

# RECYCLING

## AND ISSUES WITH THE TECHNOLOGY

Recycling is the solution most people think of to solve plastic pollution. Yet, most don't understand the details of which problems need to be addressed for recycling systems so they can scale up to manage more waste, **especially in developing countries.**

The first issue is that **recycling doesn't work for all types of plastics.** The majority of plastics can only be recycled once or twice before they downgrade in quality. Also, **it's costly to sort plastics** by type for recycling and the most common solutions are limited to manual sorting by poor workers. Sometimes, **it's even cheaper to make plastics from new oil products** instead of using recycled plastics!



## QUICK FACTS



Only **19.5% of plastics were recycled globally in 2015.** The majority went to open dumps or landfills, often since it's difficult to sort plastics for recycling and not all plastics are recyclable.



About **80% of plastic types (like LDPE) have low-residual value,** meaning they easily lose quality when recycled. This creates little incentive for waste collectors to recycle them.

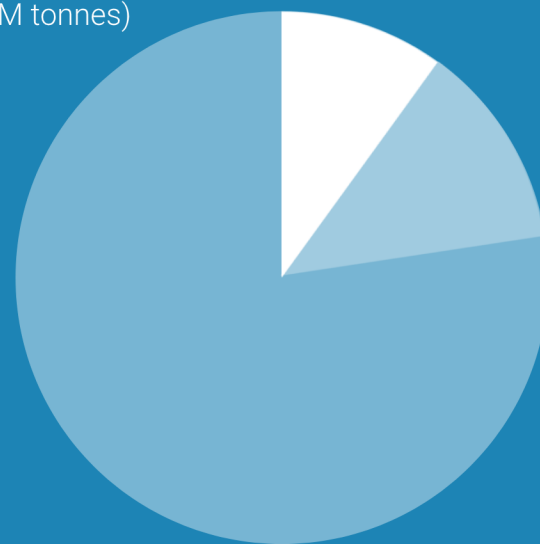


In 2015, companies like Waste Management **sent 25% of recycling they received to the landfill,** simply because it was too contaminated by food residue to process.

**Landfilled**  
(79% / 4600M tonnes)

**Recycled** (9% / 500M tonnes)

**Incinerated**  
(12% / 700M tonnes)



OF ALL PLASTICS PRODUCED SINCE 1950, ONLY 9% WERE RECYCLED.

## NEW SOLUTIONS

### EASY COLLECTION



Convenient collection systems (like curbside recycling) lead to more participation and less contamination. This needs development in rural areas especially (ex. in the US, 30% fewer people in rural areas have access to easy recycling).

### NEW PROCESSING



Plastic types that lose quality when melted (ex. LDPE) can be reused with other processes. For example, they can be ground down for use in construction materials. This can create new applications of plastic waste (like building houses/roads).

### MORE EDUCATION



To stop contamination from food waste or mixed plastic types, NGOs can launch education initiatives on what is and isn't recyclable. This also lets more people gain awareness of local recycling programs, increasing the recycling rate.

**DESIGNED BY THE PLASTIC SHIFT**

To learn more about recycling technology, visit [www.theplasticshift.com](http://www.theplasticshift.com)  
Icons used from Icons8. Vectors used from Freepik.com