6 Things You Didn't Know About The Plastic Crisis



You know that micro plastics are everywhere, and you also know that plastics take hundreds of years to biodegrade. Luckily, we have <u>individuals</u> and <u>businesses</u> working on solutions all the time. But when it comes to the plastic crisis, there's always <u>more to it</u> than you think.

<u>Plastic-Free July</u> may be over, and so is our Wedge event on Eating Plastic. But the conversation on plastic shouldn't stop here. Here are our top takeaways.

1. Biodegradable and compostable plastics are not the solution.

Let's be clear about one thing: biodegradable and compostable plastics are not the same thing. **Biodegradable plastics** are plastics that can break down faster due to additives. However, these are still plastics, and there is no regulatory requirement on harmful residues that can be left behind (actually most biodegradable plastics leave behind toxic microplastics). **Compostable plastics** are plastics that meet the criteria (EN13432 or equivalent) that ensures they will safely decompose within a specific timeframe, under industrial composting conditions. But how do they function under regular environments?

"Biodegradable and compostable plastics actually behave the exact same as normal plastics in regular environments. It's only when you involve industrial-scale solutions that these are truly dealt with." – *Thomas Peacock-Nazil, Founder of Seven Clean Seas*

Earlier this year, a University of Plymouth study tested compostable, biodegradable, oxobiodegradable, and conventional plastic bags in three different natural environments. They buried them in the ground, left them outdoors where they were exposed to air, and submerged them in the sea. We'll give you one guess what the results were. Not one of the bags broke down completely. In fact, the biodegradable bag came out almost entirely unchanged in soil and sea (this happens because there is no timescale specified for when a product is labelled 'biodegradable'). This means that you can market something as 'biodegradable' even if it takes many years to do so. Ultimately, for both biodegradable and compostable plastics, they usually only live up to their name when they undergo industrial processing. Indeed, however, there are some compostable plastics can compost under in-home composting conditions.

But, according to Less Plastics UK, there are a whole host of other problems with that. Additives in these plastic alternatives make them difficult to recycle alongside conventional plastics. If these end up in landfills, they will still release methane as they biodegrade. People might also misunderstand the capabilities of these materials, which means more of it ends up in the sea. And it doesn't at all address our throwaway culture and our increased use of precious resources for single-use purposes. Of course, there are ways to circumvent these issues. And we're not saying that biodegradable and compostable plastics aren't better than conventional plastics. But it's important to note that they're not the perfect solution.

2. Bioplastics aren't exactly ideal either.

(Quick note: the term 'bioplastics' refers to two separate things. 'Bio-based plastics' (plastics made at least partly from biological matter) and biodegradable plastics.)

A false dilemma that often comes up is the debate of natural versus synthetic materials. It's not necessarily true that natural is always better. Studies on bio-based plastics are inconclusive, and a 2018 study published in the *Journal of Cleaner Production* concluded that they *are* more sustainable, but that's about it. Most studies highlight the new problems that bio-based plastics pose. Among them is the use of land that could otherwise be growing food crops. As Samantha Thian, founder of Seastainable Co., pointed out, these could have unprecedented impacts on nature.

According to a 2012 study in the same journal, bio-based feedstocks are generally "grown using methods of industrial agricultural production." This is essentially a fancy way of saying that they use lots of toxic pesticides. And above all, ethically, it doesn't make sense to use the land for industrial purposes when world hunger continues (and will continue) to be a problem.

Ultimately, bioplastics seem like the right solution in theory, but in practice, they need more work. How do we ensure that we don't exchange one problem for another?

3. Industrial recycling solutions aren't up to par.

Many producers justify their plastic pollution by saying that things can be recycled. Unfortunately, as Janissa Ng, Senior Manager at WWF Singapore pointed out, industrial recycling is very expensive. China was the hope of many countries, so when it shut its doors in 2017 and stopped receiving recyclables, the world finally realised how big of a recycling problem it had. The US, for example, is now burning six times the amount of plastic than it is recycling. Obviously, industrial recycling isn't yet as developed as we want it to be. Sharon Lerner, in a special report on plastics waste in *The Intercept*, writes: "Yet even technology's biggest proponents acknowledge that no one yet knows how to efficiently and economically convert plastic into its component parts and then back to fuel."

In other words, sorry to burst your bubble, but simply recycling isn't going to cut it. And in simpler terms, stop using plastic when you don't need to.

4. Instead of consumer tax, let's extend responsibility to producers and governments.

Paying for plastic bags is a topic that continuously comes up in the discussion around single-use plastics. It has been proven that charges work, and it does make for pretty solid headlines when you see the number of plastic bags used dropping like flies. Specifically, in England, after the 5p charge was introduced, sales of single-use bags fell by 90%.

But there are a few issues with this plastic bag charge. First, for consumers in more affluent societies, the levy may be negligible over time. It may not necessarily lead to long-term behavioural change. Secondly, why are we acting like it's only consumers who should be responsible for the plastic crisis?

Samantha Thian had something to say about that too: "Why not tax companies?" She also highlighted discussions in the UK around extended producer responsibilities. A report, commissioned late last year by the WWF and the Resource Association, called on ministers to impose a fee on the usage of virgin plastics in packaging, and a rebate for products that use more recycled materials. This perspective, of course, represents a shift in blame to corporations and governments. Arguably, this is a step in the right direction, because they are the ones profiting the most from the fossil fuel industry. (Fun fact: plastics, if you didn't know, are made from the same materials as fossil fuels. And by the same companies too.)

5. Making noise works.

Roxane Uzureau Zhu, the co-founder of <u>BarePack</u>, reminded us that big corporations are making the changes as a result of pressure by the media. Negative press, the nasty implications around disposables, and the sheer disgust people have with unnecessary plastics have collectively formed a response that pushes corporations to do better. They also realise that there are business opportunities in switching towards more planet-friendly alternatives. While this isn't the systemic change that we're all hoping for in view of the plastic crisis, we all have to start somewhere.

What all of this shows us is that having a voice and making that heard is important. Don't underestimate the power of social media, emails, petitions, and the like.

6. And sometimes, it's just about looking within.

It can be <u>crippling</u> to think about the sheer scale of the plastic crisis or any other environmental problem. But it starts with holding up a mirror to your daily actions, says Thomas. Be personally responsible, and think about how you can impact your immediate social groups. Whether this means printing up a sign at your pantry, visibly using reusables when your friends aren't, or inviting your community to beach clean-ups, it all makes a difference. Might we suggest something simple like a swear jar but for single-use plastics? Start somewhere. And with that, here are some crucial little green steps.

Start your own micro-revolutions with our #LittleGreenSteps!

> MAKE YOUR VOICE HEARD. Post on social media, write into companies and attend events where your local representatives are present. Let them know that you want the plastic crisis to be addressed.

> GET INVOLVED with organisations that are doing good. NGOs like WWF are a good start. Beach clean-up organisations like Seven Clean Seas are great too. Actively take steps to participate in bigger-level change.

> **DEMAND FOR THE SWITCH** towards reusables. With <u>BarePack</u>, you can simply sign up (it's free) and be part of an up-and-coming system in Singapore where #BYO is easy and fuss-free. Or companies like <u>Revolv</u>, that are greening up events and organisations with reusable cups. Tell companies and restaurants that you want reusable options, so that when start-ups like BarePack and Revolv are introduced to them, they'll be more easily persuaded.

> **TRY GOING LOW-WASTE**. Plastics represents one part of the larger waste crisis. While we know <u>zero waste</u> is hard, start by being more conscious of just how much waste you're putting out. Then try lowering it. You'll realised you'd have phased out single-use plastics completely.