Recycling Markets Update
CRUEDA Committee Presentation
Seattle Public Utilities
May 31, 2019
Context - Two Major Elements of Recent Global Recycling Challenges

Recycling **Import limitations** by China and others *(on mixed paper & mixed plastics)*

International concern on **plastic pollution** *(on land and sea)*

**SINCE CHINA’S BAN, RECYCLING IN THE US HAS GONE UP IN FLAMES**

Hundreds of US cities are killing their recycling programs

China stopped importing trash from other countries. Now, many US are facing a recycling crisis.

By Chavie Lieber | @ChavieLieber | Chavie.Lieber@Vox.com | Mar 18, 2019, 4:30pm EDT

**Plastics Pile Up as China Refuses to Take the West’s Recycling**
## Background – What’s in Seattle’s recycling?

<table>
<thead>
<tr>
<th>Material</th>
<th>Tons/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers</td>
<td>35,000</td>
</tr>
<tr>
<td>Cardboard</td>
<td>14,500</td>
</tr>
<tr>
<td>Plastics</td>
<td>4,400</td>
</tr>
<tr>
<td>Glass</td>
<td>23,100</td>
</tr>
<tr>
<td>Metals</td>
<td>2,200</td>
</tr>
<tr>
<td>Non-recyclable</td>
<td>9,300</td>
</tr>
</tbody>
</table>

![Pie chart showing material distribution](chart.png)

- Papers: 40%
- Cardboard: 16%
- Glass: 26%
- Plastics: 5%
- Metals: 2%
- Non-recyclable: 11%
Background - How does Seattle’s Recycling Get Processed?

- Seattle contracts with Republic Services to process residential recycling.
- SPU pays a processing fee per ton (under 6-10 year contract).
- Republic processes with high-tech sorting systems plus manual support.
- Republic markets and sells the commodities.
- Seattle retains 100% of the market value for the commodities.
Background - Global Recycling Changes

• China stopped importing **mixed paper** and **mixed plastics** in 2018

• **Market values for paper dropped significantly** in response to global shifts in supply and demand.

• Other **Asian and North American markets expanded**, while **China continues to be the largest buyer** of paper scrap, further downstream, and influencing the market at all stages.

• Prices remain low and all buyers have **elevated standards for scrap products**.

• **Plastic pollution concerns** and responses heightened across the globe, including land and sea debris, dumping and incineration.

<table>
<thead>
<tr>
<th>Material</th>
<th>Tons/Year</th>
<th>2017 $M/Year</th>
<th>2018 $M/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers</td>
<td>35,000</td>
<td>$3.0</td>
<td>$1.0</td>
</tr>
<tr>
<td>Cardboard</td>
<td>14,500</td>
<td>$2.1</td>
<td>$1.2</td>
</tr>
<tr>
<td>Plastics</td>
<td>4,400</td>
<td>$1.3</td>
<td>$1.0</td>
</tr>
<tr>
<td>Glass</td>
<td>23,100</td>
<td>$0.3</td>
<td>$0.3</td>
</tr>
<tr>
<td>Metals</td>
<td>2,200</td>
<td>$1.2</td>
<td>$1.2</td>
</tr>
</tbody>
</table>

| Total     | 88,500    | $8.0         | $4.7         |
Sorting Facility Response to Global Challenges

- Improve **bale quality and bale types**.
- Reduce **sorting speeds**, increase **staffing**, and invest in additional **sorting technologies**.
- $1.5M sort upgrade in 2018, in addition to major 2016 upgrades.
- Expand **Asian and domestic markets** and destinations.
Seattle Response as Contract Administrator

Monitor & enforce
- Monitor & enforce contract terms
- Prohibit landfill disposal of Seattle’s recycling
- Standards for high value commodity products

Support
- Support domestic partnerships
- Build connections with local plastic and paper opportunities

Own Market Risk
- Absorb the gains and losses of market value
Where does Seattle’s Recycling Go in 2019?

• Republic, and other local facilities, have significantly increased shipment to **domestic markets for mixed paper and plastic**.

• **U.S & other Asian ports** expanded processing capacity.

• **China** continues to remain the largest **downstream buyer** and influencer in scrap paper market.

• **Strong local markets** continue in Seattle for **metals and glass**.

<table>
<thead>
<tr>
<th>Republic Seattle Facility</th>
<th>Material</th>
<th>Tons/ Yr</th>
<th>2017 Export</th>
<th>2019 Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>35,000</td>
<td>98%</td>
<td>&lt;60%</td>
<td></td>
</tr>
<tr>
<td>Cardboard</td>
<td>14,500</td>
<td>60%</td>
<td>&lt;20%</td>
<td></td>
</tr>
<tr>
<td>Plastics</td>
<td>4,400</td>
<td>85%</td>
<td>&lt;20%</td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td>23,100</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Metals</td>
<td>2,200</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>88,500</td>
<td>65%</td>
<td>&lt;35%</td>
<td></td>
</tr>
</tbody>
</table>
Seattle Leadership & Action – in Response to Global Recycling Challenges

**SPU/King County Plastics Summit 2018**
Hosted public-private partnership to identify challenges and solutions.
SPU facilitated expanded regional processing of mixed plastics
Follow-up actions for partnerships, tracking, legislations, regulations.

**SPU/King County Responsible Recycling Task Force 2018**
SPU/King County hosted 11-month regional committee of leaders from government, industry and elected officials to prioritize response.
Detailed regional action plan, timelines and responsible parties.

**Ongoing public-private-NGO partnerships with key national and international players**
Sustainable Packaging Coalition
Product Stewardship Institute
The Recycling Partnership
Pacific Coast Collaborative
WA State
Zero Waste Washington
Regional Cities & States
Responsible Recycling Task Force 2018

Comprehensive Regional Approach:
1. Establish Responsible Recycling Policies
2. Develop Local Recycling Infrastructure
3. **Harmonize** Recycling Programs & Messaging
4. Increase Demand for Recycled Materials
5. Create Clean & Marketable Feedstocks
6. Improve Upstream Design
Responsible Recycling Task Force - Sampling of 20 Action Items

**Legislative Action:**

- Support legislation that promotes the use of innovative technologies and/or processes to help develop and build local recycling infrastructure and market development:
  - **WA Sustainable Recycle Act** (HB 1543) recently adopted to create Recycling Development Center.

- Support state *Plastics Packaging Stewardship* legislation; establish *recycled-content legislation* to requires that certain products be made with a certain amount of recycled material:
  - **WA Plastic Packaging Act** adopted as a Study Bill to assess impacts of plastics packaging and consider *product stewardship* and other sustainable management, including **20% recycled content in packaging**.
Responsible Recycling Action Items, continued:

Local Processing and Markets:

• Pilot projects to encourage the domestic recycling infrastructure.
  ✓ Encouraged shift to all domestic processing for Seattle plastics
  ✓ New pilots with KC and others for regional poly-coated cartons and other materials.

• Expand statewide plastic bag/film retail drop off options through Wrap Recycling Action Program (WRAP)
  ✓ Seattle/KC working to expand film & bag drop-off in greater Seattle

• Support of local of markets for paper, plastic, and compost.
  ✓ KC/Seattle and other stakeholder support through LinkUp program.
  ✓ Outreach and requirements to reduce low value/high-contamination single-use packaging and materials.
Recycling Action Items, continued:

• **Customer outreach** - Continue the Communication Consortium for **unified messaging about curbside recycling** to Seattle & King County residents.
  
  ✔ *SPU and others expanding regional* **Recycle Right** messaging.

• **Downstream impacts** – Begin monitoring **chain of custody** for adherence to recognized **environmental and human health and safety standards**.
  
  ✔ Increased global pressure in 2019 for **manufacturers and processors on responsible management**, including recent **Basel Convention** updates.

  ✔ Seattle & KC and other cities contributing to **new monitoring research and options**.
Recycling Action Items, continued:

• **Sustainable Packaging** - Engage with the Sustainable Packaging Coalition and How2Recycle programs to educate brands and packaging designers on recyclability of packaging, the use of recycled materials in packaging, and designing packaging that is less toxic and more recyclable (e.g., no PVC plastic).

  ✓ *Sustainable Packaging Coalition Conference in Seattle April 2019*
  ✓ *Continue partnerships* to support SPC’s national and regional efforts and voluntary adoption by industry.
Reaching Seattle Customers in 2019

• Recycling still works
  • Supporting customers with effective recycling information and tools - Regional Recycle Right Campaign

![](image)

• All recyclables need to **Empty, Clean & Dry**
• Only put **what’s accepted** on our guides in the cart

**Waste Prevention works even better**
• Supporting customers to **reduce single use packaging**, food scraps, and other consumer wastes.
Questions?