

August 12, 2021

Tire Stewardship BC Draft Program Plan Feedback

To Whom It May Concern:

Thank you for the opportunity to comment on the draft plan. Zero Waste BC is a non-profit association dedicated to driving systemic change towards Zero Waste in BC. 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. EPR programs can play a key role in changing these consumption systems.

We are pleased that BC has regulated these products and that this EPR program exists. The program has evolved a lot and set up many strong elements since it first began which is to be commended. However, as the program plan goes for its next renewal, we submit these comments in hope that the program will not just *meet requirements* but really show leadership in the realm of EPR to move it beyond mere recycling to actually changing the nature of the products and how the service is delivered, as envisioned in the Canadian Council of Ministers of Environment Canada-wide Action Plan for EPR.

Please see our comments by section below:

Section 1. Program Structure

TSBC is to be commended for having a voluntary bike tire program. Now that it has been running for some time, the program should ask the province to include bicycle tires in the Recycling Regulation, advertise it well, garner more collection sites, report on metrics and ensure the stewards are paying appropriately.

Section 2. Consumer Access to Collection Facilities

Access to Collection

The number of collection facilities is impressive but removing barriers for consumers should be a focus. Tires on rims should also be accepted as for many consumers this is a barrier, and waiving the limit of four tires. The program should show the percentage of tires collected from local government facilities (as well as by the other forms of collectors) and compensate these

facilities appropriately to ensure there is no fee charged to the end user. Many local governments have a long history of collecting tires (as it previously was mandated by the province) and so the public usually thinks of those locations as the first ones to use. If the program wishes to shift this, it will need to significantly ramp up its communication efforts and partner with local governments to help redirect the tires. As local governments may not be compensated by the program for collection, they may charge tipping fees. This then may push consumers to hide their tires in waste (which could explain why tires showed up in some waste composition studies) or illegally dump them. Of note, it was a goal of the 2006 plan to eliminate scrap tire tipping fees but that plan said that ensuring the financial affairs were in order needed to be addressed first. Fifteen years later, this still remains a problem but it is clear the program is financially stable.

While the number of collection sites in the annual report is impressive, it does not denote the number of each kind of collection site. When trying to use the map on the TSBC website, (both with Firefox and Safari on a Mac), no locations showed up at all when accessed July 13th. When trying again August 12th, locations were noted but did not distinguish between types of collection sites and could only be viewed by community and not province-wide. The map on the website should show all locations on the map and make it clear which ones are only if a new purchase was made. Similarly, the annual reports and auditing should reflect this too. The ideal scenario for a program is a barrier free (accepts rims, no fee, does not require new purchase, no limit on number of returns) collection location in every community in BC (not just 25% of registered retailers in a regional district which could still result in some very long travel times to properly dispose of tires) and TSBC should work towards this in collaboration with the BC Product Stewardship Council and the Indigenous Zero Waste Technical Advisory Group. TSBC is commended for not using the SABC standard which does not provide suitable accessibility.

The goal of TSBC should be to not require collection events as the collection network should be very robust and well known. They should be used only as a temporary measure (up to 1 year) until a no-barrier collection site can be arranged.

TSBC should also do secret shopper trials to see how easy it is and how welcoming the collection sites are to those citizens returning tires. Given that these sites are not compensated, there may be less willingness to accept tires or encourage consumers to bring them in. This then would be a missed opportunity to get more tires and may require program modifications.

While the annual report includes working with groups to partner on cleanups, this plan should note it as well. Given that tires are a common item for illegal dumping, the program should take proactive steps to minimize the occurrence as well as assist in the cleanup. Data gathered on illegal dumping could be used to understand why this occurs (as well as where and when) and then develop an action plan to minimize it.

Recovery Rate -the 93% rate is very good but even so, the program should aim to go higher as the sheer volumes of sales means that in 2020, over a quarter of a million tires were landfilled or dumped. This is a significant amount. For a program with such a long history, aiming for 98-100% should be achievable, especially if working with local governments to understand why the remainder is not handled correctly. Part of this work can be looking at where the uncollected tires end up, in what numbers and why.

The use of the recovery calculation using sales from five years past does mean that it may be subject to variation as a result of changes in sales. A better approach may be to use a rolling average of the sales 4 to 6 years back to account for this. In addition, surveys could be used to determine consumer behaviour with regard to winter tires and longevity of the tires.

While it is a good incentive not to add a fee to the sales of retreaded tires, data on the sale of retreaded tires should be gathered. If they are retreads of sold-in-BC tires for BC customers, the impact of these sales may be solely in the extended lifespan of the tire and will not make much difference unless annual sales dramatically differed. However, if the retreaded tires come from outside of BC, then the recovery rate may be artificially high.

Section 3 Consumer Awareness

For a program operating as long as TSBC has, it is surprising that the level of consumer awareness is not higher. The fact that the recovery rate is high despite this shows the importance of a good collection network. That said, for the quarter of a million tires that are missing each year, far more should be done to raise awareness of the program. The goal should be to get 95% of the population aware by 2024 (and later 100%). To do otherwise is to continue to externalize costs to the public and the environment. The program could also pursue disposal bans with local governments as a way to ensure consumers do the right thing but also that they are aware that throwing the tires away is not appropriate.

The surveys are one tool, but more campaigns should be created based on an understanding of which end users do not know about the program and how to reach them. Metrics for these specific campaigns should be measured and used to adjust the communications or other aspects that are shown to be barriers (for example, tipping fees).

The list of delivery methods is good (though as noted above the depot finder webpage is not functioning for all systems, nor does the Recyclepedia map work). These methods should continue to be used and enhanced. TSBC is to be congratulated for being an early partner with the First Nations Recycling Initiative.

Section 4 Management of Program Costs

It is suitable that TSBC is compensating transporters and processors. Compensation for local government collectors should occur as well. An analysis of the need for compensation for other collectors should take place as well. When these items are under consideration, the program should look at offering insurance for collectors if this is a barrier for some (more likely for local governments and First Nations than sites that sell tires).

As the costs charged for advanced disposal fees have barely changed since the program began, it is safe to assume that raising the fees is overdue and that this additional revenue can be used to fairly compensate local government collection sites and others, raise the awareness level of the program with stronger communications tools, fund research into product redesign and the safety of the tire management processes, fund community clean ups, and other measures to improve the program.

Advance Disposal Fees	2007	2020
Passenger and light truck tire	\$4	\$5 (changed to \$5 in 2008)
Medium truck tire	\$9	\$9
Agricultural drive tire	\$15	\$15
Logger/skidder tire	\$35	\$35

Section 5 Management of Environmental Impacts

Redesign

While the use for playground mats and mulch is a form of recycling, with the increasing data about the potential harm that runoff from roads including the material from tires, more research should be done to see what impact these uses may have.¹ Research should also be done to see how the problem chemicals can be removed or replaced with safer alternatives (redesign). Another redesign question is if the passenger and light truck tires could be designed for retreading as a way to extend the lifespan.

The plan notes that TSBC’s ability to push for redesign is limited, however there is a network for tire programs across Canada and elsewhere that collectively are facing the same issues and collectively could wield greater influence. A key aspect of an EPR program should be providing feedback to the producers, especially the design departments, so that product end-of-life considerations can inform design. Innovation happens when there is a need and when the information is flowing appropriately.

Reduce

¹ Canadian Geographic (2021). Killer tire chemical threatening Canadian salmon. www.canadiangeographic.ca/article/killer-tire-chemical-threatening-canadian-salmon

TSBC and its members are doing well with the extension of the tire lifespans and it would also be good to know what portion of that change has occurred in the last decade. If tire maintenance and pressure is a major factor in longevity, then perhaps awareness of this should be part of the consumer awareness survey as well.

Reuse

TSBC should be actively promoting reuse as part of the program and gathering all associated data, including that which will inform the recovery rate. A formal process should be enacted to assess all incoming tires for the potential for reuse or retreading.

Recycle

Ideally, research should be done to see what the barriers are to using the rubber in new tires or other products that represent higher and better use.

The use of tires instead of bark mulch is **very** concerning as now there are many small pieces of potentially harmful rubber distributed in the environment. It will be hard to ensure collection of this material and if it is shown to be leaching chemicals into streams, a potential liability for the program. Also, as this effectively transfer a material from within a program to outside of the Recycling Regulation, often with the support of Community Grants, there should be provisions made to steward the mats at the end of their useful lives; otherwise the grantees and community groups will end up with a liability.

Perhaps more of a focus on the manufacturing incentive to drive the use of rubber in products already requiring rubber may be beneficial, with care taken to ensure this does not result in more dispersal of small bits of rubber.

Energy Recovery

The use of tires for energy is problematic as this releases GHGs when GHG emissions need to be radically reduced. The US EPA WARM model² shows that combustion of tires releases more GHGs than landfilling. While redesign, reduction, reuse and recycling are all preferable to disposing of an item, perhaps sequestering the carbon rather than releasing it through combustion may be the better option. Another concern is that if these are combusted at cement kilns, these facilities have lower standards for air emissions than even an incinerator and with fewer requirements for testing and keeping the public informed. If the ash is used in concrete, then analysis should be done for what chemicals from tires can then be found in the cement, what the leaching potential is, and what that impact could have. This research could help to minimize the risk that not only tires may be polluting the streams, but also the products

² US EPA, November 2020. Documentation for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction model (WARM) -Management Practices Chapter, Exhibit 1-1.
https://www.epa.gov/sites/production/files/2020-12/documents/warm_management_practices_v15_10-29-2020.pdf

made with the cement. Of note is that cement facilities burning coke or coal have one kind of fuel that they were designed to use and the pollution mitigation equipment is more likely to be designed for the type of pollutants associated with those fuels and may not be appropriate nor adequate for the burning of tires. It is also hoped that allowing this fuel for cement kilns is not slowing the progress on finding lower carbon methods of making cement, nor keeping costs artificially low.

Residual Management

The plan states that the landfilled waste is low but it would be good to know how much by showing not just the percentage allocation of the tires to recycling, energy recovery and landfill, but also the tonnage. This would make it clear the scale of rubber, fibre and steel going to each end fate.

Section 7 Performance Management

Here are the recommendations to strengthen these targets:

- 1/2- Ideally the program would report on historic sales, especially in the years during which it can be expected sales were made for tires being returned now. This should be done by tire type.
- 3 -As noted the recovery rate should be 98 - 100% and differentiated by tire type.
- 4 -The tonnage by regional district (and ideally community) should be provided as well as collection per capita per tire type to see where the program works very well and where it can improve. Showing this by tire type will be important as for some kinds of tires, they may not be evenly distributed across the province.
- 5 -Waste composition studies should be more frequent and cover a wider range of regional districts. There could be a target for this set with BC Product Stewardship Council. This data should be made public and as transparently and with as much detail as possible.
- 6 -Please also note the tonnes when reporting. Energy recovery should be phased out. Targets for reduce and for reuse should be added.
- 8/9 -As noted, collection facilities should be listed by category with the target being all municipalities (and First Nation communities who wish it) have at least one no-barrier collection site.
- 12 -These awareness targets are too low and the escalation should be much more rapid. Include awareness of the fact that there is a program or special way to dispose of tires and that it is free, as well as of tire maintenance.
- The program could go beyond what is the minimum required and provide third party audits for certain ones of the other components.



Section 8 Stakeholder Consultation

It is positive that TSBC has an advisory committee. It is hoped that this group can have as much influence as possible. The other methods of engaging with stakeholders are appreciated as well, especially as they are not just during the plan development.

We hope that this information is helpful in crafting the renewed plan.

Sincerely,
Sue Maxwell
On behalf of Zero Waste BC