

SOLID WASTE MANAGEMENT PLAN PUBLIC/TECHNICAL ADVISORY COMMITTEE

Thursday, November 21, 2024

In-Person Meeting

2:00 pm – 5:30 pm

Meeting Notes

Attendees: Director Sarah Kirby-Yung (Chair), Director Craig Hodge (Vice-Chair), Ben Liegey, Brianne De Man, Christian Dietrich, Cody Irwin, Louise Schwarz, Raman Johal, Sue Maxwell

Absent: Bill Chan, Brenda Martens, Daniel Rotman, Doug Schell, Grant Hankins, Hunter Bergen, Jake Turek, Jamie Kaminski, Jaye-Jay Berggren, John Doherty, Kevin Huang, Matthew Morin, Michael Zarbl, Sara Larter, Sean Miles, Tara Immell, Ulwiana Mehta-Malhorta, Lori Bryan (IAC Co-Chair)

Metro Vancouver Staff: Paul Henderson, Stephanie Liu, Chris Underwood, Terry Fulton, Brooke Atkinson, Karen Storry, Adriana Velazquez, Zack Ha

	INTRODUCTIONS <ul style="list-style-type: none"> Meeting started at 2:00 pm 	Chair
1.	Welcome from the Chair <ul style="list-style-type: none"> Director Kirby-Yung welcomed Committee members Territorial acknowledgement Informed that this meeting is recorded and livestreamed and that video and audio footage from the meeting will be posted on the PTAC website after the meeting. There is no zoom option for this meeting. 	Chair
2.	AGENDA <ul style="list-style-type: none"> Reviewed the November 21, 2024 meeting agenda. 	Chair
3.	MEETING NOTES – September 13, 2024 <ul style="list-style-type: none"> Reviewed the September 13, 2024 meeting notes and members did not note any errors or omissions. 	Chair
4.	ACTION/STANDING ITEMS	
	4.1 Action tracker Action items from previous meetings: Metro Vancouver provided updates on the progress of items in the action tracker. There is one in-progress item left on the 2024 Action Tracker, and one completed item:	Brooke Atkinson, Metro Vancouver

	<ul style="list-style-type: none"> • Metro Vancouver to share lessons learned from innovative Metro Vancouver repair and reuse initiatives with PTAC (expected to be completed in 2025) • A completed action item included addressing an inquiry raised at the September 13, 2024 meeting regarding different disposal costs. Staff included information about the inquiry in the September 5, 2024 Zero Waste Committee Agenda 	
5.	NOVEMBER 7, 2024 ZWC/PTAC PUBLIC PRESENTATION DAY DEBRIEF	
	<p>A quick summary of the Public Presentation Day on November 7, 2024 was provided:</p> <ul style="list-style-type: none"> • 13 public presentations were provided to the Zero Waste Committee and PTAC, by representatives of a variety of different industries and organizations <p>PTAC members' feedback on Public Presentation Day:</p> <ul style="list-style-type: none"> • PTAC members found most of the public presentations to be informative. • Members generally agree that this is a good opportunity to: <ul style="list-style-type: none"> ▪ Scan for ideas and innovations from businesses and non-profit organizations ▪ Understand barriers that Metro Vancouver could help address ▪ Complement input for the solid waste management plan update • However, a concern was raised that receiving presentations purely promoting commercial interests does not align with the role of PTAC. Accordingly, updated guidelines for future Public Presentation Days should be considered. <p>Chair Kirby-Yung asked members if there is an interest in receiving a presentation from the Indigenous Zero Waste Technical Advisory Group (IZWTAG) at a future meeting. IZWTAG is an Indigenous-run non-profit society, and a presentation from them could help incorporate Indigenous perspectives and knowledge into the plan update. No members objected or had any concerns with the proposed presentation.</p>	Chair and member discussion
6.	METRO VANCOUVER UPDATES	
	<p>6.1 Solid Waste Management Plan Update – Technical Studies and Timeline Update</p> <p>Terry Fulton, Senior Project Engineer, Solid Waste Services, provided an update about the solid waste management plan process, including next steps:</p> <ul style="list-style-type: none"> • Share the draft evaluation criteria and goals with PTAC • Report on idea generation engagement • Initiate options analysis phase • The updated plan is estimated to be drafted in 2026 <p>6.2 Zero Waste Committee Updates</p>	Terry Fulton

	<p>Paul Henderson, General Manager, Solid Waste Services, provided an update on recent discussions and activities of the Zero Waste Committee and highlighted:</p> <ul style="list-style-type: none"> • Construction and Demolition Waste Reduction Forum: expected to be scheduled for May 2025 • Engagement Panel Updated Terms of Reference and plans to initiate recruitment of additional members • Industry Advisory Committee Feedback Summary Report - summary of input from the Industry Advisory Committee in 2024 • Manager’s Report: <ul style="list-style-type: none"> ▪ Binners’ Project Coffee Cup Revolution ▪ Reuse Research Reports 	Paul Henderson
7.	WORKING GROUP PRESENTATIONS	
	<p>Plastics Management Working Group Chair Sue Maxwell and the members of Plastics Management Working Group provided a presentation that is posted on the committee website. There is a supplementary document that provides a summary of the Plastics Management Working Group included as Attachment 1.</p> <p>Member discussion:</p> <ul style="list-style-type: none"> • A comment was raised about challenges with recycling film plastics. <ul style="list-style-type: none"> ▪ The working group did not categorize plastic waste by flexible vs hard, but rather by what is going to garbage instead of being recycled or reused. ▪ Solutions could be defining what film plastics are within the waste composition studies that Metro Vancouver holds. • A PTAC member asked the working group what a potential suggestion from the group would be to address the challenges of EPR (eco-modulated fees, internalization of external fees). <ul style="list-style-type: none"> ▪ Suggestion of potentially framing them as incentives (i.e. discounts) rather than fees. Make sure producers are ultimately financially responsible. ▪ Recycle BC does not currently collect flexible plastics from all homes, but Recycle BC is planning to include flexible plastics in their program over the next two to three years within the province. • Large potential impact on food waste reduction in the food service sector by reducing plastic waste. Also potential quick-win by using reusables for dine-in. <p>Food Waste and Organics Working Group Chair Ben Liegey and the members of Food Waste and Organics Working Group provided a presentation that is posted on the committee website.</p> <p>Member discussion:</p> <ul style="list-style-type: none"> • A question was raised about the capacity for rescuing food (number of organizations to support) and capacity for local organics processing. 	Working Group Members

- The number of non-profit organizations is growing, and they have been doing very well. The issue is more on the business side, where more education is needed to encourage businesses to donate food and the pricing of processing food waste need to be considered.
- There are not many organics processing facilities in the region, but discussions are underway with most of the municipalities on ways to improve the availability of local infrastructure and promote participation in organics programs.

Construction and Demolition Working Group

Chair Brenda Martens and members of Construction and Demolition Working Group provided a presentation that is posted on the committee [website](#). There is a supplementary document that provides a summary of the Construction and Demolition Working Group included as Attachment 2.

Member discussion:

- Member commented how building with deconstruction in mind is key from the working groups suggestions.
 - Brussels: example of houses being built using individual, replaceable components to more easily facilitate deconstruction rather than requiring entire buildings to be demolished and rebuilt.
- Working group member commented that a report from World Business Council for Sustainable Development and a report on embodied carbon for buildings (Community Energy Association) were used as information for this presentation.
- Comment that there is an opportunity to create a marketplace to sell surplus construction materials, could be done similar to food recovery network. (FoodMesh)
- With the proposed ‘build nothing’ concept, need to be careful with the language since there is a housing issue in the region and build nothing could be misinterpreted to counteract the need to develop more housing.
 - Working group members clarified that ‘build nothing’ means identify what is required (e.g. more housing), and first assessing whether there are already buildings that can be used or repurposed to fill the need, rather than building new.
- Challenge for deconstruction is the coordination of logistics, timing, and space. How could we tackle that challenge?
 - View deconstruction of buildings as a utility, what is needed? It is land to store the materials.
 - San Fransisco example of using the space beneath the freeways to store deconstruction materials was mentioned. Government supported using that land space for storage of deconstructed materials as it was considered necessary.
- There is a lack of knowledge among contractors about what deconstruction could look like. Some municipalities have bylaws requiring deconstruction, but more education is needed.

	<ul style="list-style-type: none"> The construction and demolition waste reduction forum coming up in spring 2025 will be a good place to discuss how to advance these initiatives in more municipalities. 	
8.	PTAC ADDITIONAL DISCUSSION ON SOLID WASTE MANAGEMENT PLAN UPDATE – IDEA GENERATION	
	<p>All working group presentation recordings and supplementary documents will be posted on the committee website after the meeting.</p> <p>If there is any additional feedback that was not captured at this meeting, the feedback could be emailed to zerowaste@metrovancover.org by December 13, 2024.</p>	Brooke Atkinson
9.	OTHER BUSINESS	
	<p>9.1 PTAC Potential Meeting Dates 2025</p> <ul style="list-style-type: none"> Proposed meeting five times in 2025 Potential meeting months were shared Meeting invitations for the year will be sent out in early 2025 <p>9.2 PTAC New Members Update</p> <ul style="list-style-type: none"> Application period closed end of September Staff and the Engagement Panel have reviewed applications Recommended members will be presented to the Zero Waste Committee and Board in early 2025 	Chair
10.	INFORMATION ITEMS	
	<p>10.1 Public/Technical Advisory Committee 2024 Work Plan</p> <p>10.2 Regional Waste Flows 2024</p> <p>10.3 National Zero Waste Council and Metro Vancouver Respond to Competition Bureau’s Public Consultation on the Competition Act’s New Greenwashing Provision</p> <p>10.4 National Zero Waste Council and Metro Vancouver Respond to Innovation, Science and Economic Development Canada Consultation on Right-to-Repair Legislation</p>	Chair
11.	ADJOURNMENT	Chair
	<ul style="list-style-type: none"> Adjourned at 3:50 pm 	

Attachment 1: Metro Vancouver Public Technical/Advisory Committee - Plastics Management Working Group Recommendations

Attachment 2: Metro Vancouver Public/Technical Advisory Committee – Construction and Demolition Working Group Recommendations

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 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 municipalities 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 Metro Vancouver + municipality 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 municipalities + 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 municipalities 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)

The following document was submitted by the Public/Technical Advisory Committee Construction and Demolition 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 – Construction and Demolition Working Group Recommendations

	Accountability and oversight of C&D Waste	Facilitate markets for diverted goods	Managing waste volumes and surges	Adoption of zero waste hierarchy
Avoid waste generation	<ul style="list-style-type: none"> Connect projects to haulers (protect haulers and receiver confidential information such as customer base) to receivers (as per SF example), can use Green Halo platform https://www.greenhalosystems.com/ Industry to develop a registry of the supply of volumes, annual volumes reported out and validated through assurance from independent 3rd party Common confidential database so that we can measure reductions/increases - independent industry platform. 	<ul style="list-style-type: none"> Embed the Zero Waste Hierarchy and C&D waste/embody carbon hierarchy in Metro Van's procurement and policies - include sourcing used/salvaged materials where possible. Encourage other organizations to do the same. (this can be part of creating end markets) Industry to develop a registry of the supply of volumes, annual volumes reported out and validated through assurance from independent 3rd party 	<ul style="list-style-type: none"> Industry to develop a registry of the supply of volumes, annual volumes reported out and validated through assurance from independent 3rd party Public awareness campaign regarding land use change waste. Work with organizations that make decisions that increase waste during disasters to make waste minimization also a priority (i.e. insurance companies, etc). Work with building and design industry and policy makers to adopt the ZW/embody energy hierarchy as the guidance for building sector 	<ul style="list-style-type: none"> Review policies and publications for language that "assumes" waste generation. For example revise "demolition" to "building removal" and "construction waste" to "construction excess resources" Have a pollution hierarchy such that pollution prevention is not undertaken at one level unless all feasible options for pollution prevention at a higher level have been taken Require DfD/A, salvage reuse and recycled content in all MV's own building and infrastructure procurement. Push for building codes to consider disassembly, repair, flexibility of use, deconstruction and embodied carbon Adopt the ZW hierarchy as the guide and encourage others to do so as well Support capacity building (education) in the industry Produce and distribute specification templates for circular building procurement Encourage Product design for modularity, reuse recycle (according to pollution hierarchy)

<p>Recycle / recover materials</p>	<ul style="list-style-type: none"> • consult on licensing (permitting) and regulating haulers (as per SF) • Incentivize source separation • Annual reporting out by industry stakeholders by third party auditor • Have collection of reusable items at disposal locations as per North Van pilot, but permanent (Whistler as example https://mywcss.org/social-enterprises/re-use-it-centre/) 	<ul style="list-style-type: none"> • Set up systems to address costs of material storage (can be using public land, providing support or other tools) • Streamline regulation system to foster increased use of salvaged/diverted materials • Work with province, academia and NGOs to develop a model for wood waste that determines what assets exist and what are needed to create an ecosystem that can handle all kinds of wood and use it to the highest and best purposes (like King County). Use NZWC or other systems to build regional partnership. • Virtual Marketplace Platform (RHEAPLY), provides important tools; public marketplace for businesses; asset management for those large inventory holders for their stock - Like 'house moving storage' for example 	<ul style="list-style-type: none"> • Framework developed where products that cannot be reused or recycled have an environmental fee 	<ul style="list-style-type: none"> • Pollution Hierarchy <ol style="list-style-type: none"> 1. reduce environment impact by producing the product by eliminating toxic components and increase energy efficiency; 2. redesign to improve reusability or recyclability; 3. reuse the product, 4. recycle the product • Work with the province and other partners to have EPR for C&D materials
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		<ul style="list-style-type: none"> Industry to develop their strategy in reduce/reuse targets with guidance from govt. eg. defining "highest use" 		
Reduce / reuse	<ul style="list-style-type: none"> "Hyper-regulate" (look at new term, effective regulation) mixed waste / commingled, standardized communication Have significant deterrents for projects, haulers and receiving facilities that misreport their recycling/waste Ensure enforcement of existing regulations https://www.recyclingcertification.org/ to ensure recycling / recovery is taking place 	<ul style="list-style-type: none"> Open land uses to recycling (may be residual waste) 		<ul style="list-style-type: none"> Similar to the above - adopt a pollution hierarchy and framed in the regulation as a guiding principle Phase out incineration of all materials including C&D. Work to recover materials instead. Create a municipal template and toolkit for building removal bylaws that include house moving and deconstruction
Misc.	<ul style="list-style-type: none"> Work with Fraser Valley RD to jointly research 2-3 combined heat and power plants for lower mainland 	<ul style="list-style-type: none"> Note: The pollution hierarchy as outlined in the column of Adoption of Zero Waste applies to the other 3 columns (i.e. accountability, managing waste volume) 	<ul style="list-style-type: none"> Start to regulate out the use of materials that can't be reused or recycled. Phase out problematic materials 	

Accountability and oversight of C&D waste

- Tracking generators, haulers and receivers
- Licensing and permits
- Capacity tracking (receivers)
- Audits and certifications
- Collecting good data and 'leakage' out of region
- Contaminated soil?

Facilitate markets for diverted, salvaged/surplus construction materials

- Procurement for waste management/salvaged materials – MV template for managing site and building materials
- Address costs of material storage
- Create certainty in the marketplace of both supply and demand
- Facilitate land for receiving facility use (recycling, reuse, etc.) with industrial rezoning and cost reductions
- Create an environment to create more processing capacity
- Create business opportunities for C&D waste with established partners/problem solvers
- Remove regulatory barriers for processors and end user

Managing waste volume and surges

- Natural disasters
- Prevention of C&D waste due to affordable housing policy and other changes in land uses.
- End use management – capacity under current 'onerous' requirements
- Building removal options, support hierarchy
- Renovation and retrofit vs new build

Adoption of Zero Waste Hierarchy

- Tie waste into values and priorities (practicality, cost, circularity, carbon and climate change)
- Design for Disassembly/Adaptability
- Extended Producer Responsibility for C&D
- Influence policies on end uses (such as wood pellets)
- Examine incineration