

The main impact of plastic is that it is so widely produced for so many goods, used only once and for a very short amount of time, but takes centuries to decompose. Globally, there currently exists about 8.3 billion tons of plastic in the world, and the annual production of plastic increases significantly every year (Recycle Coach 2021). Not only is the quantity itself a problem, but the many effects it has on the planet, its ecosystems, and even human health, are countless. Marine life easily choke on plastic or die from eating it and microplastics find their way even into human stomachs; the World Wildlife Fund conducted a study in 2019 that found that on average, individuals ingest about 5 grams of microplastics every week: the equivalent of a credit card. Though we are not entirely sure how this kind of ingestion affects the human body yet, it certainly can't be healthy. This is only one specific example of the consequences of plastic.

To evaluate the full costs of plastic production, many components would have to be taken into account. First, we have to look at fossil fuels, without any government subsidies; specifically, we must consider their full cost, including their externalities (notably, greenhouse gasses) because most are made from fossil fuels (synthetic plastics). Otherwise, we'd have to consider the full costs of biofuels or carbohydrates used to produce biobased plastics. Then we must consider their transportation and short lifespan. Most importantly, we would have to consider the amount of time the plastic will take to decompose, and any potential effects it may have on the environment from a landfill (for example, killing a bird). All of these measurements are extremely hard to evaluate, let alone accord an actual cost to.

Between all stakeholders, I believe every party needs a change in outlook on consumption as a whole, especially products like plastic. However, responsibility most directly

falls on producers and the government. Governments can implement quotas, taxes, subsidies, or other influencing tactics to minimize or eradicate plastic use. But producers themselves must also follow those guidelines and not find loopholes or pay their way out of breaking laws. I believe the government should issue a complete ban on as many single use plastics as possible, and that producers should be fined accordingly for any violations. The main obstacle to such a radical change, though, is our present economic system. I believe it would be hard to convince that such a change is more beneficial than the continued patterns of overconsumption will ever be.

Sources:

“7+ Revealing Plastic Waste Statistics (2021).” Recycle Coach, September 21, 2021.

<https://recyclecoach.com/resources/7-revealing-plastic-waste-statistics-2021/>

“Could You Be Eating a Credit Card a Week?” World Wildlife Fund, June 12, 2019.

https://wwf.panda.org/wwf_news/?348371/Could-you-be-eating-a-credit-card-a-week