

DISCOVER >

THE FATE OF PLASTICS & ISSUES WITH RECYCLING

While plastic has many useful properties for a variety of applications, there are issues with its use in terms of environmental and human health which we'll cover in weeks 3 and 4. This week, we focus on what happens to plastic waste and why recycling is not our best solution.

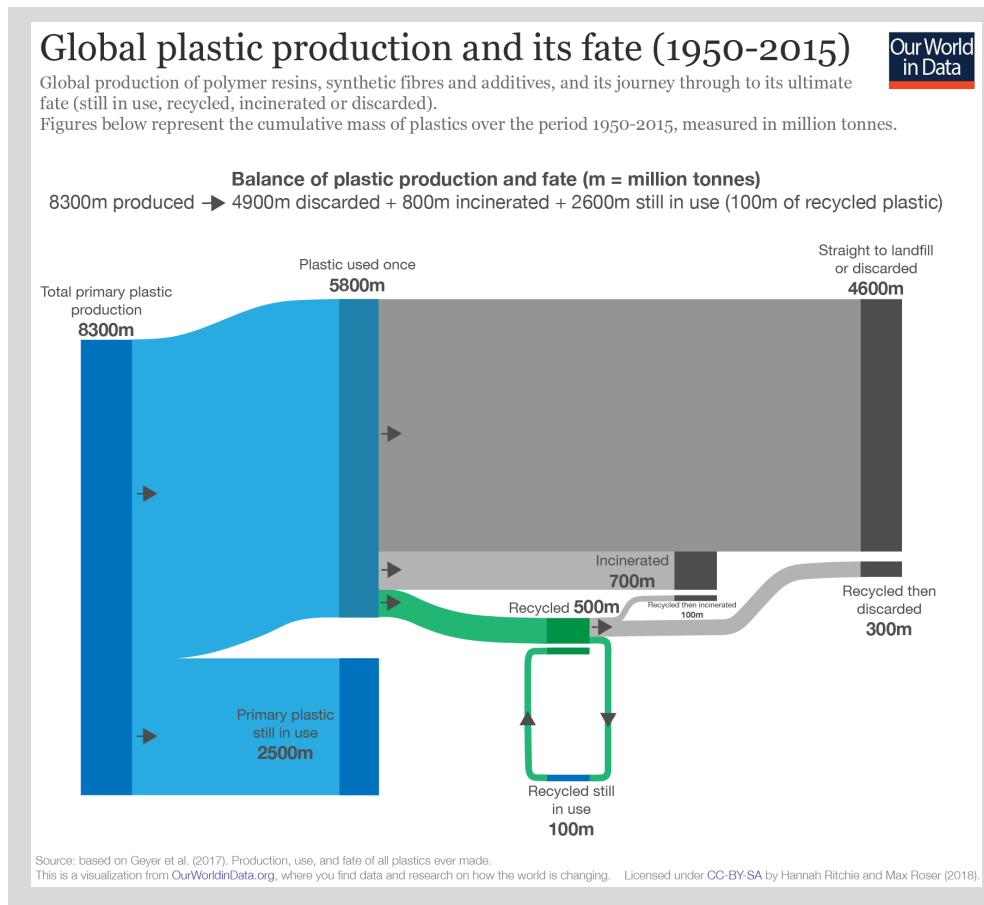
There are three options for properly managing plastic waste: recycling, incineration, and landfill disposal (see the figure for a visual on the fate of all plastics). As mentioned last week, only 9% of plastic ever made was recycled (Geyer et al. 2017). Why such a low number? Some reasons include:

Recycling not available after disposal - If a city or area doesn't offer recycling, the plastic goes to the landfill (or may enter the environment through litter).

Contamination - Even if users recycle, some plastic is rejected at the handling facility due to contamination such as from food waste or other high concentrations of non-recyclable items.

Strict local and global policies - Mixed material items may not be accepted for recycling such as coffee cups made from paper with a plastic lining. In addition, countries who import plastic waste for recycling, such as China, may import less materials for various reasons. The US has historically exported a large portion of its plastic recycling (~30%) to China yet has not significantly increased its domestic recycling. Therefore, recyclable plastic material has been disposed of in landfills.

Recycling degrades the quality of plastics - For most plastics, they can only be recycled once. Therefore, recycling only delays landfill disposal or incineration rather than prevents it. (Our World Data, FAQ on Plastics 2020)



ADJUST >

RECYCLING TIPS

Remember, the best action we can take, is to reduce our plastic use in the first place (see Tips from Week 1). However, there is no doubt that plastics have a role in our lives. Follow these tips:

Recycle Right at Home - Recycling is confusing, so make a commitment to learn. Get on your city's website. If your city doesn't have it, simply search "how recycling works" on the web (be sure to let your city know recycling is important to you).

Recycle Right at HSC - Take our [Recycling Quiz](#) to see how much you know then review the signage before you dispose of things. Sometimes we have to trash recyclables on campus due to contamination.

Clean Before Disposal - Before you recycle, rinse food and beverages. Food/drinks contaminate!

Reuse as Much as Possible - Yes, we know this isn't recycling, but it's important to try to reuse plastic as much as possible. For example, wash Ziploc bags or upcycle plastic into useful items.

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GO BEYOND >

GO DEEPER

Here are some articles to learn more:

- [Data on Global Recycling](#)
- [15 Tips to Recycling Right](#)
- [Plastic Codes Explained](#) (we'll touch on the health impacts in week 4)
- [Wish-Cycling Video](#) (learn why you should stop "wish-cycling" and how to improve your recycling)