RECYCLE BC DATA AND METRICS

Sam Baker - Director, Logistics
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AGENDA

1. Introduction
2. Data Sources
3. Data Tools
4. Examples of Data Use
5. Finding Efficiencies
6. Challenges with Data
7. Planning for the Future
WHO WE ARE

Recycle BC is a not-for-profit organization responsible for residential packaging and paper recycling throughout British Columbia.

Recycle BC ensures household materials are collected, sorted and responsibly recycled.

Our program is funded by over 1,200 businesses that include retailers, manufacturers and restaurants that supply packaging and printed paper to BC residents, shifting costs away from homeowners.
# Recycling Statistics

- **235,655** tonnes reported by stewards
- **40 kg** recovered per capita
- **98.3%** of households have access to depots
- **1,850,000** households serviced (includes curbside, multi-family and depot collection)
- **11,576,653** social media impressions across Twitter, Facebook and Instagram
- **183,983** net tonnes collected
- **4,578,000** population served (includes curbside, multi-family and depot collection)
- **169** communities benefiting/participating in curbside and multi-family programs
- **206,778** gross tonnes collected
- **73%** of those residents who make an effort to recycle

## Material Category and Recovery Rate

<table>
<thead>
<tr>
<th>Material Category</th>
<th>Recovery Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>86%</td>
</tr>
<tr>
<td>Plastic</td>
<td>42%</td>
</tr>
<tr>
<td>Rigid Plastic</td>
<td>54%</td>
</tr>
<tr>
<td>Flexible Plastic</td>
<td>19%</td>
</tr>
<tr>
<td>Metal</td>
<td>67%</td>
</tr>
<tr>
<td>Glass</td>
<td>78%</td>
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</tbody>
</table>

*78.1% recovery rate†*
DATA SOURCES

Recycle BC data collection points include:

• Contracts
  o Partner information
  o Contract terms

• Scales
  o Inbound material weights by load

• Inbound composition audits
  o Material composition information by collector

• Stakeholder interactions
  o Incident reports
  o Due diligence visits

• Resident interactions
  o Social media, surveys, etc.
DATA TOOLS

Enterprise Relationship Management
Customer Relationship Management
Data Visualization & Analysis
Social Media

SAP

Power BI

sprout social

RECYCLEBC
HAZARDOUS SCORECARD

2018 PERFORMANCE

<table>
<thead>
<tr>
<th># AUDITS WITH HAZARDOUS MATERIAL</th>
<th>% AUDITS WITH HAZARDOUS MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td>29%</td>
</tr>
<tr>
<td>TOTAL # AUDITS</td>
<td>180</td>
</tr>
</tbody>
</table>

2018 % HAZARDOUS AUDITS AND TIMES AUDITED BY QUARTER

WHAT IS HAZARDOUS MATERIAL?
Hazardous material is material that can be dangerous and is not accepted for recycling collection. The most common types are disposable propane cylinders, lithium batteries from electronics such as computers and cell phones, and lighter fluid containers. Other examples include reusable propane canisters, butane canisters, helium balloon cylinders and oxygen cylinders used for home health, medical sharps (needles) and flammable liquid and pesticide containers with contents remaining.

WHY IT’S A PROBLEM
Hazardous material can pose serious safety problems for recycling workers and the operation of recycling facilities if they are not properly disposed of or recycled. Many of these items may explode or burst when heated, compressed or dropped. Even small sparks can cause flammable and combustible material to catch fire or explode.

HOW TO PREVENT IT
It’s important residents dispose of these materials properly and DO NOT put any materials that have risk of explosion or injury in with their packaging and paper products. Residents should take hazardous materials to a recycling depot that accepts them for safe disposal.

REMOVE AND TAG THESE ITEMS AT THE CURB
Practice active tagging and contamination removal at the source (resident’s bins) to ensure they aren’t put in the collection trucks or delivered to the receiving facility.

EDUCATE YOUR RESIDENTS
The Recycling Council of BC’s Recyclopedia allows residents to search for a nearby depot at RecycleBC.ca. Residents can also call their recycling hotline 1-800-867-4321, or email hotline@rcbc.ca to find a drop-off location.
FINDING EFFICIENCY

TIMES AUDITED VS % OCCURRENCE OF HAZARDOUS MATERIAL BY ORIGINATING SITE AND CHANNEL

% Hazardous Audits

% Hazardous Audits

Times Audited

Stream Type: MS Containers • MS Fibres • SS Commingled
FINDING EFFICIENCY
FINDING EFFICIENCY

CHALLENGES WITH DATA

1. Data cleanliness
2. Pulling data together from various sources
3. Creating dashboards of value
PLANNING FOR THE FUTURE

- Self serve data for Collectors
- Interactive online content for residents