Group study launched into PET thermoform recycling

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The Foodservice Packaging Institute (FPI) has organised a group of industry partners to examine recycling of PET thermoform packaging.

The group is conducting a study to further understand the PET thermoform packaging recycling stream and define the most cost-effective and practical pathways for recovering it. Through the study, the group hopes to establish a common understanding of the most impactful opportunities to increase PET thermoform recycling.

In partnership with FPI, the Association of Plastic Recyclers (APR), the National Association for PET Container Resources (NAPCOR), the Northeast Recycling Council (NERC), The Recycling Partnership, and the Sustainable Packaging Coalition (SPC) will pool data and resources to gain a more thorough understanding of this complex issue. The study is being conducted by Resource Recycling Systems (RRS).

"Each partner has been working to increase recycling of PET thermoforms in different ways, so it’s important to bring all parties together to find a solution," said Natha Dempsey, president of the FPI. "While we’re making progress, it just makes sense to combine efforts to define a unified path to increased recyclability for PET thermoforms."

Project partner NAPCOR reports that the volume of PET thermoform material recycled in the US surpassed 100 million pounds (45,359 tonnes) in 2018. Most of this volume was captured in kerbside PET bottle bales and processed with bottles by PET reclaimers who accept them at up to specified percentages of the bale weight.

However, as thermoform recycling increases, so does the prevalence of thermoforms in residential PET bales, bumping up against the limits of PET bottle reclaimer acceptance levels. The study will further explore this, along with other potential PET thermoform recovery pathways.

"We know there is a shortfall of available postconsumer recycled PET to meet stated content goals," said Darrel Collier, executive director of NAPCOR. "PET thermoforms offer significant performance benefits to consumers and producers and can help increase the overall supply of this valuable raw material. Our research indicates that PET thermoforms can, and are being recycled, though they do pose some technical and logistical collection and sorting challenges."

This project will explore the potential limitations and obstacles, viability, costs and related metrics of PET thermoform kerbside recycling and other potential recycling pathways. Recycled PET thermoforms can be utilised in the manufacture of new PET containers, strapping and other types of packaging, as well as in polyester fibre applications.

"Common food items are sold in PET thermoform containers and the desire of the public to contribute to the environment through recycling drives their expectations to recycle this material," noted Lynn Rubinstein, executive director of NERC. "These packages are being put in recycling containers and often treated as a contaminant. Finding a positive economic solution to productive recycling will help the industry and the economy."

"PET thermoforms represent a viable feedstock to feed the growing demand for recycled PET resin," added Steve Alexander, chief executive of APR. "We are hearing from more and more markets that are interested in using this recycled material; now we need to figure out how to get it to them."

This study will utilise combined partner organisation knowledge pertaining to potential technical, logistical and market obstacles to increasing PET thermoform recycling, building on collective work to date.

"Americans want to recycle their plastics packaging, but don’t always know what is and isn’t recyclable," concluded Liz Bedard, senior director of industry collaboration at The Recycling Partnership. "Brands are committed to using more recycled PET in their packaging, but need the valuable supply from kerbside recycling. Finding the pathway to collect and recycle PET thermoforms will allow communities to increase recycling rates and, at the same time, provide a valuable recycled material to the industry."

The study should be completed later this year.
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