



BC Used Oil
Management Association

Extended Producer Responsibility Plan

*Lubricating Oil, Oil Filter Products, Antifreeze Products,
Empty Oil Containers*

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DRAFT FOR CONSULTATION

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Contents

1 Acronyms	1
2 Overview	1
3 Legal Requirements	1
3.1 Products Covered under the Plan	2
4 Governance and Financing	2
4.1 Governance.....	2
4.2 Bylaws.....	2
4.3 Annual General Meeting and Annual Reporting	2
4.4 Program Financing	3
5 Product Available for Collection	3
6 Collection	4
6.1 Commercial Collection (~95%).....	4
6.2 Consumer Collection (~5%)	4
6.2.1 BCUOMA Recycling Centers	5
6.2.2 Community Collection Events	5
7 Transportation and Processing	6
7.1 Incentive System for Province-wide Collection Coverage.....	6
7.2 Registered Collectors and Processors.....	6
7.3 Product Collection Targets	6
7.4 Product Management	7
7.5 Landfill Audits.....	8
8 Paying the Cost of Collection and Management	8
8.1 Return Collection Facility Costs	10
8.2 Commercial Collection Costs	11
8.3 Dispute Resolution.....	11
9 Program Marketing and Consumer Awareness	11
9.1 Consumer Awareness	12
10 Performance Measures and Targets	12
11 Consultations on Plan Implementation and Operation	12

Supplementary Documents:

- [Performance Measures, Targets and Reporting Commitments](#)
- [Consultation Process, Feedback and Responses](#)
- [Product Design and Use Trends](#)

1 Acronyms

The following acronyms are commonly used throughout this document.

ASTM	American Society for Testing Materials
BCUOMA	British Columbia Used Oil Management Association
EHC	Environmental Handling Charge
EPR	Extended Producer Responsibility
RCF	Return Collection Facility
RI	Return Incentive
UOMA	Used Oil Management Associations of Canada

2 Overview

The British Columbia Used Oil Management Association is a not-for-profit society formed under the British Columbia Society Act in 2003. BCUOMA's mandate is to ensure the responsible collection and management of the used oil, antifreeze, filters and containers required under the [BC Recycling Regulation](#).

Since its inception, BCUOMA has improved collection and recycling performance in all regions of the province – and across all product categories. The commitment to continuous improvement remains a major focus in this EPR Plan.

BCUOMA has operated a province-wide collection and recycling program for used oil, oil filters and used oil containers since August 2003 and for antifreeze since 2011. This collection program includes the do-it-yourself market as well as the commercial and industrial markets.

The BCUOMA program is funded by its producer members through an EHC on the sale or commercial use of new products. Each BCUOMA member determines if and how it will recover its costs for the BCUOMA charge. BCUOMA produces audited annual financial statements outlining the fee revenue and program expenditures.

3 Legal Requirements

The [Recycling Regulation](#), replacing the Post-Consumer Residual Stewardship Program Regulation, was brought into law on October 7, 2004. Under authority of the [Environmental Management Act](#), the regulation sets out the requirements for EPR in British Columbia. BCUOMA represents the producers of designated products appointed to carry out their legal obligations in accordance with the approved plan. This EPR Plan is submitted in conformity with Section 4 of the regulation.

The list of members that have appointed BCUOMA to carry out the duties of the producer under Part 2 of the regulation is available [here](#) on the BCUOMA website.

3.1 Products Covered under the Plan

Schedule 2 of the Recycling Regulation defines the products managed under each of the categories of used lubricating oil, antifreeze, oil filters and oil containers.

4 Governance and Financing

BCUOMA members, through networks of both company-owned and independently-owned retail and wholesale facilities, bring lubricating oil, automotive antifreeze and filters into the province for sale or distribution. Retail facilities range from self-serve gas bars to mass merchandise marketers, quick lube shops, radiator shops, and automotive, farm, marine and commercial equipment dealers. Wholesale lubricating oil facilities comprise both branded bulk plants, and independently-owned and brand owner warehouses.

Oil is sold in containers as small as less than a one-litre bottle, and as large as 205-litre drums, 1,600-litre “lube cubes”, 30,000-litre tank trucks and 50,000-litre rail cars. Automotive antifreeze is mainly sold in 4 to 5-litre containers with very little, if any, sold in containers larger than the tote size (1,000 litres).

4.1 Governance

A multi-sector [Board of Directors](#) manages BCUOMA, with representatives from the manufacturing, retail, local government and public sectors. The Chief Executive Officer reports to the Board and is responsible for operations management, financial management, communications, staff management and general administrative oversight. BCUOMA also works closely with other used oil management associations in Canada to harmonise operations and minimize costs.

4.2 Bylaws

[BCUOMA bylaws](#) outline how the organization will operate. The bylaws are available on the BCUOMA website in the members’ section.

4.3 Annual General Meeting and Annual Reporting

BCUOMA holds an Annual General Meeting (AGM) that is open to the public to attend. At the meeting, BCUOMA members vote on items such as Director appointments, bylaw changes and fees. The members also use the AGM to select an independent financial auditor for the next year.

An [Annual Report](#) is released to the members and the public at the AGM. The report outlines the financial and operational performance of BCUOMA over the last year and includes an Audited Financial Statement and an Independent Non-financial Information Review Report. The report is submitted to the Ministry of Environment for review against the requirements in the [Recycling Regulation](#) and approved EPR Plan.

4.4 Program Financing

BCUOMA collects EHCs from its members. The EHCs are applied at the point that the member sells the product. Varying by product type, the EHCs are set by the Board of Directors and approved by the members. The fee may or may not be passed on to the consumer as a separate charge by the member or downstream seller.

5 Product Available for Collection

BCUOMA uses the best available science to determine the amount of each type of material available to collect, often partnering with other used oil associations in Canada ([UOMA](#)) to ensure there is consistency at a national level.

Lubricating Oil

- A portion of the oil put into vehicles is consumed in use and not available for collection. Oil that is consumed is typically burned off during vehicle operation, lost in small leaks or drips, or lost in a vehicle accident or engine malfunction. BCUOMA periodically conducts “Consumed in Use” studies to inform/update its formula to estimate the volume of oil available for collection.
- Another factor impacting the used oil available for collection in BC is re-purposing by the owners. A BCUOMA study identified that significant unaccounted volumes have been directed to purposes such as burner fuel, explosive manufacturing, cement/lime manufacturing and fish/pleasure boats. “Unaccounted Used Oil” studies are also completed periodically to update the available for collection formula.

Antifreeze

- Antifreeze is sold in concentrated and diluted form. BCUOMA tracks the quantities of each form sold to calculate the volume sold and available for collection.
- BCUOMA has been operating an antifreeze program since 2011, and other provinces have since started programs. Although fewer reports and studies are available for user stage analysis of antifreeze than for oil, the product can be lost in use through leaks, vehicle accidents, engine malfunctions (e.g., hose breaks) and some re-purposing for other uses that are not part of the BCUOMA program. It can be assumed that most, if not all, of the antifreeze sold off the retail shelf is “top-up” antifreeze that is replacing antifreeze lost in use and not available for collection. BCUOMA has engaged with other provincial programs to study the estimated “Antifreeze Available for Collection” and is also conducting its own studies.

Oil Filters

- It is assumed that all oil filters sold into the marketplace are available for collection. Small quantities of used filters are lost as damaged in use or lost in vehicle accidents but estimates of these quantities are not currently deducted from the BCUOMA estimates of oil filters available for collection.

Oil Containers

- It is assumed that all oil containers sold into the marketplace are available for collection. BCUOMA’s varying fee approach will continue to reflect the complexity and cost to manage each product type.

BCUOMA commits to the continuing completion of “available for recycling” type studies (Oil Consumed in Use, Unaccounted Used Oil, Antifreeze Available for Collection, etc.) and will post them in the [Resources & Reports](#) section of the BCUOMA website. Further, the percentages from the study year for the Unaccounted Used Oil study will be used in baseline development and annual reporting.

6 Collection

Of all the oil and antifreeze collected in BC, most (approximately 95%) is collected from commercial facilities such as service stations, lube shops and large commercial operations (e.g., mining, forestry and agriculture). These commercial facilities are typically serviced by a BCUOMA [Registered Collector](#) that has a service agreement with that facility. Approximately 5% of the oil and antifreeze collected in BC comes from consumers that change their own oil/antifreeze or small commercial operators that choose to use the free consumer drop-off system.

6.1 Commercial Collection (~95%)

The commercial collection system includes roughly 4,000 generators around the province. This system provides the cleanest material and leads to the best environmental outcome for that material. In a commercial setting, oil and antifreeze recovered from a personal or commercial vehicle can be stored and kept clean and free of contamination such as water, gasoline and solids. Oil/antifreeze that is kept clean is more likely to be processed and re-refined as new lubricating oil or antifreeze.

Commercial facilities choose the Registered Collector with which they want to enter into a service agreement. These agreements often outline the collection frequency, collection requirements and any payments or charges. These agreements are between the facility and the collector and do not involve BCUOMA, although BCUOMA does provide financial incentives to collectors and processors based on collection volumes and locations. The collectors have supply arrangements with processors that manage used oil, antifreeze, filters and containers.

Some small commercial operations choose to use the consumer recycling system and transport their used oil, antifreeze, filters and containers to a Registered RCF. Access to a RCF is therefore significantly less important for commercial collection than for consumer collection. While BCUOMA does not put volume restrictions on drop-offs, the recycling facilities typically do. If a large volume will be dropped off, it is recommended that the RCF be contacted in advance to ensure they have the capacity to accept it.

Given that the vast majority of BCUOMA products are collected through the commercial system, product recovery (see [section 7.3](#)) is considered the measure that best reflects BCUOMA's performance in this stream.

6.2 Consumer Collection (~5%)

For consumers who choose to change their own oil or antifreeze, BCUOMA has a province-wide network of registered recycling centers that provide consumers with free access for recycling. These

RCFs are conveniently located at facilities that accept a variety of stewardship program products such as privately operated multi-material depots (bottle depots), local government operated recycling and landfill sites, eco depots, and retail and industrial sites.

In addition, there are over 1,000 professional lube shops located across BC where consumers can take their vehicle to have their oil, oil filter and antifreeze changed. These facilities are located to coincide with the demand. Materials collected at professional lube shops are taken directly from the vehicle and placed in storage infrastructure. These materials are picked up by a Registered Collector on a frequent basis and are less contaminated, making them more suitable for re-refining.

Given the low product volumes represented by consumer collection, accessibility to recycling is considered the measure that best reflects BCUOMA's performance measure for this stream. BCUOMA has completed multiple studies to analyze the collection network, measure accessibility, and customize an accessibility approach that supports the user types. The past work done by BCUOMA to understand and develop a return network to service its specific user needs is unmatched by any program in Canada. BCUOMA's customized accessibility approach will be applied, providing an enhanced and aspirational level of service across BC.

In its [Annual Report](#), BCUOMA will report accessibility performance against its customized levels, addressing any service gaps (e.g., remote areas) as determined appropriate.

6.2.1 BCUOMA Recycling Centers

In recent years, BCUOMA made some changes to its [Consumer Collection Program](#) to improve the consumer experience and environmental performance at the facilities. BCUOMA invested in new infrastructure such as modified sea containers with spill containment, collection tanks and consumer friendly signage. BCUOMA also increased the RI rate provided to facilities for the litres of consumer oil/antifreeze collected. Some retailers that were being inundated with late night drop offs, mystery materials and other products not part of the program (e.g., paint, tires, couches) have chosen to opt out of the BCUOMA program.

BCUOMA offers [Infrastructure Grants](#) to registered local governments, private businesses, non-profit organizations, and other sectors that require additional infrastructure for their public RCFs.

A current list of RCFs by municipality is provided in each [Annual Report](#) and the search tool on the BCUOMA website. BCUOMA will also report performance against its customized minimum accessibility standard for each community.

6.2.2 Community Collection Events

BCUOMA provides financial support for community collection events operated by Regional Districts, municipalities, and community groups. The events are often multi-material events that are supported by other stewardship programs and provide residents with an opportunity to recycle several products at the same location. Organizations are invited to apply for the BCUOMA [Round Up Grant](#), offered with the goal to help increase the number of free collections events available to residents across BC.

These events are geared to communities that are interested in having an event in place of a facility, or as a consumer awareness initiative in communities that already meet the service level. BCUOMA's support of collection events is supplemental or community-optional to meeting BCUOMA's accessibility standard.

Each BCUOMA [Annual Report](#) will include a reporting of the community collection events supported by grants. The Annual Report will also describe the frequency and use of other collection methods used as alternatives to a physical location (e.g., mobile collections) in providing collection services to consumers.

7 Transportation and Processing

7.1 Incentive System for Province-wide Collection Coverage

BCUOMA has designated multiple collection zones across BC. Used oil, oil filters, antifreeze and oil containers are regularly picked up from roughly 4,000 generators by Registered Collectors. Collectors are required to ship the collected materials to a BCUOMA Registered Processor for an approved end use. Any approved end use must be environmentally sound and be in compliance with environmental requirements.

A map of the [provincial zones](#) and additional collection information is available on the BCUOMA website.

7.2 Registered Collectors and Processors

BCUOMA registers the collectors and processors before they are eligible to participate in the program. Under the [Hazardous Waste Regulation](#), used oil, automotive antifreeze and oil filters are considered hazardous wastes. Containers also often contain a certain amount of new oil or antifreeze, and measures are required to ensure that proper equipment and vehicles are used for their transport. As a result, it is important that any collectors and processors handling used oil and antifreeze materials are doing so in compliance with the required environmental standards.

BCUOMA requires that, as a condition of registration and every two years thereafter, each collector and processor engage an independent third-party qualified professional to conduct an environmental audit of their operations and state in a Letter of Regulatory Compliance that the operation is in substantial compliance with all applicable provincial and federal environmental legislation and regulations. In addition, the collector and processor must submit a current Business Licence. If either of these two conditions is not met, BCUOMA registration will not occur.

7.3 Product Collection Targets

As BCUOMA is a mature program, collection is projected to remain stable, consistent, and notably higher than the 75% identified in the Recycling Regulation.

For reporting purposes, BCUOMA calculates product recovery as follows:

Product Sold – Consumed in Use – Re-purposed = Available for Collection

Collected / Available for Collection = Capture Rate

BCUOMA will demonstrate continuous improvement by further improving the precision of the measurements used in its methodology to determine the products unavailable for collection, and by continuing to investigate where uncollected material may be re-purposed by the user or disposed.

The total sales of each product, the products available for collection, and the product capture rates against provincial targets will be reported in BCUOMA's [Annual Report](#). The oil, antifreeze, filters and containers collected in a calendar year by Regional District/by collection stream will also be reported.

7.4 Product Management

The following definitions will be used to report the management of BCUOMA program materials:

Program Material	PPH	Description
Used Oil	Reuse	Lubricating oil begins its product lifecycle by entering a refinery and being refined for a lubricating purpose based on the specific chemical qualities of the crude oil input and the demand for lubricating products in the marketplace. Used lubricating oil that is directed to a market that, either with or without re-refining, will replace a product that would have been an output of the original crude oil refining process will be considered reuse. The product must meet the ASTM or equivalent standard for use as a lubricating oil.
	Recycle	Used oil that is not directed to a reuse market above but is used in the production of a new product and displaces another input to product will be considered recycled. This includes directing used oil to approved burner units, the production of asphalt, use as a fuel in cement kilns that meet applicable product standards or government standards for use such as the Hazardous Waste Regulation.
	Recovery of Energy	Unrefined or untreated used oil that is not manufactured for sale at an industry standard, but instead is used for burning.
Antifreeze	Reuse	Antifreeze that is directly, or after re-processing, used as an antifreeze product is considered reused. The product must meet the ASTM standard for sale as a coolant in automotive engines.
	Recycle	Antifreeze that is not directed to a reuse market above but is used in the production of a new product and displaces another input to product will be considered recycled. The product must meet the ASTM standard for sale as an approved industrial grade coolant.
	Recovery of Energy	Antifreeze that is directed to energy recovery as an alternative fuel source would meet this definition. No such uses are currently identified as available.

Program Material	PPH	Description
Filters	Reuse	A filter that can be used as a filter directly or after cleaning and re-processing is considered reused. No such uses are currently identified as available.
	Recycle	Filters that are not directed to a reuse market above but can be processed as an input into the production of a new product and displaces another input to product will be considered recycled. Filters that are comprised of steel and plastic currently meet this definition.
	Recovery of Energy	Filters that are not recycled but are directed to energy recovery as an alternative fuel source as per applicable government standards meet this definition.
Oil Containers	Reuse	Reducing the amount generated. Containers that can be re-used directly or after cleaning and re-processing as a container for sale of automotive product fluids are considered reused. BCUOMA will report changes in sales.
	Recycle	Containers that are not directed to a reuse market above but can be processed as an input into the production of a new product and displaces another input will be considered recycled. Plastic and metal containers that enter plastic and metal recycling processes meet this definition.
	Energy Recovery	Containers that are not recycled but are directed to energy recovery as an alternative fuel source as per applicable government standards meet this definition.

In its [Annual Report](#), BCUOMA will report on how collected products were managed in accordance with these definitions, together with industry’s efforts to reduce the environmental impacts of these products.

7.5 Landfill Audits

BCUOMA participates in landfill waste audits with local governments and other stewardship agencies on an annual or semi-annual basis depending on local government scheduling. BCUOMA will continue to work with local governments on future audits and commits to reporting on audit findings that are relevant to BCUOMA’s program materials.

8 Paying the Cost of Collection and Management

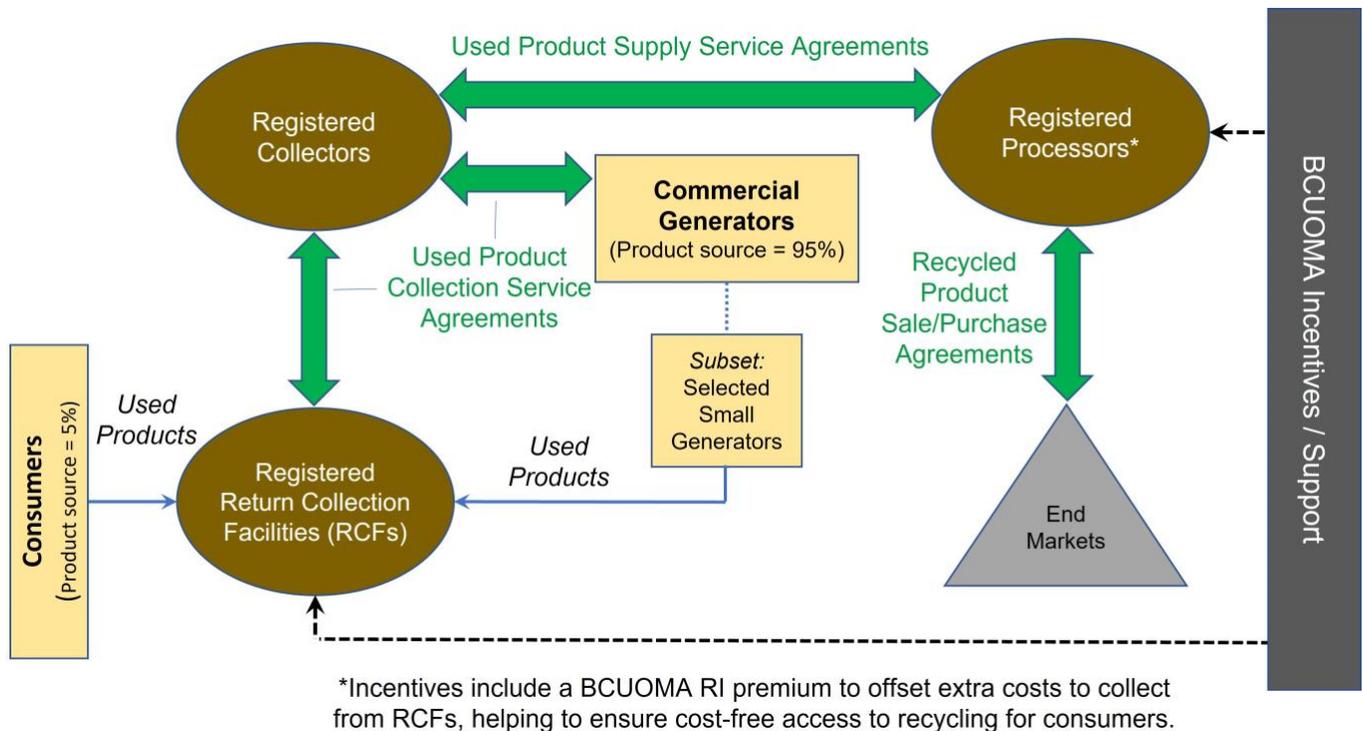
BCUOMA pays the cost of collection and management of products by providing incentives to the marketplace to drive the desired outcomes. The registered participants own and have the ability to market the material, thereby being in control of their financial outcomes. This incentive system rewards facilities that collect more material. The system differs significantly from the payment systems used by some stewardship programs that set fixed rates for program service providers and retains ownership of the material, thereby pre-determining a program participant’s financial outcome.

Most residents and businesses have their vehicles serviced commercially (e.g., service station, lube shop) and negotiate service terms with the commercial operation. For consumers that choose to service

their own vehicles, the used oil and antifreeze can be returned at a Registered RCF at no cost to the consumer.

RCFs receive a financial incentive from BCUOMA to collect oil and antifreeze from consumers. BCUOMA also pays a RI Premium to cover the additional costs to Registered Collectors to service RCFs and ensure no-cost drop off locations for consumers. BCUOMA also supplements the commercial arrangement with RCFs by providing [infrastructure grants](#) and marketing support such as [signage](#). RCFs can be retailers, depots, local governments or other business that choose to enter into an agreement with BCUOMA and to separately enter into a service agreement with a BCUOMA Registered Collector.

BCUOMA provides an incentive to Registered Processors and Collectors based on the material type and the zones in the Province (see [section 7.1](#)). As noted in this section’s introduction, the processors own the material they collect or receive from collectors and market this material for their own benefit. The incentives provided by BCUOMA are actively managed and reviewed by the association to ensure the desired outcomes are being achieved. The following diagram illustrates BCUOMA’s open market approach, which allows the program’s key participants to determine their financial outcomes.



Local governments can choose to register as a RCF with BCUOMA and follow the same rules and procedures as private facilities.

The BCUOMA Program Financial Framework is provided below.

Cost Component	Cost Elements	BCUOMA Compensation – Commercial Operators	BCUOMA Compensation – RCF Operators	Minimum Review Timelines
Generator Site Costs	Labour Space Equipment Materials Other	Considered to be a cost of business for all commercial operators who derive used oil products as a by-product of their normal business operations	Per litre RCF incentive for receiving used oil products at no cost to consumers Infrastructure grants available to RCFs support improved facility standards for RCF operators and collectors	Biennially - minimum
Transportation and Management	Fuel Labour Insurance Equipment Overhead costs Market price (cost) Other	Graduated return incentives based on defined collection zones	N/A as RCFs are not responsible for transport and management	Biennially - minimum
Product Processing Costs / Revenue	Processor charges / payments to reflect market value of the products received	Considered to be a cost / revenue source of business for all commercial operators who derive used oil products as a by-product of their normal business operations	Per litre incentive paid to Processors for collecting used oil products at RCF locations with no additional pick-up charges to RCF operators. RCF operators may benefit from revenue opportunities, where negotiated with collectors and/or processors	Biennially - minimum

8.1 Return Collection Facility Costs

To inform the Financial Framework under which the BCUOMA program operates (see 8 above), in 2019 BCUOMA joined the Canadian Electrical Stewardship Association (CESA)-led project along with Call2Recycle, the Outdoor Power Equipment Institute of Canada (OPEIC), and the Canadian Wireless Telecommunications Association (CWTA) that invited depot operators to present information about the costs associated with the collecting and handling of the respective materials at their facilities. This effort culminated in a report dated August 30, 2019 with the following results:

- 221 depots were invited to provide information for this project in the form of a survey response and where applicable a follow-up interview. An average of 2.95 contacts per depot were made to initiate engagement in the project. 5 completed and 27 partially completed surveys were received.

- The overall report and the associated time and motion study concluded that due to low voluntary participation by the depots, the sample size was inadequate to be considered statistically valid and the costing information received was insufficient to form a basis for estimating the actual and specific costs of managing BCUOMA related materials at depots. However, the study did provide a general conceptual activity-based costing model that was used to inform and validate the BCUOMA program Financial Framework.

8.2 Commercial Collection Costs

In 2019, BCUOMA initiated a review of the RI program that provides incentives to registered program participants. The study was led by MNP and included surveys and interviews of registrants, and an analysis of the RI setting methodology. The results of the study were incorporated into the Financial Framework in 8 above.

8.3 Dispute Resolution

BCUOMA requires collectors, processors and collection facilities to register, accept terms and conditions, and follow the requirements to receive payment in the form of a financial incentive from BCUOMA. BCUOMA's requirements including [manuals, registration forms and applications](#) are posted on its website.

If there is a dispute between BCUOMA and a service provider or stakeholder, the individual consumer or company can take the following actions:

1. Bring the dispute to the Chief Executive Officer;
2. If the matter is not resolved at the previous level, service providers can use normal commercial legal procedures such as BC's [Arbitration Act](#).

BCUOMA's incentive system supports the competitive commercial market. BCUOMA has had very few disputes, if any, that would require a more complex dispute resolution system to produce a successful result. More complex processes are likely needed in systems where the financial outcomes of participants are pre-determined which, as highlighted earlier, is not the case with BCUOMA.

9 Program Marketing and Consumer Awareness

BCUOMA will continue to ensure that timely and relevant information is available to the public on its [website](#). BCUOMA will also use other channels such as traditional media (TV/radio), outdoor media (bus ads) and digital and social media advertising as a means of spreading the message to the public on used oil and antifreeze material recycling. BCUOMA also maintains social media accounts on the most widely used platforms to inform the public of the program.

9.1 Consumer Awareness

As BCUOMA is largely a commercial program where a majority of the product is collected from commercial facilities, “general” consumer awareness as a performance measure is not as critical as it is for other, more consumer-oriented, products and programs.

The primary focus of BCUOMA’s Communications Strategy will continue to be on segmenting and micro-targeting the audience to ensure greater reach and impact for BCUOMA’s message. Using a combination of social media audience and engagement analysis along with industry and public surveys, BCUOMA will determine key target markets and develop strategies for each.

BCUOMA is committed to improving consumer awareness among those consumers who change their own oil or antifreeze or require drop off at consumer RCFs. While identifying this user group can be difficult, BCUOMA is confident that its Communications Strategy can develop a reliable and accurate profile to conduct additional research/surveys and gather key information on RCF users. To this end, BCUOMA’s media mix will be expanded to include trade media advertising in industries such as logging, farming and transportation. Opportunities to reach automotive enthusiasts through sponsorships and advertising at automotive racetracks and Show & Shine events will also be explored. BCUOMA will look for opportunities to work with municipalities and Regional Districts to capture information from users at Community Collection Events and seek opportunities to share recycling tips and RCF information at point of purchase.

BCUOMA’s progress on identifying RCF users will be reported in the [Annual Report](#). In addition to reporting “general” consumer awareness of the program against target, the Annual Report will report the results against targets for consumers that have materials to return to an RCF in the areas of program awareness, location awareness, and information source awareness.

10 Performance Measures and Targets

The Performance Measures, Targets and Reporting Commitments for the term of the Plan can be found [here](#).

11 Consultations on Plan Implementation and Operation

The Consultation Process and Attendance and the Summary of Consultation Feedback for the term of the Plan can be found [here](#).