HOW IS PLASTIC RECYCLED?

This year's Earth Day is focused on mobilizing the world to end plastic pollution. Here, we examine plastics recycling, which plays a big part in these efforts, and the recycling process.

### PLASTICS AND U.S. RECYCLING RATES

**KEY:** MASS PRODUCED | PERCENTAGE RECYCLED
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1 | PETE | 4.5 BILLION KG | 19.5%
2 | HDPE | 5.5 BILLION KG | 10.3%
3 | PVC | 0.9 BILLION KG | 0.0%
4 | LDPE | 7.4 BILLION KG | 5.3%
5 | PP | 7.2 BILLION KG | 0.6%
6 | PS | 2.2 BILLION KG | 0.9%
OTHER | DATA UNAVAILABLE | 0.0%

### THE RECYCLING PROCESS

**6,300 BILLION KG PLASTIC WASTE GENERATED** | **567 BILLION KG PLASTIC WASTE RECYCLED**


Plastic must be sorted by type before it can be recycled. This is done by hand, by selectively dissolving mixtures, or with techniques such as near-infrared spectroscopy and electrostatic separation.

1. **SHREDDING AND GRANULATING**
2. **WASHING AND CONTAMINANT SEPARATION**
3. **DRYING, DECONTAMINATION, AND PELLETIZATION**

Washing removes dirt and labels, and density separation removes contaminants. During drying, recyclers separate plastics by color using fluorescent or UV light. The pellets produced at the end of the process can be redistributed to make new plastic products.