

A Call to Action: Make the Small Recyclable

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The Problem

If you look around your house or office, you'll probably find many examples of "small format" packaging and products. Lip balm, travel- sized toothpaste, skin care tubes, toothbrushes, pharmaceutical bottles, blister packs, pens, dental floss containers, coffee pods, bottle caps, and even the little paper or plastic umbrellas we put in drinks – these are all examples of packaging or products that tend to be relatively small in their size.

As <u>a recent report</u> from McKinsey highlights, there are many benefits to small packaging and product. For food and cosmetic products, a smaller size might be most appropriate for the use case and designed to reduce product waste and spoilage or ensure a product is affordable and accessible for consumers.

Many small packages are designed for convenience and limited use in transit, such as travel packets or condiment sachets from restaurants. More small products and packaging can fit into a given retailer's shelf space or distribution truck, which can yield a lower carbon footprint.

The problem with small format packaging and products today is that in most municipalities, these materials do not get captured for recycling. Even if the packaging or product is made of material that is recyclable, it cannot be segregated within the material recovery facility because it is too small.





Finding a Circular Solution

At the end of 2021, **The Sustainability Consortium** (**TSC**) began working with corporate, academic, and NGO stakeholders including P&G, Burt's Bees, Haleon, Colgate-Palmolive, The Kraft Heinz Company, Ulta Beauty, Stina Inc., The Recycling Partnership, and others to help make small format packaging recyclable. In 2022, the group began the waste characterization work described below as well as sponsored research with the Massachusetts Institute of Technology focused on sorting technology for capturing small format plastic for recycling at a materials recovery facility.

As a first step, the group sponsored a series of exploratory waste characterization studies to begin to understand the current landscape of small format packaging and products in the US- what they are, where they are ending up, and in what volumes. Sampling was done at different points in the waste and recycling system, including residential curbside setouts, a transfer station tipping floor, and plastic recycling bales. These studies used the Association for Plastics Recycling (APR) definition of small format; items smaller than 2" in at least two dimensions. Small format was separated from larger waste and recycling samples, weighed, and sorted into categories based on material and application.

While work is ongoing to quantify small format volumes, in these studies, the proportion of small format items was observed to be very small in comparison to the broader waste and recycling streams. Additionally, small format products and packaging were found to be very heterogeneous in their application type, format, and material type. That said, the most common application types found were food packaging, food service items, and caps and closures. It was observed that sometimes a package or product becomes small format after being compressed within the truck, and that many of the small format items end up within the glass recycling stream in a material recovery facility. These and other learnings will help inform next steps for TSC's small format recycling coalition.





Call to Action

The small format waste characterization studies we have done are an initial step towards answering the question of how much small format packaging and product there is, and thus what the opportunity space will be when the infrastructure is available to capture and recycle these materials. There is a need for additional data that captures different regions, seasons, community sizes, and other variables that may impact small format composition in the waste stream. Additionally, non-residential studies, such as samples taken from restaurants, gas stations, office buildings, or grocery store parking lots are needed to get an accurate picture of post-consumer small format packaging and products. Production and sales data, consumer behavior insights, and an audit of small format in recycled glass streams will also be helpful for estimating small format volumes, developing return on investment models, and identifying the kind of interventions needed to effectively capture small format for recycling.

Findings from completed small format waste characterization studies can be made available to stakeholders upon request. Summaries will be posted on TSC's website in the coming weeks, followed by a comprehensive technical report. In the meantime, TSC's small format recycling coalition is continuing to design and launch studies that generate the data and insights necessary to plan for and enable a circular economy for small format packaging and products.

Contact us: We call on other brands, retailers, packaging producers, consumer organizations, municipalities and recyclers to join us in this collective effort. If interested, please contact Jennifer Park (jennifer.park@sustainabilityconosrtium.org).



