## We Need to Kick our Addiction to Plastic

It's time for politicians and CEOs to step up and take action

## By Ayana Elizabeth Johnson

As a marine biologist, watching our global plastic pollution problem grow and grow and grow is fascinatingly horrifying. Just the amount is incredible—72 million tons of plastic packaging is produced every year, and around one-third of that ends up in the ocean. That's the equivalent of a garbage truck full of plastic being dumped into the ocean every single minute, every day of the year. And once it's in the ocean, it is broken down into smaller pieces by sun and salt; it becomes micro plastic and gets incorporated in the food chain.

One-third of fish caught in the UK are contaminated with microplastic. Oysters and mussels are contaminated. A recent study found 83 percent of drinking water samples around the world were contaminated. Contamination of sea water itself means there is microplastic in our table salt. Sea minerals and fish meal, the foundation of many agricultural fertilizers and feed for livestock and pets, are contaminated.

We used science to create a material that lasts forever, and then we throw it away, all day, every day. That doesn't make any sense. And of course, there is no "away." Every single piece of plastic that has ever been created is still with us.

So what do we do about this problem that is choking our ocean? There are many proven and practical ways to deal with plastic pollution. My favorite technological solution is the Inner Harbor Water Wheel in Baltimore, Maryland. It uses river currents and floating booms to funnel plastic and other trash into a water wheel and then into a dumpster that can be hauled away. Very simple. Very effective. These should be at the mouth of every river, preventing plastic from getting to the sea.

And if there is one thing we have learned from the incredible effort led by Afroz Shah to pick up almost 8,000 tons of trash from a beach in Mumbai, it's that beach cleanups are not to be scoffed at. Let's Do It, an organization I've only just become aware of, has been quietly scaling up massive cleanups around the world since 2008. The Ocean Conservancy and Surfrider have also been mobilizing citizens for beach cleanups for decades. We should each pitch in and pick up.

We can also become more effective at reducing, reusing, recycling, and re-purposing existing plastic. But then there is the reality check that there is so much plastic already in the environment—and so much of it is microplastic—that it is nearly impossible to truly clean up. Our planet is already forever changed.

We can't go back to a world free of plastic pollution. But we can stop the problem from growing, and we can turn the trend around. To do that we really must break our addiction to plastic. We must refuse to use plastic. We must stop creating new plastic. This will require a major cultural shift—the creation of new traditions, norms, trends, memes. A shift away from a culture that accepts things being disposable, away from ordering so many of our meals "to go."

At the risk of sounding too romantic, we need a return to eating our meals and drinking our coffee while sitting and looking each other in the eye—then actually washing the dishes! Of course, this also

has lots of other benefits—for our heath, well-being, for community-building—beyond plastic reduction.

Breaking our addiction will also require a major shift in government and corporate policies. It's time for a little less talk and a little more action. There is so much that can be done to alleviate this explosive plastic fiasco.

We can ban plastic straws (# StopSucking) and utensils as the city of Seattle just did." Ban plastic bags like Kenya just did. Ban plastic microbeads like the United States did. Ban plastic takeout containers like Hobart, Tasmania just did. Improve the quality of the drinking water that comes out of the tap, so people won't feel they have to drink bottled water to protect their health.

Let's race to see which cities, states, nations, and corporations will be first to achieve all of the above. Let's follow those who are leading, and learn from them the practical nuance of how to make this shift away from plastic work in reality. It takes political will, visionary leadership.

As an advocate for social justice, I will note that while the stakes are high for all of us, they are often even higher for poor communities and communities of color on the coasts. They are the ones who live near the most polluted and plastic-choked waters; who are less likely to be able to filter carcinogenic microplastics out of their drinking water; who are more likely to live in neighborhoods without robust waste management and recycling services, where plastic trash just piles up and up. Ocean conservation is a social justice issue.

So it's time to take a leap, together, to envision a world without single-use plastic. Getting new plastic bags every time you buy groceries is ridiculous. Getting disposable plastic forks, plates, and bowls every time you eat a meal to-go is nuts. Using a plastic straw that will last forever for only a few seconds is crazy. And shipping water all over the world in little plastic bottles is totally absurd. People did just fine getting their food home from the store, eating outside their homes, and staying hydrated before all this plastic got involved.

With political will, a cultural shift, some scientific innovation, an eye to social justice, and by washing a few more dishes, we can work our way out of this enormous mess we humans have made.