



# Where Will YOUR Plastic End Up?

## What is plastic?

- Plastics are made of polymers and additives. Over 99% of plastic is made from chemicals sourced from fossil fuels<sup>1</sup>. They are cheap to make, can be molded into almost anything, and don't breakdown easily.

## Why is plastic a problem?



- Non-biodegradable:** It can take up to 1,000 years to break down and, as a result, builds up in the environment at an alarming rate<sup>2</sup>
- Microplastics:**
  - Occur once the plastics begin to slowly breakdown into small particles. These microplastics have the pervasive ability spread throughout the entire environment & have been found in every corner of the globe.
  - Plastic microfibers are 1) contaminating *drinking water systems*, 2) *polluting soil*, and 3) *drifting through the air*, which means we are all consuming plastic at an increasing rate.
    - How will plastics impact human health long term?** Tests have already confirmed liver and cell damage and disruptions to reproductive systems on other animals ingesting plastic.<sup>3</sup>
- Climate Crisis:** The production of plastic is one of the most energy-intensive manufacturing processes in the world.

Less than 10% of all plastic gets recycled<sup>4</sup>

On average people could be ingesting approximately 5 grams of plastic every week, which is the equivalent weight of a credit card<sup>6</sup>

### PLASTIC FACTS

More than 430 million tons of plastic are produced per year. That amount is expected to triple by 2060 without action<sup>4</sup>

**11 MILLION TONS OF PLASTIC**  
are dumped in our oceans annually<sup>4</sup>

# We Can Make A Difference



***Why isn't recycling enough?*** Most plastics, even when placed in the recycling bin, are not recycled. As a result, ***recycling alone*** is not an effective solution for the following reasons <sup>5</sup>:

- Recycling is not a simple process, & plastic material cannot be recycled multiple times.
- Dirty plastic items won't be recycled at all. Instead, they will go to the landfill.
- There is an increase in emissions associated with the extensive recycling process.

***What can we do to help minimize plastic waste?***

Below are ***meaningful*** steps<sup>4</sup> (in addition to recycling) to create a cleaner future...

**Produce and Consume Less** - Use items owned (deep in the closet) before buying anything new. *When buying something new, its long-term potential should be considered. Buy items with non-plastic packaging when possible.*

**Buy Vintage (it's also trendy!)** - The more we consume, the more companies will produce. Why buy new, when there are many stylish products that already exist!

**Reuse; Don't Use Items Only Once-** Using products for as long as possible is one of the best ways to address our waste issue.

**Buy in Bulk** - *It saves money AND reduces packaging as well. Plastic packaging is the reason for the majority (36%) of plastic production<sup>4</sup>.*

**Get Involved** - Say something; speak with friends, neighbors, local municipal leaders, and restaurant owners about consumption and recycling concerns.

1. <https://www.ciel.org/issue/fossil-fuels-plastic/>

2. <https://www.un.org/africarenewal/magazine/may-2023/understanding-plastic-pollution-and-its-impact-lives>

3. <https://www.nationalgeographic.com/environment/article/plastic-pollution>

4. <https://www.un.org/sustainabledevelopment/blog/2023/08/explainer-what-is-plastic-pollution/>

5. <https://naturopac.org/news/why-recycling-is-not-enough-to-solve-our-plastic-issue/>

6. [https://www.panda.org/wwf\\_news/7348337/Revealed-plastic-ingestion-by-people-could-be-equating-to-a-credit-card-a-week](https://www.panda.org/wwf_news/7348337/Revealed-plastic-ingestion-by-people-could-be-equating-to-a-credit-card-a-week)

Front Photo credit: Climate action - <https://www.climateaction.org/news/london-to-increase-public-water-fountains-to-reduce-plastic-pollution>



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**A majority of our plastic waste is not recycled.** Before Jan 1, 2018, half of all material sent for recycling was exported and reprocessed in plants overseas (**13.2 million tons of scrap paper and 1.42 million tons of scrap plastics annually**<sup>1</sup>). With export bans implemented at the start of 2018, that option is no longer viable.

Once plastic reaches the environment in the form of waste, the microplastics (tiny particles) begin to contaminate the food chains, air, and water supplies. Direct and ongoing exposure can be linked to many negative health outcomes including cancer, cardiovascular diseases, inflammatory bowel disease, diabetes, rheumatoid arthritis, chronic inflammation, auto-immune conditions, neuro-degenerative diseases, and stroke.<sup>2</sup> **Below are several additional facts<sup>3</sup>:**

## Fact #1

Less than 9% of all plastic gets recycled.

## Fact #2

There are five massive patches of plastic garbage in our oceans around the world -the one in the Pacific is the size of Texas.

## Fact #3

Humans eat over 40 POUNDS of Plastic in their lifetime.

## Fact #4

By 2050 there will be **more plastic** in the oceans **than fish** (by weight)

## Fact #5

**10 MILLION TONS OF PLASTIC are dumped in our oceans annually.**

## Fact #6

1 MILLION Marine Animals are killed every year by plastic pollution.







# We Can Make A Difference

Below are **meaningful** steps<sup>4</sup> (in addition to recycling) to create a healthier environment and future...

1. **Produce and Consume Less** - Use items owned (deep in the closet) before buying anything new. When buying something new, its long-term potential should be considered.
2. **Buy Vintage** (it's also trendy!) - The more we consume, the more companies will produce. Why buy new, when there are many stylish products that already exist!
3. **Reuse; Don't Use Items Only Once** - Using products for as long as possible is one of the best ways to address our waste issue. Period.
4. **Buy in Bulk** - It saves money AND reduces packaging as well. **The EPA reports that containers and packaging make up a major portion of solid waste, amounting to 82.2 million tons of generation in 2018 (28.1 percent of total generation).**<sup>5</sup>
5. **Get Involved** - Say something; speak with friends, neighbors, local municipal leaders, and restaurant owners about consumption and recycling concerns. It is important that everyone get involved!

## Water Bottles

**Challenge:** Used for one day & then remains in the ground for *several hundred years* with pollution & energy created to ship the bottles around the world.

**Solution:** Use a reusable bottle (preferably glass or metal).

## Plastic Cutlery and Straws

**Challenge:** We use 100 million plastic utensils & 500 million straws<sup>6</sup> each day for only minutes at a time, much of which comes wrapped in even more plastic.

**Solution:** When possible use silverware (i.e., leave a set at the office) or bamboo utensils & **say no to plastics with take-out**. If a straw is needed, there are non-plastic alternatives available.

## Party Planning

**Challenge:** Parties generate a great deal of garbage for a few hours of fun.

**Solution:** Set the table with cloth napkins and reusable dishes, glasses, and silverware. Use reusable & biodegradable decorations.<sup>7</sup>

1. New York Times - <https://www.nytimes.com/2018/01/11/world/china-recyclables-ban.html>

2. Center for International Environmental Law - <https://www.ciel.org/wp-content/uploads/2019/02/Plastic-and-Health-The-Hidden-Costs-of-a-Plastic-Planet-February-2019.pdf>

3. Plastic Oceans Facts - <https://plasticoceans.org/the-facts/>

4. Audubon - <https://www.audubon.org/news/eight-easy-ways-reduce-your-plastic-waste>

5. EPA - <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/containers-and-packaging-product-specific-data>

6. Plastic Pollution Coalition - <https://www.plasticpollutioncoalition.org/guides-eats>

7. Plastic Pollution Coalition - <https://www.plasticpollutioncoalition.org/guides-towns>

8. Front Photo credit: Climate action - <https://www.climateaction.org/news/london-to-increase-public-water-fountains-to-reduce-plastic-pollution>

9. Back Photo credit: KALW - <https://www.kalw.org/post/us-plastic-pollution-choking-worlds-oceans>