CIRCULAR PLASTIC PACKAGING

FOR A MORE SUSTAINABLE AND RESOURCE EFFICIENT FUTURE

Lightweight, versatile, and durable plastic packaging protects consumer goods and perishable foods throughout the supply chain, preserving the value of all the resources used to get them to market. After use, **most flexible plastic packaging goes to the landfill**, because current waste infrastructure is not prepared to recycle it efficiently.

Sealed Air supports the idea that **advanced recycling** is necessary to help improve access, recycling rates, and quality of recycled plastic, while reducing dependence on virgin materials for packaging.

WHY PLASTIC RECYCLING MATTERS

14%

The amount of plastic waste recycled each year globally. That's about 39 million tonnes recycled out of a total of 275 million tonnes of plastic waste.

42%

The percentage of global plastic waste comprised of packaging.

83%

The amount of plastic waste incinerated, landfilled, or discarded into unmanaged dumps each year.

20 YEARS

The average amount of time for a plastic bag to decompose under well-managed conditions.

INNOVATION DRIVES AN IMPROVED WASTE INFRASTRUCTURE

MECHANICAL RECYCLING

Our current infrastructure: good, but the loop is not fully closed.

Curbside collection programs make access easy and available, but material acceptance is often limited to PET bottles (R1C1)* and HDPE (R1C2) jugs and jars. Collection and sorting processes vary by facility and can change over time, requiring users to stay informed on local guidelines.

Chop-and-wash process results in downgraded recycled plastics that can not return to original use at 100% utilization. To obtain desired performance, most recycled plastics used in packaging must be combined with virgin plastic.

Mechanically-recycled plastic is not typically clean or pure enough for use in direct contact with food, so it is often downcycled into applications like manufactured lumber, paving materials, or other non-food products. This is why the loop is not fully closed.

WHAT'S THE MEANING OF THIS?

You see them on plastic products all the time. But do you know what they are? These are resin identification codes (RIC) and they indicate what type of plastic an item is made from. Despite use of chasing arrows generally thought to imply recycling, RICs are used mainly for sorting purposes and **do not directly indicate recyclability.** Always check local guidelines for material acceptance policies.

NEW! ADVANCED RECYCLING

Improves the infrastructure: fully closes the loop.

Collection programs currently are limited to drop-off locations, making access to this new technology more challenging. Many flexible plastics can be accepted into advanced recycling technologies such as pyrolysis, but availability is limited due to newness to the recycling infrastructure and the need to increase scale.

Pyrolysis process results in oil that can be converted back into plastics with 100% of the cleanliness and performance characteristics of virgin materials. Advanced recycled plastics can be fully utilized in packaging and is clean enough to be used in contact with food.

Advanced recycled plastic can be processed again and again, which means no trip to the landfill, and recycled resin with the same performance characteristics as virgin materials. This loop is fully closed and represents a significant achievement in the creation of circular plastic packaging.

SEALED AIR INVESTS IN ADVANCED RECYCLING PROJECTS TO HELP MAKE OUR WORLD BETTER THAN WE FOUND IT.

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