



Reference: 334263

December 7, 2018

Rosemary Sutton  
Executive Director  
Tire Stewardship BC  
PO Box 5366  
Victoria BC V8R 1H8

Dear Rosemary Sutton:

Thank you for submitting proposed amendments to the Extended Producer Responsibility Plan - Tires (the “amendments”) in fulfillment of the requirements of section 6 of the [Recycling Regulation](#) (the “regulation”) made under the *Environmental Management Act*. I appreciate the industry’s continued commitment to achieving compliance in this regard.

Under the regulation, the director has the ability to both amend an approved extended producer responsibility (EPR) plan on his own initiative, and to approve amendments to an approved plan that have been proposed by a producer. I have completed my review of, and approve, the amendments proposed by the Tire Stewardship BC Association (TSBC) on November 28, 2018. This amended plan takes effect on December 7, 2018.

Pursuant to section 6 of the regulation and based on the plan’s original approval date of September 19, 2006, TSBC’s next plan review must be completed by September 19, 2021. However, a director under the *Environmental Management Act* may amend the approved plan pursuant to section 5(5) of the regulation or rescind approval of the approved plan pursuant to section 6.1 of the regulation, should TSBC fail to meet the commitments set out in the approved plan. Please also note that failure to comply with an approved plan may result in the imposition of an administrative monetary penalty of up to \$40,000 or a fine of up to \$200,000.

### **Future plans and amendments**

The ministry expects continuous improvement across all future plans and amendments including the following areas of concern:

1. Plan commitments – for example, use specific and measurable language;
2. Consumer access – for example, develop comprehensive province-wide accessibility – particularly in rural areas, or improve upon the current Stewardship Agencies of B.C. accessibility standard;

3. Consumer awareness - for example, include performance requirements tailored for different consumer groups and all product types managed by the program;
4. Financial transparency – for example, provide greater levels of disclosure in financial statements to better serve interests of producers, the ministry, and other stakeholders; and
5. Pollution prevention hierarchy – for example, highlight program areas of influence.

I acknowledge that some plans better address various concerns than others, and that collaboration between some producers/appointed agencies and the ministry is underway. As well, the ministry intends to develop further guidance on select areas of concern.

### **Third Party Assurance for Non-Financial Information in Annual Reports**

Third party assurance for non-financial information in Annual Reports is required through Section 8(2)(h) of the regulation. The assurance report should be completed in accordance with the document entitled, “Third Party Assurance Requirements for Non-Financial Information in Annual Reports” dated October 2018 and revised from time to time, which is enclosed.

Finally, the ministry expects this approval letter to be forwarded to TSBC’s board of directors as well as its member producers, since each producer is responsible for ensuring its agent fulfills the plan, and compliance proceedings may be taken against a producer if the agent fails to implement the plan.

I look forward to working with you to ensure the success of your program. If you have any questions about this letter, please contact me at 778 698-4860 or [ExtendedProducerResponsibility@gov.bc.ca](mailto:ExtendedProducerResponsibility@gov.bc.ca). If you have any questions regarding the implementation of your plan, or suggested opportunities for improvement, please contact your ministry file lead.

Sincerely,



Bob McDonald  
Director, Extended Producer Responsibility Section  
Environmental Standards Branch

Enclosure (2)

cc: Kris Ord, Executive Director, Environmental Standards Branch  
Meegan Armstrong, Ministry file lead, Extended Producer Responsibility Section



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# **Extended Producer Responsibility Plan - Tires**

**Submitted to:**  
**BC Ministry of Environment & Climate  
Change Strategy**  
**Extended Producer Responsibility Section**  
**Submission Dates: November 28, 2018,  
October 10, 2018, June 22, 2018.**



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## Table of Contents

A. Regulatory Basis for this Plan.....	1
B. Appointment of an Agency.....	1
C. Plan Components .....	3
1. Program Structure [Section 5 (1)(c)(i)] .....	3
2. Consumer Access to Collection Facilities [Section 5 (1)(c)(iii)] .....	4
3. Consumer Awareness [Section 5 (1)(c)(iv)].....	7
4. Management of Program Costs [Section 5 (1)(c)(v)] .....	8
5. Management of Environmental Impacts [Section 5(1)(c) (v, vii & viii)].....	9
6. Dispute Resolution [Section 5 (1)(c)(vi)] .....	13
7. Stakeholder Consultation on Plan Implementation and Operation [Section 5 (1)(b)].....	14
8. Performance Measures and Targets [Section 5 (1)(a)(i),(ii),(iii)] .....	15
Appendix I	Tire Definitions
Appendix II	Consultation Presentation
Appendix III	Summary of Consultation Feedback & Associated Responses

## **A. Regulatory Basis for this Plan**

This Extended Producer Responsibility Plan (Plan) is filed by Tire Stewardship BC Association (TSBC) with the Ministry of Environment (Ministry) pursuant to the requirements of the Recycling Regulation, B.C. Reg. 449/2004 (Regulation), for the tire product category identified in Schedule 4 of the Regulation as currently in effect.

For purposes of this Plan, the tires covered in Schedule 4 are referred to as “*regulated*” and are described in detail in Section I of [Appendix I](#), Tire Definitions. The tire types currently regulated are commonly referred to as Passenger and Light Truck (PLT) tires, Medium Truck (MT) tires, Agricultural (AG) tires and Logger Skidder (LS) tires.

This Plan describes the current program for regulated tires in the context of the approval criteria set forth in the Regulation. The Plan is expected to remain applicable for the foreseeable term.

Some Off-the-Road (OTR) tire types are explicitly excluded under Schedule 4, Section 2 (d) of the Regulation. These “*unregulated*” tires are also described in more detail in [Appendix I](#), under Section II e).

## **B. Appointment of an Agency**

Established under the BC Society Act, and operating under the new British Columbia Societies Act, TSBC is the provincial not-for-profit society responsible for operating BC’s scrap tire recycling program in accordance with its Ministry-approved Extended Producer Responsibility Plan and the Regulation.

Since January 1, 2007, TSBC has been accountable to the retailers, other stakeholders and the public for the collection, processing and environmentally sound disposal of all currently regulated tires. TSBC will continue to be the stewardship agency on behalf of each registered retailer (producer) in the province and will comply with Part 2 of the Regulation with respect to the duties referred to in paragraph (a). In addition, a copy of any notification the agency received from the producer is available upon the request of a director as per Section 2(4)(b) of the Regulation.

For the purpose of the tire program, the BC Recycling Regulation defines a producer as a person who

- i. sells, offers for sale or distributes a new tire product in British Columbia,
- ii. is the owner or licensee of a trademark under which a tire product is sold or distributed in British Columbia, whether or not the trademark is registered, or
- iii. imports the tire product into British Columbia for sale or distribution.

The current list of retailers (producers) represented by TSBC is available at <http://tsbc.ca/pdf/registeredretailers.pdf>

The society is governed by a Board comprised of [seven directors](#) representing the four member organizations:

- Retail Council of Canada;
- Western Canada Tire Dealers Association;
- The Tire and Rubber Association of Canada; and
- New Car Dealers Association of BC.

TSBC also consults with its Advisory Committee comprising representatives from the Recycling Council of BC (Chair), retailers, scrap tire generators, haulers, processors, manufacturers, and local government. The committee meets at least annually or as needed to provide advice on program policy and operations. This forum is considered essential to the ongoing success of the program and will be maintained. The [current membership](#) is posted on the TSBC website.

Any changes to TSBC's structure and governance will be reported to the Ministry of Environment.

To guide the development of this Plan, TSBC has established its vision, mission, and goals, as amended from time to time.

### **VISION**

*All scrap tires are transformed to the environmental, economic, and social benefit of BC's citizens.*

### **MISSION**

*To administer a sustainable Extended Producer Responsibility program for the stewardship of all BC scrap tires designated under the BC Recycling Regulation.*

### **GOALS**

- *To support the environmentally friendly and sustainable collection and management of 100% of regulated scrap tires available for collection.*
- *To sustain or reduce the "average" Advance Disposal Fee.*
- *To maintain TSBC's financial stability.*
- *To foster and support innovation and research relative to higher valued solutions within the industry.*
- *To assist the industry in building sustainable markets for recycled rubber products.*
- *To support community projects that use BC recycled rubber.*
- *To support the pollution prevention hierarchy as referenced in the BC Recycling Regulation.*
- *To provide public education on the benefits of maintenance and inflation of tires to extend tire life, thereby delaying their entry to the waste stream.*

## C. Plan Components

### 1. Program Structure [Section 5 (1)(c)(i)]

*The plan adequately provides for the producer collecting and paying the costs of collecting and managing products within the product category covered by the plan, whether the products are currently or previously used in a commercial enterprise, sold, offered for sale or distributed in British Columbia.*

TSBC program participants are as follows:

- Retailers (producers): sell program tires and generate scrap tires.
- Return to Retailers (R2R): sub set of retailers that have voluntarily agreed to accept up to 4 car tires, clean and off rim from the public during business hours.
- Collection Facilities: sub set of retailers that in the normal course of business take back program scrap tires when a new program tire is purchased.
- Generators: generate scrap tires (auto wreckers, landfills etc).
- Haulers: collect and transport scrap tires from retailers and generators.
- Processors: process tires into products or for use as energy recovery.
- Manufacturers: manufacture products from BC recycled rubber.

TSBC collects an Advance Disposal Fee (ADF), commonly referred to as an eco-fee, from registered retailers on the sale of every new tire including replacement tires and tires on new vehicles. ADFs are set by TSBC on PLT, MT, AG and LS tires. The fee rates, listed on the TSBC website, vary by tire type to compensate for the higher costs of collecting and disposing of larger tires. Details of the tire types are provided in [Appendix I – Tire Definitions](#).

These fees are used in the operation of the tire recycling program in BC with none of the eco-fees collected directed to government. While the majority of funds (currently 92%) are incentives paid to transport and recycle BC's scrap tires in environmentally responsible ways, TSBC also directs funds to other activities that enhance BC's tire recycling program and help TSBC meet its goals:

- A Manufacturer Incentive Program to stimulate the use of BC recycled rubber by BC manufacturing companies. This program has created a strong and stable market for BC recycled products.
- A [Community Grant Program](#) to support communities in their use of BC recycled rubber in projects such as playgrounds and other recreational facilities.
- A voluntary province-wide [program to recycle bicycle tires and tubes](#). The program piggybacks on the existing automobile scrap tire and collection infrastructure. There is neither an eco-fee to the consumer nor a disposal fee charged to bicycle shops.

- A compliance process to ensure all retailers “pay their fair share” by correctly reporting and remitting eco-fees on all new program tires sold in BC.
- A Research and Development program to find value-added [solutions to tire fibre](#).

Now that both the capability and capacity to process non-program OTR tires up to 39” exists in BC, TSBC has been researching projected volumes and costs to determine the eco-fees required for these tires. Early indications show significant support from affected stakeholders to add these tires to the BC Recycling Regulation.

## 2. Consumer Access to Collection Facilities [Section 5 (1)(c)(iii)]

*The plan adequately provides for reasonable and free consumer access to collection facilities or collection services.*

Unlike other product recycling programs where consumers must choose between putting their end of life product into the waste stream or taking it to a collection depot for recycling, most motorists exchange their old tires for new ones at the time of purchase. The majority of retailers take back one old tire for every new tire sold and arrange for haulers to collect and transport the tires to processors.

Not all tire retailers are in a position to take back a scrap tire for every new tire sold. An example is Home Depot, which may sell a trailer with new tires even though their primary business is not selling tires or equipment with new tires. TSBC therefore defines a collection facility as “a TSBC registered retailer that, in the normal course of business, will accept one scrap tire for every new tire sold.” There are currently over 1,900 such retailers in BC that take back consumers’ scrap tires when new tires are purchased.

Some motorists choose to take their old tires home rather than leave them with the retailer for disposal. Some consumers take these orphan tires to landfill where they are held for collection by haulers. Based on collection data, this volume is approximately **3%** of the total volume collected annually. However, recognizing this can be a logistical problem for some landfills, TSBC provides alternative disposal options to reduce this burden:

- The [Return to Retailer \(R2R\) program](#) provides consumers a free option to return these orphan tires to participating retailers. This is a year-round program for consumers to drop off up to four passenger or light truck tires, clean and off rim, during the retailer's business hours. R2R locations are a subset of the over 1,900 retailers referenced above and are located in both rural and urban locations. As reported in our 2017 Annual Report, at the end of 2017 there were 828 R2R locations throughout BC. The current list is posted on TSBC’s web site and updated quarterly. This list is also the data source for the drop off location finder for Recyclepedia and BC Recycles.

- Tire collection events are another convenient option for disposing of orphan tires. These events are held primarily between March and September every year in various locations throughout the province. Event locations are selected based on where demand exists and/or upon request by a retailer or local government. Some collection events are held in partnership with elementary schools that participate in the Artist Response Team’s educational program which teaches children through song about environmental stewardship. TSBC also seeks synergies to hold events in conjunction with other BC stewards and to continue to participate in clean up events held by regional districts and municipalities. In 2018, TSBC included a significant education component on what happens to the eco-fees and what happens to the scrap tires. After speaking with consumers at these events it became obvious that TSBC needed to focus its efforts on a communication strategy to educate the consumer on TSBC’s Return to Retailer program rather than solely focus its efforts on collection events. In 2019 this will include, but not be limited to, attending community events, such as car free days and car related events, in addition to a social media campaign. In its Annual Report to the Director, TSBC will provide details of the various activities undertaken, including the location of collection events and the partners involved.

Important to note is that no tires are refused at these events as TSBC recognizes the consumer could abandon them at a later time and place.

The collection and transportation of scrap tires from source locations throughout BC to processors is well established, efficient and effective with close to all scrap tires **available for collection** at retailers or scrap tire generators (e.g., landfills and auto wreckers) collected for recycling, energy recovery or reuse. There are no known stockpiles, and collection complaints from retailers, generators and consumers are extremely rare, demonstrating the effectiveness of the collection system and TSBC’s confidence in the estimated number of scrap tires available for collection. TSBC will maintain annual contact with local governments through a survey of the BC Product Stewardship Council members to seek feedback on any known stockpiles or disposal issues for their residents and will also participate in the Council’s monthly webinars and present to the Council upon request. TSBC will also continue to participate in the waste audits conducted jointly by the stewards under the SABC umbrella and these results will be reported in TSBC’s Annual Report to the director.

In comparison, the common but imperfect measure of effectiveness of stewardship programs as required by the BC Recycling Regulation is the “Recovery Rate”:

**Recovery Rate** = the actual number of scrap tires collected in the reporting year / the actual number of new tires sold in the reporting year

In a recent study conducted by Deloitte on behalf of the Ministry of Environment, it was recognized that the Recovery Rate, especially for long life products such as tires, is not a sound standalone measure especially if looking at only one year’s data. TSBC’s annual Recovery Rates

have ranged in the last ten years from 73% to 90% with an average of 80%. The annual rates vary according to the number of new tires sold or scrapped in any year, both of which are sensitive to changes in BC’s economy, weather and population.

To better understand the divergence between collected volumes and sold volumes, and to derive a better measure, TSBC engaged its audit firm to conduct research on the underlying factors.

The factors identified in the analysis were:

1. The time lag between the sale of a new tire and the time of collection, i.e. at end of life;
2. Sales trends / consumer behavior – winter tires, new car sales / vehicle registrations;
3. Permanent loss of tires available for collection – export of used tires, population migration; and
4. Efficiency of the scrap tire collection system.

The analysis concluded that with a robust collection system in place, the most quantifiable factors impacting the delta between sales and collections is the long-term life of a tire and the tire sales trends, neither of which can be influenced by TSBC.

An example of the Recovery Rate being an unmeaningful and imperfect measure to reflect performance is the Recovery Rate of 76% as reported in TSBC’s 2016 annual report. While this result alone would imply mediocre performance, there were no legitimate collection complaints and no known stockpiles. Driving the difference between sales and collections was the significant increase in sales, specifically those that did not generate a scrap tire (new car sales coupled with increased vehicle registrations and increases in winter tire sales by first time buyers). TSBC is reporting the same trend in 2017.

TSBC will continue to report on units sold and collected in the reporting year, including historical trends; however, the calculation used for the Recovery Rate will align with the average life of tire and therefore establish a more meaningful measure of program performance. Although there is no way to exactly tell the life of a tire due to design, driver’s habits, climate, road conditions etc., most research indicates that the average life of a tire is between 4 to 6 years. Therefore, going forward, TSBC will report its Recovery Rate as follows:

$$\text{Recovery Rate for Tires} = \frac{\text{actual number of scrap tires collected in the reporting year}}{\text{actual number of new tires sold } \underline{\text{5 years prior}} \text{ to the reporting year}}$$

If restated for the years in the table, the results are as follows:

	2015	2016	2017
Current Recovery Rate calculation	79%	76%	73%
Proposed Recovery Rate calculation	90%	94%	96%

TSBC fully expects this rate will continue to fluctuate given the factors affecting sales and the increased and ongoing use of winter tires that will extend the life of a tire.

### 3. Consumer Awareness [Section 5 (1)(c)(iv)]

*The plan adequately provides for making consumers aware of the extended producer responsibility program; the location of collection facilities or the availability of collection services; and how to manage products in a safe manner.*

TSBC uses a variety of methods to raise consumer awareness of the program:

- TSBC website.
- Facebook and Twitter.
- [Videos](#) showcasing the recycling process, Research & Development program and how the eco fee is used to create new value from old tires.
- Information brochures at the point of sale.
- Information available through the Recycling Council of BC (RCBC) Recycling Hotline and BC Recycles.
- TSBC-decaled trailers that travel throughout BC collecting tires.
- Media attention from special events, in particular TSBC's [Community Grant Program](#). This program supports the use of BC recycled rubber in community projects such as playgrounds and other recreation facilities that are wheelchair and publicly accessible. TSBC requires that all grant recipients advise the MLA of the project and in 2019 this requirement will extend to informing mayor and council to ensure officials are aware of the use of recycled tires in their jurisdiction.

TSBC also works with other stewardship agencies in joint initiatives to improve overall public awareness and interest in recycling. Initiatives include:

- [BCRecycles.ca](#) – a common website for information about BC's stewardship programs.
- [Recycling Handbook](#) – a common brochure that describes all of BC's stewardship programs.
- [Recyclepedia](#) – an enhanced web tool and app for consumers wanting to know where to recycle certain materials.
- Community events – attendance at community events throughout the province either in conjunction with other stewards or as part of the Ambassador Tour, led primarily by the BC Used Oil Management Association (BCUOMA).
- First Nations coordinator – a resource hired by Recycle BC but jointly funded by many of the stewards to assist in our collective engagement with First Nations to develop or improve the collection of stewarded products.

- Joint collection events – a specific activity going forward that will focus on consumer education and awareness, emphasizing what the eco-fee is used for and what happens to the tires.

TSBC also participates in the biennial Stewardship Agencies of British Columbia (SABC) consumer awareness survey that has established a baseline for consumer awareness on drop off locations, and where to find information on the drop off locations. It is important to note that for tires, most consumers leave their tires at the retailer location when new ones are purchased and as such most consumers rarely need to know where to drop off tires. However, to address the need for a performance measure in this area, starting in 2019, TSBC will conduct its own annual survey pertaining specifically to these two areas of awareness. The results will be included in TSBC's Annual Report to the director under Performance Measure and Targets. The 2016 SABC survey results will be used as the baseline.

#### **4. Management of Program Costs [Section 5 (1)(c)(v)]**

*The plan adequately provides for assessing the performance of the producer's extended producer responsibility program and the management of costs incurred by the program.*

#### **PROGRAM ECO-FEES**

The program is funded by an eco-fee remitted by the retailer (producer) on every new regulated tire sold. TSBC does not have control over its revenue streams as this is dependent on product sales, which in turn is often dependent on the state of the economy.

On average, administration costs account for less than 8% of total revenues, which is in line with tire recycling programs across the country. Approximately 92% of the revenues are paid out in program incentives to: collect, transport, and process scrap tires; manufacture new products; host tire collection events; and provide community grants. Of the total incentives paid annually the average distribution and the recipient of the incentives is as follows: transportation incentive paid to haulers 32%; processing incentive paid to BC processors 63%; and manufacturing incentive paid to manufacturers 5%. The transportation incentive is adjusted quarterly for fuel related costs and every two years for non-fuel related costs. Processing incentives for TDP (recycling) were reviewed in 2016 with a significant reduction introduced on January 01, 2018, and a review is underway in 2018 for TDF (energy recovery). The manufacturing incentive is a budget driven program reviewed on an annual basis.

TSBC operates a return to retailer model and so does not contract with any local governments or private depots to accept tires on its behalf. TSBC provides free pick up of all program tires from these facilities, with the exception of tires that contain dirt or other debris, are on rims, or are not readily accessible. In these cases, a fee may apply. Feedback during the plan consultation

process indicated that some local government sites and private depots were seeking compensation from the program for accepting and handling tires. TSBC has concluded from the feedback that due to the disparity of the comments received that a one size solution is not the answer and that compensation, if appropriate, is not the only solution. In 2019, TSBC will initiate a review to understand the challenges for local government and private depots in handling tires. The objective of the report will be to quantify the issue, identify solutions and lay out the actions necessary for all parties involved. The report will be shared with Ministry staff.

## REPORTING

TSBC's financial statements are audited annually and published on its website as part of its [annual report](#) to the Ministry. TSBC's non-financial information is also subject to an annual audit as required by the Ministry of Environment and the results are included as part of TSBC's annual report.

TSBC publishes its [program policies](#) which include the incentive rates for transporting and processing BC scrap tires and details of the Manufacturing Incentive Program.

## RISK MANAGEMENT

TSBC has agreements with its recyclers and manufacturers which include but are not limited to the obligations of both parties with respect to insurance requirements, audit and reporting, performance measures and financial penalties, financial securities, and contingency plans in the event of fire, flood or market disruption.

TSBC maintains a reserve fund that assists in stabilizing eco-fees by addressing year to year cost variances resulting from program enhancements and fluctuations in sales and collection volumes. The fund also exists to provide support for research and development activities that align with TSBC's goal to *foster and support innovation and research relative to higher valued solutions within the industry*. TSBC's processing and manufacturing sectors have invested heavily in recent years to generate operational efficiencies and create new products, allowing TSBC to reduce the incentives paid (most recently on January 1, 2018) and/or build market stability for both sectors.

## 5. Management of Environmental Impacts [Section 5(1)(c) (v, vii & viii)]

*The plan adequately provides for assessing the management of environmental impacts of the program. The plan adequately provides for eliminating or reducing the environmental impacts of a product through the product's life cycle and for the management of the product in adherence to the order of preference in the pollution prevention hierarchy.*

There are many environmental benefits of diverting tires from landfills and the environment in general: reduced fire hazard and the potential for air, water and land pollution; fewer breeding

habitats for West Nile Virus-carrying mosquitoes; and the recovery of rubber and steel that are very energy intensive materials to obtain raw, and consequently major contributors of greenhouse gases (GHG).

TSBC will also continue to manage collected products in accordance with the Pollution Prevention Hierarchy, whenever feasible and economically viable.

## **REDUCE**

While managing tires at their end of life is important, lengthening their lives so that fewer are used is essential. Tire manufacturers are making progress: since 1981 the average tire life has gone up 56% (from 46,000 km to over 72,000 km). Also, average tire rolling resistance has decreased by more than 25% simply by making the tires lighter and stronger. Manufacturers also recognize the need to balance environmental concerns with tire safety and customer satisfaction.

TSBC works in partnership with The Tire & Rubber Association of Canada in their annual [Be Tire Smart](#) campaign which focuses on educating the motoring public on the benefits of proper tire inflation and maintenance.

## **REUSE**

Known in the industry as culling, tires collected by the hauler can be diverted from recycling and sold as used tires. TSBC recognizes but does not financially support the culling of tires for reuse. In addition, most of the Medium Truck tires are retreaded at least once, extending the life of the tire.

## **RECYCLE**

TSBC's ability to influence product design to increase recyclability is extremely limited. While this is an accepted and theoretically possible outcome in some industries, automotive tires are not simple consumer commodities. Instead, they are a critical element in the safe operation of motor vehicles. For this reason, the design and operating parameters of tires are mandated by federal regulation and international agreement. The things that make a tire "safe" also tend to be those that make it difficult to recycle. That said, international tire manufacturers are responding to the environmental challenges of tire manufacturing by doing such things as replacing high aromatic petroleum-based oils with bio-based oils from corn, canola, oranges, etc. In addition, manufacturers are beginning to incorporate recycled rubber into selected tire types and are actively investing in new sources of natural rubber supply such as guayule and Russian Dandelion, which can be produced in North America.

A tire has three main components: rubber, steel and fibre. In BC, the majority of tires are recycled into:

- crumb rubber – granules of rubber with the steel and fiber removed; and

- mulch – tire shreds with the steel removed.

The crumb is used to create a variety of products including: athletic tracks and synthetic turf fields; playgrounds; colourful, resilient flooring in recreational facilities; and flooring and mats for agricultural and industrial use. The mulch is used to replace bark mulch and can be purchased by the public directly from many big box stores.

The steel extracted from tires during the crumb and mulch processing is recycled, the fibre is directed to a cement kiln for energy recovery, and any waste from the process is landfilled.

The processor is required to submit the results of its annual environmental audit and, per program policy, post a financial security. In addition, the processor is subject to 3<sup>rd</sup> party audits by customers that sell the recycled product, such as Costco and Walmart.

Beyond primary processing, TSBC promotes the use of BC's recycled rubber in products manufactured in BC through a Manufacturing Incentive.

## **ENERGY RECOVERY**

The remaining tires are used as tire derived fuel (TDF) to recover the energy. The steel in tires consumed in the cement kiln is used to replace virgin steel and although accounted for historically in the energy recovery volumes, arguably should have been considered recycling.

The policy of allowing some tires to be used as a fuel supplement is both environmentally and economically sound and a practice followed by many other Canadian provincial programs for a variety of reasons. It is a significant end use in both the US and Europe and taking a life cycle approach, studies conducted in this area concluded the following:

- [2010 Pembina Report \(Alberta\)](#)
  - “no outright winner... no option showed net benefit for all environmental indicators used.”
- [2008 Aliapur \(France\)](#)
  - “The environmental assessment of material recycling methods is not systematically better than that of energy recycling methods.”

TDF usage at the cement plant in BC requires environmental permits, which are issued by Metro Vancouver as the delegated authority for the Ministry of Environment. The cement kiln is also required, as per program policy, to post a financial security.

TDF usage in BC has varied over the years, being primarily market driven in the past. However, in recent years the volume has held steady at around 12% of the tire volumes collected.

## RESIDUAL MANAGEMENT

The volume of material going to waste, which results from the recycling process and tires that cannot be processed, has dropped significantly. This is due to equipment upgrades at BC's recycling plant which have reduced the amount of waste from processing the tires and increased the ability to process tires that previously could not be recycled. At the time of submitting this Plan, BC's waste component is at an all-time low of 1%.

Going forward, the Performance Measure and Targets for environmental impacts will follow the Ministry required format. Already adopted by other BC Stewards, TSBC will now report the end fate by product component: rubber, steel and fibre. The table below re-states TSBC's 2015 & 2016 data previously reported under the old format, the 2017 data included in TSBC's 2017 annual report, due to the director on July 1, 2018, and the proposed targets. TSBC's 2018 Annual Report to the director and Non-Financial Information Audit will reflect the new format.

Component*	Recycling	Energy Recovery	Landfill	Total
<b>Rubber</b>				
<i>2018 target</i>	84%	15%	1%	<b>100%</b>
<i>2017</i>	82.7%	17%	0.3%	<b>100%</b>
<i>2016</i>	79.4%	18.5%	2.1%	<b>100%</b>
<i>2015</i>	79.5%	18.2%	2.3%	<b>100%</b>
<b>Steel</b>				
<i>2018 target</i>	100%	0%	0%	<b>100%</b>
<i>2017</i>	100%	0%	0%	<b>100%</b>
<i>2016</i>	100%	0%	0%	<b>100%</b>
<i>2015</i>	100%	0%	0%	<b>100%</b>
<b>Fibre</b>				
<i>2018 target</i>	0%	98%	2%	<b>100%</b>
<i>2017</i>	0%	99.2%	0.8%	<b>100%</b>
<i>2016</i>	0%	99.6%	0.4%	<b>100%</b>
<i>2015</i>	0%	100%	0%	<b>100%</b>

\* On average, of the total weight processed and shipped, the rubber component represents 70% with steel and fibre @ 15% each.

Important to note is that a tire component is tracked and reported only if it is separated from the whole product during the recycling process. An example from the table above for 2016 data is the rubber component of 18.5% under Energy Recovery, which also includes the steel and fibre within the tire as these materials are not extracted from the tire prior to entering the kiln. In the case of numbers reported for the steel and fibre components, these are residuals extracted during the recycling process. This distinction is important as the data reported to the Ministry

must be audited and an estimate of the percentage of steel and fibre in a whole tire or tire shred entering the kiln would not be considered auditable.

TSBC's focus in recent years has been to divert the amount of waste and tires from landfill to energy recovery and/or recycling. As noted earlier, TSBC is pleased that an all-time low waste level has been achieved. Through Research and Development funding, TSBC is currently supporting the work of a third party to find a recycling end use for fibre, a residual from the crumb recycling process. More information on the project can be found on the UBC website and TSBC will provide any significant updates in its Annual Report.

## 6. Dispute Resolution [Section 5 (1)(c)(vi)]

*The plan adequately provides for a dispute resolution procedure for disputes that arise between a producer and person providing services related to the collection and management of the product during implementation of the plan or operation of the extended producer responsibility program.*

TSBC's strategy has been to avoid disputes and our success has been achieved by taking a partnership approach with program service providers and related stakeholders. This entails:

- Having written contracts with all companies that receive financial incentives from TSBC (Participants).
- Managing key contracts with regular and frequent partnership relationship meetings to keep communication and trust levels high.
- Tracking and monitoring tire collection complaints from retailers and generators.
  - Should an issue arise with tire collection the retailer / generator is asked to handle the issue directly with Western Rubber Products. In the event the issue remains unresolved, the retailer / generator is asked to contact the TSBC office directly.
- Hauler and local government representation on TSBC's advisory committee.

There have been no disputes since TSBC implemented the program but in the event that one occurs, TSBC has set out a dispute resolution procedure in its contracts with Participants. This involves a multi-step settlement process that starts with negotiation before moving to mediation where the costs are shared equally among the parties involved.

## 7. Stakeholder Consultation on Plan Implementation and Operation [Section 5 (1)(b)]

*The producer has undertaken satisfactory consultation with stakeholders prior to submitting the plan for approval and will provide opportunity for stakeholder input in the implementation and operation of the extended producer responsibility program.*

### STAKEHOLDER CONSULTATION – DURING TERM OF THE PLAN

TSBC connects with many of its stakeholders on an ongoing basis and this will continue during the operation of the program:

- The TSBC Advisory Committee convenes once a year and upon request by any of the members. The committee is made up of a broad reach of stakeholders including producers (retailers), service providers and local government. The committee has an opportunity to address any specific issues, to learn of any TSBC program updates and to provide advice on any operational or policy issues presented for discussion.
- The BC Product Stewardship Council holds frequent conference calls for the purpose of updating stewards on local government issues and for stewards to present to local government. This ongoing dialogue has been beneficial to keeping all parties up to date on current issues.
- The Ambassador Tour visits to retailers throughout the province to seek feedback on the program, in particular tire collection.
- Partnership meetings with key service providers occur monthly or quarterly and assist in keeping current on any issues or developing threats to the operation of the program.
- Monthly communication to retailers provides them with key updates / messaging.
- Quarterly dialogue is held between TSBC member organizations and the director that represents the member organization on the board. This allows for any member organization concerns to be conveyed to the board and staff and allows for a transparent process.
- Staff attendance at key conferences enables face to face dialogue with other stakeholders to specifically address any issues.

### STAKEHOLDER CONSULTATION – INPUT TO THIS PLAN

Stakeholders were invited to attend consultation webinars for the review of TSBC's Extended Producer Responsibility (Plan). The Plan and webinar details were posted on TSBC's web site and the following consultation sessions were offered and held as follows:

- May 10, 2018: TSBC Advisory Committee
- May 15, 2018: BC Product Stewardship Council (BCPSC)
- May 16, 2018: general stakeholders
- June 5, 2018: general stakeholders

Interested parties could download a copy of the Plan from the TSBC web site, in addition to the Power Point presentation used to walk the attendees through the webinar sessions. TSBC's Plan was posted and available for public comment on April 25, 2018 with the deadline for submission of written comments by June 08, 2018.

Advance notifications were sent to the BCPSC on April 25, 2018, with follow up reminders, in addition to the Recycling Council of BC and the Coast Waste Management Association to distribute as part of their regular communications to their members. A notice was emailed to TSBC's registered retailers and generators on May 9, 15 & 31 and an email to TSBC's member organizations on April 28, 2018.

A total of 97 individuals participated in the four webinars. TSBC also received 6 emails with questions and 2 formal written submissions.

The PowerPoint presentation presented on the webinars is available in [Appendix II](#). TSBC provided an overview of the Plan as well as opportunities to ask questions and provide feedback. [Appendix III](#) includes a summary of questions and comments received during both the webinars and in writing. Where relevant, the feedback received has been incorporated in the Plan to provide greater clarity and / or address issues raised.

## **8. Performance Measures and Targets [Section 5 (1)(a)(i),(ii),(iii)]**

*The plan will achieve, or is capable of achieving within a reasonable time:*

- *a 75% recovery rate or another recovery rate established by the director;*
- *any performance measure, performance requirements or targets established by the director; and*
- *any performance measures, performance requirements or targets in the plan.*

TSBC commits to achieving the following annual targets (table 1) and reporting commitments (table 2). The results of both the performance targets and reporting commitments will be included in TSBC's Annual Report to the director submitted on or before July 1 every year. Performance Measures 1, 2 & 3 are subject to third party assurance (Non-Financial Information Audit).

Table 1.

Performance Measures		Annual Targets			
1.	Recovery Rate <u>(Total # Units Collected in reporting year / Total # Units Sold 5 years prior to reporting year)</u>	90%			
2.	The percentage allocation of total tonnes of scrap tires (i.e. all rubber, steel and fibre) <u>processed and shipped</u>  The percentages are for the term of the Plan unless otherwise indicated.  Note: on average rubber accounts for 70% of the total weight with 15% steel and 15% fibre.		Recycling	Energy Recovery	Landfill
		Rubber	2018 & 19: 84% 2020 & 21: 86% 2022: 88%	2018 & 19: 15% 2020 & 21: 13% 2022: 11%	1%
		Steel	100%		
		Fibre		98%	2%
3.	Number of collection sites (i.e. registered retailers that will take back a scrap tire from the consumer at the time a new tire is sold)	1,850			
4.	a) Total number of retailers and generators in BC that take back orphan tires (R2R) b) Number of R2Rs in each Regional District	a) 800 province-wide b) At least 25% of registered retailers in each Regional District are R2R locations			
5.	Education and Awareness a) Awareness of where to take scrap tires for safe disposal b) Awareness of where to go to find information on safe disposal locations	a) 2018 & 2019: 57% 2020 & 2021: 59% 2022: 61%  b) 2018 & 2019: 73% 2020 & 2021: 75% 2022: 77%			

Table 2.

<b>Reporting Commitments</b>	
1.	Total tonnes collected by Regional District in a calendar year / total KG per capita for all of BC
2.	Dates, locations and results of tire collection events
3.	Number of legitimate collection complaints received by TSBC
4.	Number of consumer complaints received by TSBC
5.	Results of SABC waste audits and any local government waste audits if data is shared directly with / made available directly to TSBC
6.	Comparison of results to targets for all Performance Measures
7.	Independently audited financial statements
8.	Non-financial audit report
9.	Total product collected and sold in the reporting year
10.	Description of how the product was managed in accordance with the pollution prevention hierarchy
11.	Location of collection facilities
12.	Description of educational materials and educational strategies used
13.	Efforts taken to reduce environmental impacts, to increase reusability and recyclability

## Appendix I Tire Definitions

### SECTION I: TIRE PRODUCT CATEGORIES INCLUDED

Tire Type	Definition
<b>Passenger Tires, Small RV Tires and Light Truck Tires</b>	<p>Passenger tires are designed for use on passenger cars, light trucks, small recreational vehicles (RVs) and multipurpose passenger vehicles (MPVs), including sport utility vehicles (SUVs) and crossover utility vehicles (CUV's), and to comply with Canadian Motor Vehicle Safety Standard (CMVSS No. 109).</p> <p>The light truck tire category is tires designed for use on consumer or commercial light trucks, under 10,000 lbs. Gross Vehicle Weight, and comply with Canadian Motor Vehicle Safety Standard (CMVSS No. 119).</p> <p>Codes found on the sidewall of light passenger and light truck tires are P (Passenger) and LT (Light Truck). Temporary spare tires are marked T (Temporary).</p>
<b>Motorcycle, Golf Cart and All Terrain Vehicle Tires</b>	<p>Includes all tires specifically designed for on/off highway motorcycles, motorcycle sidecars, motor bikes, mopeds, mini-cycles, golf carts and all terrain vehicles.</p>
<b>Forklift, Small Utility and RV Trailer Tires, Bobcat/Skid Steer Tires</b>	<p>Includes pneumatic forklift tires, bobcat/skid steer tires measuring 16" and under, as well as RV (Recreational Trailer) and utility trailer, tires marked ST (Special, Trailer).</p>
<b>Agricultural Tires (Small)</b>	<p>Includes drive and free rolling farm and implement tires up to 16" deemed for use on farm equipment.</p>
<b>Medium Truck Tires</b>	<p>Also commonly known as Commercial Truck Tires – Truck and Bus tires including Wide Base or Heavy Truck tires designed for truck/bus applications and Larger RV (Recreational Vehicle) tires not marked "P or LT" (Passenger or Light Truck), all of which comply with Canadian Motor Vehicle Safety Standard (CMVSS No. 119).</p>
<b>Agricultural Drive Tires (Medium)</b>	<p>Includes drive wheel tires used on tractors and combine equipment. These tires are normally identified with a sidewall marking with suffix letters R (Radial Ply) or HF (High Flotation) and are 16.5" – 25.5". These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 5 Agricultural.</p>
<b>Forklift, Bobcat/Skid Steer Tires</b>	<p>Includes pneumatic forklift tires, bobcat/skid steer tires measuring 16.5" and over.</p>
<b>Logger/Skidder Tires, Agricultural Drive Tires (Large)</b>	<p>Tires used on tree harvesting equipment and normally identified with a sidewall marking with suffix letters LS (Logger/Skidder). These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 5 Agricultural. This section would also include Agriculture Drive Tires measuring 26" and up.</p>

***For the purpose of determining eligible tire sizes within the tire type category, TSBC will deem the following reference material as the reference authority: 2005 Tire and Rim Handbook of the Tire and Rim Association of the United States as amended from time to time.***

## **SECTION II: TIRE PRODUCT CATEGORIES EXCLUDED**

The Recycling Regulation specifically excludes certain types of tires including:

- a) *tires designed for use on cycles, wheelchairs or three-wheeled motorized devices designed for the transportation of persons with physical impairment;*
- b) *tires designed for use on an aircraft or wheelbarrow;*
- c) *tires that ordinarily have a retail value of less than \$30;*
- d) *recapped and retreaded tires; and*
- e) *tires designated with a tread code of C,E,G,L, IND in the 2005 Tire and Rim Handbook of the Tire and Rim Association of the United States, as amended from time to time.*

*TSBC Explanatory Note:* Tires with tread code C (Compactor), E (Earthmoving), G (Grader), L (Loader), IND (Industrial) or NHS (Not for Highway Service) are generally referred to as Grader/Loader or Small-Off-The-Road or Large-Off-The-Road tires. A further distinction for clarity is as follows:

### ***Small Off-the-Road (Industrial Equipment) Tires***

Tires of truck type construction for off road applications without DOT approval. Conventional sizes smaller than 16.00" cross section and wide base sizes smaller than 20.5" cross section. These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 4 Off-the-Road.

### ***Large Off-the-Road Tires***

Tires of truck type construction for off road applications without DOT approval. Conventional sizes 16.00" and larger cross section, and wide base sizes of 20.5" and larger cross section. These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 4 Off-the-Road.

### ***Industrial Tires***

Industrial tires identified with a sidewall marking of "IND" (Industrial), "NHS" (Not for Highway Service) Solid and Press-On tires (commonly found on forklifts). These tires are listed in The Tire and Rim Association Inc. annual yearbook Section 6, Industrial. This does not apply to bobcat/skid steer tires.

## Appendix II Consultation Presentation



### Stewardship Plan Renewal Consultation

## Stewardship Plan Outline



- A. Regulatory Basis for this Plan
- B. Overview of Existing Program
- 1. Program Structure
- 2. Consumer Access to Collection Facilities
- 3. Consumer Awareness
- 4. Management of Program Costs
- 5. Management of Environmental Impacts
- 6. Tire Management per Pollution Prevention Hierarchy
- 7. Product Life Cycle Management
- 8. Dispute Resolution
- 9. Stakeholder Consultation
- 10. Performance Measures and Targets**

## A. Regulatory Basis

- **Producer = Tire Retailer**
- **Regulated** tires
  - Passenger and Light Truck (PLT)
  - Medium Truck (MT)
  - Agricultural (AG)
  - Logger Skidder (LS)
- **Unregulated** tires
  - Bicycle Tires (but included in the program)
  - Other Off the Road (OTR)
    - Small, medium, large, giant

## B. Unregulated Tire Research

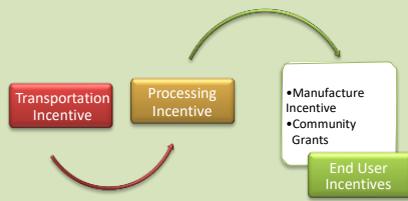
- OTR research continues
  - ✓ Solution found for S, M, L
  - ✓ What are expected annual volumes?
  - ✓ What stockpiles exists?
  - ✓ What should the eco fee be?
  - ✓ Affected stakeholder buy in appears high
- Ongoing updates delivered to MOE
- TSBC will be in a position to start formal consultations with affected stakeholders soon

# 1. Program Structure

- Program Participants
  - Retailers (Producers)
    - Sell tires, generate scrap tires
  - Return to Retailers (R2R)
    - Sub set of Retailers that voluntarily take back car tires from the public
  - Collection Facilities
    - Sub set of Retailers that take back scrap tires when a new tire is purchased
  - Generators
    - Do not sell tires, generate scrap tires
    - Examples: transfer stations, auto wreckers
- Haulers
  - Collect & transport tires from Retailers & Generators
- Processors
  - Process tires into product or process tires for energy recovery
- Manufacturers
  - Manufacture products from BC recycled rubber

# 1. Program Structure

- Financial Incentives
  - Transportation
  - Processing
  - Manufacturing
- Bike tire program
- Community Grants
- Revenue compliance program
- R&D program
- Maintain the existing operational structure
- All rates posted on TSBC web site



## 2. Consumer Access

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Retailer model (~97%)             <ul style="list-style-type: none"> <li>– Most consumers leave their tires at the retailer location (collection facility)</li> <li>– 1,900 collection facilities throughout BC</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Report # of collection facilities             <ul style="list-style-type: none"> <li>➤ Target – 1,700</li> </ul> </li> </ul> |
|---|---|

## 2. Consumer Access

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Orphan Tires (~3%)             <ul style="list-style-type: none"> <li>– Option 1: Return to Retailer locations (R2R)                 <ul style="list-style-type: none"> <li>• Number has doubled in last 5 years, close to 800 across BC</li> </ul> </li> <li>– Option 2: collection events                 <ul style="list-style-type: none"> <li>• 15 per year</li> <li>• Will accept all tires to avoid potential unacceptable disposal methods / abandoned waste post collection event</li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Monitor distribution of R2R retailers and recruit new where needed             <ul style="list-style-type: none"> <li>➤ Target - 700</li> </ul> </li> <li>• Continue to conduct collection events with added educational component and held jointly with other stewards where feasible.</li> <li>• Locations &amp; # based on need / demand.</li> </ul> |
|--|--|

## 2. Consumer Access

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Recovery rate             <ul style="list-style-type: none"> <li>– Current definition not appropriate for long term products</li> <li>– Factors affecting recovery rate:                 <ul style="list-style-type: none"> <li>• High sales volumes</li> <li>• Increase vehicle regns</li> <li>• Culls exported for reuse</li> </ul> </li> </ul> </li> <li>• 100% of tires available for collection are collected</li> </ul> | <ul style="list-style-type: none"> <li>• Amend the definition<br/><i>#collected / #sold 5 yrs prior</i></li> <li>• Report the recovery rate<br/>➤ Target - 80%</li> <li>• Report collected and sold units</li> <li>• <del>Report Capture Rate**</del></li> <li>• <del><i>#collected / #available for collection</i></del></li> <li>• Report on collection complaints</li> <li>• Conduct annual survey with RDs on collection, known stockpiles &amp; abandoned waste issues</li> </ul> |
|--|--|

\*\* to be removed from Plan as measure and result are not auditable

## 3. Consumer Awareness

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Collection events</li> <li>• Community events - Ambassador Tour</li> <li>• Joint First Nations coordinator</li> <li>• Website</li> <li>• RCBC hotline / Recyclepedia</li> <li>• BC Recycles web site / pamphlet</li> <li>• Social media</li> </ul> | <ul style="list-style-type: none"> <li>• Addition of educational component for collection events</li> <li>• Joint initiatives to improve overall public awareness and interest in recycling</li> <li>• Increased presence on social media</li> <li>➤ Target - &gt; 57% awareness of drop off locations &amp; &gt; 75% awareness of where to find info on drop off locations</li> </ul> |
|---|--|

## 4. Program Costs

>90% revenue used to pay out incentives to transport, process scrap tires and create value add

Reductions in processing incentives Jan 1, 2018

Transportation incentive adjusted quarterly for fuel, bi-annually for all other transportation costs.

Recipients:

- Haulers
  - Receive a transportation incentive to transport tires. Based on weight & distance travelled.
  - Accounts for on av. 32% of total incentives paid annually.

- Processors
  - Receive a processing incentive to convert a whole tire into product or for energy recovery purposes.
  - Rates vary – lower incentives for energy recovery and \$0 for landfill.
  - Accounts for on av. 63% of total incentives paid annually.
- Manufacturers
  - Receive a manufacturing incentive to make products from BC recycled rubber.
  - Accounts for on av. 5% of total incentives paid annually.

*Note: also cover costs of all non program tires from collection events & bicycle tires*

## 4. Program Costs

- Collection model – free\* pick up from Retailer & Generator sites
- Reporting - financial statement audits & non-financial data audits

\* Exceptions apply, e.g. full of debris (dirty), not readily accessible



- Continue to manage program costs to the economic, social and environmental benefits of BC's citizens.
- Continue to publicize incentive rates and conduct rate reviews.
- Remain open and transparent with audited financial and non financial data.
- Maintain TSBC's financial stability while fostering and supporting innovation and research relative to higher valued solutions within the industry.

## 5. Environmental Impacts

- Promotion of Be Tire Smart
  - Extending tire life so that fewer tires are used
- Using alternative materials to manufacture tires



- Continued messaging to encourage BC motorists to adopt good tire maintenance practices
- Report on progress made by manufacturers to reduce environmental impacts

## 5. Environmental Impacts

- Recycle (3R)
- Energy Recovery (4R)
  - Over 50% is the fibre sent to Lafarge, a residual from crumbing that is landfilled in most other provinces
- Residual Disposal (5R)
  - Significant reductions in the amount of material landfilled
    - 2% in 2013, down to 0.3% in 2017.

- Align reporting to the Ministry's requirement for NFI audit reporting
    - Report by component
    - Must be an auditable number
- > **Target**

	Recycling	Energy Recovery	Landfill
Rubber	84%	15%	1%
Steel	100%		
Fibre		98%	2%

## 6. Dispute Resolution

- No disputes with any registered participant
- Success achieved by taking a partnership approach with our service providers



- Continue to manage & foster relationships with service providers.
- Ongoing communications with stakeholders throughout the term of the plan
  - BCPSC webinars
  - RD surveys
  - TSBC advisory meetings
  - Monthly retailer messaging

## 7. Stakeholder Consultation



- Advisory Committee – May 9
- BC Product Stewardship Council – May 15
- All stakeholders – May 16 & June 5
- Web site posting – until June 8

## 8. Performance Measures & Targets

Performance Measures		Annual Targets			
1.	Recovery Rate (Total # Units Collected in reporting year / Total # Units Sold 5 years prior to reporting year)	80%			
2.	The percentage allocation of total tonnes of scrap tires (i.e. all rubber, steel and fibre) processed and shipped		Recycling	Energy Recovery	Landfill
		Rubber	84%	15%	1%
		Steel	100%		
		Fibre		98%	2%
3.	Number of collection sites (i.e. registered retailers that will take back a scrap tire from the consumer at the time a new tire is sold)	1,700			
4.	a) Total number of retailers and generators in BC that take back orphan tires (R2R) b) Number of R2Rs in each Regional District	a) 700 province-wide b) At least 2  Regional District			
5.	Education and Awareness a) Awareness of where to take scrap tires for safe disposal b) Awareness of where to go to find information on safe disposal locations	a) Maintain or increase awareness level of 57% b) Maintain or increase awareness level of 73%			

The 97%

To help address the 3%

To help address the 3%



 = Target to be amended based on feedback

**TIRE**  
Stewardship  
New value from old tires  
BC

## 8. ... & Reporting Commitments

**TIRE**  
Stewardship  
New value from old tires  
BC

Reporting Commitments	
1.	Total tonnes collected by Regional District in a calendar year / total KG per capita for all of BC
2.	Dates, locations and results of tire collection events <span style="background-color: #0070C0; color: white; padding: 2px;">To help address the 3%</span>
3.	Number of legitimate collection complaints received by TSBC
4.	Number of consumer complaints received by TSBC
5.	Comparison of results to targets for all Performance Measures
6.	Independently audited financial statements
7.	Non-financial audit report
8.	Total product collected and sold in the reporting year
9.	Description of how the product was managed in accordance with the pollution prevention hierarchy
10.	Location of collection facilities
11.	Description of educational materials and educational strategies used
12.	Efforts taken to reduce environmental impacts, to increase reusability and recyclability

## Appendix III Summary of Consultation Feedback and Associated Responses

**Industry:** *We are very satisfied with the performance of the Tire Stewardship BC organization and the way that it has been operating. We are looking forward to working with Tire Stewardship BC in the coming years.*

**Local Government:** *TSBC should be commended for its broad collection network, and leadership in adopting innovative new initiatives such as: the Research and Development Program to find new value-added solutions, the Community Grant Program to support the use of recycled rubber in playgrounds and recreational facilities, and the Be Tire Smart campaign to extend the service life of tires.*

During the consultation period, TSBC did receive some questions regarding program operations that related to the applicability of GST, the timing of an e-commerce solution for remitting eco-fees, auditor rotation, retailer record retention, etc.

In addition, Metro Vancouver included comments that were directed to all EPR programs in BC:

*Data Collection. Formalize the collection of data, including product pathways that are not directly managed by the stewardship program.*

*Options for Local Government. All EPR programs should develop arrangements for local governments who receive, or pick-up illegally dumped material, to be paid for managing and handling this material, whether or not the facility is designated as a depot. Local governments, generally, do not seek to compete with private depot operators, yet still receive this material from residents and businesses. (Stewardship Agencies of BC members should consider a study to find out the root causes for people who dump illegally, who bring materials to transfer stations even when there are permanent depots available, prefer 'round-up' events to permanent depot locations, and 'hide' banned materials in residential loads. Such a study is recommended to include possible solutions to address these issues, such as enhanced collection models that go beyond the drop-off approach (depot model), and illegal dumping cost recovery models for local government, similar to the program implemented by producers in California.)*

The following is a summary of the questions and comments received. In distilling four hours of discussion and 7 written comments into the following table, TSBC's intent is to capture the essence of the input without distortion. Where possible, direct quotes are used to convey comments from one or more individuals and when multiple questions were received on the same subject, the theme of the question is addressed rather than restating all the questions. The Ministry has been provided with a copy of all questions asked both on the webinars and received by email.

Participant Questions and Comments	Source	TSBC Response or Actions
<b>Program Structure &amp; Costs</b>		
<p>The questions below all relate to Producers paying the costs of managing obligated materials and so have been grouped as the response provided by TSBC is intended to address them all.</p> <p>How does TSBC intend to address the new Ministry of Environment and Climate Change Strategy guidance document on “Producers Paying the Costs of Managing Obligated Materials” (April 24, 2018)?</p> <p>Around ministry guidance documents on producers managing costs of obligated materials, how are the rates being determined – are the rates for transportation arbitrary, how do we know if what’s being paid is enough?</p> <p>There are a lot of references to paying for the collection, but I don’t see any numbers allocated to that cost - we don’t get compensated for work we put in for tires. Can it be demonstrated that collection costs are being covered by TSBC? I’m looking for the methodology for the collection rates.</p> <p>About dirty tires or tires on rims – the only way to recover costs for these is to charge residents dropping off the tires, which would make it “not free” and would thus be out of compliance with the Regulation.</p> <p>We have to pay to transport tires from unmanned landfills to the main transfer station for collection.</p>	Local Govt	<p>TSBC has amended its Extended Producer Responsibility Plan (Plan) to specifically lay out the various parties involved in the program and which parties receive a financial incentive for what service. The Plan also provides a link to the program policy document on TSBC’s web site that shows the various rates paid. Please note that the term collection in the Plan refers to the transportation of the scrap tires from the generating location to the processing facility.</p> <p>In addition, the Plan has been amended to state TSBC’s intention to initiate a review in 2019 with the objective of gaining a better understanding of local government issues, current costs and revenue streams, and to help TSBC determine the strategy to remedy those issues.</p> <p>At its collection events TSBC will be conducting a survey with residents that drop off tires to better understand why the resident did not return the scrap tire when the new tire was purchased and why the resident chose to return the tire at a collection event and not to a R2R location. All of this information, and more, will help guide TSBC in its consumer awareness strategy.</p>
Within TSBC’s program, collectors do not receive a financial incentive. Thus, this is a	Local Govt	Collector is not a term used within the TSBC program, but it is understood what you are

Participant Questions and Comments	Source	TSBC Response or Actions
<p>scenario where a local government or private depot may receive tires (but is not a collector) and may also be charged by the program’s hauler to remove the tires. In order to recover costs, a local government or private depot may choose to charge consumers a drop-off fee to recycle tires</p>		<p>referring to. If a consumer chooses to return a scrap tire to a local government site or private depot, despite there being a R2R option, the fee assessed by the receiving location should be considered a convenience fee as a free option exists.</p>
<p>A question of clarification, when talking about debris and dirty tires, you’re talking about registered collectors like retailers (not landfills, transfer stations), right?</p>	<p>Local Govt</p>	<p>Retailers are not registered collectors but any reference to debris and dirty tires is generic to any location, so includes landfills and transfer stations.</p>
<p>Some landfills comment that they do not always receive collection services equivalent to those provided to retailers, specifically frequency and not being able to take all the tires at the time of collection.</p>	<p>Local Govt</p>	<p>The haulers give priority to retailers because retailers are the stewards of the program and typically have much less storage space, especially in the snow season when tire changeovers produce high volumes of scrap tires for collection. TSBC will work with the industry and the landfill managers to look for ways to collect all the program tires available for collection.</p>
<p>Why is there no commission or incentive for us as retailers? It all costs money to recycle these tires and we as retailers don't produce them, the manufacturers do.</p> <p>You incentive everyone but us. We collect, handle, store and strip in some cases.</p>	<p>Industry</p>	<p>Under the BC Recycling Regulation, the obligated party for tires is the Producer, defined specifically in the regulation as the tire retailer. TSBC acts as the agency to help the obligated party, the tire retailer, meet its obligations under the regulation.</p> <p>In Canada, the only province that pays the tire retailer a fee to handle the tires is Ontario. In Ontario the obligated party is the Brand Owner / First Importer. Note: the current Ontario program is winding down Dec 31, 2018 with specific details of how the obligated party will be managing / dispersing the funds under a new program still unclear.</p>
<p>Tires on rims to retailers are still an issue for some. Has there been any further</p>	<p>Industry</p>	<p>Under the BC Recycling Regulation, TSBC is responsible, on behalf of the Producers</p>

Participant Questions and Comments	Source	TSBC Response or Actions
<p>thought to help offset the cost? There is increased labour cost to strip tires. Techs are getting more pay than ever. In 32 years, I have not been paid for steel scrap. Washington State indicated 400 automotive facilities will close this year alone. BC is almost the same, putting more pressure on us. More scrap tires to less retailers will be the result.</p>		<p>(retailers) to collect, transport and process scrap tires, not including the metal rims. Some retailers may be charging the consumer and some haulers may be charging the retailer for de-rimming services they provide to get the tire to a condition where it can be processed.</p> <p>The industry organization that expressed this concern, a member of TSBC’s advisory committee, was invited to submit a request for a face to face meeting with TSBC. The request was received, and the two parties are planning to meet in July.</p>
<p>Wages and fuel costs climb continually. Is there a way to increase the frequency of when the transportation incentives are adjusted? I am wondering about the criteria and factors for these rates. There are lots of things up in the air more than ever now, with ICBC, insurance rates, etc.</p>	Industry	<p>The fuel is reviewed and adjusted quarterly, and the non-fuel component is adjusted every two years. TSBC asked for a written request from the haulers so the issue can be formally addressed. The request was received, and a review will be initiated shortly in consultation with representatives of the affected parties.</p>
<p>Does TSBC play a role in ensuring compliance (remittance of the tire eco fee) by retailers? If so, what’s being done?</p>	Industry	<p>Yes, compliance reviews are conducted throughout the year. Every retailer is subject to review regardless of size and location.</p>
<p><b>Consumer Access to Collection Facilities</b></p>		
<p>R2R locations are a subset of the over 1,900 retailers referenced above and are located in both rural and urban locations.” Can the Plan specify what percentage of the retailers are also R2R locations?</p> <p>R2Rs are a subset of the number of retailers. Can this be included in the context of the Plan rather than have it appear that you’re skirting that number?</p>	Local Govt	<p>The Plan has been amended to better explain the subset and to explicitly state the number and the percentage. The measure and target related to the geographic distribution has been amended also.</p>
<p>TSBC has stated it “will maintain annual contact with local governments through a</p>	Local Govt	<p>The Plan has been amended.</p>

Participant Questions and Comments	Source	TSBC Response or Actions
<p>survey of the BC Product Stewardship Council members to seek feedback on any known stockpiles or disposal issues for their residents and will also participate in the Council’s monthly webinars and present to the Council upon request.” Since TSBC cannot assure stakeholders of actions that the BC Product Stewardship Council may or may not take, suggest rewording to the following: “TSBC will maintain annual contact with local governments through a survey of the BC Product Stewardship Council members to seek feedback on any known stockpiles or disposal issues for their residents and will also participate in the Council’s monthly webinars and present to the Council other activities upon request.”</p>		
<p>Why do you believe that a resident would consider a trip to the landfill or transfer station as less convenient than a trip to a tire retailer to drop off their tires? Most customers do not come to our landfill with only tires, they come with other materials to dispose of or recycle. Our facility could be more convenient if it saves them an additional stop.</p>	<p>Local Govt</p>	<p>It is TSBC’s position that if a product is added to the Recycling Regulation, it is the agency’s responsibility / regulatory requirement to provide free consumer access for drop off. In this case that means a tire retailer, or a collection event, as there is a fee associated with dropping off tires at landfills. In addition, a landfill that accepts the tires, will likely seek compensation from TSBC to handle this material. If TSBC has provided a local drop off location and the consumer chooses instead to drop off tires at a landfill site, then this is of course their choice. The Plan has been amended to include TSBC’s intention to initiate a review in 2019 to understand better the issues expressed by local government for handling tires and to determine what actions are necessary to remedy those issues.</p>

Participant Questions and Comments	Source	TSBC Response or Actions
<b>Consumer Awareness</b>		
<p>Multiple local governments have reported the disposal in the garbage of painted tires, tires exposed to salt water, tires filled with foam, and tires filled with dirt. How does TSBC intend to address this topic? Will TSBC consider recycling these types of tires if there are future technological or financial developments?</p> <p>Why does the program not take responsibility for the tires that are program tires when sold, but have not been kept in good enough quality to recycle? Tires that have been used in salt water environments, painted or filled for example. The paint program accepts all paint cans, even if the paint is dry and cannot be recycled, they pay for the management of those materials as well.</p> <p>Our region has embarked on coastline cleanups and we have come across lots of Styrofoam filled tires – not sure where they’re being produced. Maybe companies are filling them for dock flotation. It takes lots of labour to open the tires and remove the Styrofoam to try to get these tires recycled. Any knowledge of who is producing these? Is there any way to charge higher eco-fees to those producing these?</p>	Local Govt	<p>TSBC is currently working with the local cement kiln to see if these tires can be used for energy recovery. Failing that as a solution, TSBC will work with any local government that receives these types of tires to determine if it makes economic and environmental sense to collect these tires for transportation to the recycling facility when the eventual disposal will be landfill.</p> <p>Eco fees are triggered on the sale of a new tire. Those filling the tires with Styrofoam are doing so after the tire has been used for its intended purpose.</p>
<b>Environmental Impacts</b>		
<p>“TSBC will also continue to manage collected products in accordance with the Pollution Prevention Hierarchy, whenever feasible and economically viable.” The</p>	Local Govt	<p>These terms are a direct quote from the Ministry of Environment’s BC Recycling Regulation Guidance document. TSBC understands this to mean that a steward can</p>

Participant Questions and Comments	Source	TSBC Response or Actions
criteria 'feasible' and 'economically viable' need to be fully defined in the Plan.		consider all factors associated with managing its products.
<p>Does TSBC collect data on the number of tires reused? If so, does TSBC report on the number of tires directed for reuse?</p> <p>Why doesn't the program track how many tires are picked up from collection sites or generators and resold or reused? From my site it can be as high as 20% of the tires that leave our site (per the paperwork from the driver) are not reported as being accepted by the processor (per the data from TSBC).</p>	Local Govt	<p>This information is not formally tracked by TSBC except for tires that are culled for reuse by the Processor. TSBC does not report on this number.</p> <p>The Ministry / Regulation does not require TSBC to report on 2R. However, TSBC does survey the haulers to get a sense of what is being pulled out of the system and perhaps more importantly for TSBC, what is being sold out of the country. Accurate tracking and auditable numbers would require a complete system and process change.</p>
<p>The volume of material going to waste, which results from the recycling process and tires that cannot be processed, has dropped significantly." Does this amount include the tires that TSBC has determined to be non-recyclable? (e.g., painted tires, tires exposed to salt water, etc...) How does TSBC report on non-recyclable tires?</p>	Local Govt	<p>This number only includes non-recyclable tires if these tires have been received at the Processor site.</p> <p>TSBC does participate in the joint SABC waste audits that provide information on the volumes of program tires that do end up in landfill. To date, the waste audits conducted show trace amounts of program tires entering the landfill. TSBC is hoping its commitment to conduct a survey with Regional Districts will help identify and quantify the non-recyclable tires that are not collected by TSBC.</p>
<p>It says the number of tires that can't be processed has dropped significantly. Are these tires that have been designated as "not recyclable" (e.g., dirty tires)?</p>	Local Govt	<p>No, these would have included (up to a few years ago) mostly Agricultural and Logger/Skidder tires which were cut up and landfilled. These can now be processed.</p>
<p>You said that in the Plan you're not able to express the amount of fibre or steel in the tires that go to TDF, correct?</p> <p>If you can't include them, is this explained in the Notes to your Report? Also, can the</p>	Industry	<p>Correct, we can make assumptions on the tire composition, but the numbers wouldn't be auditable. And yes, it will be explained in the Annual Report as to why we do not pull out the fibre and steel numbers from whole tires</p>

Participant Questions and Comments	Source	TSBC Response or Actions
<p>assumed steel and fibre numbers be included in the Notes, even though they aren't auditable?</p>		<p>sent for energy recovery, and what the estimated volume of those components are.</p>
<p><b>Performance Measures and Targets</b></p>		
<p>The difference between capture rate and recovery rate is confusing as “tires available for collection” is not clearly defined. Capture rate should either be more clearly defined or discontinued.</p> <p>Metro Vancouver staff are supportive of adopting this new performance measure &lt;new definition of Recovery Rate&gt;, as long as both the Capture Rate measure and prior version of Recovery Rate measure are discontinued.</p> <p>Recovery Rate for Tires = actual number of scrap tires collected in the reporting year / actual number of new tires sold 5 years prior to the reporting year...for the sake of clarity, does the program intend to use the “average” or “actual” number of new tires sold 5 years prior to the reporting year?</p>	<p>Local Govt</p>	<p>The Plan has been amended to remove any reference to capture rate. This approach had been used in the current Plan to help support the Recovery Rate measure and target. However, with a proposed amendment to the definition to Recovery Rate to make it a more meaningful measure, TSBC has no issue removing capture rate. The Plan will continue to report on retailer and generator satisfaction by way of the number of complaints – the lower the complaints, the higher their satisfaction with tire collections.</p> <p>The new Recovery Rate measure will use the actual number of new tires sold 5 years prior to the reporting period.</p>
<p>Have you run the numbers backwards (using the new calculation for Recovery Rate) to see how they come out? Will it satisfy the requirement to be closer to 100%?</p> <p>If there's an opportunity to re-define the calculation, let's make sure we're doing it the right way to be representative of the actual recovery – every opportunity should be explored.</p>	<p>Industry</p>	<p>Yes, the new definition has been applied to historical numbers and the results are much more reflective of program performance and show a higher Recovery Rate than under the current definition.</p> <p>TSBC worked with its auditors to arrive at the new definition for Recovery Rate. There are a lot of variables and many ways to look at this, and none will be precise. The proposed definition seems the most accurate, most meaningful and reflective of actual program performance.</p>

Participant Questions and Comments	Source	TSBC Response or Actions
<p>Why is the target so low on a per-regional district basis for R2R locations? Would it be better to express it as a % of available locations – or perhaps a different way to express this, since this target looks terrible.</p>	<p>Local Govt</p>	<p>TSBC has replaced the target of 2 per Regional District with a minimum of 25% of the retailers in the Regional District are R2R locations.</p>
<p>Is the overall true goal not simply that only 1% or less goes to landfill? Is 15% the real goal for TDF?</p>	<p>Industry</p>	<p>The Ministry requires that all stewards report on end fate for recycling, energy recovery and landfill, so TSBC must set a target for each. Yes, 15% is the real goal. TSBC would have to explain the reason and state actions to remedy the missed target to the Ministry if TDF goes over 15%. There have been target reductions for TDF since 2007.</p>
<p><b>Other</b></p>		
<p>Can you please clarify again the approach to addressing OTRs? Will TSBC accept these types of tires?</p> <p>Further to my question about OTRs, I wanted to provide some additional comments and context on the challenges we are currently experiencing: As a generator under TSBC, we have had a challenge disposing of end-of-life OTRs. We shear the OTRs into smaller sizes and make arrangements to have them transported to Western Rubber Products (Liberty Tire) Vancouver Island facility; however, it is very expensive. It would make sense to us to expand the inclusion list to accommodate all OTRs, not just logging truck OTRs, skidders, etc.</p>	<p>Industry</p>	<p>Some OTRs do fall under the program (e.g., Agricultural and Logger/Skidder) but for TSBC to accept other OTRs going forward, they would first need to be added to the Recycling Regulation by the Ministry. We do have a solution for these tires and there appears to be considerable stakeholder support – we’re hoping to make it happen in 2019 but our timeline is somewhat dictated by the Ministry. All affected stakeholders will be consulted as part of the process.</p> <p>For now, many retailers and generators, such as yourselves, have an arrangement directly with Western Rubber to collect these non-program tires, which are brought to their facility in Delta for processing.</p>