PAC NEXT is proud to present the Packaging Materials Recovery Systems Map. This map was created by our Systems Optimization committee to help package designers, decision makers, manufacturers understand the flow of packaging materials through the current collection and recovery systems and how design and material choices can impact overall recycling and recovery rates.

120+ Materials Identified
With over 120 materials identified to date by the PAC NEXT System Optimization committee, the number and quantity of materials being captured in today's recycling systems continues to grow. In October 2011, the System Optimization committee was commissioned with the task of developing a baseline process map of how the material recovery process and supporting infrastructure function today. The Packaging Materials Recovery Systems Map allows for a common understanding of what elements are included in the system.

Collection Methodologies
The process starts with the various generators or points where materials are discarded; each with a different discarded materials characterization. There are a number of collection methodologies available with some being more appropriate than others. The choice is dictated by convenience, cost and efficiency relative to the materials being collected.

The Processing Streams & Materials Recovered
There are two main diversion avenues: recycling and composting. Some recycling processes generate material mixes that require secondary processing. Through primary or secondary processing, materials are made market ready. A recovery opportunity also exists for materials not recyclable or compostable.

End Market
Market ready materials are sent for consumption by manufacturers. Materials going to Energy from Waste/Waste to Energy have their intrinsic energy recovered. All materials not recycled, composted or recovered ultimately end up in landfill.

The Packaging Materials Recovery Systems Map shows empty percentage fields to follow how materials flow through the system. It also shows that losses can be expected as materials flow through the system.

The Packaging Materials Recovery Systems Map is the first step in establishing preferred, efficient systems and the respective cost models, which will be developed as more data become available.

We thank all PAC NEXT members who collaborated on this project and provided their valuable input.

If you would like to receive more information and/or learn how to join the System Optimization committee, please feel free to contact us.

With thanks,
### Printed Paper and Packaging (PPP)

<table>
<thead>
<tr>
<th>Category</th>
<th>Pathway</th>
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<tbody>
<tr>
<td>Residential</td>
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<tr>
<td>Industrial</td>
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<tr>
<td>Office Commercial</td>
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<td>Institutional</td>
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<tr>
<td>Retail Commercial</td>
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<tr>
<td>Public Space</td>
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<tr>
<td>Food Services</td>
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<tr>
<td>Litter</td>
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<tr>
<td>Other</td>
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</tbody>
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#### Ongoing Processing
- **Return To Vendor**
- **Deposit Return Vendor & Depot**
- **Blue Box**
- **Green Bin**
- **Depot**
- **Other**

#### Collection Method
- **Captured Y/N**
- **Material Recovery Facility**
- **Compacting Facility**
- **Other Primary Processing Facility**

#### Recyclable Materials
- **Aluminum**
- **Aluminum Foil**
- **Steel**
- **Clear Glass**
- **Coloured Glass**
- **Mixed Paper**
- **OCC** (Old Corrugated Containers)
- **OND** (Old Newspaper)
- **PEX** (Polyethylene terephthalate, resin code #1)
- **PETE** (Polyethylene, resin code #2)
- **Hardpack**
- **Woven Glass**
- **FOAT Plastics**
- **Resin**
- **Individual Recyclables**
- **Clear Coloured Glass**
- **Individual Plastic Resins**

#### Secondary Processing
- **Recovered Y/N**
- **Compost**
- **Special Refuse Derived Fuel**
- **Energy from Waste**
- **Waste to Energy (W2E)**

#### End Market
- **Consulting Market**
- **Energy/Steel**
- **Landfill**

### Abbreviations:
- **OCC** (Old Corrugated Containers)
- **OND** (Old Newspaper)
- **PEX** (Polyethylene terephthalate, resin code #1)
- **PETE** (Polyethylene, resin code #2)
- **SDF** (Special Derived Fuel)
- **RDF** (Refuse Derived Fuel)
- **W2E** (Waste to Energy)
- **EFW** (Energy from Waste)

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