



May 21, 2024

To Whom It May Concern:

Thank you for sharing and allowing us to comment on your biennial Solid Waste Management Plan Progress report.

Zero Waste BC is a non-profit association dedicated to driving systemic change towards Zero Waste in BC. Zero Waste Canada is a non-profit grassroots organization, dedicated to ending our age of wastefulness through improved industrial design and education. Zero Waste is the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health. Our current resource consumption systems of linear take-make-waste not only create waste but also generate a huge amount of greenhouse gases which constitute some of the discharges that threaten the environment and human health as well as impacting the biodiversity of the planet. For more information on Zero Waste, please see the Zero Waste Hierarchy.¹

Since the last biennial report, we are very pleased to see the work on waste prevention and reuse and hope this will continue to be scaled up. We also support the work done to make recycling and waste centres one stop dropping options as much as possible, including the addition of pilot reuse options which we hope can be expanded.

Section 2 Strategies

Specific feedback on strategies is noted below using the Zero Waste hierarchy:

Strategy 1.2 Reduce or eliminate materials entering the solid waste system which hinder or limit the opportunities to achieve reuse, recycling, or energy recovery, or that may exacerbate environmental impacts of disposed residuals. We encourage Metro Vancouver to expand the work of the NZWC and collaborations as well as to increase the effectiveness, enforcement and education on disposal bans. This should include mandating clear bags, and until then looking in black bags as visual enforcement will only go so far if you cannot see what is in the waste (as demonstrated by the results of the waste composition studies)

Strategy 1.3 Provide information and education on options to reduce waste -we fully support this work and feel it should be scaled up. This could include expanding the Love Food Hate Waste program to include the ICI sector as well as hosting workshops on the alternate years to the full NZWC conference which was recently scaled back to biannually.

Strategy 2.1 Increase the opportunities for reuse. These are great initiatives that should be scaled up.

¹ Zero Waste Hierarchy: <https://zerowastecanada.ca/zero-waste-hierarchy/>.

Strategy 2.2 Increase the effectiveness of existing recycling programs and Strategy 2.3 Provide opportunities to increase private sector recycling. Metro Vancouver has made some strides in this area to make sorting waste correctly easier and more convenient. Future actions should work to make three stream collection mandatory in all municipalities.

Strategy 2.4 Target construction and demolition sector for increased reuse and recycling -Metro Vancouver should work to have all member municipalities embrace deconstruction policies as well as more actively monitor C&D facilities for accuracy to support the municipal bylaws.

Strategy 2.5 Reduce paper and paperboard being disposed -While Recycle BC is responsible for collection of this materials from residential homes, Metro Vancouver should play a key role in ensuring this mandate is fulfilled (including provision of streetscape collection). Metro Vancouver also has a strong role to play on ensuring the ICI sector has collection systems in place and low contamination levels as the composition studies still show a significant amount of this material going into the garbage. Enforcement of bans needs to include paper as well. A focus on the need for reusables instead of fibre based takeout ware is needed as the Provincial policy on single use plastics may drive a switch to fibre unless a strong campaign is in place to push for reusables.

Strategy 2.6 Target organics for recycling and energy recovery. Metro Vancouver should continue the work to keep organics out of the garbage and only consider the Surrey AD facility as appropriate for energy recovery (not the WTE facility). Energy recovery should be considered as a byproduct of a composting process and not as a primary product. The main intent should be to reduce the volume of organics being discarded and returning discarded organics back to the soil.

Strategy 2.7 Target wood for reuse, recycling and energy recovery. We support the development of a plan to keep wood in use as wood and not for energy recovery. Focusing on energy recovery will divert funding and resources needed to develop a robust reuse infrastructure, fail to achieve the problem of over use of primary resources, and slow progress toward the development of renewable energy infrastructure such as solar, geo-thermal, tidal, and wind.

Strategy 2.8 Target plastics for increased recycling. Metro Vancouver should continue to be a strong advocate for the reduced use of plastics and ensuring any that are used are recycled. Similar to strategy 2.5, Metro Vancouver should still pursue this strategy despite the existence of Recycle BC.

Strategy 2.9 Target multi-family and commercial/institutional sectors to improve diversion rates. We hope to see progress on this.

Strategy 2.10 Develop contingency plans for the loss of recycling markets. Metro Vancouver should support the inclusion of ICI packaging and paper in the Recycling Regulation so the fluctuation in markets no longer is a risk to Metro Vancouver systems.

Strategy 2.11 Integrated Utility Management Advisory Committee

While Metro Vancouver has two advisory committee in the lead up to the next solid waste management plan, the shift to the Zero Waste Committee which has no representatives from the public or civil society groups means that the onus is on the public to monitor the agendas for the Zero Waste Committee and understand that that is the place to provide feedback. Going forward, we would recommend a more robust way to ensure that the public interest is represented.

Strategy 3.1 Use Waste-to-Energy to provide electricity and district heating. As noted in ZWBC's recent presentation to the Zero Waste Committee, we strongly advise against the pursuit of further lock in of the waste to energy facility and that alternative, truly clean and renewable energy source is sought for the district energy system. We also recommend that a cost analysis be done on the costs of district energy compared to upgrading to standards closer to passive standard and use of heat pumps and other low carbon, low polluting sources.

Strategy 3.2 Recover energy from other solid waste management facilities. We support this but stress more emphasis needs to be placed on preventing organics from going to landfill.

Strategy 3.3 Utilize non-recyclable material as fuel. We do not support this as it is a waste of the material and the embodied energy, and puts out significant quantities of biogenic GHGs that will take decades to reabsorb. The majority of what is currently being burned could have been avoided, recycled or composted. Instead, systems should be developed to keep the wood usable and create a network of businesses that can use the wood as a material, not a fuel. Furthermore, many non-recyclable materials are typically toxic or harmful when burned. Focusing on burning this material increases the environmental and health risks of the region.

As noted in our review of the 2021 biennial report,

- We do not support “beneficial” use of bottom ash from waste incinerators. While bottom ash from an incinerator is deemed to be safe for burying in a properly managed landfill, it is not void of heavy metals or other toxins. Using it in concrete that will then be distributed across the region to unrecorded locations is not sound practice. An example in the UK, where ash from an incinerator was used widely, required removal of the contaminated material from those sites. Not only did this put the public and environment at risk, but it was also costly and reduced trust in local leadership.²
- Diverting biosolids to the Burnaby incinerator. Biosolids are an organic material that should be processed as such and not sent to be burned in an incinerator. Doing this would further increase a dependence on a system that is expensive, outdated, and not necessary for the management of solid waste in the 21st century.

Section 3 Performance Measures

We urge Metro Vancouver to use the term recycling as recently defined by CSA for plastics: *Recycling is the reclamation of plastics (as polymer, monomer, or constituent chemical building blocks) in such a manner that they displace the primary or raw materials that are used as chemical building blocks in the production of plastics and plastic products and packaging.*³ This is particularly relevant for wood, which should only be counted as recycled if it is the reclamation of wood in such a manner that they displace the primary or raw materials that are used as building

² Guardian (2000). Incinerator firm faces charges over toxic waste.

<https://www.theguardian.com/society/2000/dec/15/localgovernment.uknews>

³ CSA (2021). *Defining Recycling in the Context of Plastics*. <https://www.csagroup.org/wp-content/uploads/CSA-Group-Research-Defining-Recycling-in-the-Context-of-Plastics.pdf>

blocks in the production of wood and wood products and packaging. This is more in line with how it is defined in the report section 3.3 “recycling involves processes that alter the structure of materials and allows them to be remanufactured into new products”. Recycling is not merely if there is a market in which to sell the waste material, but needs to be about actually putting in back into an equivalent product (not burned).

Metro Vancouver should then recalculate the recycling rate excluding all wood that was sent for burning or energy uses. Failing that, the data on wood going to such uses should be made explicit so the public can calculate an accurate recycling rate.

Table 1 includes a new column for C&D waste residuals sent to the Vancouver Landfill but there is no explanation what this material is and how it differs from the existing C&D column. Please explain what this material is. It also does not appear in the total tonnage sent to the Vancouver Landfill (table 3) which is confusing. Also the total for table 1 (for 2022 anyway) is not a sum of the three columns listed.

We appreciate the clarity on landfill cover amount shown in table 5, though steps should be taken to minimize the materials needed. These volumes should be included in disposal figures.

We fully support the development of metrics for reuse and hope this work will continue and expand.

For EPR programs, we recommend Metro Vancouver make estimates of the amount of program materials that remain in the waste based on waste composition studies and other data.

In Table 11 the total amount generated and total disposed is less than reported. Please assist us in understanding how these amounts are calculated. For disposal, Table 2 shows VLF, WTE plus contingency which in 2022 equaled 1,015,768 tonnes. When the VLF C&D, C&D residuals and private C&D landfill are added (from tables 1 and 3), it equals 1,354,683 for total disposal solid waste in region (excluding landfill cover, residuals from the liquid waste/water treatment and ash. Similarly, table 6 has the smaller number for disposal but it is not clear why.

Thank you for providing the section on the calculation methodology. It does not note how this new VLF C&D residual amount is factored in or not.

Note the C&D disposal amount in table 15 does not match the totals of C&D (both kinds) to VLF plus private C&D disposal noted earlier in the report (which is 382,153).

The report should be reviewed to ensure consistent numbers are reported and then all calculation of recycling rates and per capita rates should be reviewed for accuracy.

Section 4 Detailed Actions

The current status of many of the actions are noted as complete or substantially complete when the aim of the action has not been achieved. In some cases, the description does not state if the action has been achieved or is even underway (example 1.1.3 notes comments on one plan but does not say if comments have been submitted on other EPR plans or if staff support is being given.)

Despite significant efforts in the area of recycling, there has been limited progress in the reduction of waste as a whole compared to what was envisioned in the plan. Metro Vancouver and their respective municipalities place a significant amount of responsibility on the regions EPR

programs and their ability to collect and responsibly manage all material within their programs. The reality is that the regional EPR programs struggle to collect all materials in their program setting low recovery targets, and they also struggle in responsibly managing materials that do not have established recycling markets such as low-grade plastics, products made with multiple materials, or materials that contain toxins such as brominated fire retardants. Furthermore, these programs do very little in the area of reduction and reuse of waste. Where an EPR program may have responsibility for part of an action Metro Vancouver should still be doing its part to ensure the action is achieved (by the EPR program or through work done by Metro Vancouver to ensure it occurs)

In addition, there are several actions where Metro Vancouver is relying solely on communications tools rather than also strongly supporting them with policy, collaboration with member municipalities and other tools, yet the action may be deemed mostly complete. The examples are numerous but include 2.83 the Province has developed EPR programs for all plastics when in actual fact there remain no EPR programs for plastics in ICI packaging, furniture, household goods, carpet, textiles, automobiles, and no plastic recycling in most existing programs for electrical goods. Also 2.4.4 Municipalities Will: Work with Metro Vancouver to develop a process to require C&D recycling at construction/demolition sites which is marked as substantially complete when there remain many municipalities without a required process.

Recommendations:

With this in mind, we offer the following recommendation to improve Metro Vancouver's Solid Waste Management Plan going forward:

- Metro Vancouver should have its solid waste planning consultant or an impartial third party do a review of the status of the existing plan to determine what actions have actually been completed or not. Where there are discrepancies, those should be highlighted so that important strategies can be carried over to the next plan which can offer more detailed recommendations to ensure progress is made.
- Put more emphasis and resources towards supporting municipalities and other organizations in the pursuit of meaningful, and effective reduction and reuse activities. This includes advocating to the Ministry of Environment to ensure that all EPR programs shift their focus towards repair, reuse and refill of their products and packaging with recycling as the last resort.
- Ensure that Metro Vancouver is clear with their terminology and not misrepresent the action of recycling (which is about cycling the material back into a purpose as close to its original as possible) with misleading terms such as advanced recycling or recycling to fuel etc. These terms are used to confuse the public into accepting the destruction of materials and resources through burning, as a form of recycling, which it is not.
- Avoid further commitments to burning waste and district energy systems relying on burning waste. The more resources spent looking at this solution which has been proven to be flawed, the less resources there are to focus on waste reduction, reuse, recycling and composting, which have a much higher return on investment for the region as a whole. Instead phase out burning waste and redirect those funds towards Zero Waste actions.

- Consider targets for total discard reduction including recycling, composting, as well as waste in order to extend the useful life of products, packaging and materials. This will encourage further reduction and reuse of all materials.
- Develop an action plan to support a networked system of clean wood processors who will use the wood to create marketable products (not energy). Possibly work with King County to learn from their plans as well as neighbouring regions to ensure the system is scaled to the local supply.
- Given that there are sometimes challenges processing organics, that there will continue to be an ongoing supply and this will not be part of an EPR program, Metro Vancouver should develop or secure its own long-term composting capacity.
- Supporting an online information hub for reduction, reduce, reuse, repair and refilleries (possibly in partnership with RCBC with a goal that it covers the whole province).
- Work to further enhance the disposal bans by adding inspectors, improving formal training and culture of diversion for the inspectors, and conduct various pilot programs to find solution for more meaningful inspection process such as sampling and inspecting waste in black bags. Consider adding a clear bag mandate to make it easier to inspect loads.
- Work with adjacent regions to implement similar disposal bans to prevent private haulers transporting waste to adjacent regions for the purpose of circumventing disposal bans. Gather full data on all waste collected to ensure that the data set is complete, including all waste collected by private haulers
- Advocate for the federal and provincial government to restrict the export of waste by private companies who wish to circumvent regional disposal bans.
- Advocate for the National Zero Waste Council to adopt the international definition of Zero Waste and the Zero Waste Hierarchy 8.0 (see appendix)

Questions:

Metro Vancouver is to be congratulated for having a good data set (aside from the discrepancies noted above). We have some additional questions on it:

- What are the costs per tonne of each disposal method for both operational costs only and for costs including capital costs?
- What monitoring is being done of the United Boulevard centre to see if leachate from the use of bottom ash is occurring? What monitoring is being conducted for each load of bottom ash that leaves the facility to minimize the downstream risk of spreading it across the region?
- 3.1.6 notes Lafarge is taking the drinking water residuals but table 3 would indicate they are going to the Vancouver Landfill (if WT stands for water treatment)-where do they go and what does WT stand for?

Again, thank you for the opportunity to provide feedback and we would be happy to discuss these matters further.

Sincerely,

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On behalf of Zero Waste Canada

And

Sue Maxwell

On behalf of Zero Waste BC