Federal Market Development and Recycling Support

Chris Newman
U.S. EPA, Region 5
Chicago, IL
EPA’s FY19 Sustainable Materials Management

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SMM Measurement &amp; Database Management</td>
</tr>
<tr>
<td>• SMM in the Built Environment</td>
</tr>
<tr>
<td>• WasteWise</td>
</tr>
<tr>
<td>• LCA &amp; SMM Policy</td>
</tr>
<tr>
<td>• Materials Collection, Processing, and Utilization Systems</td>
</tr>
</tbody>
</table>
EPA’s 2015 Waste Management Facts and Figures

<table>
<thead>
<tr>
<th>MSW Generation and Management</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Million tons MSW generated</td>
<td>259.0</td>
<td>262.4</td>
</tr>
<tr>
<td>Per capita generation rate in pounds per person per day</td>
<td>4.45</td>
<td>4.48</td>
</tr>
<tr>
<td>Million tons recycled plus composted</td>
<td>89.6</td>
<td>91.2</td>
</tr>
<tr>
<td>Recycling plus composting rate</td>
<td>34.6%</td>
<td>34.7%</td>
</tr>
<tr>
<td>Million tons combusted with energy recovery</td>
<td>33.2</td>
<td>33.6</td>
</tr>
<tr>
<td>Million tons landfilled</td>
<td>136.2</td>
<td>137.7</td>
</tr>
</tbody>
</table>
Four Focus Areas

• Based on stakeholder discussions, EPA has identified four main areas of focus:
  – Education
  – Infrastructure
  – Markets
  – Better data
EPA Support for Market Development

• EPA Region 5 supports projects that build a foundation for markets for recovered materials
  – Cooperative agreement with Michigan Technological Univ.
    • Research and inventory ‘Buy Recycled’ public procurement policies
      Provide guidance on end-of-life lithium battery management
  – Grants to the Recycling Partnership
    • Improving communication with residents
      – S.E. Wisconsin (EPA Region 4)
      – Minnesota (EPA Region 5, Environmental Education)
    • MRF-shed communication study to reduce contamination
      (completed 2017)
  – Illinois Contamination Taskforce (participant)
EPA Support for Market Development

• Memorandum of Understanding between:
  – ACC’s Flexible Film Recycling Group’s WRAP Campaign
  – Green Blue’s Sustainable Packaging Coalition’s how2recycle Campaign

• The parties agreed to:
  1) decrease disposal rates through source reduction, reuse, recycling and prevention;
  2) Reduce environmental impacts of plastics throughout the life cycle;
  3) Provide technical assistance to increase stakeholder capacity to implement sustainable materials management.
EPA Support for Market Development

- Safer Choice packaging requirements, [www.epa.gov/saferchoice](http://www.epa.gov/saferchoice)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is sourced, manufactured, transported, and recycled using renewable energy</td>
<td>Packaging is delivered by hybrid fuel truck. Packaging plant purchases wind/solar/hydroelectric power.</td>
</tr>
<tr>
<td>Optimizes the use of renewable or recycled source materials</td>
<td>Packaging contains post consumer recycled content.</td>
</tr>
<tr>
<td>Is manufactured using clean production technologies and best practices</td>
<td>Packaging contains regrind.</td>
</tr>
<tr>
<td>Is made from materials healthful in all probable end-of-life scenarios</td>
<td>Packaging is recyclable, for example, HDPE resin.</td>
</tr>
<tr>
<td>Is physically designed to optimize materials and energy</td>
<td>Packaging uses less resin than alternative, for example, by replacing pails with bag-in-box or by delivering product in tanker trucks instead of 265 gallon containers.</td>
</tr>
<tr>
<td>Is effectively recovered and used in biological and/or industrial closed-loop cycles</td>
<td>Packaging is collected by partner for reuse. Bulk containers are returned and refilled.</td>
</tr>
</tbody>
</table>
Federal Government Actions for Recycled Material Markets

• Comprehensive Procurement Guidelines
  – RCRA section 6002 (a), requires the purchase of EPA-designated products containing recovered materials by “procuring agencies” that spend more than $10,000 a year on that item.
  – Procuring agencies are any level of government or government contractor that uses _appropriated federal funds_.
  – Find out more at:
    • https://www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products

• General Services Administration's (GSA) Advantage highlights CPG items, [www.gsaadvantage.gov](http://www.gsaadvantage.gov)

• GSA’s [www.SFTool.gov](http://www.SFTool.gov) – Sustainable Facilities Tool is a tool that assists Federal Agencies and the general public to buy and build ‘green’.
EPA Education Tools

- iWarm helps people understand how recycling can save energy.
  - [https://developer.epa.gov/iwarm-widgets/](https://developer.epa.gov/iwarm-widgets/)

- Based on the Warm model, but scaled for an individual user
  - [www.epa.gov/warm](http://www.epa.gov/warm)

- Recycling Economic Information Report
  - [https://www.epa.gov/smm/recycling-economic-information-rei-report](https://www.epa.gov/smm/recycling-economic-information-rei-report)
EPA Education Tools

• Managing and Transforming Waste Streams – A Tool for Communities
  – Features a table of 100 measures communities can employ to reduce waste and recover materials.
  – Interactive functions let local planners explore best practices and create a list of strategies tailored to their community's needs

• Energy Star Portfolio Manager for companies and facilities
  – Initially tracked energy and water, waste has been added
  – Adding Waste & Materials tracking helps users benchmark their waste management practices
  – This provides insight on waste reduction and opportunities maybe
Recycling and China

The Connection

• U.S. processed over 130 million tons of recovered materials in 2017
• U.S. exported nearly 41 million tons (about 32%) of these materials worldwide to 155 countries
• About 13 million tons (31% of U.S. exports) went to China for recycling
• China is by far the largest importer of recovered materials in the world

Some Facts about U.S. Recycling

• 155,000 direct employment in recycling
• 378,000 more jobs throughout the economy indirectly supported by recycling
• $17.9 billion - value of all U.S. materials exported ($5.6 billion to China)

Source: ISRI – NRC Quarterly Market Report, March 29, 2018
U.S. Government Actions: Addressing China’s National Sword

- Urging China to halt implementation and consider alternative, non-discriminatory approaches that will more effectively target illegal trade and harmful wastes
- In December 2017, the U.S. Trade Representative and Dept. of Commerce, in consultation with EPA, submitted formal comments to the World Trade Organization to address China’s (then) proposed measures
- EPA is regularly communicating with affected parties
- Supporting G7 countries efforts to expand markets for recovered materials
- Supporting Organization for Economic Cooperation and Development’s report on secondary plastics markets
Examples of State Market Development Activities in Region 5

• Indiana – Accepted grant proposals in 2018, from $1,000 to $500,000, with matching requirement. With a 50% matching
  (https://www.in.gov/idem/recycle/2358.htm)

• Ohio – Has a market development grant program, up to $200,000 is available per grant, with a 100% matching
  requirement (https://epa.ohio.gov/ocapp/recycling#1843210479-market-development-grant)

• Minnesota – Provides technical assistance and information on materials
• Chris Newman
  – U.S. EPA Region 5
  – 312-353-8402
  – newman.christopherm@epa.gov