

The Problem of Plastics

Plastics permeate all parts of our environment. They are such a part of our lives that most people rarely give them much thought. Many people toss their plastic bottles into a recycling bin and think They've done all that needs doing. But there is more that we can and should be doing.

Developing technologies may one day remove plastics from the environment and utilize microorganisms to enzymatically degrade them. And new technologies are being developed to improve plastic recycling. But currently the plastic waste problem is growing worse.

Greenhouse gasses are released in the manufacture and recycling of plastics. Unrecycled plastic is often incinerated, releasing more greenhouse gases. Plastics degrade into microplastics in landfills and oceans releasing additional greenhouse gasses. Microplastics in the ocean are also toxic to phytoplankton and zooplankton, disrupting a chain of events that removes CO₂ from atmospheric circulation and sequesters it in the sea floor.

Plastics are ubiquitous in our lives, but we can reduce our dependence on plastics in some simple ways.

Minimizing Plastics in Our Lives¹

- **Recycle.** (All plastics are recyclable in theory, but more than 90% never are. Most recycling centers accept #1 and #2 plastics, but other plastics are more difficult to recycle—#3 to #6 plastics are rejected by some recycling centers, and #7 plastic is rarely recycled. Know what is recyclable in your area and when possible, avoid plastics that are not recyclable.)
- **Stop using single-use plastics.** (Plastic items like drinking straws, disposable plates, and cutlery, can be replaced by alternatives.)
- **Use cloth bags when shopping.**
- **Buy more food in bulk.** (Many stores sell some foods in bulk, making it possible to avoid disposable plastic packaging.)
- **Store foods in glass, metal or silicone containers.** (Glass and metal can be recycled indefinitely without loss of quality or purity. There is a limit to how many times plastics can effectively be recycled)
- **Buy eco-conscious products.** (A growing number of companies sell common household items like laundry and dishwasher detergents, and solid bars of shampoo in plastic-free paper, cardboard, and biodegradable packaging. Search 'eco-conscious products' on the web. And some stores are set up to refill containers with liquid soaps and cleaning fluids.)
- **Avoid products containing microplastics.** (Microplastics are used in many products, including some cosmetics, personal hygiene products, cleaning supplies, and tee shirts.)
- **Reuse and repurpose plastic bottles and bags when possible.**

¹ This list of actions was modified from the article "Reduce your plastic consumption and lessen its impact on the environment" on the Iberdrola website: <https://www.iberdrola.com/sustainability/how-to-reduce-plastic-use>.