Why is plastic bad for the environment and how much is in the ocean?

Packaging accounts for over 40 per cent of plastic usage

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In recent years, people have started cutting down on plastic consumption, as we have realised the effects plastic can have on the environment and our oceans.

But although most people know that plastic cannot be absorbed back into the environment, there are many that are unaware just how much plastic ends up in our oceans - and how detrimental this can be.

In addition to being bad for the environment, the amount of plastic in the ocean continues to grow - affecting wildlife and humans alike.

How much plastic is in the ocean?

Although it is difficult to identify exactly how much plastic is in the ocean due to microparticles and the amount that has sunk to the bottom, most scientists estimate that eight million metric tons of plastic end up in our oceans each year - adding to the estimated 150 million metric tons currently circulating our oceans.

To put that number into perspective, the amount is equivalent to a garbage truck full of plastic dumping plastic into the ocean every minute.

And that figure is only expected to increase as plastic production and consumption continue.

According to the Ocean Conservancy, in less than 10 years, scientists predict there will be 250 million metric tons in the ocean and by 2050, there will be more plastic in the oceans than there are fish.

Why is this bad?

The world is currently producing nearly 300 million tons of plastic each year - a significant amount of which will end up in the oceans.

Unfortunately, although plastic is a useful product, many of these products are created for single-use - with an estimated 50 per cent of plastic used once and thrown away.

Not only is this harmful to the environment and the oceans, but it is also harmful to wildlife - where it impacts nearly 700 species in the ocean, and humans.

According to the Ocean Conservancy, plastic has been found in more than 60 per cent of all seabirds and 100 per cent of sea turtle species.

Ingesting plastic has life-threatening effects on wildlife - and this plastic eventually ends up being digested by humans.

Brits who consume fish are at risk of consuming 11,000 fragments of plastic each year, according to a recent Belgian study.

And half of all plastic manufactured becomes trash in less than a year.

What plastic can be recycled?

Currently, only nine per cent of the world's plastic is recycled - a problem because most plastics are not biodegradable and typically take more than 400 years to degrade.

And it never fully degrades, rather it breaks down into smaller and smaller pieces that are eventually ingested by marine life.

Single-use plastics are the worst offenders and include plastic bags, food packaging, and straws.

Most of the plastic produced is used in packaging - which accounts for more than 40 per cent of non-fibre plastic, according to a study published in the journal Science Advances.

However, nearly all solid plastic, such as water bottles, are capable of being recycled.

How can we fix this?

While a complete solution to the plastic problem is likely years away, small changes can make a big difference.

Choosing to forgo straws, as many restaurants have begun to do, lessens the plastic waste and protects wildlife.

Switching to reusable bags when shopping can also make a difference - as single-use plastic bags are a large part of the problem.

And knowing the proper way to recycle common plastics is necessary if humans want to keep plastics from the ocean.

Ways to reduce your single-use plastic

1/6 Plastic water bottle for a reusable beverage container

Instead of continually buying drinks in plastic bottles you can switch to a reusable beverage container and reduce your single-use of plastics. Selfridges' Bobble 550ml filtered water

bottle costs £12.95 and includes a replaceable carbon filter that filters water as you drink, removing chlorine and organic contaminants in the process. You can buy it from selfridges.com
Getty/Selfridges

2/6 Coffee cup for a Travel coffee mug

It is estimated that the UK throws away around 2.5bn disposable coffee cups a year and almost all are incinerated, exported or sent to landfill because their plastic lining makes them expensive to recycle. The new Latte Levy in the UK means there will now be a 25p charge on every disposable coffee cup bought by consumers. Pret A Manger announced that it will double its discount to 50p in an effort to reduce waste. By swapping to a reusable cup you will be able to help cut the cost of disposable coffee cups. This Keep Cup Brew, cork edition, travel cup in Fika is just one of the many available to purchase. It fits under most commercial coffee machines, is splash-proof and ideal for transporting your coffee whilst on the go. You can buy this particular cup for £19.99 from trouva.com.

Getty/Trouva

3/6 Plastic bags for reusable cloth bags

An eco-friendly alternative to an ordinary plastic bag is this lightweight shopping bag. It comes with a practical pillowcase pocket and features a black and white ink splatter design. Convenient and durable it also has a matte black spring clip to attach it where you need it. You can buy this from paperchase.co.uk for just £5.00. Getty/Paperchase

4/6 Coffee pods for a pot of coffee

Cut your plastic coffee pod usage with a cafetiere. This Barista and Co, 3 Cup Gold Cafetiere, from Habitat offers a simple way to brew and serve in style. Made from borosilicate glass and plated stainless steel with an ergonomically designed handle, the cafetiere is built to last and a pleasure to use; a fine metal filter produces a smooth coffee that retains its natural oils. You can buy it for £30 from habitat.co.uk. Getty/Habitat

5/6 Balloons for eco-friendly decorations

Instead of using plastic balloons at your party try swapping them for some eco-friendly bunting. Handmade in Scotland, the bunting comprises thirteen brightly coloured pennants which spell out the words 'Happy Birthday', and uses lettering that has been printed onto 100 per cent recycled card. Included is 11ft of natural jute twine to hang the pennants on, and everything comes packaged in a cello bag. You can buy this bunting from Little Silverleaf on notonthehighstreet.com for £12.50. Getty/notonthehighstreet

6/6 Plastic straw for a reusable bamboo one

Swap plastic straws for reusable ones made of bamboo. These straws are handmade in Bali and crafted by local balinese artisans. Made of organic and natural materials they are the best eco-friendly alternative to plastic, steel or glass straws. You can purchase them from Bali Boo on Amazon.co.uk for £13.99.

PA/Bali Boo/Amazon

Another potential solution, found recently by accident, relies on a mutant enzyme that is capable of breaking down plastic bottles.

Published in the journal Proceedings of the National Academy of Sciences, scientists accidentally discovered the enzyme - which could recycle plastic for reuse as plastic and fundamentally reduce the amount of plastic in the environment, according to the study's author, University of Portsmouth professor John McGeehan.

If each person dedicated their attention to the plastic issue, the detrimental effects of plastic on the world could be lessened.