the services in the way that is the model. Use a tool to support end markets. Consider allying with others in the public sector like post-secondary institutes.

Advocate

- Provide input to all feedback opportunities (EPR, BC, fed, etc.) and develop some clear ZW principles to guide this feedback.
- Apply a higher standard to public entities in all aspects of Zero Waste initiatives. Trust needs to be earned in order to achieve Zero Waste. Consider transparent measures and metrics.
- Push for a strong global plastics treaty and federal policy on waste; plus quick implementation of Zero Plastic Waste Strategy

- Support federal P2 notice for grocery stores and develop strategy to support it locally. Ensure monitoring and reporting back are parts of the system.
- Support federal and provincial tools that support the first 3 Rs of the ZW hierarchy and EPR
- Work with the province to eliminate the need to have provincial approval on municipal bylaws relating to environmental protection (consider if there is no blanket allowance, work to have key sets of policy pre-approved the way SUP policy, empowering municipalities to pilot items, make a suite of options available that can be harmonized)
- Look at what the next set of SUI bans should be -work with munis/prov/fed (e.g plastic teabags, cigarette butts, hotel amenities,etc.)
- Push for better design for plastics used and eliminating use of unnecessary + problematic plastics and additives with Fed/Prov. Discourage use of biodegradable and compostable plastics
- Push for right to repair, mandatory repair options for key items (ties into inclusive)
- Work collectively with RDs/Prov/Fed on what changes are needed regarding policies that support wasting -liability (for reuse/repair) and insurance (requirements to throw away everything after a disaster)
- Consider partnering with post-secondary institutes on what education and services can be offered (e.g. repair). Also advocating to ensure any barriers such as liability are addressed.

Reduce

- Continue to support active transport, public transport and shared transport over single occupancy vehicles (to decrease need for SOV). Also support shared options in high traffic areas.
- Support packaging free items at farmers markets and elsewhere
- Support reusable menstrual solutions instead of single use

Create and Support Sharing Networks

- Expand the roles of libraries or set up new ones for specific items. Develop model policy and practices for tool libraries, toy libraries, kitchen gadgets, etc. Support with communications. Do this in partnership with municipalities. (ties into inclusive)
- Support neighbourhood sharing networks + supporting other sharing systems (Tool Library, Thingery) + strata sharing programs. (ties into inclusive)
- Consider partnering with post-secondary institutes to support sharing networks and also consider them as a source of sharing (space for community events for example)
- Map out assets that can be shared -community reuse, repair and sharing (Squamish is working on it, Share Reuse Repair has some for the Lower Mainland and Portland, OR is a good example.)

Make Reuse, Maintain and Repair the Norm

- Expand and make regular pilots like the Urban Repurpose resale store is allowed to do @ North Shore Transfer Station -"intercept" people throwing away usable items. Expand it to staff taking reusable items as another category as a permanent feature.

- Encouraging reuse at universities, schools, hospitals, publicly funded organizations and other sectors. Work with education facilities to expand systems like UBC's mindful moveout (will need support, perhaps case study, funding, tool kit, coalition -group). Encourage healthcare to move to reusables, share info on progress and examples (for example glove use, exam table covers, reusable masks). Work with tourism sector to offer reusable bags, beverage containers, etc. in rooms and develop shared campaign for tourists to travel lighter (footprint); refillable amenities. Collaborate with public sector partners to determine and address barriers.
- Encourage the use of reusable diapers (consider equity lens) long term
- Develop and support a network for reuse of CRD materials (could include setting aside land); deconstruction principles, policies & programs, linked to C&D working group. Partner with others to develop a supply of reusable materials that can then lead to requirements in RFPs for a certain % use of materials.
- Invest in reuse solutions and pilots (more drop off infrastructure, reuse first at regional facilities by providing separate areas for working/reusable items to be placed)
- Support repair of items; more repair cafes, online connections to repair manuals, possible maker spaces for parts. (ties into inclusive)
- Support maintenance of items

Support for Reusables in Food Services

- Address single use items systemically (not just to move from plastic)
- Develop metro-wide connected reuse programs for foodservice/beverage takeout ware
- Develop + support model bylaw to require reusables for dine in settings (Banff, Victoria - pending)
- Require adequate dishwasher capacity for new foodservice permits (work with munis or develop model)
- Consider a campaign to encourage enjoying the coffee or meal (dine in, not fast eating)
- Develop standards for foodservice ware so can harmonize systems
- Explore ways to reduce single use items distributed through drive throughs
- Developing systems to support reusables in cafeterias, food courts and catering

Tackle Textiles

- Continue and expand the Think Thrice Campaign/encourage circularity in clothing
- Support a textiles hub group to determine gaps and plan for collective actions

Education and Communications

- Provide MF settings comprehensive tools and support for implementing waste reduction and diversion
- Consider educating the public on how to consume more wisely (chemicals to be concerned about, footprint of products, how to assess quality and what a lifetime cost may be, sharing consumer reports through libraries, etc)
- Work with RCBC to develop a comprehensive directory for where to borrow, share, rent rarely used items. Also repair options.
- Map out what plastics reduction campaigns are needed

- Campaign to reduce bottled water use -public fountains, not for sale in MV + muni facilities and those getting public funding, map where they are (ties to equity), provide water wagons at events. Look for partners (post-secondary is good sector to approach) - work has been done , see what gaps exist both in the programming and in the public's awareness of these options/campaigns (ties into inclusive)
- Increase access to public zero waste education through outreach events similar to the City of Vancouver Zero Waste Days
- Learning from partners experience

2. Enhance accountability for eliminating waste?

Improve EPR

- Work to improve the quality of the EPR system-particularly with regard to using the ZW hierarchy to support **redesign, reduction, reuse, repair, salvage** for parts, longer lifespans and durability, better end fates for materials; etc.; fair compensation and paying full costs; accessibility; transparency (chain of custody, financial, contracting); communications
(can include advocacy, waste composition data, bans, supporting the MOECCS staff, etc)(ties into inclusive)
- Work to expand the range of EPR programs to include cigarettes/smoking devices, carpet, vehicles, textiles and all consumer products (can include advocacy, waste composition data, bans, supporting the MOECCS staff, etc)
- Advocate for increased deposit rates for beverage containers until return rate is 99%, also ask province to ensure programs develop a reusables system (as is in Recycling Regulation)
- Push for EPR programs to have ecomodulated fees (for textiles -factor in the challenges of recycling mixed materials, for plastics, factor in harms from plastics) (e.g. France)
- Work to improve EPR programs with an equity lens (can people keep using the item they already have, will parts and repair be made available for free or at an affordable level, will reuse options support access to lower cost items, can people access recycling options (even without a vehicle), etc.)
- Push for accountability for producers (e.g. Quebec has fines for non-collection)
- Ask for the additional supportive policies (as noted in the CCME Canada-wide Action Plan for EPR)
- Consider an equity lens and environmental impact when advocating on EPR

Business Accountability

- Encourage requirements for zero waste plans as part of business licensing in member munis + provide support (can start sector by sector)
- Increase PAYT and the cost differential + do not discount for larger volumes
- Develop systems to provide feedback to generators (collectively as a community as well as to individual generators)
- Use tipping fees as a tool so that poor sorters and high volume generators pay more.

Hauler Accountability

- Step up inspections and enforcement to all loads
- Work collaboratively with haulers to gather better data and play a role in educating customers.
- Consider accountability and transparency measures, both for Metro Vancouver and for customers of haulers who may not be getting the services they are paying for (noted example of recycling being mixed in with waste when taken away)

System Accountability

- Report on full environmental and GHG footprint of waste (by type of disposal if possible)
- Support restrictions on plastic waste exports to countries that do not have proper recycling and disposal infrastructure to meet emerging international plastic recycling standards, nor equivalent health, safety and environmental standards
- Waste composition studies -include the degree of reusability (note that there may be some option in plastics registry) +more data on reuse and repair overall + why + value
- Support better labelling so consumers know if it can be recycled
- Accountability for all businesses; public sector should set a leading example
- Eliminate hard to recycle plastics
- Get commitments from member municipalities to roll out supportive bylaws and systems
- Support digital passports for materials
- Do not support mixing materials (i.e putting plastic in cement) that makes it hard and unpredictable to recycle at the next round
- Consider plastic leaking into liquid waste -education campaign, consider sources, encourage filters on washing machines, natural fibre use, glass use, etc. Partner with plastics, river, fish and ocean focused groups

3. Leverage knowledge and expertise through collaboration?

- Educate and share information regarding the negative health and side effects from micro plastics, etc.
- Use the NZWC as a way to develop model policy and work federally/provincially to have them enacted (like ZW Europe does)
- Use NZWC and other avenues to build collective support for key goals and actions at provincial and federal levels
- Use the ZW Conference as a way to workshop and build support for local solutions and ideas, creating task forces for key policies
- Work to develop relationships with potential partners and develop teams and collaborations for projects as much as possible (for example, convene meetings of community, government and other partners to focus on textiles).
- Collaboration can allow access to other funding opportunities plus social benefits
- Invite partnership with local First Nations to learn from perspectives and ways of doing things that use less resources (ties into inclusive)

- Metro Van staff to participate in initiatives that support redesign/rethink, reduce and reuse
- Partner with entrepreneur innovators to build the momentum and capacity
- Have an ongoing PTAC to advise on implementation (continuity and public oversight)

4. Increase participation and reduce contamination in organics and recycling programs?

- Mandate streams for source separation collection for all MF + ICI settings
- Support a strong BC system for ICI PPP -including EPR (might be more finely tailored by sector according to the materials generated)
- Supporting MF buildings to have strong sorting and collection systems (Strata organizations better recycling performance, good contracts for service of buildings + property management companies)-connecting people with the information
- Work with munis and EPR programs to have multi-stream streetscape containers as the norm. Ensure Province is enforcing Recycling Regulation.
- Advocate for home recycling for film plastics (plus Styrofoam and glass)
- Mandate multi-stream collection for all Construction,Reno,Demo settings (focus on the service providers rather than the project owners, can also be in RFP for services)
- Provide ICI settings comprehensive tools and support/coaching for implementing waste reduction and diversion (e.g. Lethbridge, Squamish)

5. Build confidence in recycling systems?

- Recycling end market traceability for commercial sector recycling. Use smart trackers to ensure clarity on where discard streams go, share data to improve public confidence in system
- Provide feedback to citizens/businesses on results to show transparency, foster trust, encourage action (high level data)

6. Develop more inclusive programs and services?

- SUI reduction/education for small ethnocultural businesses and suppliers of food service ware
- Campaigns in key languages for region
- Collaborate with diverse communities to support campaigns (meeting communities where they are)

7. Improve infrastructure and systems for waste management across the region?

- Encourage local circularity of plastic resins
- Ensure large item-pick-up items collected are "graded" for reuse opportunities. Like by Urban Repurpose at their North Shore pick-up/free give-away days.Recycled content requirements

- Support MV-wide civic litter pick up twice a year but gather and share data from it -like a brand audit
Continue to waive disposal fees for community clean up materials (in partnership with munis and groups) + develop a support program
- Close the incinerator, focus on waste reduction instead, use the land to host a reuse facility for CRD (Michael flagged)
- Enact a policy that does not support gasification, plasmification, pyrolysis, chemical recycling to fuel, cement kilns, and other destructive methods of handling waste. Ensure no Metro Vancouver waste goes to these facilities, and no funding support. (Michael flagged)
- Need a facility to process the auto shredder fluff to recycle more materials (ties to EPR as well)