

The plastic recycling system is broken. Here's how we can fix it

October 14 2021, by Eleni Iacovidou, Norman Ebner



Global plastic supply chains have been altered by COVID-19. Credit: [Filmbetrachter/Pixabay](#)

The investor Warren Buffett once [remarked](#) that "only when the tide goes out do you discover who's been swimming naked". For the plastics recycling industry, the pandemic was a bit like the tide going out, exposing its deep-rooted structural problems.

Specifically, [COVID-19](#) exposed the plastics [recycling](#) sector's

[vulnerability](#) to oil-price changes. Economic shutdown driven by the pandemic led to reduced global oil demand, which in turn caused oil prices to plunge. This shifted manufacturers' preference towards making [new plastic](#), increasing the cost of recycling plastics in the first place.

Changes like this are leading to increasing pollution from new plastic production, with negative consequences for the health of our planet. In the short term, it could also threaten the livelihoods of those working in plastic [waste](#) management across the world. And in the long term, it could result in lower [investment](#) in the recycling sector, as companies may be wary of risking financial loss.

Since before the pandemic, governments worldwide have shown a tendency to seek quick-fix solutions to plastic pollution in order to signal a decisive stance on sustainability. For example, a move that commonly receives high levels of political support is a ban on single-use plastic plates and cutlery.

But while this ban has its benefits, it only provides a [partial solution](#) to the much larger problem of [excessive consumption](#), influenced by our modern [culture of convenience](#).

Such actions seem to smooth over the problem of generating plastic waste, when in reality, the resulting proliferation of other single-use items can lead to [even worse](#) environmental consequences. A far better plan would be to first tackle the problems with plastic production at their source.

Improvements

To begin with, it's time to improve transparency in the plastic production system.

There is [not enough data](#) on which types and amounts of plastics are imported and exported between countries, as well as on how those plastics are used, meaning we don't always know precisely where most waste is generated. A monitoring system that can properly track how plastics flow across different countries will help us to better understand where regulations may be needed.

For example, blind spots in plastic data collection can be illuminated using [track-and-trace technology](#) able to follow a piece of plastic from its origin, along many trade routes, to the end of its journey as refuse or recycling.

Analyzing hundreds of thousands of these journeys will help us develop a deeper understanding of the complex political and economic [power dynamics](#) that influence [plastic supply chains](#) across the planet.

What's more, we must promote sustainable plastic waste management within countries by making it [economically achievable](#) to recycle plastics, even in places with little recycling infrastructure.

To do this, there needs to be significant changes in [regulations](#) to ensure that companies make the effort to recycle where possible, as well as [incentives](#) to achieve recycling targets and establish plants.

In the UK, the [plastic packaging tax](#), due to be introduced in April 2022, aims to increase demand for recycled plastic. By taxing plastic packaging that contains less than 30% recycled material at £0.20 per kilogram, the government is creating a clear incentive for businesses to take advantage of recycled plastic when planning their products' packages.

Similarly, in the EU, the [plastic packaging levy](#) introduced in January 2021 mandates member states to pay a tax of £0.68 per kilogram on non-recycled plastic packaging.

Although it may be a few years before the effects of these taxes become clear, both are likely to spur improvements in plastic recycling rates while attracting investment into better recycling facilities. But if measures like these are to be successful, monitoring systems need to be put in place to make sure companies aren't finding ways to dodge the laws.

Finally, the role plastic waste plays in different local cultures shouldn't be overlooked. [Conventions](#) on how plastic waste should be treated, as well as [attitudes](#) towards informal waste pickers, ranging from acceptance to stigma, affect the way [plastic waste](#) management systems operate. These factors will need to be addressed by those familiar with each community's customs if these systems are to be improved.

If we want to rid our natural spaces of plastic, we need to promote an [inclusive](#), transparent approach to how [plastic](#) waste is treated.

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