

## The Journey of a Plastic Bag

Making plastic isn't easy. It takes lots of energy and resources, and releases lots of greenhouse gases (GHGs) too. It's these GHGs that trap heat on the Earth and make climate change worse.

**Let's take a look at what it takes to make a plastic bag:**

### 1. Getting the Materials

Plastic is made from oil, which is found deep inside the Earth. That oil gets taken out of the ground, through a process called extraction, which creates a lot of GHGs.



### 2. Moving the Materials

The oil then needs to be taken to a refinery (which is like a factory) to be made into a bag. The oil might travel by ship, truck, train, or be sent through a pipeline. In most cases, GHGs are released during transportation. Sometimes oil spills might happen while the oil is being moved. These spills are bad for the planet and can hurt lots of animals.

### 3. Making the Bag

Next, the oil is turned into a bag. It's a complicated process that uses a lot of energy. It's also when about 90% of the GHGs will be released during the plastic's journey.<sup>1</sup>



### 4. Moving the Bag

After the bag is made, it needs to get to stores. It will usually be sent by ship, truck, or train, and GHGs are often released along the way.

### 5. Using the Bag

Now it's the bag's time to shine! It might help you carry your new clothes or food home from the store, but what do you do with it after? Most plastic bags are only used for about 12 minutes before they are thrown away. Think about how much went into making that bag. Crazy, right?!



### 6. Disposing of the Bag

The bag's job is done and now it's on to the next step: getting rid of it. After the plastic bag leaves you, it can go to a couple of places:

- **Landfill:** This is where most of the plastic that we throw out ends up. While there, the plastic mixes with microorganisms living in the garbage, and as the plastic breaks down GHGs are released.
- **Incinerator:** This is a fancy word for a container where you burn waste. When we burn plastic, it releases GHGs and other harmful chemicals into the air.
- **Recycling depot:** This is the best place for plastic to go. It means it can get turned into something new. But, the rules around plastic and recycling are tricky. Only about 10% of the plastic around the world is recycled properly!<sup>2</sup>



## The Plastic Problem

We use plastic for a lot of things. It helps us keep food fresh, it's in our clothing and it protects the stuff we buy. It's even in our chewing gum! You probably don't think twice when you see a plastic wrapper—but maybe you should.

A lot of greenhouse gases (GHGs) are released when we make plastic. These GHGs build up in the atmosphere and contribute to climate change. But this isn't the only problem. When plastic gets into the environment, it's really bad news for animals, people, and the planet.



## Plastic in the Environment

Plastic gets into the environment all the time. It might have blown out of your recycling bin or been carried off by a hungry critter. Maybe it was dropped by someone littering. A lot of this plastic eventually makes its way to our oceans.



Over time, the sun, wind, and rain will start to break the plastic down. It will never completely go away, but just become smaller pieces. These are called microplastics and they can be as small as a grain of sand!

Sometimes animals eat microplastics because they look like food. Other times, they gulp them down and don't even notice. It's a problem for us too. There are microplastics in the air we breathe, the water we drink, and the food we eat.

## How do we fix this?

It won't be easy, but we can make a big difference by working together. Here are some ideas to help you get started:

- Say no to plastic whenever you can. For example:
  - Instead of buying a new water bottle each time, bring a reusable one.
  - At a restaurant, bring your own containers to take leftover food home.
  - Choose foods that don't come in individual packaging, wrappers, or containers.
- Join or organize a litter clean up in your neighborhood.
- If you do need to use plastic, try to use ones that can be recycled in your area. This information can usually be found on your city or town's website.

### Sources:

<sup>1</sup> [Plastic leakage and greenhouse gas emissions are increasing](#), OECD

<sup>2</sup> [Recycled Content comment paper](#), Environmental Defense

<sup>3</sup> [Fast facts about plastic pollution](#), National Geographic