













Canadian Stewardship Services Alliance



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CSSA Review and Outlook

The 2016 Annual Steward Meeting marks the fourth year of bringing together stewards to consider the progress of packaging and printed paper stewardship programs across the county, while providing a preview of budgets and fees. Surveys from past meetings confirm that stewards believe the meeting and pre-read are productive and useful for keeping them informed about the programs.

Recent Accomplishments

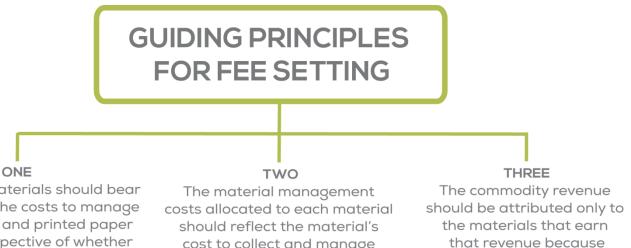
1. A new fee-setting methodology

The major achievement of the past 12 months is the development of a new stewardship fee methodology, known as the Four-Step Fee Methodology. Developed for stewards by stewards, the new methodology is supported by the steward community and has been approved by the Boards of Directors of all four stewardship organizations. For 2017 fees, the Four-Step Fee Methodology replaces the threefactor formula for all but Stewardship Ontario's program, where Ministerial approval is required and pending.

The Four-Step Fee Methodology is a clear demonstration of what can be accomplished when stewards assume a leadership role to advance harmonization within CSSA's national shared services framework. The new fee methodology's key features include:

- stewards' perspectives and interests reflected
- fair and principle-based
- all materials contribute to pay for the system, even if they are not currently collected
- fair allocation of costs and revenues to each material in a manner that reflects its impact on the recycling system.

The methodology and the principles that support it are depicted here:

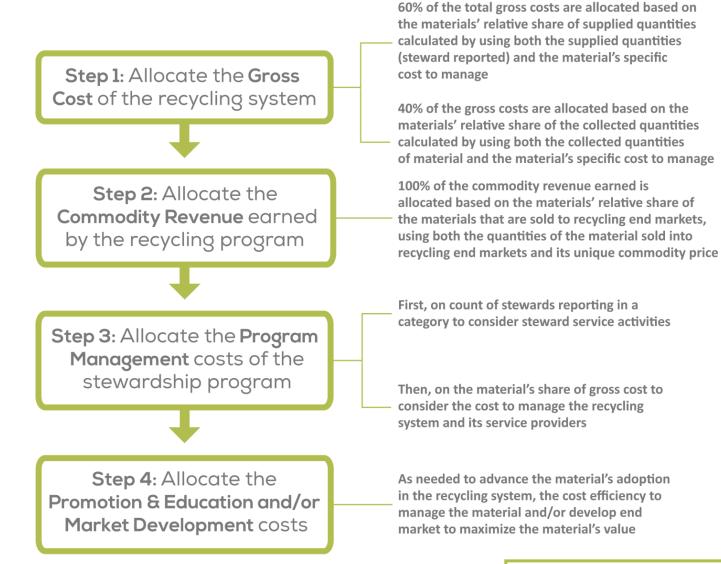


materials that are marketed have value and should benefit from that earned revenue.

All obligated materials should bear a fair share of the costs to manage the packaging and printed paper program, irrespective of whether a material is collected because all obligated stewards who put obligated materials into the marketplace should contribute to the recycling system.

The material management costs allocated to each material should reflect the material's cost to collect and manage it in the recycling system because a material's unique characteristics can drive costs in distinctive ways.





CSSA acknowledges and commends the hard work and dedication of the stewards who worked for almost a year to make the fee methodology project a success. The Steward Consultation Committee (SCC) collectively represented all materials and all steward perspectives (logos of companies represented in sidebar). Together, SCC members pay over 30% of the total fees of the printed paper and packaging programs in British Columbia, Saskatchewan, Manitoba and Ontario and represent from 20% to 50% of materials supplied in each material group.

2. New and improved reporting tools for stewards New this year, we developed Sector-Specific and Best Practice Reporting Tip Sheets for stewards tailored to address the most common questions and reporting issues. We also made significant improvements to the Steward Guidebook to provide more details and





examples about what businesses and materials are obligated in each stewardship program. These tools were available early in the year to assist stewards in preparing their 2016 reports. We asked for feedback on these new resources and several of you let us know the tip sheets were very helpful when filing your reports.

3. Published program steward lists

To make it easier for "first importer" stewards to identify which brands to omit from their reports, we created a list of resident and voluntary stewards for each program that included a Change Log to easily see changes from the previous year. As always, stewards are encouraged to share any ideas that can help meet regulatory obligations and improve engagement with us.

4. Evolved governance

Following a comprehensive review undertaken by the CSSA Board in 2015 and 2016, the governance structure has evolved to reflect stewards' desire for more involvement and decision-making with stewardship organizations at the provincial level. MMBC and MMSW are now autonomous organizations with independent Boards of Directors. CSSA remains a not-for-profit dedicated to providing shared services to packaging and printed paper programs, including steward and service provider reporting.

Benefits of Shared Services Continue to Accrue

Stewards continue to benefit from the one-stop convenience of reporting for multiple programs through our central WeRecycle Portal, supported by a national call centre staffed by knowledgeable representatives. Assistance is available during business hours in multiple time zones via a single phone number (1-888-980-9549) or email (werecycle@cssalliance.ca). With four steward organizations sharing the costs of program administrative services, the savings to stewards continue to accrue at a rate of about \$3.6 million each year. Since CSSA first began offering services in 2013, nearly \$12 million of cost savings have been achieved. But it doesn't stop there. In addition to the administrative and overhead savings, costs are avoided because we are able to build on existing technology, business process infrastructure, legal frameworks and human resources across all our client stewardship organizations. This ability scales to include new programs, avoiding millions in start-up costs.

New Harmonization Initiatives on the Horizon

As the service provider to Stewardship Ontario, MMSM, MMSW and MMBC, CSSA is in a unique position to identify opportunities of common interest to these programs that will advance our stewards' harmonization objectives. Two priority projects will be the focus of this effort over the next year.

The first is **harmonized program performance metrics**. Exploratory work on this project is underway and the goal is to have a suite of common performance metrics to enable packaging and printed paper stewards to make meaningful recycling and financial performance comparisons across programs.

The second project is a **review to determine the best approach for differentiating material-specific costs**. Today this is done by conducting Activity Based Costing (ABC) studies to measure the impact that each type of material has on each activity within the recycling system. The total impact of each material is translated into a cost per tonne for that the material. The Fee Methodology Project underlined the importance of the ability to represent each material's specific cost impact as a key input to calculating fees. Conducting these studies as in the past continues to be a growing challenge and we are reviewing the current ABC methodology and exploring the benefits and feasibility of alternative methods for



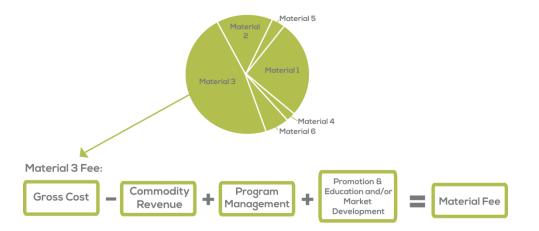
determining material-specific costs. The goal of the Material Cost Differentiation project is to identify potential options for differentiating material-specific costs that will work equally well for all four of the packaging and printed paper programs.

Why fee rates (cents per kg) do not express a material's qualities

A common question asked by regulators and stewards alike is, "How does the fee rate incent businesses to select 'good' materials over 'bad' materials?" Aside from the difficulties of characterizing materials in this manner, it is important to remember that the fee rate itself does not provide a signal about the behaviour of a material. Many factors influence the cost per tonne in the recycling system – including density, ease of handling and value on commodity markets – that do not necessarily reflect a material's qualities as a product or package.

The fee rate is simply the total fee (i.e. the total cost attributed to a material) divided by the total quantity of that material supplied by stewards.

Think of the total program budget as a pie. Each slice of the pie represents a specific material and the total fee attributed to it. The Four-Step Fee Methodology is used to determine the total fee for each material, as depicted in the formula below for Material 3.



One material's fee rate cannot be usefully compared to another material's fee rate because each rate is individually calculated using the total fee amount and supplied quantity specific to each material. Therefore, trying to compare one material fee rate to another material fee rate is not useful. For the same reason, a fee rate does not fully determine whether a material is "good" (easy to recycle) or "bad" (difficult to recycle). Similarly, comparing fee rates year over year has limited utility. The fee rate only expresses a material's total fee amount divided by its total quantity supplied.



However, while the fee rate itself does not signal potential packaging choices, the new Four-Step Fee Methodology does, in fact, "reward" recycled materials by ensuring the revenue generated from the post-consumer sale of the material is attributed to that material only.





Stewardship Ontario (SO)

2015 Review

Stewardship Ontario achieved a recycling rate of 64% based on 2014 Blue Box data, exceeding the government mandated target of 60%. Tonnage decreased slightly from the previous year while the population and households serviced both increased. The "evolving tonne" trend continued with relatively more plastics and less paper, affecting the collection, processing and sale of recyclables. A modest increase in costs reflected higher collection and processing costs, combined with a decline in commodity revenue.

Promotion & Education initiatives are key to improving consumer awareness and encouraging recycling behaviours that help stewards meet sustainability goals and regulatory requirements. In 2015, efforts included billboard and transit advertising campaigns for often-forgotten paper and plastics from the bathroom and increasing awareness of recyclable materials that often end up in the garbage. Editable posters of campaign creative were made available on the Stewardship Ontario website for municipalities to download and use for their own advertising.

2016 Update

At the time that the 2016 fees were calculated last fall, Waste Diversion Ontario (WDO) had not yet set the municipal payment obligation. Stewardship Ontario, therefore, estimated the obligation based on 50% of municipal-reported net costs (using verified information from Datacall). In June of this year, WDO's Board of Directors determined the 2016 payment obligation (based on 2014 data) to be \$5.4 million less than the proxy used by Stewardship Ontario. The result is Stewardship Ontario will have collected more fees from stewards in 2016 than is needed to meet its payment obligation to municipalities. To address this issue, \$5.4 million is being returned to stewards through the calculation of 2017 fees.

Also in June, the *Waste-Free Ontario Act (Bill 151)* received Royal Assent. The Act is housekeeping legislation that, once proclaimed, will repeal the 2002 Waste Diversion Act and enact the Waste Diversion Transition Act and the Resource Recovery and Circular Economy Act (RRCEA).

In July, Stewardship Ontario launched an eight-week campaign to remind and encourage multi-family building residents to recycle aluminum cans, PET bottles and gable-top containers. Based on a 2015 recycling audit of multi-family buildings, these three high value materials had low capture rates in areas throughout Ontario. The objective was to clearly communicate that recycling in multi-family buildings is available and easy, while also providing a reminder that aluminum, PET and gable tops should go in the recycling. A mix of billboards, transit posters, radio spots, print ads, and a digital buy generated more than 29 million impressions.

Outlook

With proclamation of the RRCEA pending, Stewardship Ontario continues to operate the Blue Box and Municipal Hazardous or Special Waste (MHSW) programs based on the status quo until otherwise directed by the Minister. The primary objective is to ensure that stewards remain in compliance with





their stewardship obligations and are regularly informed on the status and process of the transition to the new legislation.

The government is expected to finalize its draft "Strategy for a Waste-Free Ontario: Building the Circular Economy" within three months of the new legislation coming into effect. As part of the transition, WDO will be replaced with a new Resource Productivity and Recovery Authority, which will act as the new compliance and enforcement agency.

Recycling Performance 2015

As noted above, tonnes managed through the Blue Box in 2015 declined slightly from the previous year, primarily due to less paper being collected, while the recycling rate held steady above the provincial target. Recycled kilograms per capita decreased in 2015 reflecting reduced tonnes and an increase in the population served. This is a continued trend from prior years, as a result of the evolving tonne. Access to and awareness of recycling programs are being maintained at high levels.

Recycling and Accessibility Performance for 2015						
Metric	Ontario 2015	Ontario 2014	YOY Variance			
RECYC	CLING PERFORMANCE					
Recycled Tonnes	852,437	884,504	-3.6%			
Generated Tonnes	1,332,544	1,361,930	-2.2%			
Recycling Rate	64.0%	64.9%	-1.5%			
Provincial Recycling Target	60.0%	60.0%				
Population Serviced by PPP Program	13,465,269	13,358,776	0.8%			
Recycled kg per capita	63.3	66.2	-4.4%			
ACCESS	IBILITY PERFORMANCE					
# Households Serviced	5,427,113	5,365,378	1.2%			
% Households with Access to PPP Program	97.6%	97.3%	0.4%			
P & E Cost per capita*	\$0.55	\$0.52	5.7%			
Consumer Awareness**	97.0%	97.0%	0.0%			

* Total municipal and SO P&E

** Consumer research from 2013

Financial Performance 2015

Total net cost of the Blue Box system for 2015 as reported by municipalities, and including program expenses, was \$263.7 million, an increase of 4.3% from the previous year. Net cost per tonne and per capita also increased from 2014. Higher collection and processing expenses were the major contributors to the increases.





Financial Program Performance for 2015						
Cost PerformanceOntario 2015Ontario 2014YOY Variance						
Recycled Tonnes	852,437	884,504	-3.6%			
Net Cost*	\$263,726,504	\$252,936,907	4.3%			
Net Cost per Tonne	\$309	\$286	8.2%			
Net Cost per Capita	\$19.59	\$18.93	3.4%			
Recycled kg per Capita	63.3	66.2	-4.4%			

* Net costs include 100% of municipal costs and 100% of commodity revenues. Also included are Promotion & Education, regulatory, market development and all other program management costs.

2017 Budget

The 2017 steward obligation will be determined by the WDO Board. The obligation to municipalities represents more than 95% of the Blue Box program budget. For the purpose of calculating fees, Stewardship Ontario is again adopting the conservative approach of using 50% of reported net costs as a proxy for its municipal payment obligation (using verified information from Datacall). Any adjustments made by WDO will be considered by Stewardship Ontario in setting future fees.

Stewardship Ontario Budget						
	2017	2016	YOY Variance			
Obligation Share	50%	50%				
Supply Chain Costs	\$131,073,311	\$128,083,573	2.3%			
Promotion & Education and Research & Market Development	\$505,000	\$550,000	-8.2%			
Program Management	\$4,036,932	\$4,214,003	-4.2%			
Regulatory	\$1,200,000	\$800,000	50.0%			
Total Cost (before cost containment & reserve drawdown)	\$136,815,243	\$133,647,576	2.4%			
Cost Containment Drawdown	\$(5,433,492)	-				
Printed Paper Reserve Drawdown	\$(1,240,681)	-				
Market Development Reserve Drawdown	\$(95,000)	-				
Total Fee	\$130,046,071	\$133,647,576	-2.7%			

The total fee for 2017 is calculated to be \$130.0 million, a decrease of 2.7% from 2016. Municipalreported gross costs increased by 2.3% from the previous year primarily due to increased collection operating costs and material handling costs, with cost containment measures from 2016 reducing the total fee by \$5.4 million.





Revenue from the sale of recycled materials is included in municipal-reported net costs. For the purpose of setting the annual obligation, a three-year rolling average of revenue is used to reduce the effects of volatile commodity markets. Revenue for 2015 was \$85.8 million, a decrease of 6.4% from 2014 and approximately equal to revenue earned in 2013. Rolling average revenue declined \$3.0 million in 2015.

2017 Fee Schedule

Following extensive work initiated in 2015 by the Steward Consultation Committee (SCC), in June 2016 the Stewardship Ontario Board of Directors approved the new Four-Step Fee Methodology to replace the three-factor formula that has been used since inception. WDO granted its approval in August and has prepared a submission for the Minister of the Environment and Climate Change (MOECC), who is required to approve any material change to the Blue Box program plan.

With the MOECC approval outstanding and indications that approval would be unlikely to happen for the 2017 fee cycle, Stewardship Ontario's fees have been calculated using the approved three-factor methodology. This means the implementation of the Four-Step Fee Methodology now being used for other programs, and fee rate changes for most material categories, are on hold for Ontario. A surplus drawdown of \$1.2 million in reserves to printed paper stewards has been made to mitigate the specific impact of the three-factor formula on the category. The 2017 obligation used to set material fee rates includes the reduction for cost containment noted in the budget summary.





Stewardship Ontario Fee Schedule (cents/kg)						
Category	Material	2017 Fee Rates before cost containment and surplus drawdown	2017 Fee Rates after cost containment and surplus drawdown	2016 Fee Rates	Variance: 2017 & 2016 fee rates (before drawdown)	Variance: 2017 & 2016 fee rates (after drawdown)
PRINTED PAPER						
Printed paper	Newsprint - CNA/OCNA	0.40	0.37	0.44	-9.1%	-14.8%
	Newsprint – Non- CNA/OCNA	5.86	5.27	5.24	11.8%	0.6%
	Magazines and Catalogues	9.89	8.84	7.16	38.1%	23.5%
	Telephone Books	11.08	9.71	8.71	27.2%	11.5%
	Other Printed Paper	19.66	17.45	17.68	11.2%	-1.3%
PACKAGING						
Paper Based Packaging	Corrugated Cardboard	9.96	9.61	9.28	7.3%	3.5%
	Boxboard	9.96	9.54	9.28	7.3%	2.8%
	Gable Top Cartons	23.72	22.75	24.93	-4.9%	-8.7%
	Paper Laminates	23.72	22.69	24.93	-4.9%	-9.0%
	Aseptic Containers	23.72	22.83	24.93	-4.9%	-8.4%
Plastic Packaging	PET Bottles	16.73	15.99	17.50	-4.4%	-8.6%
	HDPE Bottles	12.56	11.88	13.81	-9.1%	-14.0%
	Plastic Film	34.33	32.96	33.32	3.0%	-1.1%
	Plastic Laminates	34.33	32.90	33.32	3.0%	-1.3%
	Polystyrene	34.33	33.00	33.32	3.0%	-1.0%
	Other Plastics	34.33	33.02	33.32	3.0%	-0.9%
Steel Packaging	Steel Food & Beverage Cans	6.70	6.33	6.21	7.9%	2.0%
	Steel Aerosols	6.70	6.45	6.21	7.9%	3.8%
	Steel Paint Cans	6.70	6.44	6.21	7.9%	3.7%
Aluminum Packaging	Aluminum Food & Beverage Cans	4.77	4.16	4.11	16.1%	1.3%
	Other Aluminum Packaging	7.33	6.86	11.08	-33.8%	-38.1%
Glass Packaging	Clear Glass	3.90	3.77	3.78	3.2%	-0.2%
	Coloured Glass	5.32	5.10	5.63	-5.5%	-9.4%
CAN/OCNA In-Kind		\$7,322,988	\$7,322,988	\$6,857,061	6.8%	6.8%



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Fee rates for 2017 decrease for 14 of the 23 material categories. Selected materials with notable rate changes are discussed below:

- Newsprint-CNA/OCNA: rate decrease of 14.8% was the result of a decrease in the common cost budget on which fee rates are based (steward obligation portion is paid in-kind) and the application of the surplus drawdown. The CNA/OCNA in-kind contribution is calculated to be \$7.3 million, an increase of 6.8% from 2016. These stewards will contribute \$0.4 million in fees towards common costs.
- Magazines and Catalogues: the 23.5% increase in the rate after the application of both the cost containment credit and the printed paper surplus is primarily a result of a decrease in supplied tonnes. Total fees allocated to the category were steady with previous years, but there are fewer tonnes available to spread costs. As with last year, the fee rates for magazines and catalogues, telephone books and other printed paper are partially aggregated to ensure that magazines and catalogues do not pay more than the cost to manage their material, which would be contrary to the principles of the fee setting methodology for materials that exceed the 60% recycling rate.
- <u>Telephone Books</u>: increase of 11.5% was primarily driven by a significant drop in supplied tonnes.
- <u>Other Aluminum Packaging</u>: rate decrease of 38.1% reflects more tonnes being recovered, combined with higher unit revenue compared to cost.



Canadian Stewardship Services Alliance

Multi-Material Stewardship Manitoba (MMSM)

2015 Review

MMSM marked its sixth year of operation in 2015. The program's 65% recovery rate and 72 kg of eligible material per capita for the year were both slight increases from 2014.

An amalgamation of Manitoba municipalities had MMSM working directly with local governments to ensure a smooth transition and merger of recycling data. MMSM now funds 142 municipalities (including First Nations, provincial and national parks), providing residential recycling services to 94% of Manitobans.

Promotion & Education to enhance consumer engagement and support recycling efforts continued to be a key focus. In 2015, recycling awareness was increased through a range of advertising, contests, community sponsorships and public relations activities to build the residential recovery rate, including:

- Encouraging the reduction, reuse and recycling of "single-use" plastic bags to meet the government's targets, included collaboration with Winnipeg Harvest on the launch of the "Bag it Forward" program and the "Bag Up Manitoba" school challenge that collected nearly 1.5 million bags. Consumer research indicated notable growth in bag recycling.
- A standardized list of mandatory acceptable Blue Box material was implemented.
- Advertising continued to educate the public on what is recyclable, with the "relationship campaign" linking the blue box and various items. School programs featured a dedicated website for students and event sponsorships. Media included print, radio, out-of-home, online and television. MMSM also enhanced its social media and online presence.

2016 Update

MMSM prepared a new program plan that was submitted to the Government of Manitoba in April and public consultations are in progress. The 2017-2021 plan details how the program will continue to fulfill the requirements of the Packaging and Printed Paper Stewardship Regulation. The plan and MMSM consultation summary are available on the MMSM website.

A Municipal Recycling Guide providing a standardized list of acceptable Blue Box materials was developed for province-wide implementation. The guide can be customized for use by individual municipalities.

A waste study program has been initiated to gather information on the types and quantities of PPP managed in the residential waste and recycling streams in Manitoba. The program includes sampling of representative single-family and multi-family households, along with materials managed at Material Recovery Facilities (MRFs).





Outlook

Consultation on Billing Alignment

MMSM is seeking steward input on adjusting its annual billing cycle to align with other packaging and printed paper stewardship programs. Currently, MMSM follows a quarterly cycle beginning April 1 each year. MMBC and MMSW schedules begin on January 1. MMSM is proposing that its billing cycle begin on January 1 because a significant portion of active MMSM stewards are also members of one or more of the other programs. The primary benefits to stewards of the proposed harmonization are reduced costs and increased administration efficiency. MMSM stewards are encouraged to provide their views before November 14, 2016, by email to <u>kmelnychuk@stewardshipmanitoba.org</u>.

Recycling Performance 2015

Tonnes increased slightly from the previous year, as did recycled kilograms per capita. Access remained steady with 2014 and awareness increased to 96%.

Recycling and Accessibility Performance for 2015				
Metric	Manitoba 2015	Manitoba 2014	YOY Variance	
	RECYCLING PERFORMANC	E		
Eligible Recovered Tonnes	82,184	81,141	1.3%	
Generated Tonnes	125,579	125,110	0.4%	
Recovery Rate	65.4%	64.9%	0.9%	
Population Serviced by PPP Program*	1,139,942	1,129,772	0.9%	
Recycled kg per capita	72.1	71.8	0.4%	
Net Cost per Tonne	\$297	\$280	5.9%	
	ACCESSIBILITY PERFORMAN	ICE		
# Households Serviced**	490,443	486,182	0.9%	
% Households with Access to PPP Program	94.3%	93.5%	0.9%	
P & E Cost per capita***	\$0.72	\$0.69	4.4%	
Consumer Awareness	96.0%	93.0%	3.2%	

* Population numbers are based on the 2011 census

** 2014 household figure restated to reconcile municipal and census data

*** Total municipal and MMSM P&E. Note, the majority of the increase applies to municipal costs.





2017 Budget

The 2017 MMSM steward obligation of \$17.5 million is a 12.8% increase from the previous year, primarily due to an increase in the three-year (2013-15) rolling average of net cost per tonne from lower commodity prices and also the City of Winnipeg's deployment of recycling carts and MRF upgrades in 2013. As in 2016, the MMSM Board approved the drawdown of \$1.0 million from the program's reserves to partially offset the increase.

Increased program management costs for 2017 reflect the inclusion of other material management costs for items such as field studies that were previously included in the share of supply chain costs.

MMSM Budget					
Cost Performance	2017	2016	YOY Variance		
Obligation Share	80%	80%			
Supply Chain Costs	\$15,720,843	\$13,996,700	12.3%		
Promotion & Education	\$640,000	\$650,000	-1.5%		
Program Management*	\$2,072,253	\$1,797,363	15.3%		
Government Fees	\$95,000	\$100,000	-5.0%		
Total Fee (before surplus drawdown)	\$18,528,096	\$16,544,063	12.0%		
Surplus Drawdown	\$ (1,000,000)	\$ (1,000,000)	0.0%		
Total Fee	\$17,528,096	\$15,544,063	12.8%		

*Program Management includes field studies, staffing and administrative services

2017 Fee Schedule

The MMSM Board has approved the new Four-Step Fee Methodology to calculate steward fee rates for the 2017 obligation. The approval followed the extensive work of the Steward Consultation Committee (SCC) to replace the previous three-factor formula. The new methodology focuses solely on allocation of costs and commodity revenues to each material in a manner that reflects each material's impact on the recycling system.

The \$1.0 million surplus drawdown noted in the budget discussion above is applied to all materials as a reduction to the net cost.

Activity Based Costing (ABC) data that is used to calculate material cost differentiation has been updated for the 2017 fee schedule. ABC data had previously used both Manitoba and Ontario studies. Now the Ontario data has been retired as the Manitoba data is sufficient to be used alone in MMSM fee setting.

The historical aggregations of ABC and fee categories have been maintained in the 2017 fee schedule, with any future changes to be informed by the upcoming review and refresh of the ABC methodology that determines material cost differentiation.





	Ν	/IMSM Fee Sch	edule* (cent	ts/kg)		
Category	Material	2017 Fee Rates	2017 Fee Rates	2016 Fee Rates	2016 Fee Rates	Variance
PRINTED PAPER		Before Surplus Drawdown	After Surplus Drawdown	Before Surplus Drawdown	After Surplus Drawdown	After Surplus Drawdown
Printed paper	Newsprint	6.51	6.23	7.82	7.36	-15.4%
	Magazines and Catalogues	6.68	6.38	17.85	16.73	-61.9%
	Telephone Books	6.68	6.38	17.85	16.73	-61.9%
	Other Printed Paper	6.68	6.38	17.85	16.73	-61.9%
PACKAGING						
Paper Based Packaging	Corrugated Cardboard	24.00	22.79	14.98	14.10	61.6%
	Polycoat & Laminates	60.15	57.04	40.39	37.86	50.7%
	Boxboard	24.00	22.79	14.98	14.10	61.6%
Plastic Packaging	PET Bottles	28.00	26.73	17.78	16.80	59.1%
	HDPE Bottles	21.90	21.04	20.29	19.21	9.5%
	Plastic Film	45.45	43.20	43.73	41.18	4.9%
	Other Plastics	45.45	43.20	43.73	41.18	4.9%
Steel Packaging	Steel Food & Beverage Cans	11.02	10.66	14.58	13.85	-23.0%
	Steel Aerosols	11.02	10.66	14.58	13.85	-23.0%
	Other Steel Containers	11.02	10.66	14.58	13.85	-23.0%
Aluminum Packaging	Aluminum Food & Beverage Cans	-37.76	-40.62	-8.00	-8.98	-352.3%
	Other Aluminum Packaging	15.39	14.78	27.04	26.09	-43.3%
Glass Packaging	Glass	5.01	4.79	7.58	7.14	-32.9%
Enhanced Bag Fee	Plastic bags per unit	0.06	0.06	0.06	0.06	1.7%

* 2016 fee rates were calculated using the three-factor formula and 2017 fee rates were calculated using the Four-Step Fee Methodology

As detailed in the above table, the general effect of the new methodology in Manitoba is a decrease of approximately 15% to 62% in rates for printed paper, steel, aluminum and glass packaging. Rates have increased between 5% and 62% for paper and plastic packaging categories, partially reflecting general cost increases. The rate for Aluminum Food & Beverage Cans is a credit and its increase is largely due to this material's relatively high recovery rate and its retention of significantly more revenue with the Four-Step Fee Methodology.





Multi-Material Stewardship Western (MMSW)

Program Update

MMSW launched its program on January 1, 2016, and to-date has executed funding agreements with municipalities that service 86% of Saskatchewan households. These municipalities deliver collection, processing and material marketing services and receive payment based on a 60% capture rate of the packaging and paper reported by MMSW members.

A two-year Transition Period that provides for certain exemptions is due to expire on December 31, 2016. The exemptions cover reporting and paying fees for newspapers with annual revenue over \$2 million and other businesses with annual revenue between \$2 million and \$5 million. These businesses were only required to register with MMSW and pay a \$500 flat fee. Upon expiration of the Transition Period, these businesses are to revert to their original obligation status.

MMSW Budget					
	2017	2016	YOY Variance		
Obligation Share	75%	75%			
Supply chain costs	\$5,340,864	\$5,668,202	-5.8%		
Promotion & Education	\$75,000	\$50,000	50.0%		
Program Management	\$1,448,073	\$1,516,356	-4.5%		
Working Capital Accumulation	-	\$1,417,051	-100.0%		
Total Fee	\$6,863,937	\$8,651,609	-20.7%		

2017 Budget

The 2017 Budget reflects the cost to manage 60% of the 57,000 tonnes of material reported by MMSW stewards in 2016 which did not significantly change from 2015. While steward-reported tonnes and associated supply chain costs stayed flat, the total budget declined by 21% with the elimination of \$1.4 million for working capital accumulation. An increase in Promotion & Education anticipates planned recycling awareness activities in Saskatchewan.

2017 Fee Schedule

In June 2016, MMSW's Board of Directors approved the new Four-Step Fee Methodology to replace the three-factor formula. The use of the new methodology generally results in a reduction in fees charged to paper stewards and increases in fees charged to some plastic packaging materials. In addition to a new fee-setting methodology, the 21% reduction in the overall program budget has a significant impact on 2017 fee rates.

A two-tiered flat fee for low volume stewards will be published for businesses that supply between one and five tonnes of packaging and paper in Saskatchewan once the temporary exemptions for newspapers and businesses with annual revenues between \$2 million and \$5 million expire.





	MMSW Fee Schedule (cents/kg)					
Category	Material	2017 Fee Rates*	2016 Fee Rates*	Variance		
PRINTED PAPER						
Printed paper	Newsprint	4.00	7.15	-44.1%		
	Magazines and Catalogues	4.00	7.15	-44.1%		
	Telephone Books	4.00	7.15	-44.1%		
	Other Printed Paper	4.00	7.15	-44.1%		
PACKAGING		0.00	12.02	20.20		
Paper Based Packaging	Corrugated Cardboard	9.00	12.92	-30.3%		
	Boxboard	9.00	12.92	-30.3%		
Composite Paper Packaging	Gable Top Cartons	20.00	22.47	-11.0%		
	Paper Laminates	20.00	22.47	-11.0%		
	Aseptic Containers	20.00	22.47	-11.0%		
High Grade Plastics	PET Containers	17.00	17.54	-3.1%		
	HDPE Containers	17.00	17.54	-3.1%		
Low Grade Plastics	Plastic Film	27.00	24.62	9.7%		
	Polystyrene	27.00	24.62	9.7%		
	Other Plastics	27.00	24.62	9.7%		
Plastic Laminates	Plastic Laminates	31.00	33.76	-8.2%		
Steel Packaging	Other Steel Packaging	8.00	15.76	-49.2%		
	Steel Aerosols	8.00	15.76	-49.2%		
	Steel Paint Cans	8.00	15.76	-49.2%		
Aluminum Packaging	Aluminum Food & Milk Containers	19.00	24.32	-21.9%		
	Other Aluminum Packaging	19.00	24.32	-21.9%		
Glass Packaging	Clear Glass	4.00	13.80	-71.0%		
	Coloured Glass	4.00	13.80	-71.0%		

* 2016 fee rates were calculated using the three-factor formula and 2017 fee rates were calculated using the Four-Step Fee Methodology



Multi-Material BC (MMBC)

2015 Review

MMBC completed its first full year of operation in 2015. The program launched in May 2014 following government approval of the stewardship plan in 2013. MMBC is the first fully steward financed and managed program for packaging and printed paper in North America.

The program achieved a 77% recovery rate in 2015 and recovered 43.6kg per capita. The slight decrease in recovery rate from previous year reflects an increase in steward-reported tonnes due to new stewards having joined MMBC — not a decline in recovery performance. Operational stability, partnerships and cost-effective delivery continued as key priorities. With the addition of 24 new depot locations during the year, 97% of BC households enjoyed access to recycling services.

Promotion & Education outreach communicated directly with BC residents and through local governments, non-profits and private companies by providing materials to inform their residents and customers about the MMBC program. Initiatives included an advertising campaign highlighting how recycled materials have a "Second Life" in new products, community outreach by the events team and sponsorship of the Canada Winter Games held in Prince George. Research and measurement are used to gauge consumer awareness and behaviours.

2016 Update

MMBC continued to increase direct service to BC communities with the addition of the City of Vancouver and Pitt Meadows. Both municipalities had previously provided collection service under contract to MMBC since the program launch in 2014. The transitions were made in August and October.

A new on-street recycling pilot project in Vancouver introduced in August features 31 new recycling stations located in the city's West End. The majority of the recycling stations will have three adjoined receptacles for mixed paper, containers and garbage. Select locations will offer compostable organics recycling. The pilot is supported by an educational campaign and builds on preliminary and smaller streetscape bin pilot projects conducted in 2014 and 2015.

MMBC was also cited as a strong example of a successful recycling program in a recent joint report by the Ellen MacArthur Foundation and the World Economic Forum (WEF). "<u>The New Plastics Economy</u>: <u>Rethinking the Future of Plastics</u>" calls for industry and governments to apply circular economy principles to global plastic packaging flows. The report recognizes MMBC's efforts to harmonize and redesign the collection and post-collection systems in British Columbia and notes the program "allows the province to achieve productivity previously unavailable to residential recycling programmes."

Outlook

One of MMBC's Program Plan requirements is to engage in consultation within six months following the first three years of program implementation. This consultation will take place in November, 2017. The consultation will be a forum for producers, collectors, processors, recycling end-markets and other interested stakeholders to discuss the program to date and future enhancements for efficiency and effectiveness in the management of residential PPP in the province.

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Recovery Performance 2015

Recovered tonnes and kilograms per capita for 2015 were steady compared to annualized results from 2014, when the program was launched and operated for seven months. Supplied tonnes increased with the inclusion of new stewards to the program.

Recovery and Accessibility Performance for 2015					
Metric	BC 2015	BC 2014 (annualized)*	YOY Variance		
	RECOVERY PERFORM	ANCE			
Recovered Tonnes	186,509	186,331	0.1%		
Supplied Tonnes	243,191	232,562	4.6%		
Recovery Rate	76.7%	80.1%	-4.3%		
Population Serviced by PPP Program**	4,282,219	4,232,081	1.2%		
Recovered kg per capita	43.6	44.0	-1.1%		
	ACCESSIBILITY PERFOR	MANCE			
# Households Serviced**	1,714,761	1,694,258	1.2%		
% Households with Access to PPP Program**	97.3%	96.0%	1.4%		
P & E Cost per capita	\$0.42	\$0.36	16.0%		
% of residents aware and using recycling services	99.0%	98.0%	1.0%		

* Based on 7.5 months of operation. For ease of comparison, 2014 performance metrics have been annualized.

** Represents access to curbside, multifamily and/or depot services.

Financial Performance 2015

Total steward cost for managing the MMBC program in 2015 was \$73.8 million and stable with the previous year.

Financial Program Performance for 2015				
Cost Performance	BC 2015	BC 2014 (annualized)*	YOY Variance	
Recovered Tonnes	186,509	186,331	0.1%	
Net Cost	\$73,801,736	\$73,503,141	0.4%	
Net Cost per Tonne	\$396	\$394	0.3%	
Net Cost per Capita	\$17	\$17	-0.8%	
Recovered Kgs per Capita	43.6	44.0	-1.1%	

* Based on 7.5 months of operation. For ease of comparison, 2014 performance metrics have been annualized





2017 Budget

The total 2017 fee for MMBC stewards is \$82.3 million, a 4.0% increase from 2016. The budget for Promotion & Education is increased to support further enhancements to consumer awareness of recycling in BC. MMBC has successfully accumulated a prudent financial reserve to provide liquidity for operational obligations while maintaining a constant fee schedule in its first three years (2014-16).

MMBC Budget						
	2017	2016	YOY Variance			
Obligation Share	100% industry managed	100% industry managed				
Share of Supply Chain Costs	\$72,962,398	\$70,189,611	4.0%			
Promotion & Education	\$1,800,000	\$1,350,000	33.3%			
Program Management	\$7,558,538	\$7,584,646	-0.3%			
Total Fee	\$82,320,936	\$79,124,257	4.0%			

2017 Fee Schedule

In June, the MMBC Board of Directors approved the new Four-Step Fee Methodology developed by the members of the Steward Consultation Committee (SCC) for use in setting the MMBC fees for 2017. The new methodology generally reduces fees charged to printed paper materials (between 45% and 54% from 2016 rates) and the steel, aluminum and glass categories (40% to 61%), while increasing fees charged to plastic packaging materials (45% to 71%). Fee rates for 2017 are also being updated for the first time since 2013 and are based on more current data.





MMBC Fee Schedule (cents/kg)						
Category	Material	2017 Fee Rates*	2016 Fee Rates*	Variance		
PRINTED PAPER						
Printed paper	Newsprint	11.00	20.00	-45.0%		
	Magazines and Catalogues	11.00	24.00	-54.2%		
	Telephone Books	11.00	24.00	-54.2%		
	Other Printed Paper	11.00	24.00	-54.2%		
PACKAGING						
Paper Based Packaging	Corrugated Cardboard	24.00	29.00	-17.2%		
	Boxboard	24.00	29.00	-17.2%		
Composite Paper Packaging	Gable Top Cartons	52.00	52.00	0.0%		
	Paper Laminates	52.00	52.00	0.0%		
	Aseptic Containers	52.00	52.00	0.0%		
High Grade Plastics	PET Containers	53.00	31.00	71.0%		
	HDPE Containers	53.00	31.00	71.0%		
Low Grade Plastics	Plastic Film	91.00	54.00	68.5%		
	Polystyrene	91.00	54.00	68.5%		
	Other Plastics	91.00	54.00	68.5%		
Plastic Laminates	Plastic Laminates	102.00	70.00	45.7%		
Steel Packaging	Other Steel Packaging	20.00	52.00	-61.5%		
	Steel Aerosols	20.00	52.00	-61.5%		
	Steel Paint Cans	20.00	52.00	-61.5%		
Aluminum Packaging	Aluminum Food & Milk Containers	26.00	45.00	-42.2%		
	Other Aluminum Packaging	26.00	45.00	-42.2%		
Glass Packaging	Clear Glass	15.00	25.00	-40.0%		
	Coloured Glass	15.00	25.00	-40.0%		

* 2016 fee rates were calculated using the three-factor formula and 2017 fee rates were calculated using the Four-Step Fee Methodology



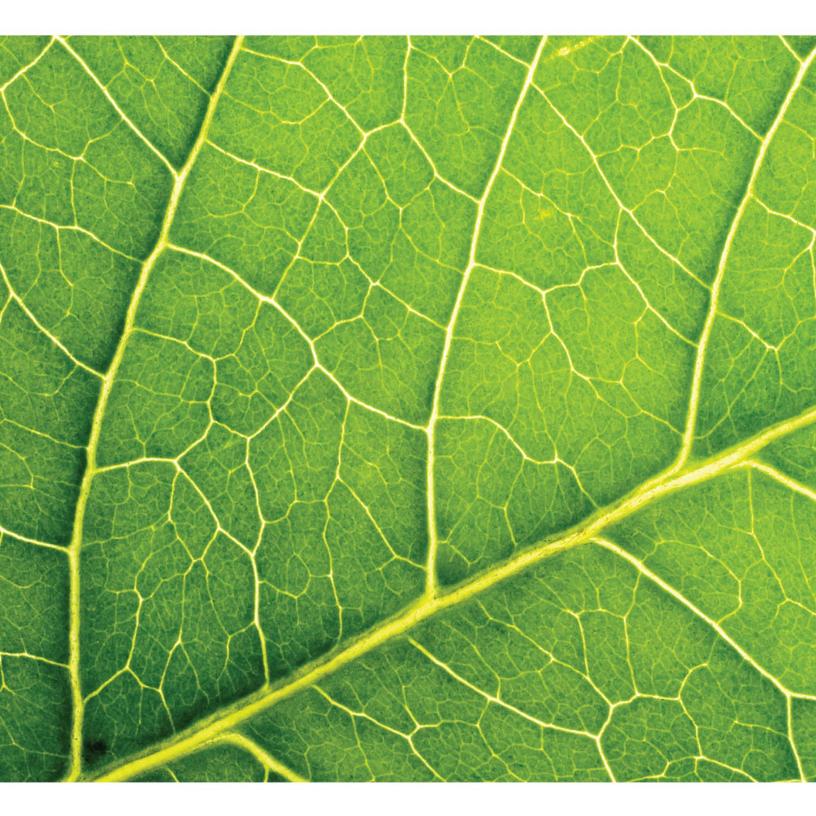
Thank you!













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