Green Cart Update

Approval sought late 2019
Disclaimer

This presentation outlines my professional opinion developed through working in solid waste management. The views are my own and they do not necessarily reflect the official policy or position of the City of Lethbridge.
Cost Effective

Switch to alternate weeks collection largely eliminates extra costs.

Processing in the range of $50-75/t.

Compares well with $60+/t landfilling and $125+/t recycling.
Feed people and animals

Lethbridge Food Bank
Las Vegas

Waste & Recycling Services
**Impact**

**What’s in our trash?**
More than just garbage.

- Saskatoon – 58%
- Calgary -65%
- Lethbridge – 60%+

**Waste & Recycling Services**
Total GHGs emissions excluding LULUCF
Top 20 of countries (year 2011) vs. Food wastage

If food wastage were a country, it would be the third largest emitting country in the world.

Source: WRI'S Climate Data Explorer (4)
Plants and compost are amazing

Interplant signalling through hyphal networks
David Johnson  Lucy Gilbert

Existing Processing Options
System 1 – Organics Waste
System 1 – Organics Waste
System 2 – Packaging Waste

Waste & Recycling Services
Package Versus Contents

Average carbon footprint of food product production, processing and packaging

- Beverages
- Cereals and Grains
- Dairy
- Fish and seafood
- Fruit
- Legumes and Nuts
- Meat
- Vegetables

kg CO2 eq/kg product

Oregon Department of Environmental Quality
Wasted Food

Second Harvest – The Avoidable Crisis of Food Waste

Role Munis can play

Source Reduction –

• Review landfill policies, regulations, Legislation and fees
• Increase fees for dumping organics in landfill
• Communicate responsible purchasing and food handling behaviours to consumers
• Legislate mandatory reporting of FLW
Role Munis can play

Waste Mgt.—

- Identify infrastructure gaps preventing reuse and recycling
- Encourage and support the development of new business models by waste management haulers
- Invest revenue from increased landfill and emissions taxes in the development of innovative reuse and recycling infrastructure and initiatives
- Assist businesses to individually and jointly evaluate long-term investment options to reduce FLW
INDUSTRIAL, COMMERCIAL, INSTITUTIONAL & CONSTRUCTION AND DEMOLITION 5 YEAR SCHEDULE:

**Legend**
- As required
- Milestone
- Voluntary Program
- Economic Program
- Regulatory Program

**ICI Schedule:**
- **Waste Diversion Assistance & Promotion**
- **Differential Tipping Fees**
- **MRF Operational**

**Tipping Fees:**
- 2018: $95/t
- 2019: $105/t
- 2020: $115/t
- 2021: $115/t
- 2022: $115/t

**C&D Schedule:**
- **Education & Awareness Program**
- **Differential Tipping Fees**

**Organics Solution:**
- **Voluntary Program**
- **Economic Program**
- **Regulatory Program**

**PERFORMANCE MONITORING**

**2018**
- July: Surcharge announced

**2019**
- July 1, 2019: Add Polystyrene Foam (EPS) Packaging to DM List

**2020**
- July 1, 2019: Add Mattresses and textiles to DM Materials list

**2021**
- Announced: Organics Surcharge

**2022**
- Anticipated consultation on targets setting beyond 2021

**Add Mattresses and textiles to DM Materials list**
Surcharges – “Organics”

- **cardboard & paper**: newspaper, catalogues, magazines, mixed paper, boxboard, corrugated cardboard
- **recyclable wood**: dimensional lumber, pallets, tree pruning, and other items that are made of raw and un-processed wood
- **asphalt shingles**: asphalt shingles from new construction or re-roofing
- **scrap metal**: general scrap metal including appliances and structural or decorative metal and metal items suitable for recycling
- **drywall**: clean gypsum wall board from new construction suitable for recycling
- **concrete**: concrete foundations, sidewalks, brick, rubble, gravel & sand suitable for recycling
- **brick & masonry block**: structural or decorative, with or without mortar, crushed or whole
- **asphalt pavement**: road asphalt
2019 - Commercial lawn/Garden
2019 – Major Organics Generators - Retail

Costco Wholesale

Waste & Recycling Services
Examples

Beginning October 1, 2019, loads that contain more than 25% recyclable materials (designated materials) will be charged a fee of $50 per tonne.

Example A

A 5 tonne load of waste appears to be 20% cardboard, 5% paper and 20% wood.

This load contains approximately 45% designated materials. For this hypothetical load, the total surcharge would be $250 in addition to the appropriate tipping fee.

Example B

A 5 tonne load of waste appears to be 10% drywall, 5% asphalt shingles, 2% metal and 1% paper.

For this hypothetical load there would be no surcharge as the load contains less than 25% recyclable materials.
Ocean Plastics

Plastic waste available to enter the ocean in 2010 (million MT)

- > 5.00
- 1.00 - 5.00
- 0.25 - 1.00
- 0.01 - 0.25
- < 0.01

Waste & Recycling Services
Food Waste Generation

The biggest food wasters around the world

<table>
<thead>
<tr>
<th>RANK/REGION</th>
<th>POUNDS OF FOOD WASTE PER PERSON/PER YEAR</th>
<th>TYPES OF FOOD MOST WASTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 East Asia</td>
<td>530 pounds</td>
<td>Roots/tubers</td>
</tr>
<tr>
<td>2 Europe</td>
<td>610 pounds</td>
<td>Roots/tubers</td>
</tr>
<tr>
<td>1 North America &amp; Oceania</td>
<td>640 pounds</td>
<td>Roots/tubers</td>
</tr>
</tbody>
</table>

SOURCE: The Food and Agriculture Organization of the United Nations
Summing up

• Organics – The case is strong and CoL is planning for progress.
• Focus on what can be done now.
• Focus on most impactful areas.
• Keep reduction of Food Waste and Loss in mind – not just diversion to processing.
• Direct engagement with business works.
• We can’t do everything, but we can do something meaningful.
Questions