

Protecting our planet: Five strategies for reducing plastic waste

April 9 2024, by Olga Rukovets



Microplastics in the Chesapeake Bay Watershed. Credit: Chesapeake Bay Program

Plastics are ubiquitous in our world, and given that plastic waste can take thousands of years to [break down](#), there's more of it to be found on Earth every single day. Worse yet is the fact that the stuff [doesn't easily decompose](#)—it mostly just disintegrates into smaller and smaller pieces.

These tiny particles, called microplastics, have found their way to all parts of our globe, no matter how remote. They're also increasingly detected in our food and drinking water. A recent [study](#) by Columbia researchers found that [water bottles](#) contain even more—10 to 100 times more—of these minute plastic bits (dubbed "nanoplastics") than we previously believed. The [health effects](#) and downstream repercussions of microplastics are not fully understood, but researchers are concerned about the long-term impacts of ingesting all this plastic.

Meaningful change to clean up this mess will undoubtedly need to happen on a very large scale. Accordingly, [Earthday.org](#), an organization that originates from the first Earth Day back in 1970, has designated this year's theme as [Planet vs. Plastics](#), with a goal of achieving a 60% reduction in plastics production by 2040.

Organizations like Ocean Cleanup have been working on technologies to clean up the plastic floating in our oceans and polluting our waterways. And in 2022, 175 UN member nations signed on to a [global agreement](#) that promises to produce a binding treaty to overcome the scourge of plastic by the end of this year (though it has not been without [setbacks](#)).

What are some actions individuals can take on a regular basis to reduce plastics consumption?

1. Embrace the circular economy

Increasingly, advocates are calling for a circular approach to production and consumption as one important way to reduce the burden of [plastic waste](#). Fast fashion, for example, may be appealing for its convenience and low prices—but what are the true costs? With 100 billion garments being produced every year, 87% end up as waste (40 million tons) in a landfill or incinerator. The average person is now buying 60 percent more clothing than they did 15 years ago, but they're only keeping them for half as long as they used to, according to EarthDay.org.

Instead, the UN Environment Program [recommends](#) re-wearing clothes more frequently and washing them less often. Look for neighborhood swaps and Buy Nothing groups, where you can trade items with your [local community](#). Consider repairing items before trading them in for new ones. See additional tips for healthier consumption of "stuff" [here](#).

2. Reduce your reliance on single-use plastics

Considering the fact that Americans currently purchase about 50 billion [water bottles](#) per year, switching to a reusable water bottle could save an [average of 156 plastic bottles](#) annually. Start bringing reusable shopping bags and containers when you go to the grocery store or coffee shop.

Many cities and states have already implemented plastic bag bans as one step toward decreasing our use of these plastics. Some [local businesses](#) even offer discounts for bringing your own coffee cup or bags with you.

3. If all else fails, recycle (responsibly)

When it can't be avoided, recycle your plastic [correctly](#). If you try to recycle the wrong items—sometimes called "[wishcycling](#)"—it can slow down an already constrained sorting process. One rule to remember, Keefe Harrison, CEO of the Recycling Partnership, told NPR: "When in

doubt, leave it out."

Recycling programs vary between communities and states, so it's important to get to know your symbols and research what they mean in your own zip code. For example, plastic bags and plastic wrap or film cannot be placed in your household recycling bin, but some stores have special collections for those items.

The symbol on the bottom of a plastic container can tell you what the plastic is made from, which can help guide your decision to recycle it or not, but it doesn't necessarily mean it can be picked up by your local recycling program. Local websites, like New York City's 311, can provide a more detailed breakdown of the types of items that can and cannot be recycled—e.g., rigid plastic packaging including "clamshells": yes; tubes from cosmetics and toothpaste: no.

Still, reports of how much (or how little) of our plastic waste is actually [recycled](#) are alarming—with some estimates ranging from 10% to [as low as 5%](#)—so it is still best to opt for other alternatives whenever possible.

4. Get involved with local actions and clean-ups

There are many local movements doing their part to mitigate the environmental contamination caused by plastics pollution. Take a look at what's happening locally in your [neighborhood](#) and globally. Check with your parks department for organized community efforts or consider starting your [own](#). As part of EarthDay.org, you can register your initiative with the [Great Global Cleanup](#), where you can find helpful tips on all stages of this process and connect with a worldwide community.

5. Stay informed about new legislation

As the world grapples with the growing plastics crisis, some states are trying to take matters into their own hands. In California, the Plastic Pollution Prevention and Packaging Producer Responsibility Act (known as SB 54), mandates the switch to compostable packaging for all single-use utensils, containers and other receptacles by 2032, with steep fines for companies that don't comply.

New York is currently moving ahead with a bill called [Packaging Reduction and Recycling Infrastructure Act](#), with the goal of cutting down plastic packaging by 50% in the next 12 years; if it is signed into law, this legislation would also mandate charging fees for noncompliant brands.

Pay attention to what's happening in your own county, state or country and get involved with efforts to advocate for causes you support. Send messages to your representatives, educate your neighbors and friends, and join a larger contingent of people trying to make the world a better and more sustainable place for current and future generations.

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