

GENEVA CONFERENCE

The next round of the UN Plastics Treaty starts this week in Geneva (Aug 2025). This time they must confront the real issue and prioritise innovative solutions. Plastic isn't the problem – it's the way the plastic is made which causes it to lie or float around for decades.

At conferences like this there are endless reiterations of the problem, with alarming pictures and statistics, but no new ideas how to solve the problem except “reduce, reuse, recycle,” which is plainly not adequate. The prevailing narrative of the two main protagonists at the conference “banning or not banning plastic” risks creating more harm than good.

Plastic itself isn't the problem, and swapping it for paper, glass, or so-called ‘compostables’ won't solve the environmental crisis – and in many cases will make it worse. According to the 2023 UNEP report, replacing plastics with conventional alternatives could triple greenhouse gas emissions by 2060. We need smarter materials, not more bans.

Banning plastics also increases food waste, reduces crop growth, massively increases financial cost, and increases CO₂ emissions. It also disrupts recycling of ordinary plastic, as alternatives such as plastics made from crops will contaminate recycling streams.

Plastic bans have been driven by public outrage over ocean pollution, but the way to deal with this is to make the plastic so that it safely biodegrades if it gets into the open environment instead of lying or floating around for decades. The two protagonist groups at the UN Conference are not even talking about this possibility. Either they don't know about it or have been told that it leaves microplastics – no it doesn't.

D2w masterbatch technology ensures that plastic packaging degrades into biodegradable materials within a timescale of months, not decades or centuries. This isn't a license to litter - it's a fail-safe option for a global waste problem that governments cannot fully control.

The negotiators in Geneva should:

1. Recognise the role of advanced biodegradable plastic materials in reducing pollution.
2. Incentivise the use of innovation, rather than doubling down on outdated policies.
3. Base decisions on science, not slogans, and consider the full lifecycle impact of materials.

Consumers deserve solutions that work, and demonising plastic distracts from the real question: how do we make essential materials so that they are safe for the planet? That's where global policy should focus.

THE DANGER OF PLA

<https://www.thecooldown.com/outdoors/microplastics-pollution-study-pla-biodegradable-health/>

Polylactic acid, or PLA, is a bioplastic commonly marketed as compostable, and it's often used in food packaging. Made from fermented plant starch rather than fossil fuels, when broken down under the right conditions, it can degrade into lactic acid, generally understood as safe.

However, researchers from China say that PLA microplastics can break down into nanoparticles inside the body and potentially trigger a range of harmful biological responses. In their study, published in June 2025 online in the *Journal of Hazardous Materials*, mice were orally exposed to a daily dose of PLA microplastics. Short-term oral exposure appeared to impact gut microbiota and induce inflammation, while longer-term exposure seemed to cause persistent changes, including to the metabolism.

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