



Plastic Packaging Polluting the Environment

Have you ever thought about the consequences of plastic in the environment? If not, you should. Plastic pollution is a serious, global issue affecting humans, wildlife and the environment. Here is what you should know about this topic.

Did you know that the amount of plastic produced in a year is roughly the same as the entire weight of humanity? Half of the plastics in this amount are single-use. Single-use packaging products are materials used once for a short period before being thrown away. And the result of these single-use plastics is plastic pollution.

Plastic pollution is a worldwide issue affecting places all over the world, however, the most severe effects are seen in developed Asian countries, such as China, Malaysia, India and the Philippines, with the United States also a significant contributor. Unsurprisingly, these countries have the highest percent of global plastic pollution as they are densely populated, have had a rapid rate of urbanisation occur and are known to have poor waste management systems. And ultimately, more people means more plastic. According to Statsita, in 2019, China generated the most single-use plastic at 25.4 million metric tons of plastic worldwide. This was followed by the United States with 17.2 million metric tons. Which makes these densely populated countries foremost when it comes to plastic waste.

The reason plastic pollution is a global issue is because of the effects it has on the planet. Plastic has significant impacts when it comes to the environment. For example, plastics' toxicity kills wildlife or makes them more defenceless against diseases and infections. Another way plastic pollution affects the environment is through their manufacturing processes. These stages include extraction and transportation of fossil fuels, the intensive refining process, discharge plastic in the environment, and harmful chemicals being put out into the atmosphere, all of which have harmful impacts. Plastics' carbon footprint is also something to be noticed. Through all stages of plastics lifecycle, 3.4% of global greenhouse gas is emitted, which is a considerable contribution overall to global warming.

In addition, plastic is never gone. It can take plastic waste anywhere from 20 to 500 years to decompose, and even then, it is never fully gone, but just broken into smaller pieces, or, microplastics. This is due to their tough and complex chemical structure. Therefore, every single piece of plastic that has ever been produced has ended up in the environment and is still present, in one form or another. And with plastic in the environment, there are various negative effects. An example of this is plastic in the ocean. Once plastic enters the ocean, it immediately affects the water quality. With microplastics in the water, organic pollutants dissolve, which is bad because if enough organic pollutants are accessible, all the dissolved oxygen will eventually run out. If such conditions occur, most aquatic animals will die due to lack of oxygen.

Additionally, regular plastics and microplastics are toxic to marine life. Studies show that at least 100,000 marine animals die from plastic pollution every year. This number is likely an underestimate as it only accounts for a few species. Another factor is microplastics' microscopic size and how it makes it that much easier for ocean species and organisms to ingest these plastics.



However, the problem with plastic is not plastic itself, it is how it is used. Humans have spent years completely disregarding the planet, by carelessly discarding plastic into the environment, unaware, or not having any regard for the consequences. It is not just animals and the environment that are negatively affected by plastic pollution, but humans ourselves, and now society is having to suffer the consequences of our actions and behaviours. Scientific studies have shown that the toxic chemicals and pollutants that come from plastic threaten human health, causing change in hormone activity or even cancer. A recent study from Auckland University states that the average amount of airborne microplastics detected in a day was 4,885 square metres. Aside from human health impacts, with plastic in the wild, animals can easily become trapped and injured. As well as the safety issue, hundreds of habitats and ecosystems are being destroyed by rubbish, making it hard for some species to live and breed naturally, which could eventually lead to their extinction.

Moreover, after years of being unaware of plastic pollution and the issue it has become, there is no way to completely prevent and contain it, but there are things we can do to slow it down. Plastic pollution happens when plastic waste, single-use plastics, are dumped in the environment, illegally. When plastic is dumped in the streets, it doesn't just stay there. Rainwater and winds carry the plastic into streams, rivers, drains and the ocean. Another way plastic gets into the environment is through transportation. The plastic that you put in the bin ends up in landfill and when plastic is being transported to the landfill, it is very easy for the plastic to be blown away. However, while it may not

be deliberate, plastic can still easily get in the environment. Even so, here are a few ways you can help prevent plastic pollution. One way to do this is by using disposable products. Take note of the plastic products you use on a daily basis and replace them with eco friendly, reusable ones. Another way is to buy in bulk. Buy a larger container of product instead of buying multiple small ones over time. A final way is to recycle. It seems obvious, but plastic pollution wouldn't be as big of a problem if we were recycling effectively.

Ultimately, whether we mean to litter or not, there is always a chance that the plastic we throw away could find its way into the environment.

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