Waste Reduction and Recycling in Manitoba - Program Performance

SWANA – Northern Lights Chapter
Winnipeg, MB – May 14, 2015
Overview

- Overview of Manitoba’s waste reduction and recycling support programs
- Waste and recycling program performance comparison – indicators and issues
- Question and Answers
Special Operating Agency (SOA) - Program Areas

- Established in 2005
- Waste Diversion
  - Waste Reduction and Recycling Support (WRARS) Program
  - Household Hazardous Waste
  - Composting
  - Construction, Renovation and Demolition Waste
  - Producer Responsibility Organizations (PROs)
  - Northern and Remote Community Recycling
- Water Conservation
- Education for Sustainability
- Greening Government

www.greenmanitoba.ca
MB Stewardship Programs (2013)

- 5 EPR Regulations under The WRAP Act (1995 – 2010)
- 13 Producer Responsibility Organizations (PROs)
- $42 million in dedicated resources
- 120,000,000 kilograms (100 kgs/capita) of materials managed
- Program plan renewals 2016 – 2017
- www.greenmanitoba.ca /pros
Program Performance (2013)

- MMSM: 83,700 tonnes of blue box materials recycled
  - 54% recovery / 75 kgs per capita
- Tires: 1 million tires (14,700 T) collected annually from 1,460 (landfill and retail)
- Used Oil: 13.6 million litres recovered (75%)
- HHW: 283,000 L of paint (21 year round sites and 60 return to retail sites)
- E-waste: 3 million kgs from 57 collection depots
Waste Reduction and Recycling Support (WRARS) Levy - 2013

- WRARS Fund established 2009
- $10 per tonne levy on all waste landfilled
  - $9.6 million in revenue (840 kgs / capita)
- 80% of Fund ($7.6 million) rebated for municipal recycling reported
  - 184 municipalities / Recycling 69,100 tonnes (60 kgs/capita)
- 20% of Fund ($1.9 million) to support Provincial waste priorities
  - CR&D
  - Organics
  - Ag Plastics
  - Non-Program HHW
- Waste and Recycling Report
  - EPR programs and WRARS information summary (2011, 2012)
Population Served by Landfill Class

- **85%** Class 1 Landfills [15]
- **10%** Class 2 Landfills [46]
- **5%** Class 3 Landfills [123]

Provincial Landfills
- Parks: 9
- ANA (Community Councils): 36

- +90% of waste is weighed
- Tipping Fees: $10 to $60 per tonne
Manitoba Composts

- Announced June 2014
- Organics Diversion Goal (2020): 100,000 T
  - 85 kgs per capita
- $1 million dedicated annual funding pool
  - Environmental Approvals & CCME Compost Quality Criteria
  - Per tonne incentive payment
    - $10 / T for facilities 2,500 T / year or more
    - $25 / T for facilities < 2,500 T (to a maximum of $25,000 annually)
  - Capital Funding Support
- 2013 survey identified 80 public and private compost sites
  - 53 managed sites (35,000 T)
IMPROVING WASTE DIVERSION AND RECYCLING IN MANITOBA: A DISCUSSION PAPER
Green Jobs and the Economy

- Capitalize on local economic growth through EPR programs, local processing and manufacturing
- Develop green procurement policies for use of waste materials in products (e.g. rubberized asphalt, materials with recycled content)
- Increase green jobs through waste diversion
  - 10 times as many jobs created through waste diversion/recycling than landfiling
  - For every 1,000 T of material diverted two (2) jobs are created

Conference Board of Canada (2014)
Goal: cut waste in half by 2020
840 to 420 kgs/capita

- Landfill Material Bans (organics, CR&D, EPR program materials)
- Organics, CR&D, ICI diversion priorities
- Prohibit burning of compostable and recyclable paper/cardboard waste
- Support regional recycling and waste transfer stations
- Expand scope of EPR programs
- Northern & Remote Community Support
- Set recovery targets for EPR programs (75% or higher)
- Excessive / non-recyclable and fast food packaging (e.g. coffee cups)
- Promotion and Education
- Options for hard-to-recycle items – e.g. mattresses, shingles
- WRARS Fund – Landfill Levy options

For every tonne of cardboard recycled instead of being burned or landfilled, 3.5 tonnes of CO2e are eliminated

Up to 100 kilograms of methane is produced from each tonne of waste disposed of at a landfill
WRARS Waste Trend – Tonnes per Capita Landfilled

2010 2011 2012 2013 2014

2013 Baseline

0.950 0.923 0.878 0.841 0.836

0.900 0.880 0.860 0.840 0.820 0.800 0.780 0.760
Waste Program Performance Comparisons

  - Report every 2 years (1994 – 2010)
  - Only comparative data at provincial level
  - 2012 Report not released

  - Nationally consistent reporting methodology for waste disposal

- Municipal program performance not readily available

- International waste data comparison – OECD / Conference Board of Canada

- Environment Canada – EPR Performance Guide (October 2007)
  - Recommend program performance indicators

- No national compilation report
Waste Disposal – Kilograms Per Capita (2010)

Statistics Canada, 2013

Kilograms

Canada

Newfoundland and Labrador

Quebec

New Brunswick

Nova Scotia

Ontario

Manitoba

Saskatchewan

Alberta

British Columbia

MB Goal (420 Kgs/capita)

2014 (836 Kgs/capita)
Organic Waste Collection – Kilograms Per Capita (2010)

Statistics Canada, 2013
BC has the highest diversion per capita of 322 kgs at a cost of less than $100 per capita operating cost. SK and MB have the two lowest per capita current expenditures as well as the two lowest diversion rates.
PPP Programs (Canadian Stewardship Service Alliance)

<table>
<thead>
<tr>
<th>2013</th>
<th>MMBC (BC) 100%</th>
<th>MMSW (SK) 75%</th>
<th>Stewardship ON (50%)</th>
<th>MMSM (MB) 80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Cost Per Tonne</td>
<td>-</td>
<td>-</td>
<td>$274</td>
<td>$275</td>
</tr>
<tr>
<td>Net Cost Per Capita</td>
<td>-</td>
<td>-</td>
<td>$19</td>
<td>$19</td>
</tr>
<tr>
<td>Kgs per Capita Recycled</td>
<td>-</td>
<td>-</td>
<td>68.3</td>
<td>68.7</td>
</tr>
<tr>
<td>% Hhlds With Access to PPP</td>
<td>-</td>
<td>-</td>
<td>97%</td>
<td>93%</td>
</tr>
<tr>
<td>Recycling Rate</td>
<td>-</td>
<td>-</td>
<td>66%</td>
<td>63%</td>
</tr>
</tbody>
</table>

- System-wide performance indicators
  - Environmental
  - Consumer
  - Financial

- Allows “apples to apples” comparisons
- Earlier analysis for MB and ON 2011 and 2012
- No formal report on CSSA site
- MMSM vs WRARS recycling per capita 75 vs 60
### Used Oil Management Association (UOMA)

<table>
<thead>
<tr>
<th>2013</th>
<th>BC</th>
<th>AB</th>
<th>SK</th>
<th>MB</th>
<th>PQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Oil</td>
<td>75%</td>
<td>81%</td>
<td>73%</td>
<td>74%</td>
<td>92%</td>
</tr>
<tr>
<td>Filters</td>
<td>83%</td>
<td>92%</td>
<td>82%</td>
<td>73%</td>
<td>79%</td>
</tr>
<tr>
<td>Oil Containers</td>
<td>75%</td>
<td>88%</td>
<td>69%</td>
<td>57%</td>
<td>99%</td>
</tr>
<tr>
<td>Antifreeze</td>
<td>41%</td>
<td>-</td>
<td>-</td>
<td>15%</td>
<td>26%</td>
</tr>
<tr>
<td>Antifreeze Containers</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3%</td>
<td>24%</td>
</tr>
<tr>
<td>Aerosol Lubricants</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>42%</td>
</tr>
</tbody>
</table>

Percent recovery reported

- No cost data provided
- No quantitative collection data
- Links to provincial program annual reports for more information
## Electronic Products Recycling Association (EPRA)

<table>
<thead>
<tr>
<th></th>
<th>NS</th>
<th>PEI</th>
<th>Quebec</th>
<th>MB</th>
<th>SK</th>
<th>BC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collection (Tonnes)</strong></td>
<td>4,736</td>
<td>645</td>
<td>10,627</td>
<td>3,026</td>
<td>3,288</td>
<td>23,234</td>
</tr>
<tr>
<td><strong>Kgs/Capita</strong></td>
<td>5.04</td>
<td>4.44</td>
<td>1.30</td>
<td>2.38</td>
<td>2.95</td>
<td>5.04</td>
</tr>
<tr>
<td><strong>Cost per tonne</strong></td>
<td>$1,207</td>
<td>$1,112</td>
<td>$1,354</td>
<td>$1,134</td>
<td>$1,731</td>
<td>$1,055</td>
</tr>
</tbody>
</table>

Note: Alberta and Ontario Programs not reported through EPRA

### Other Categories Reported
- Access
- Awareness
- # Collection Sites
- Program Scope and Reuse in Quebec
Canadian Association of Tire Recycling Agencies (CATRA)

Categories
- Levy
- Processing
- Stockpiles
- Goal
- Contacts

- Information and links to Programs in BC, AB, SK, MB, ON, PQ, NB, NS, PEI, NL and Yukon
- No consistent performance indicators or reporting measures
- Individual annual reports – good information
# Key Performance Indicators (2007)

<table>
<thead>
<tr>
<th>Performance Category</th>
<th>Key Performance Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Awareness</td>
<td>o Percentage of population aware of program</td>
</tr>
<tr>
<td>2) Participation and Accessibility</td>
<td>o Participation rate</td>
</tr>
<tr>
<td>3) Product Collection</td>
<td>o Absolute collection</td>
</tr>
<tr>
<td></td>
<td>o Collection rate</td>
</tr>
<tr>
<td></td>
<td>o Absolute collection rate per capita</td>
</tr>
<tr>
<td>4) Post-Collection Management</td>
<td>o Post-collection fate of material</td>
</tr>
<tr>
<td>5) Operational Efficiency</td>
<td>o Distribution of expenses</td>
</tr>
<tr>
<td></td>
<td>o Cost per unit of collected material</td>
</tr>
<tr>
<td>6) Quality of Service</td>
<td>o Target community and program partner satisfaction</td>
</tr>
<tr>
<td>7) Management Performance</td>
<td>o Progress against business plan goals and/or targets</td>
</tr>
<tr>
<td></td>
<td>o Regulatory non-compliance</td>
</tr>
</tbody>
</table>
Summary

- Program performance reporting and comparisons are important
  - “how do we compare”
- PRO information is available in annual reports
  - Reporting system/template needed
  - Time frame is important
- Waste data is not readily available or is dated (Stats Can)
- The appropriate indicators are known (CSSA and EPRA)
- Comparison of municipal programs is difficult
- CCME & PROs – lot’s more to do
Questions / Discussion

Not sure where to take your recyclables?

ManitobaEcoDepot.ca

Whether it's for a mobile phone, old tires or the paint from that room you did last year, our new search tool will help you find the nearest depot to recycle it—anywhere in Manitoba. Now it's easy to search by location or by the type of product you want to drop off, making us your go-to recycling resource.

www.greenmanitoba.ca