Annual Steward Meeting
October 31, 2017
Welcome

Calla Farn
Vice-President, Steward Services
Webcast Information

• Speaker advances slides
• Sound slider
• Questions/comments at ‘Ask a Question’ then click ‘submit’
• If you have technical issues also let us know via the “Ask A Question” box
• Today’s slides and presentation will be posted on the website within the next 24 hours.
Today’s Agenda

• CSSA Review and Outlook
• Keynote: Recycling and the Circular Economy
• Panel: Packaging Materials and Circular Economy
• **Break** (approx 3:15 pm ET)
• Program Updates, 2018 Budget and Fee Schedules:
  • Multi-Material Stewardship Manitoba (MMSM)
  • Multi-Material Stewardship Western (MMSW)
  • Recycle BC
  • Stewardship Ontario (SO)
  • Q&A
• Material Cost Differentiation
• Wrap-up
Steward Polls

Pollev.com/cssa

**how's my presentation so far?**
You can respond once:

- 0 It's amazing.
- 0 It's incredibly amazing!
- 0 It's good

**Q&A**

Please enter a question

**Slides**

This is a test poll question

- A) This is the 1st response
- B) This is the 2nd response.
- None of the above
Poll #1: The amount and type of information in the Report to Stewards is about right.

- Agree
- Neither Agree Nor Disagree
- Disagree
- Did Not Read It

www.pollev.com/cssa
Looking Ahead...

• Circular Economy
  ○ Contributions of Recycling, Stewardship & EPR

• Keynote
  ○ Environmental Commissioner of Ontario

• Panel
  ○ Packaging Material Trends
Engaging Stewards

• Membership Agreements, Rules and Policies
• SO: Amended Blue Box Program Plan
• Satisfaction Survey
Support for Harmonization and Simplification

- **83%** of respondents said CSSA provided excellent customer service.
- **76%** rated the ease of doing business with CSSA as excellent.
- **75%** said the overall quality of program information provided by CSSA was excellent.
- **61%** said CSSA’s overall performance was the same as or better than other stewardship organizations.
Streamlining Rules and Policies

• Comprehensive review by programs
  o Increase administrative harmonization
  o Improve clarity
  o Promote fairness

• High webinar participation

• Submit comments by November 10
  o stewardfeedback@cssalliance.ca
Improving Reporting and Invoices

• Researching tools, resources and services to simplify reporting – 2019
• Online tutorial
• Invoices
  o Date harmonization
  o Redesign
Building a Strong Foundation

• Level Playing Field
• Moving ahead with MCD
• Fee Methodology
Ontario’s Transition Plan

- Redefine steward and material obligations
- Increase environmental performance
- Timeline: seamless or orderly
- Increase ability to manage costs
Moving to EPR

• Global business theme
• Catalyst for managing risks and delivering growth
• Maximize resource value – close the loop
Environmental Commissioner of Ontario

- Dr. Dianne Saxe
- “Tough but fair watchdog”
- Experienced environmental lawyer
- Appointed in 2015
Climate Change and the Circular Economy

Canadian Stewardship Services Alliance
Dianne Saxe
October 31, 2017
Overview

1. Who is the ECO?
2. Climate changes everything
3. Opportunities: waste reduction and the circular economy
1: Who is the ECO?
Who is the ECO?

• Impartial, independent

• Guardian of the *Environmental Bill of Rights*

• Watchdog on:
  • Greenhouse gas emissions in Ontario
  • Energy conservation
  • Environmental protection

• Driven by what I have learned in the last year
Really good reports

ENERGY CONSERVATION

Every Drop Counts
Reducing the Energy and Climate Footprint of Ontario’s Water Use

ENVIRONMENT

Good Choices, Bad Choices.
Environmental Rights and Environmental Protection in Ontario

CLIMATE

Facing CLIMATE CHANGE

Environmental Commissioner of Ontario
Find them here (eco.on.ca)
2: Climate changes everything
Who are you working for?
Your colleagues may know

97% of climate scientists agree:

• Climate change is:
  • Human-caused
  • Serious
  • Caused mostly by greenhouse gases in the atmosphere that keep solar heat from escaping
  • Primary GHG is CO2 from fossil fuels
  • Real
But do they know?

Climate change is already here, now:

- Moving fast ("off the charts")
- $Trillions financial opportunity and threat
- Immense impact on environment and people
- Huge implications for Ontario infrastructure and economy
Highest ever CO$_2$ emissions

On our watch:
2015 emissions 63% higher than 1990

Source: Global Carbon Project, Carbon Budget 2016
Where does the CO₂ go? (2006-2015)

Sources = Sinks

34.1 GtCO₂/yr
91%

16.4 GtCO₂/yr
44%

3.5 GtCO₂/yr
9%

11.6 GtCO₂/yr
31%

9.7 GtCO₂/yr
26%

Highest air CO₂ in (human) history

- Millions of years: 180 - 280
- 1860: 280
- 1988: 350
- 2017: 410 ppm

- Now permanently above 400 ppm
- Trapping extra heat

Source: National Oceanic and Atmospheric Administration, Trends in Atmospheric Carbon Dioxide at Mauna Loa Observatory (full record), 2016.
Not just CO2- Levels in air
Not just CO$_2$—what’s trapping heat?

- ~50% more heat than CO$_2$ alone
- Methane
- Nitrous oxide
- Refrigerants

Highest temperatures in human history
93% of the extra heat is in oceans, lakes

Warmer water takes up more space


Higher sea levels, wilder storms
NOAA Sea Level Rise Viewer, 6 feet
Only 1% of the heat in the air

20th Century “normal” is gone

Global Land and Ocean Temperature Anomalies, January-December

Source: National Oceanic and Atmospheric Administration. Climate Change – Global Temperature
More already locked in

Using the regional climate model to project climate change for Canada.
A mid-range mitigation scenario (RCP4.5) where global mean warming is ~3°C relative to pre-industrial.

Surface air temperature change (relative to 1986-2005 average) from the regional climate model CanRCM4 (44 km resolution, RCP4.5)
“Global Warming”?

- ≠ Everywhere always warmer
- Higher average temperatures
  - But unevenly distributed
  - Disruption of natural cycles
- More damaging, more unpleasant extremes

TOO HOT!

TOO COLD!
When, not if

- Milder winters
  - Ice roads, winter sports, snow cover
- Wetter springs, faster melts
- Hotter, drier summers

- Storms, floods, droughts
- Forest fire
- Invasive species
Extreme events already tripled

Figure 3. The Actuaries Climate Index for Canada and the United States.

Source: Actuaries Climate Index, Executive Summary
Catastrophic insured losses – Canada

Source: Insurance Bureau of Canada Facts Book, PCS, CatIQ, Swiss Re, Munich Re & Deloitte
Values in 2018 $ CAD
How much worse? Depends on emissions

Source: Laboratory of Mathematical Parallel Systems (LAMPS) at York University, Temperature Change for 1900 to 2100 relative to 1986-2005 from AR5 CMIP5 subset, 2016.
2050 GDP/person?

Source: MIT Technology Review; Vol. 120 | No. 1; Page 60-61
Because emissions skyrocketed

2015 emissions 63% higher than 1990

Data: CDIAC/GCP/BP/USGS

2000-09 +3.4%/yr
1990-99 +1.1%/yr

Projection 2016 36.4 Gt CO₂

Source: Global Carbon Project
And are still growing

Source: BP 2016; Jackson et al. 2015; Global Carbon Budget 2016
Carbon budget running out

If we want a 2/3 chance of staying <2°C, most of proven fossil fuel reserves can not be burned.

Source: Carbon Brief, Carbon Countdown, 2017
What else have we unleashed?

- Permafrost
- Soil carbon loss
- Forest die-back
- Ocean current changes
- Loss of sea ice

- What would a tipping point look like?
Global sea ice

from NSIDC sea ice concentration data

Global Sea Ice Area

Last date: 2017-06-25

graph by Wipneus

https://sites.google.com/site/arctischopping/in/home/global-sea-ice
Is it too late?

- We are in for big changes
- There is still a little time to have an impact on what’s coming
- Our choices, right now, matter
3: Opportunities: waste reduction and the circular economy
New Report: *Beyond the Blue Box*

- Consequences of waste
- History of recycling in Ontario
- Problems with the old law (WDA)
- The new Waste-Free Ontario framework
- Ontario’s transition to a circular economy
- Recommendations
Waste has environmental consequences

- Landfilling:
  - soil and groundwater pollution
  - organics contribute to climate change
  - uses up precious disposal capacity
  - squanders valuable resources
Efforts over past 40 years

- Focus has been almost exclusively on recycling
  - We continue to produce mountains of waste: almost 1 tonne/person/year
  - Diversion rates have stagnated at 25%

Diagram:
- Reduce
- Reuse
- Recycling
- Recovery
- Landfill

Most favoured option: Reduce

Our focus should be here

Our current focus is here

Least favoured option: Landfill
Problems with the old law

- *Waste Diversion Act, 2002* only captured small portion of materials
- Weak requirements for industrial, commercial and institutional (IC&I) sectors
- Did not address economic barriers
Waste-Free Ontario: what’s new?

In the Law:
- Direct producer responsibility
- Enhanced transparency and accountability measures
  - Data collection
  - Service provider responsibilities
- Enforcement responsibilities
- Circular Economy

In the Strategy:
- Improving IC&I diversion
- Regulatory review
- Designating new materials
- Organics action plan
- Excess soil management policy
- Procurement
The circular economy

- Fundamental change in thinking
- Designing products with durability and reuse in mind
Climate change and the circular economy

- CO$_2$ embodied in goods and materials represents a massive, under-recognized source of GHG emissions
  - Extracting raw materials generates GHGs, as well as releases toxic chemicals into the air and water
  - Reusing and recycling materials means fewer raw materials extracted from the earth
- Huge economic and employment promise of a low-waste economy
What the strategy says:

- Provide clear direction via policy statements
- Improve and establish environmental standards
- Use green procurement practices
- Implement disposal bans
Circular Economy

ECO Recommendations:

- Make the ultimate goal of Ontario’s circular economy policies the creation of profitable markets for all end-of-life materials

- Work with other ministries to integrate circular economy objectives into policy and practice across government
What’s the role for producers?

- Direct producer responsibility can refocus producers on design for the environment:
  - Make products better, make them last longer
  - Rethink packaging: find ways to reduce packaging or replace with more recyclable/reusable materials
- Potential for producers to help develop markets for recycled materials (incorporate into product design)
What are the challenges?

- Major cultural, economic, social shift
- Design and process changes
- Training a skilled workforce
- Supporting innovative businesses
Learning from others

- Scotland
- European Union
- China
What else will help?

Get IC&I to pull their weight:

- Over half of Ontario’s waste (6.7 tonnes/year) is from IC&I and CRD sectors

- IC&I has low diversion rate (~15%)
  - Compare to residential waste diversion rate: 37% or higher

Source: Statistics Canada (cansim/089-404).
IC&I Action

ECO Recommendation: Expand and enforce source separation and diversion obligations for the IC&I sectors.

What else will help?

Strong recycling standards

• High standards are critical to ensure high-quality materials and good environmental results

• Create a level playing field
Recycling standards

ECO Recommendation:
Develop recycling standards that are clear, enforceable and provide a high level of environmental protection
What else will help?

Getting organics out of landfill

- Almost all waste GHGs are from organics in landfill
- Waste contributed 5.2% (8.6 Mt) of Ontario’s total GHGs in 2015
  - 7.7 Mt from landfills
  - Mostly methane
Why is this important?

- Methane is also a:
  - health hazard at high concentrations
  - contributor to ground level ozone
- Wasted fuel source
- Waste nutrients
Organic waste

ECO Recommendations:
- Adopt some form of disposal ban on food waste
- Make the process for approving anaerobic digestion and composting facilities fast and predictable, while still protecting public health and environmental interests
Questions?

commissioner@eco.on.ca

@Ont_ECO

/OntarioEnvironmentalCommissioner
Poll #2: What should be the priority for producers designing packaging in a circular economy?

- Develop longer-lasting products
- Reduce packaging or replace with more recyclable/reusable materials
- Develop markets for recycled materials (incorporated into product design)

www.pollev.com/cssa
Packaging Materials and the Circular Economy

Panel Discussion
Today’s Panel

• John Coyne – moderator
• Joe Hruska
  ○ Canadian Plastics Industry Association
• Isabelle Faucher
  ○ Carton Council of Canada
• Rachel Morier
  ○ PACNext
Panel Discussion:

Canadian Plastics Industry Association

Joe Hruska
Panel Discussion:
Carton Council of Canada

Isabelle Faucher
Panel Discussion: PACNext

Rachel Morier
Panel Discussion: Material Evolution and Trends that will Influence Stewards...

John Coyne  Joe Hruska  Isabelle Faucher  Rachel Morier
Poll #3 How important is it for your company to know the details of what happens to the PPP you provide to the marketplace?

• Very important
• Somewhat important
• Not important

www.pollev.com/cssa
*BREAK*
Program Reviews
Annual Steward Meeting
October 31, 2017

Karen Melnychuk,
Executive Director
MMSM Update

• Program Plan
• Steward Consultations
• Promotion & Education
• Recycling & Accessibility Performance
• 2018 Budget
• 2018 Fee Schedule
Program Plan for 2017-2021

- Initiated in 2016
- Further consultations with municipalities and government
- Revised Plan available at stewardshipmanitoba.org
Steward Consultations

• Billing Dates

• Rules and Policies
  • Dispute Resolution Policy
  • Administrative Fee, Interest and Penalty Policy
  • Onboarding Policy
  • Parallel Importation Policy
  • Revised Steward-Initiated Adjustment Requests
  • Reporting and Deductions Policy
Promotion & Education

• “Recycle Something New” campaign
• Plastic bag reduction
Promotion & Education

- First Nations and northern communities
- Single-family dwelling project
- School Programs
A Tale of Recycling

http://simplyrecycle.ca/school-programs/
## 2016 Performance

### Recycling and Accessibility Performance for 2016

<table>
<thead>
<tr>
<th>Metric</th>
<th>Manitoba 2016</th>
<th>Manitoba 2015</th>
<th>YOY Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycling Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligible Recovered Tonnes</td>
<td>82,146</td>
<td>82,184</td>
<td>0.0%</td>
</tr>
<tr>
<td>Generated Tonnes</td>
<td>132,682</td>
<td>125,579</td>
<td>5.7%</td>
</tr>
<tr>
<td>Recovery Rate*</td>
<td>61.9%</td>
<td>65.4%</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Population Serviced by PPP Program</td>
<td>1,206,492</td>
<td>1,139,942</td>
<td>5.8%</td>
</tr>
<tr>
<td>Recovered kg per capita</td>
<td>68.1</td>
<td>72.1</td>
<td>-5.6%</td>
</tr>
<tr>
<td><strong>Accessibility Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Households Serviced</td>
<td>517,387</td>
<td>490,443</td>
<td>5.5%</td>
</tr>
<tr>
<td>% Households with Access to PPP Program</td>
<td>94.4%</td>
<td>94.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>P &amp; E Cost per capita*</td>
<td>$0.70</td>
<td>$0.72</td>
<td>-3.2%</td>
</tr>
<tr>
<td>% of residents aware and using recycling services**</td>
<td>96.0%</td>
<td>96.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
# 2018 Budget

<table>
<thead>
<tr>
<th>MMSM BUDGET</th>
<th>2018</th>
<th>2017</th>
<th>YOY VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBIGATION SHARE</strong></td>
<td>80%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Share of Supply Chain Costs</td>
<td>$17,381,389</td>
<td>$15,720,843</td>
<td>10.6%</td>
</tr>
<tr>
<td>Promotion &amp; Education</td>
<td>$610,000</td>
<td>$640,000</td>
<td>-4.7%</td>
</tr>
<tr>
<td>Research &amp; Market Development</td>
<td>$5,000</td>
<td>$-</td>
<td>100.0%</td>
</tr>
<tr>
<td>Program Management*</td>
<td>$2,081,695</td>
<td>$2,072,253</td>
<td>0.5%</td>
</tr>
<tr>
<td>Government Fees</td>
<td>$95,000</td>
<td>$95,000</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>TOTAL FEE OBLIGATION (BEFORE SURPLUS)</strong></td>
<td>$20,173,084</td>
<td>$18,528,096</td>
<td>8.9%</td>
</tr>
<tr>
<td>Program Management as % of Total Fees</td>
<td>10.3%</td>
<td>11.2%</td>
<td>-7.7%</td>
</tr>
<tr>
<td>Surplus Accumulation (Drawdown)**</td>
<td>$900,000</td>
<td>$(1,000,000)</td>
<td>190.0%</td>
</tr>
<tr>
<td><strong>TOTAL FEE BUDGET</strong></td>
<td>$21,073,084</td>
<td>$17,528,096</td>
<td>20.2%</td>
</tr>
</tbody>
</table>
# 2018 Fee Schedule

## MMSM Fee Schedule (Cents/kg)

<table>
<thead>
<tr>
<th>Category</th>
<th>Material</th>
<th>2018 Fee Rates (cents/kg)</th>
<th>2017 Fee Rates (cents/kg)</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRINTED PAPER</strong></td>
<td>Newsprint</td>
<td>7.31</td>
<td>6.23</td>
<td>17.3%</td>
</tr>
<tr>
<td></td>
<td>Magazines and Catalogues</td>
<td>7.64</td>
<td>6.38</td>
<td>19.7%</td>
</tr>
<tr>
<td></td>
<td>Telephone Books</td>
<td>7.64</td>
<td>6.38</td>
<td>19.7%</td>
</tr>
<tr>
<td></td>
<td>Other Printed Paper</td>
<td>7.64</td>
<td>6.38</td>
<td>19.7%</td>
</tr>
<tr>
<td><strong>PAPER PACKAGING</strong></td>
<td>Corrugated Cardboard</td>
<td>28.48</td>
<td>22.79</td>
<td>25.0%</td>
</tr>
<tr>
<td></td>
<td>Boxboard</td>
<td>28.48</td>
<td>22.79</td>
<td>25.0%</td>
</tr>
<tr>
<td></td>
<td>Gable Top Cartons</td>
<td>63.19</td>
<td>57.04</td>
<td>10.8%</td>
</tr>
<tr>
<td></td>
<td>Paper Laminates</td>
<td>63.19</td>
<td>57.04</td>
<td>10.8%</td>
</tr>
<tr>
<td></td>
<td>Aseptic Containers</td>
<td>63.19</td>
<td>57.04</td>
<td>10.8%</td>
</tr>
<tr>
<td><strong>PLASTICS</strong></td>
<td>PET Bottles</td>
<td>36.05</td>
<td>26.73</td>
<td>34.9%</td>
</tr>
<tr>
<td></td>
<td>HDPE Bottles</td>
<td>26.08</td>
<td>21.04</td>
<td>24.0%</td>
</tr>
<tr>
<td></td>
<td>Plastic Film</td>
<td>49.89</td>
<td>43.20</td>
<td>15.5%</td>
</tr>
<tr>
<td></td>
<td>Other Plastics</td>
<td>49.89</td>
<td>43.20</td>
<td>15.5%</td>
</tr>
<tr>
<td><strong>STEEL</strong></td>
<td>Steel Food &amp; Beverage Cans</td>
<td>14.87</td>
<td>10.66</td>
<td>39.5%</td>
</tr>
<tr>
<td></td>
<td>Steel Aerosols</td>
<td>14.87</td>
<td>10.66</td>
<td>39.5%</td>
</tr>
<tr>
<td></td>
<td>Other Steel Containers</td>
<td>14.87</td>
<td>10.66</td>
<td>39.5%</td>
</tr>
<tr>
<td><strong>ALUMINUM</strong></td>
<td>Aluminum Food &amp; Beverage Cans</td>
<td>-42.86</td>
<td>-40.62</td>
<td>-5.5%</td>
</tr>
<tr>
<td></td>
<td>Other Aluminum Packaging</td>
<td>14.81</td>
<td>14.78</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>GLASS</strong></td>
<td>Clear Glass</td>
<td>6.10</td>
<td>4.79</td>
<td>27.3%</td>
</tr>
<tr>
<td><strong>ENHANCED BAG FEE</strong></td>
<td>Plastic bags per unit</td>
<td>0.06</td>
<td>0.06</td>
<td>-0.5%</td>
</tr>
</tbody>
</table>
2017 Annual Steward Meeting

Allen Langdon,
Managing Director
MMSW Update

- First full year for program
- P&E to build awareness
MMSW Update

• Transition period completed
  – New small business and flat-fee categories
• Milk containers added to beverage deposit program
• Non-resident franchisor clarification
# 2016 Performance

## Recycling and Accessibility Performance for 2016

<table>
<thead>
<tr>
<th>Metric</th>
<th>MMSW 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycling Performance</strong></td>
<td></td>
</tr>
<tr>
<td>Recovered Tonnes</td>
<td>36,675</td>
</tr>
<tr>
<td>Supplied Tonnes</td>
<td>58,876</td>
</tr>
<tr>
<td>Recovery Rate</td>
<td>62.3%</td>
</tr>
<tr>
<td>Population Serviced by PPP Program</td>
<td>825,564</td>
</tr>
<tr>
<td>Recovered kg per capita</td>
<td>44.4</td>
</tr>
<tr>
<td><strong>Accessibility Performance</strong></td>
<td></td>
</tr>
<tr>
<td># Households Serviced</td>
<td>352,426</td>
</tr>
<tr>
<td>% Households with Access to PPP Program</td>
<td>81.5%</td>
</tr>
<tr>
<td>P &amp; E Cost per capita</td>
<td>$0.06</td>
</tr>
<tr>
<td>% of residents aware and using recycling services</td>
<td>N/A*</td>
</tr>
</tbody>
</table>
## 2016 Performance

<table>
<thead>
<tr>
<th>COST PERFORMANCE</th>
<th>MMSW 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovered Tonnes</td>
<td>36,675</td>
</tr>
<tr>
<td>Net Cost</td>
<td>$5,561,039</td>
</tr>
<tr>
<td>Net Cost per Tonne</td>
<td>$152</td>
</tr>
<tr>
<td>Net Cost per capita</td>
<td>$7</td>
</tr>
<tr>
<td>Recovered kg per capita</td>
<td>44.4</td>
</tr>
</tbody>
</table>
# 2018 Budget

<table>
<thead>
<tr>
<th>MMSW BUDGET</th>
<th>2018</th>
<th>2017</th>
<th>YOY VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBLIGATION SHARE</td>
<td>75%</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Share of Supply Chain Costs</td>
<td>$5,596,921</td>
<td>$5,340,864</td>
<td>4.8%</td>
</tr>
<tr>
<td>Promotion &amp; Education</td>
<td>$75,000</td>
<td>$75,000</td>
<td>0.0%</td>
</tr>
<tr>
<td>Program Management</td>
<td>$1,421,949</td>
<td>$1,448,073</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Working Capital Accumulation</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Program Management as % of Total Fees</td>
<td>20.0%</td>
<td>21.1%</td>
<td>-5.0%</td>
</tr>
<tr>
<td>TOTAL BUDGET</td>
<td>$7,093,870</td>
<td>$6,863,937</td>
<td>3.3%</td>
</tr>
</tbody>
</table>
## 2018 Fee Schedule

### MMSW Fee Schedule (Cents/KG)

<table>
<thead>
<tr>
<th>Category</th>
<th>Material</th>
<th>2018 Fee Rates (cents/kg)</th>
<th>2017 Fee Rates (cents/kg)</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINTED PAPER</td>
<td>Newsprint</td>
<td>4.00</td>
<td>4.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Magazines and Catalogues</td>
<td>4.00</td>
<td>4.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Telephone Books</td>
<td>4.00</td>
<td>4.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other Printed Paper</td>
<td>4.00</td>
<td>4.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>PAPER PACKAGING</td>
<td>Corrugated Cardboard</td>
<td>9.00</td>
<td>9.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Boxboard</td>
<td>9.00</td>
<td>9.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Gable Top Cartons</td>
<td>20.00</td>
<td>20.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Paper Laminates</td>
<td>20.00</td>
<td>20.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Aseptic Containers</td>
<td>20.00</td>
<td>20.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>PLASTICS</td>
<td>PET Containers</td>
<td>17.00</td>
<td>17.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>HDPE Containers</td>
<td>17.00</td>
<td>17.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Plastic Film</td>
<td>27.00</td>
<td>27.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Plastic Laminates</td>
<td>31.00</td>
<td>31.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Polystyrene</td>
<td>27.00</td>
<td>27.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other Plastics</td>
<td>27.00</td>
<td>27.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>STEEL</td>
<td>Other Steel Packaging</td>
<td>8.00</td>
<td>8.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Steel Aerosols</td>
<td>8.00</td>
<td>8.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Steel Paint Cans</td>
<td>8.00</td>
<td>8.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>ALUMINUM</td>
<td>Aluminum Food &amp; Other Containers</td>
<td>19.00</td>
<td>19.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other Aluminum Packaging</td>
<td>19.00</td>
<td>19.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>GLASS</td>
<td>Clear Glass</td>
<td>4.00</td>
<td>4.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Coloured Glass</td>
<td>4.00</td>
<td>4.00</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
ORGANIZATION REBRAND

Same recycling program, NEW BRAND.
ON-STREET RECYCLING

• 31 on-street recycling stations in downtown Vancouver’s West End neighbourhood and Stanley Park
• August 2016 – May 2017
• All stations include bins for containers, paper, and garbage; some stations include organics bin
• Project findings:
  o Printed paper and beverage deposit containers were the two materials that were most often correctly sorted into the appropriate bins (paper and containers, respectively).
  o Paper was more accurately sorted than containers in all three audit periods.
  o The garbage bins consistently received the most amount of materials (including materials that could have been placed in one of the recycling bins).
  o The container recycling bin was contaminated with a notable amount of liquid (from recyclable cups and containers that were not completely empty).
PROMOTION AND EDUCATION

• Advertising
• Partnerships
• Community events team
• Additional awareness and education tools
  o Social media
  o Website
  o Mobile app
  o Recycling guides
  o Collector resources
ADDITIONAL UPDATES

- Program Growth – New Communities
- Stewardship Plan extended
- Flat fees – Online Assessment Tool
## 2016 PERFORMANCE

### RECYCLING AND ACCESSIBILITY PERFORMANCE FOR 2016

<table>
<thead>
<tr>
<th>METRIC</th>
<th>BC 2016</th>
<th>BC 2015</th>
<th>YOY VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RECYCLING PERFORMANCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovered Tonnes</td>
<td>185,477</td>
<td>186,509</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Supplied Tonnes</td>
<td>238,062</td>
<td>243,191</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Recovery Rate</td>
<td>77.9%</td>
<td>76.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Provincial Recovery Target</td>
<td>75%</td>
<td>75%</td>
<td>-</td>
</tr>
<tr>
<td>Population Serviced by PPP Program*</td>
<td>4,560,457</td>
<td>4,282,219</td>
<td>6.5%</td>
</tr>
<tr>
<td>Recovered kg per capita</td>
<td>40.7</td>
<td>43.6</td>
<td>-6.6%</td>
</tr>
<tr>
<td><strong>ACCESSIBILITY PERFORMANCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Households Serviced*</td>
<td>1,843,709</td>
<td>1,714,761</td>
<td>7.5%</td>
</tr>
<tr>
<td>% Households with Access to PPP Program*</td>
<td>98.1%</td>
<td>97.3%</td>
<td>0.8%</td>
</tr>
<tr>
<td>P &amp; E Cost per capita</td>
<td>$0.47</td>
<td>$0.42</td>
<td>13.7%</td>
</tr>
<tr>
<td>% of residents aware and using recycling services</td>
<td>99.0%</td>
<td>99.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
# 2016 PERFORMANCE

<table>
<thead>
<tr>
<th>COST PERFORMANCE</th>
<th>BC 2016</th>
<th>BC 2015</th>
<th>YOY VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovered Tonnes</td>
<td>185,477</td>
<td>186,509</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Net Cost</td>
<td>$73,831,727</td>
<td>$73,801,736</td>
<td>0.0%</td>
</tr>
<tr>
<td>Net Cost per Tonne</td>
<td>$398</td>
<td>$396</td>
<td>0.6%</td>
</tr>
<tr>
<td>Net Cost per capita</td>
<td>$16</td>
<td>$17</td>
<td>-6.1%</td>
</tr>
<tr>
<td>Recovered kg per capita</td>
<td>40.7</td>
<td>43.6</td>
<td>-6.6%</td>
</tr>
</tbody>
</table>
## 2018 BUDGET

<table>
<thead>
<tr>
<th>OBLIGATION SHARE</th>
<th>2018</th>
<th>2017</th>
<th>YOY VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of Supply Chain Costs</td>
<td>$82,309,027</td>
<td>$72,962,398</td>
<td>12.8%</td>
</tr>
<tr>
<td>Promotion &amp; Education</td>
<td>$1,900,000</td>
<td>$1,800,000</td>
<td>5.6%</td>
</tr>
<tr>
<td>Program Management</td>
<td>$7,172,177</td>
<td>$7,558,538</td>
<td>-5.1%</td>
</tr>
<tr>
<td>Program Management as % of Total Fees</td>
<td>7.8%</td>
<td>9.2%</td>
<td>-14.5%</td>
</tr>
<tr>
<td><strong>TOTAL BUDGET</strong></td>
<td><strong>$91,381,204</strong></td>
<td><strong>$82,320,936</strong></td>
<td><strong>11.0%</strong></td>
</tr>
</tbody>
</table>
# 2018 FEE SCHEDULE

## RECYCLE BC FEE SCHEDULE (CENTS/KG)

<table>
<thead>
<tr>
<th>Category</th>
<th>Material</th>
<th>2018 Fee Rates (cents/kg)</th>
<th>2017 Fee Rates (cents/kg)</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINTED PAPER</td>
<td>Newsprint</td>
<td>11.00</td>
<td>11.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Magazines and Catalogues</td>
<td>11.00</td>
<td>11.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Telephone Books</td>
<td>11.00</td>
<td>11.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other Printed Paper</td>
<td>11.00</td>
<td>11.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>PAPER PACKAGING</td>
<td>Corrugated Cardboard</td>
<td>24.00</td>
<td>24.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Boxboard</td>
<td>24.00</td>
<td>24.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Gable Top Cartons</td>
<td>52.00</td>
<td>52.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Paper Laminates</td>
<td>52.00</td>
<td>52.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Aseptic Containers</td>
<td>52.00</td>
<td>52.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>PLASTICS</td>
<td>PET Containers</td>
<td>53.00</td>
<td>53.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>HDPE Containers</td>
<td>53.00</td>
<td>53.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Plastic Film</td>
<td>91.00</td>
<td>91.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Plastic Laminates</td>
<td>102.00</td>
<td>102.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Polystyrene</td>
<td>91.00</td>
<td>91.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other Plastics</td>
<td>91.00</td>
<td>91.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>STEEL</td>
<td>Other Steel Packaging</td>
<td>20.00</td>
<td>20.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Steel Aerosols</td>
<td>20.00</td>
<td>20.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Steel Paint Cans</td>
<td>20.00</td>
<td>20.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>ALUMINUM</td>
<td>Aluminum Food &amp; Milk Containers</td>
<td>26.00</td>
<td>26.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other Aluminum Packaging</td>
<td>26.00</td>
<td>26.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>GLASS</td>
<td>Clear Glass</td>
<td>15.00</td>
<td>15.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Coloured Glass</td>
<td>15.00</td>
<td>15.00</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Making a difference together.

RecycleBC.ca  @RecycleBC  @RecycleBC
Amended Blue Box Program Plan (a-BBPP)

Consultations underway: Two-phased approach:

**Phase 1:** October 25 -- consultation meeting held on aspects of the program plan that pertain to stewards

- All materials posted at: [www.stewardshipontario.ca/a-bbpp](http://www.stewardshipontario.ca/a-bbpp) and feedback requested by **November 17**

**Phase 2:** December 22 -- SO and RPRA will release draft of the a-BBPP proposal

- Webinar on draft plan on **January 8**
- Feedback required by **January 15**

Amended BBPP must be approved by the RPRA and submitted to Minister by **February 15, 2018**
# 2016 Performance

## Recycling and Accessibility Performance for 2016

<table>
<thead>
<tr>
<th>Metric</th>
<th>Ontario 2016</th>
<th>Ontario 2015</th>
<th>YOY Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycling Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycled Tonnes</td>
<td>836,227</td>
<td>852,437</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Generated Tonnes</td>
<td>1,340,947</td>
<td>1,332,544</td>
<td>0.6%</td>
</tr>
<tr>
<td>Recycling Rate</td>
<td>62.4%</td>
<td>64.0%</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Provincial Recycling Target</td>
<td>60%</td>
<td>60%</td>
<td>-</td>
</tr>
<tr>
<td>Population Serviced by PPP Program</td>
<td>12,814,578</td>
<td>12,830,228*</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Recycled kg per capita</td>
<td>65.3</td>
<td>66.4*</td>
<td>-1.8%</td>
</tr>
<tr>
<td><strong>Accessibility Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Households Serviced</td>
<td>5,174,930</td>
<td>5,165,154*</td>
<td>0.2%</td>
</tr>
<tr>
<td>% Households with Access to PPP Program</td>
<td>94.6%</td>
<td>95.3%*</td>
<td>-0.7%</td>
</tr>
<tr>
<td>P &amp; E Cost per capita**</td>
<td>$0.64</td>
<td>$0.58*</td>
<td>9.7%</td>
</tr>
<tr>
<td>% of residents aware and using recycling services***</td>
<td>97.0%</td>
<td>97.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
## 2016 Performance

### FINANCIAL PROGRAM PERFORMANCE FOR 2016

<table>
<thead>
<tr>
<th>COST PERFORMANCE</th>
<th>ONTARIO 2016</th>
<th>ONTARIO 2015</th>
<th>YOY VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycled Tonnes</td>
<td>836,227</td>
<td>852,437</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Net Cost*</td>
<td>$258,540,366</td>
<td>$263,726,504</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Net Cost per Tonne</td>
<td>$309</td>
<td>$309</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Net Cost per capita</td>
<td>$20</td>
<td>$21**</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Recycled kg per capita</td>
<td>65.3</td>
<td>66.4**</td>
<td>-1.8%</td>
</tr>
</tbody>
</table>
### 2018 Budget

#### STEWARDSHIP ONTARIO BUDGET

<table>
<thead>
<tr>
<th>OBLIGATION SHARE</th>
<th>2018</th>
<th>2017 (reported net cost)</th>
<th>YOY VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of Supply Chain Costs *</td>
<td>$119,521,542</td>
<td>$123,750,323</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Promotion &amp; Education and Market Development</td>
<td>$575,000</td>
<td>$505,000</td>
<td>13.9%</td>
</tr>
<tr>
<td>Program Management</td>
<td>$4,159,723</td>
<td>$4,036,932</td>
<td>3.0%</td>
</tr>
<tr>
<td>Regulatory</td>
<td>$1,700,000</td>
<td>$1,200,000</td>
<td>41.7%</td>
</tr>
<tr>
<td>Cost Containment Drawdown</td>
<td>-</td>
<td>$(5,433,492)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Printed Paper Reserve Drawdown</td>
<td>-</td>
<td>$(1,240,681)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Market Development Reserve Drawdown</td>
<td>-</td>
<td>$(95,000)</td>
<td>-100.0%</td>
</tr>
<tr>
<td><strong>TOTAL FEE BUDGET (Steward Fees)</strong></td>
<td><strong>$125,956,265</strong></td>
<td><strong>$122,723,083</strong></td>
<td><strong>2.6%</strong></td>
</tr>
</tbody>
</table>
## 2018 Fee Schedule

<table>
<thead>
<tr>
<th>Category</th>
<th>Material</th>
<th>2018 Fee Rates (cents/kg)</th>
<th>2017 Fee Rates (cents/kg)</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRINTED PAPER</strong></td>
<td>Newsprint - CNA/OCNA</td>
<td>0.47</td>
<td>0.37</td>
<td>25.4%</td>
</tr>
<tr>
<td></td>
<td>Newsprint - Non-CNA/OCNA</td>
<td>5.68</td>
<td>5.27</td>
<td>7.8%</td>
</tr>
<tr>
<td></td>
<td>Magazines and Catalogues</td>
<td>8.47</td>
<td>8.84</td>
<td>-4.2%</td>
</tr>
<tr>
<td></td>
<td>Telephone Books</td>
<td>10.62</td>
<td>9.71</td>
<td>9.4%</td>
</tr>
<tr>
<td></td>
<td>Other Printed Paper</td>
<td>16.93</td>
<td>17.45</td>
<td>-3.0%</td>
</tr>
<tr>
<td><strong>PAPER PACKAGING</strong></td>
<td>Corrugated Cardboard</td>
<td>9.39</td>
<td>9.61</td>
<td>-2.3%</td>
</tr>
<tr>
<td></td>
<td>Boxboard</td>
<td>9.39</td>
<td>9.54</td>
<td>-1.5%</td>
</tr>
<tr>
<td></td>
<td>Gable Top Cartons</td>
<td>22.92</td>
<td>22.75</td>
<td>0.7%</td>
</tr>
<tr>
<td></td>
<td>Paper Laminates</td>
<td>22.92</td>
<td>22.69</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>Aseptic Containers</td>
<td>22.92</td>
<td>22.83</td>
<td>0.4%</td>
</tr>
<tr>
<td><strong>PLASTICS</strong></td>
<td>PET Bottles</td>
<td>15.97</td>
<td>15.99</td>
<td>-0.1%</td>
</tr>
<tr>
<td></td>
<td>HDPE Bottles</td>
<td>11.89</td>
<td>11.88</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td>Plastic Film</td>
<td>33.01</td>
<td>32.96</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td>Plastic Laminates</td>
<td>33.01</td>
<td>32.90</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td>Polystyrene</td>
<td>33.01</td>
<td>33.00</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other Plastics</td>
<td>33.01</td>
<td>33.02</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>STEEL</strong></td>
<td>Steel Food &amp; Beverage Cans</td>
<td>6.50</td>
<td>6.33</td>
<td>2.7%</td>
</tr>
<tr>
<td></td>
<td>Steel Aerosols</td>
<td>6.50</td>
<td>6.45</td>
<td>0.8%</td>
</tr>
<tr>
<td></td>
<td>Steel Paint Cans</td>
<td>6.50</td>
<td>6.44</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>ALUMINUM</strong></td>
<td>Aluminum Food &amp; Beverage Cans</td>
<td>3.33</td>
<td>4.16</td>
<td>-20.0%</td>
</tr>
<tr>
<td></td>
<td>Other Aluminum Packaging</td>
<td>7.61</td>
<td>6.86</td>
<td>10.9%</td>
</tr>
<tr>
<td><strong>GLASS</strong></td>
<td>Clear Glass</td>
<td>3.77</td>
<td>3.77</td>
<td>-0.1%</td>
</tr>
<tr>
<td></td>
<td>Coloured Glass</td>
<td>6.16</td>
<td>5.10</td>
<td>20.7%</td>
</tr>
<tr>
<td><strong>IN-KIND</strong></td>
<td></td>
<td><strong>$5,932,643</strong></td>
<td><strong>$7,322,988</strong></td>
<td><strong>-19.0%</strong></td>
</tr>
</tbody>
</table>
Questions?
Poll #4: Overall, this year’s Annual Steward Meeting was a productive and effective use of my time.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

www.pollev.com/cssa
Material Cost Differentiation Project Update

Tuesday, October 31, 2017
Today’s Agenda

1. Background & Status

2. How the Material Cost Differentiation project impacts stewards
1. Background & Status
The Material Cost Differentiation project was initiated in direct response to the decisions stewards made when developing the new Four-Step fee methodology

- Material specific cost inputs are used in fee setting and stewards confirmed these inputs remain important to the fee setting process

- Today, the material specific cost inputs are determined by conducting Activity-Based-Costing (ABC) studies (click here to watch a short video that explains the current ABC methodology)

- We need to find a new way of calculating the material specific cost input that reflects the impacts that material characteristics have on the cost of the recycling system
The MCD project will provide us with a new method of calculating the material specific cost inputs needed for fee setting.

Material Specific Costs (for use in calculating a material’s share of the cost of collection and processing).

Four-Step Fee Setting Methodology
8 Guiding Principles developed for the project

- In Q4 of 2016, the boards of SO, MMSM, MMSW and Recycle BC assigned a board member to participate on the Guiding Principles Working Group

- Those principles were presented to, and approved by, the four boards in Q2 of this year

- The 8 guiding principles were communicated to stewards on July 5, 2017
1. Relativity counts.
2. All designated materials count.
3. All material characteristics count.
4. All activities count.
5. Value counts.
6. System design and operations count.
8. The material mix counts.

Contact:

mcd@cssalliance.ca
Project is underway

- Steward governance is in place
- Steward communication will be consistent
- Expert consulting resources are being identified
2. Impacts on Stewards
The current project plan objective is to complete the work by June 2019 and therefore impact 2020 fees.

- **Q4 2017**: Select primary consultant team & begin work
- **Q1 – Q2 2018**: Propose characteristics to be measured & pilot measurement studies
- **Q2 – Q3 2018**: Alert stewards to changes in reporting categories
- **Q3 2018 – Q2 2019**: Conduct studies & produce MCD input

The outcome of the project could change the material reporting categories you will use when submitting your 2019 reports

- It is well understood that changes to reporting categories create work for stewards

- Stewards will be notified well in advance of any changes to the reporting categories
Thank You!

Presentation available at www.cssalliance.ca
Steward Poll Results

1. The amount and type of information in the Report to Stewards is about right

2. What should be the priority for producers managing materials in a circular economy?

3. How important is it for your company to know the details of what happens to the PPP you provide to the marketplace?

4. Overall, this year’s Annual Steward Meeting was a productive and effective use of my time
Thank You!

1-888-980-9549
or
info@cssalliance.ca