

August 30, 2024

Attention:

Environment and Climate Change Canada
351 Saint-Joseph Boulevard
Gatineau, Quebec K1A 0H3
plastiques-plastics@ec.gc.ca

Dear Staff,

Thank you for all the work you have done to date to move towards Zero Waste and a Circular Economy, particularly on the textiles front, and for the opportunity to comment on the consultation document - Addressing plastic waste and pollution from the textile and apparel sector.

Zero Waste BC is a non-profit association dedicated to driving systemic change towards Zero Waste in BC. Zero Waste is defined as 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 system is a linear take-make-waste system. Linear resource consumption systems create waste and other forms of pollution, deplete resources, change land uses, and diminish biodiversity by design. They also generate a huge amount of greenhouse gases which constitutes some of the discharges that threaten the economy, human health, and the environment. Here is the link to the updated [Zero Waste Hierarchy](#) which should be followed when developing waste solutions.

We are very concerned about plastics given the environmental and health impacts and the rapid rise of the amount of plastics put on the market. We are pleased that the ECCC has been responsive to the strong demand from Canadians to move towards Zero Waste, and in particular Zero Plastic Waste. We also appreciate the inclusion of key concepts such as the precautionary principle in this document. Our intention for this feedback is that it will assist in the redesign of our systems for a future where waste does not threaten the economy, human health and the environment.

Sincerely
Sue Maxwell
Chair, Zero Waste BC

Proposed environmental objective

We support the goal of preventing the disposal or leakage into the environment of textile and apparel waste but feel that there should be some additions to that goal, namely to also decrease the environmental and social footprint of textiles and apparel materials. With an aim to have a Zero Waste, Circular Economy, it is important to not focus only downstream once an item is becoming waste but also to look upstream to see what sets that in motion and what better materials and systems can be used. In addition, while we appreciate the mandate is to look at the environmental aspects, to do so without also considering the social impacts will not lead to the best outcomes. Particularly for textiles that have been so unique to each culture, where the export of our textile waste has been and can be so damaging, and, in Canada, have been a driver for many socially-beneficial support organizations, it is important to also look at solutions through a social lens as well.

We recommend using the Zero Waste Hierarchy instead of the waste hierarchy shown in the document. There are three key differences -first that there is a redesign and rethink level above the reduction one. For this sector in particular, so much of why something becomes waste is about how it was designed, what materials were selected and how it was made. We agree that it makes sense to highlight the opportunity for remanufacturing and refurbishing but do not support the inclusion of energy recovery as an option. In the ZW hierarchy, energy recovery is considered an unacceptable option as it emits a very high level of GHGs (especially when burning a fossil-fuel based plastic textile), is very polluting, is very costly and displaces better options. Please see [our recent work](#) in a cross-Canada collaboration on why waste to energy is not a solution. Landfill is the least preferred option but is still a better option than energy recovery, especially when considering that the plastics going to landfill are essentially sequestering the carbon from those items.

Potential federal role

We fully support the federal government role of convening around a roadmap for action and enacting federal measures if needed. It has been an ongoing disappointment that the previous 2009 commitments of CCME members to enact a solution for textiles and carpets have failed to be realized and a reawakening and strengthening of resolve is sorely needed.

Proposed elements

Scope

We support a broader scope for the roadmap to include:

- Managing household textile waste
- Managing microfibre pollution; AND
- Managing textile waste in virtually all subcategories within the IC&I

sectors (e.g., government operations, hospitals, hotels, schools, auto sector and all other sectors.) The exception could be large textile manufacturers as long as they have their own equivalent systems to manage the materials according to the Zero Waste Hierarchy. The ultimate goal should be to have a system that can manage all textile wastes.

In BC, we have seen the confusion and remaining residual waste that occurs when only the residential materials are regulated and not the ICI sector. It is important not to continue those errors, particularly where limited infrastructure exists, for small businesses and small communities. It is also important to ensure the correct volumes of materials are planned for and to be able to access the funding for systems that will be capable of handling these.

Consultation questions

Below are the questions and areas of interest identified in the proposed elements of the roadmap section for which ECCC is seeking input.

Areas of potential action

Support research in the textile and apparel sector

Questions for input are numbered

1. Do you have data on quantities of textile waste and pollution from any source(s) in the industrial, commercial, and institution sector (e.g., from hospitals, schools, restaurants, hotels, etc.) and/or household waste?

The recent [2023 waste composition study](#) (page 24) for Metro Vancouver (with roughly ½ of BC's population) shows textiles make up 8% of the waste. The data in the same study can be used to estimate the weights of different textile wastes for Metro Vancouver.

We support the gathering of data in the plastics registry but also more broadly for textiles and apparel as a sector regardless of material type. Getting information on the textile material flows will be useful but also to understand where it flows (to reuse, repair, refurbishment, disposal types, etc.) as well as the potential for reuse and these other options would be a goal to aim for once the data gathering system is strengthened.

Extend the life of apparel products

2. How could Canadian entities develop standards for durability? Where in the supply chain should be the focus to achieve the greatest effect on reducing waste and pollution?

We support laboratory testing but also consider the introduction of minimum warranties by textile type. Many outdoor gear companies already stand fully behind their products for the lifetime of the item. A goal to determine what is possible by categories and then raise the bar for lagging brands would be suitable.

We also support developing standards for reducing contamination. There should be some analysis of problematic materials such as PFAS, fire retardants and other toxic or hazardous products that have been added to textiles, posing risks upstream and downstream. Systems should be put in place to phase them out but also identify the historic products and ensure they do not contaminate the future material supply.

Emotional durability can be influenced by brands but a wider culture shift is also needed to shun the fast fashion, value vintage and reused clothing, value clothes for how they have lasted (e.g. Patagonia's campaigns) and in this the federal government and all of society can have a role. Some items may have emotional durability (such as a wedding dress) but limited value sitting in a closet for 20 years and so encouraging the continued use of items that are owned as well as sharing, reuse or selling of items that are being wasted (in storage). The most important point in the supply chain to have the greatest effect is the Redesign/Rethink component -what

a producer chooses to make, with what and how and for the consumer -to buy an item or not? With that in mind, there should be a comprehensive technical assistance program for designers, producers and manufacturers to understand the options and the consequences and a shift in mindset from quantity to quality. For consumers, provision of information on the impacts of their choices can be helpful in making decisions.

In addition to emotional durability, there needs to be a financial instrument to level the playing field for textile producers and retailers. A large portion of textiles are imported to Canada. Therefore, import tariffs and/or restrictions on “single-use” clothing (i.e. fast fashion) would be necessary. Similarly, there needs to be export restrictions and/or tariffs for used clothing so that the burden of end-of-life management of used clothing is not passed on to other countries, commonly in the Global South.

3. What are the risks to the industry in developing and following standards for durability? Some parts of the industry need to move from quantity to quality as a business model. The public will need to once again consider clothing valuable and a purchase an investment that will last a long time. Requirements for durability may make innovations riskier and so there may need to be some allowances for new items for which durability may take some time to establish. However, encouraging the use of materials with a proven track record and lower social and environmental footprints should be encouraged.

4. Are there other actions that could be taken to increase textile and apparel repair activities in Canada?

We support the teaching of repair skills, the funding and support of repair cafes that include textiles, and support for repair businesses. We have seen some go out of business as the cost of a cheap fast fashion item is often less than repair costs. Rent for repair businesses in cities is very high so the ability to run the business is challenging. Support for this sector is needed and should be through funds from an EPR program, waiving of GST and PST on repairs, possible government support for land use or space (like a repair hub on government property (municipal, provincial, federal)) or grants for repair such as in [Vienna](#) (now expanded to Austria). There could also be incentives for producers to be responsible for the repair of their products and to ensure the products are repairable.

5. How might charities and municipalities play an expanded role in collection and reuse? We do not think that the burden of managing used textiles should be the responsibility of charities and municipalities. Instead, there should be an EPR program that is developed for these materials and run by producers. The program should meet the original intent of EPR programs and not be solely for collection and recycling. As such, the EPR program should collect funds that provides support for redesign, repair, reuse and tracks and reports the flow of materials. Long standing service providers need to be a continued part of the system (should they choose) and the EPR regulations need to ensure that they have a continued ability to collect and resell or recycle materials as a profit source but also have the EPR program be there to ensure the continued viability of the system when there is a market downturn or for the items that are not collected currently due to their low value.

Municipalities may choose to continue or start collection, provide land for collection or not participate (as the regulation will guarantee that there must be the service provided in their community by the EPR program). They also have an opportunity to promote repair and upcycling, sponsoring education programs and supporting skill building.

There should be a whole ecosystem of service providers and entities involved in the circular flow of materials. The key will be fostering this while preventing a regulated EPR program from eliminating access to any party who can meet reasonable standards (challenges with monopsonies). The service providers of all types should have the expanded role for many more product types and more services (repair, reuse, parts, refurbishing, etc.).

One area not noted is the extensive reuse markets (such as non-charity run and online) which tend to be for higher value items and should also be encouraged to foster reuse as part of the system.

Improve waste management through take-back programs

6. Could take-back programs and/or EPR systems for textiles work in Canada? If not, what are the limitations or challenges? How can members of the Canadian supply chain (e.g., brand owners, recyclers, repairers, etc.) come together to create a take-back system in Canada?
7. What kind of collaboration needs to happen, and who could, or would, oversee these programs effectively? What are the needed skills and investments?

Yes, they can work and care should be taken to ensure they do work. In order for it to best meet the needs, very careful construction of the regulation is needed to ensure the best interest of the public, not the producers, are at the heart of the program. This may take spelling out how it will run in great detail in the regulation or creating a Crown corporation or a non-affiliated charitable partner to run it (perhaps Fashion Takes Action with the addition of public interest board members). As noted previously, it should be a comprehensive program. There may need to be a separate one for carpet. Eventually all textiles should be covered by some program (clothing, household, carpet, outdoor gear, furniture, vehicle interiors, etc.). Looking at successful European programs may be helpful.

The convening of the supply chain is best done by this non-affiliated party or the government. It cannot be left to the brand-owners alone as this will skew the results and also disempower the smaller parties (including small brand owners). Organizations that have been working in this space for a long time such as DeBrand should be part of the system and measures put in place to preserve these organizations within an EPR system.

Support textile recycling infrastructure

8. Do you know of any proposed technology (commercial or pre-commercial; please describe the technology and, if pre-commercial, include technology readiness level) to enable automation of sorting and grading processes, and/or identification and sorting based on fibre type and content? What are the common issues with these technologies that impact their accuracy or speed, and how can these issues be overcome?

We fully support the better design of textiles in the first place to support recycling. Using a single material should be a best practice. Renewable materials should be encouraged. One example of recycling of wool is [Anian](#) on Vancouver Island. Focusing on recycling of blends may be similar to the push to recycle flexible plastic packaging -much time has been spent on this and many questionable technologies pursued. The result has been many lost years waiting for the holy grail of some kind of recycling technology (as yet none have been proven) and a lot of wasted resources. In the meantime, more packaging has been shifting to flexible packaging instead of moving away from it as it cannot be truly recycled, which was likely the intention of the plastics producers.

Consider supporting design of technology to deconstruct clothing (remove zippers, buttons, etc.). It might be worth looking at the robotics industry as they now have robots that can remove nails, etc. from wood to allow for reuse (example of [Urban Machine](#)). ISED Canada seems to be constantly launching funding challenges so a similar model could be pursued. On the other hand, we have concerns with the highlighting Singular Solutions Inc. who received funding to developing a "biosustainable" additive that facilitates the biodegradation of plastic textile waste in long-term composting facilities. This sounds like a way to contaminate compost as well as ensure the municipalities or owners of the composting facility end up paying for disposal of the items rather than the producers. Items that cannot be recycled should be redesigned, and phased out. The goal is not to make plastic waste invisible or "disappear" but to prevent it from happening and develop sound systems to value the resources. Funding this project seems like a significant error in judgement and speaks to the need to start by having clear guiding principles. For this reason, we recommend again adopting the Zero Waste Hierarchy and its guiding principles to prevent these kinds of misjudgements. Infrastructure should be funded by the producers through an EPR program. Given the scale of the infrastructure needed and the fact that it might not be needed in every province, a coordinated national system would be best placed to generate the funds for the necessary infrastructure.

DeBrand has [recently opened a facility](#) for sorting textiles. Insights could be learned from them.

9. With recycled content mandates coming soon for plastic packaging, including rPET, which is the preferred resin type for most polyester blends, how do you expect this to affect textile manufacturing? Does the sector expect shortage of rPET for the textile and apparel sector? If so, how are you going to secure rPET for your manufacturing process?

NA

10. How could demand for recycled fiber be scaled up to make recycling textile and apparel products viable and economical?
11. Where do the opportunities and end-markets for recycled textile and apparel fibres in Canada lie?

A labelling scheme that shows the social and environmental footprint of clothing could help. Some producers are already doing this but the transparency and integrity of that system should be strengthened.

An EPR program should be able to generate recycled fibre by funding the infrastructure needed, which means the costs of it should decrease to the end user. Banning disposal of textiles will support the EPR program and can also increase supply of recycled fibres. Public sector procurement could be harnessed to create demand as well as communications to build awareness of the harm caused by fast fashion. Policy measures to decrease the environmental and social footprint of fashion, decrease consumption, increase durability and longevity of textiles, such as those modelled in other countries should be enacted first. Recycling measures should be developed but not as the primary action.

12. How could standards for recyclability be developed, and what are the risks to industry in developing and following these standards?

Standards should be developed with input from a coalition of stakeholders including those representing environmental and social concerns. Liaising with the leaders on this in the EU

would make sense to start to set a high bar (collectively) and consider what should not be allowed to be imported (expanding on measures for toxics in textiles and those made with slave or prison labour). The risks could be to make Canadian-made textiles more expensive and that is why there needs to be concurrent work done to set limits on imports (including online sales) to create a level playing field.

Addressing microfibre pollution

Questions for input

13. How could public awareness about negative environmental impacts of microfibers releases be communicated to the public?

Work with credible non-profit organizations that have already been raising alarm bells around this issue. Have a nation-wide campaign with a webpage of resources for actions and information. Share how microfibres get into our water system and best practices for laundry to minimize this. Also highlight why other items should not be flushed (wipes, contact lenses other plastic items).

14. Should product performance standards be developed for microfibre shedding for textiles and apparel products? If so, what could these standards include? What is the industry's view on this approach and who should lead this work?

Yes, standards should be developed. CSA and academia could lead the work with insights from the ENGOs and industry but the standards need to be publicly available (not for sale). They should include the type of materials, any additives, the degree to which the microfibres attract/hold other chemicals, setting a preference for natural fibres, set number of washes of the product that it should be able to withstand.

15. Should there be labelling programs or standards that indicate the amount of microfibers shed from a piece of clothing during a single wash? Should there be design standards to specify the maximum acceptable amount of microfibres shedding from washing machines using standard temperature and spin cycles?

One wash may not be the standard. Let researchers determine if it is the same at each wash or increases as the item ages. Also, gather data on use of cold temperature, delicate cycle or hang to dry to see if those make a difference over time. Communications could then also be driving these other best practices (lower energy use through lower temperature, avoiding a dryer) as well as considering if we need to wash our clothes as much as we do.

16. Should actions be taken to ensure new washing machines have factory installed filters? Yes, this would be the easiest way to have filters installed but would take over ten years to have full effect as it depends on the replacement of aging machines. In the meantime, there could be subsidy programs for the aftermarket filters that can be place on the outflow line (if tested and assured to be having the required impact).

At a larger scale, the federal government should be doing research to determine what can be done at the sewage treatment plants to filter out microplastics -what technology exists, what the costs are, what (if any) downsides are there, and what a reasonable phase in plan would look like.

Other

- There should be an analysis of the renewable fibres that are produced in Canada and identify what materials may be going to waste that may be better suited to replacing plastics. (for example, [sheep wool](#) on Vancouver Island). Determining the supply and market issues that result in superior materials being wasted while plastic items continue to be produced is an important step. The plan should foster the use of Canadian renewable, non-toxic materials to substitute for plastics.
- There needs to be actions included in the roadmap to address the practice of buying multiple sizes and outfits online to try on and returning the unwanted items (by consumers) and the lack of putting the purchased items back on the market and throwing them away (by producers). Transparency on this issue is also needed. Minimizing online returns could also be reduced by introducing sizing standards.
- While the paper notes there is a “well established domestic reuse market” for textiles, the market may vary in its robustness. The creation of an EPR system for other products has helped those circular system to weather market variability and ensure a guaranteed income for service providers.

Cross-cutting considerations

ECCC will consider economic and safety when developing the roadmap elements. Particular attention should be given to:

- Potential for job creation
- Impact on small and medium size business
- Gender- and diversity-sensitive approaches; and
- The overall affordability impacts and costs to Canadians resulting

from of any potential solutions

Clothing is a necessity and so should be factored into a basic income to ensure all Canadians have their essential needs met. That said, clothing pricing needs to reflect the actual costs (when all costs are internalized including environmental and social impacts, and the labour used to make clothing should be in safe and supportive factory conditions, as freely chosen work and paid a living wage). When this happens, clothing will become more expensive but this could lead people to choose higher quality, longer lasting items; reuse items; shop for used clothing and maintain and repair their items.