

Extended Producer Responsibility Plan – Tires

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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 & Climate Change Strategy (Ministry) and its successors 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 simply referred to as "tires" or "program tires" and are described in detail on the TSBC website. The program tire types (unrimmed in all cases) at the time of submitting the Plan 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 tires in the context of the approval criteria set forth in the Regulation. The Plan is expected to remain applicable for the foreseeable future.

Some tire types are explicitly excluded under Schedule 4, Section 2 (d) of the Regulation. Details of these tires, referred to as non-program tires for the purpose of this Plan, are also described in more detail on the TSBC website (see Section II e).

B. Appointment of an Agency

Operating under the British Columbia Societies Act, TSBC is a provincial not-for-profit society responsible for delivering 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 program 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 list of retailers (producers) represented by TSBC is maintained on the TSBC website.

The society is governed by a Board of Directors representing 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 a variety of stakeholder groups such as scrap tire generators, haulers, processors, manufacturers, local government and environmental organizations. 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 membership <u>list</u> and <u>terms</u> <u>of reference</u> are published on the TSBC website.

TSBC's structure and governance will be verified annually in the Annual Report to the Director, highlighting any changes from the previous report. The structure and governance information on the TSBC website will also be maintained accordingly.

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/or equipment with program tires and generate scrap tires.
- Return to Retailers (R2R): subset of retailers that have voluntarily agreed to accept up to four car tires, clean and off rim from the public during business hours.
- Collection Facilities: subset 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 scrap tires into products or 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 / equipment. Set by TSBC on behalf of producers (retailers) and published on the TSBC website, ADFs vary by tire type to compensate for the higher costs of collecting and processing of larger tires.

These fees are used in the operation of the tire recycling program in BC with no portion of the eco-fees collected directed to government. While the majority of funds (typically over 90%) represent 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. Examples include:

- A Manufacturing Incentive program to stimulate the use of BC recycled rubber by BC manufacturing companies and foster innovation and investment. 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.

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. For consumers who choose not to leave their old tires with the retailer, TSBC ensures access to other options.

TSBC's three primary options for collection service are discussed below and are followed by TSBC's approach to monitoring its recovery rates.



ACCESS TO COLLECTION

Collection Facilities – available when consumer purchases new tires

The majority of tire retailers take back one old tire for every new tire sold and arrange for haulers to collect and transport the tires to TSBC processors.

Return to Retailer Program – available year-round for consumers with "orphan" tires

Of the motorists who choose to take their old tires home rather than leaving them with the retailer when new tires are purchased, a small number ultimately take these "orphan" tires to a local government facility where they are held for collection by TSBC haulers.

Since receiving and managing orphan tires can be a logistical problem and burden for some local government facilities, the ongoing <u>Return to Retailer (R2R) program</u> is TSBC's preferred alternative for consumers:

- R2R provides consumers a free option to return orphan tires to participating retailers. R2R locations are a subset of TSBC retailers that have voluntarily agreed to offer this service.
- 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.

Tire Collection Events – scheduled events for "orphan" tires

Tire collection events are another convenient option to facilitate TSBC's capture of orphan tires. Event locations are selected based on where demand exists and/or upon request by a retailer or local government. No tires are refused at these events as TSBC recognizes that consumers could abandon them at a later time and place.

TSBC also seeks synergies to hold events in conjunction with other BC stewards and continues to participate in clean up events held by regional districts and municipalities. 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.

RECOVERY RATE

Recovery rate in the regulation "means the amount of product collected divided by the amount of product produced, expressed as a percentage". Due to a number of factors specific to tires, TSBC defines its Recovery Rate as the "actual number of scrap tires collected in the reporting year divided by the actual number of new tires sold 5 years prior to the reporting year, expressed as a percentage".



TSBC's recovery calculation for tires aligns with the average life of a tire and therefore establishes a meaningful measure of program performance. Although there is no precise way to determine the life of a tire due to tire design, driver habits, climate, road conditions, etc., most research indicates that its average life is between 4 to 6 years.

TSBC fully expects continuing fluctuations in its annual recovery rate given the factors affecting sales and the increased and ongoing use of winter tires that 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, with success measured mainly through consumer surveys conducted annually. In delivering its communications plan, TSBC adjusts its focus areas from year to year to implement campaigns (messages, delivery methods) based on changing needs, including those reported by program stakeholders.

As its core communication method, TSBC will continue to maintain an up-to-date <u>website</u> to promote program awareness. This includes providing the locations of all collection facilities, Return to Retailer locations and other collection services, and the eco-fee amounts that may be charged to consumers by retailers (producers) on the purchase of a new tire.

Beyond its website, TSBC will continue to deliver targeted campaigns in accordance with its communications plan. In the past, these have included encouraging the use of retailer collection options over local government facilities and promoting the purchase of products made using BC recycled rubber. Successful delivery methods for TSBC's information campaigns for consumers and/or local governments have included:

- Social media and digital media;
- <u>Videos</u> (e.g., showcasing the recycling process, and how the eco-fee is used to create new value from old tires);
- The RCBC & CWMA newsletters;
- TSBC-decaled trailers that travel throughout BC collecting tires;
- Media attention (from special events such as TSBC's Community Grant program); and
- Bus and radio ads.

TSBC also works with other stewardship agencies in joint initiatives to improve overall public awareness and interest in recycling. Historically, these Initiatives have included:



- <u>BCRecycles.ca</u> 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.
- <u>First Nations Recycling Initiative</u> jointly funded by many BC stewards to assist in our collective engagement with First Nations to develop or improve the collection of stewarded products.

Outcomes of TSBC's key campaigns will be confirmed in the Annual Report to the Director.

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 the retailer (producer) that may charge the consumer an eco-fee for each new tire sold.

On average, the majority of the revenues (~ 90%) are paid out in program incentives to collect, transport, and process scrap tires and to manufacture new products. The balance is used primarily to fund the administration of the program; TSBC's comprehensive communication programs; to provide Community Grants; and to cover additional tire collection costs where unique arrangements are made to address logistical or geographic challenges.

TSBC's fiscal responsibility includes regular reviews of the appropriateness of its transportation incentives and processing incentives in consultation with the affected parties.

REPORTING

TSBC's financial statements are audited annually by an independent third party. The statements are included in TSBC's Annual Report to the Director and published on the website. TSBC's non-financial information is also subject to an annual audit as required by the Ministry, and these results are also included as part of TSBC's Annual Report.

TSBC publishes its <u>program policies</u> which include the incentive rates for transporting and processing BC scrap tires.



RISK MANAGEMENT

TSBC has agreements with its processors 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.

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).

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 <u>Be Tire Smart</u> 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. In addition, most Medium Truck tires are retreaded at least once, extending the life of these tires.

While TSBC recognizes that some tires are directed away from the program for reuse, it does not actively participate or financially support these activities and as such, receives no related reporting.

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.

A tire has three key components: rubber, steel and fibre and all are directed to an end use with any waste directed to landfill.

Rubber:

- Crumb rubber granules of rubber with the steel and fibre 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.
- Mulch tire shreds with the steel removed.
 - The mulch is used to replace bark mulch and can be purchased by the public directly from many big box stores.

Steel: extracted from tires during the crumb and mulch processing and is recycled.

Fibre: extracted from tires during the crumb processing and directed to a cement kiln for energy recovery.

To ensure environmental outcomes, the processor is required to submit to TSBC the results of its annual environmental audit and, in accordance with program policy, post a financial security. The processor is also subject to third 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 its Manufacturing Incentive program.

ENERGY RECOVERY

The BC tires not directed to recycling are used as tire derived fuel (TDF) to recover the energy.

The policy of allowing some tires to be used as a fuel supplement is sound both economically and environmentally: TDF serves as a replacement for less environmentally friendly fossil fuels such as coke and coal. It is a practice followed by many other Canadian provincial programs for a variety of reasons, and TDF is a significant end use in both the US and Europe. Studies of TDF that focus on a life cycle approach are available on the TSBC website (e.g., by Aliapur and the Pembina Institute).

TDF usage at the cement plant in BC requires environmental permits, which are issued by Metro Vancouver as the delegated authority for the Ministry.

RESIDUAL MANAGEMENT

The volume of material directed to landfill, comprising waste from the recycling process and tires that cannot be processed, is extremely low.

The TSBC Annual Report to the Director reports the Residual volume together with the Recycle and Energy Recovery volumes.

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 its 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 the processor. 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. 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.

The performance measures and targets for the term of the Plan are identified in <u>Appendix I</u> and include the TSBC reporting commitments.

8. 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 — PRE-PLAN SUBMISSION

TBC

STAKEHOLDER CONSULTATION — PROGRAM OPERATIONS

TSBC connects with many of its stakeholders on an ongoing basis including:

 The TSBC Advisory Committee which convenes once a year and upon request by any of the members. The committee is made up of a broad reach of stakeholder groups such as



scrap tire generators, haulers, processors, manufacturers, local government and environmental organizations. 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 for TSBC's annual survey and connecting in person at conferences either informally or at a scheduled session arranged by the conference host.
- Attendance at community events throughout the province which enable one on one dialogue with the public.
- Partnership meetings with key service providers which 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 which provides them with key updates / messaging.
- Quarterly dialogue between TSBC member organizations and the director who 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 which enables face to face dialogue with other stakeholders to specifically address any issues.



Appendix I Performance Measures, Targets and Reporting Commitments

Term: 2022, 2023, 2024, 2025 and 2026

TSBC commits to achieving the following annual targets and reporting commitments. 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.

Table 1.

	Metric	Reporting Commitment / Target	Subject to 3 rd party audit				
Products Sold and Collected							
1	Total number of tires sold in the Reporting Year	Reported: in Annual Report Target: N/A	Yes				
2	Total number of tires collected in the Reporting Year	Reported: in Annual Report Target: N/A	Yes				
3	Recovery Rate (Total # tires collected in Reporting Year / Total # tires sold 5 years prior to Reporting Year)	Reported: in Annual Report Target: 90%	Yes				
4	Total metric tonnes of tires collected in each Regional District in the Reporting Year	Reported: in Annual Report Target: N/A	No				
5	Results of Stewardship Agencies of BC waste audits and any local government waste audits if data is shared with / made available directly to TSBC	Reported: in Annual Report Target: N/A	No				



Metric		Reporting Commitment / Target			Subject to 3 rd party audit		
Mar	Management of Environmental Impacts						
6	End fate management of materials - expressed as a % of the total volumes processed and	Reported: in Annual Report Target:			Yes		
	shipped in the Reporting Year		Recycling	Energy Recovery	Landfill		
	Note: on average, rubber accounts for 70% of the total	Rubber	2022 - 23: 88% 2024 - 26: 90%	2022 - 23: 11% 2024 - 26: 9%	1%		
	weight of the tire material with 15% steel and 15% fibre	Steel	100%				
		Fibre		98%	2%		
7	Efforts taken to reduce environmental impacts, to increase reusability and recyclability	Reported: in Annual Report Target: N/A			No		
Collections & Accessibility							
8	Number and location of collection facilities – these are "registered retailers" that will take back a scrap tire from the consumer at the time a new tire is sold	Reported: in Annual Report Target: 1,850			Yes		
9	a) Total number of registered retailers in BC that take back "orphan" tires (Return to Retailers - R2Rs) a) A minimum of 25% of "registered retailers"				Yes		
	 b) Total number of R2Rs in each Regional District For details, see section 2, Access to Collection – R2R Program 	b) At least 25% of "registered retailers" in each Regional District are R2R locations					
10	Number of TSBC tire collection events, including date, location, and number of tires collected	Reported: in Annual Report Target: N/A			No		



Metric		Reporting Commitment / Target	Subject to 3 rd party audit			
11	Number of legitimate collection complaints	Reported: in Annual Report Target: N/A	No			
Con	Consumer Education & Awareness					
12	a) Awareness of where to take scrap tires for safe disposal	Reported: in Annual Report Target: a) 2022 & 2023: 50% 2024 & 2025: 55%	Yes			
	b) Awareness of where to go to find information on safe disposal locations	2026: 60% b) 2022 & 2023: 65% 2024 & 2025: 70% 2026: 75%				
13	Description of educational materials and educational strategies used	Reported: in Annual Report Target: N/A	No			