

The Problem with Plastic

You see that? That's what we call a trick title, because there isn't just A problem with plastic. There are many. To prove it, we're going to break down how plastic harms the most critical areas of our planet, namely, our oceans and environment, our economy, and our bodies.

Ready? Let's go!

Oceans and Environment

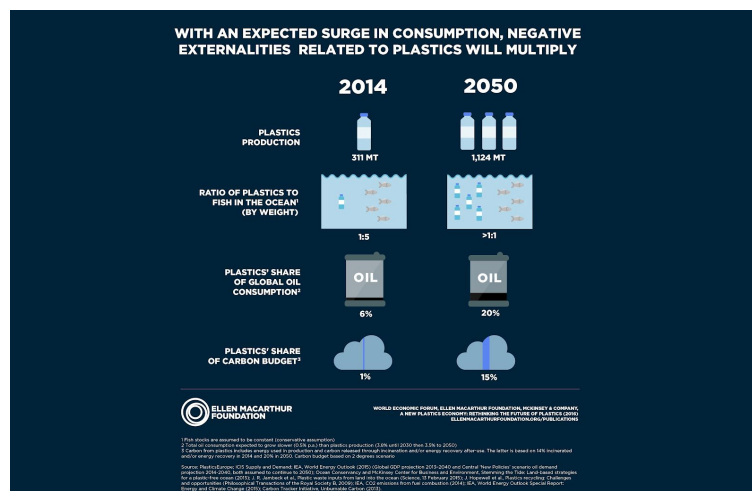
Anyone else disturbed by the literally [waist-deep mounds of plastic](#) riding in off the ocean? Just us?

Here's the deal. We get that vacuum cleaners aren't going to be made from wood, but there's a huge problem with single-use plastics and excessive waste.

While plastic has revolutionized our lives, enabled our fast-paced, devil-may-care, get-it-all-done and have-fun lives, it also harms the world we are trying so hard to enjoy.

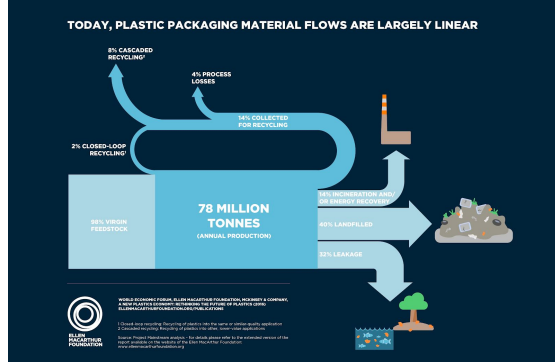
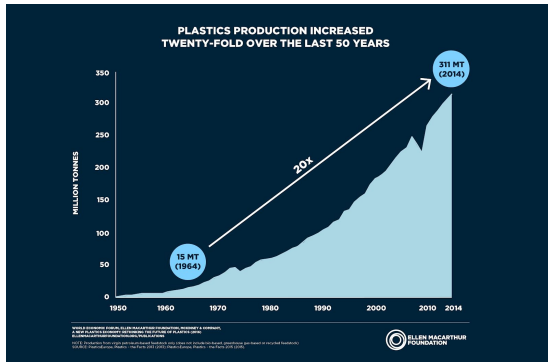
According to [The World Wildlife Foundation](#), as of summer 2019, there are “150 million metric tons of plastic in our oceans.” That's roughly the equivalent of one million whales'-worth of plastic!

These plastics will remain in the oceans for centuries before they decompose, and even then, they'll still be there—just in tiny little pieces. If things keep going as they are, the ratio of plastics to fish in the ocean will be one-to-one by the year 2050. Unfortunately, neither we nor the fish can *eat* plastic (or rather, they can and do, but it prevents them from eating other things and leads to their eventual starvation.)



(Source: [Ellen MacArthur Foundation](#))

That's not all though—our dependence on plastic is only increasing, and a large percentage of these products end up in landfills and in our oceans.

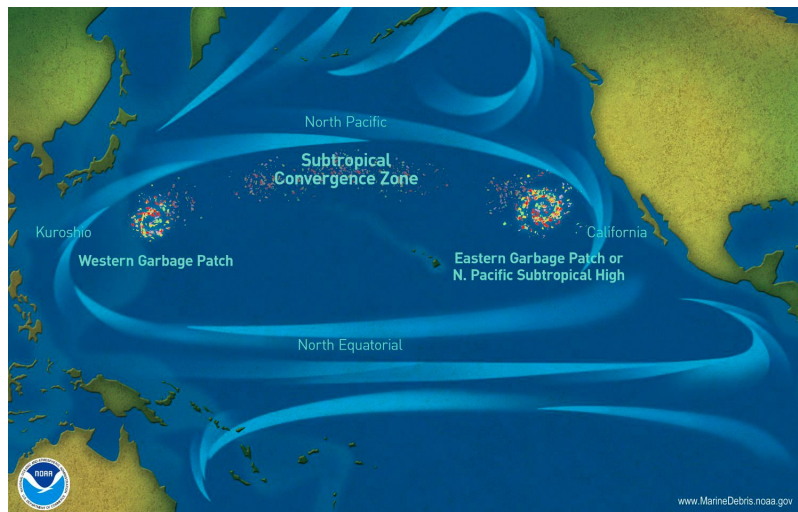


(Source: [Ellen MacArthur Foundation](#))

National Geographic actually has an [Encyclopedia entry](#) for the Great Pacific Garbage Patch, also called the Pacific Trash Vortex. The entry describes how 80% of the trash in this giant, aquatic garbage heap comes from “land-based activities” and finds its way into waterways and currents.

And what is the majority of this trash, you ask? You guessed it—plastic.

The Garbage Patch consists of mainly [microplastics](#), and it’s estimated that even more garbage actually exists below this floating plastic. In fact, “oceanographers and ecologists recently discovered that about 70 percent of marine debris actually sinks to the bottom of the ocean.” ([National Geographic Resource Library](#))



(Source: [NOAA](#))

Economy

You don’t care about the ocean, you say? Plastic also poses a problem for the economy.

[The World Economic Forum](#) found that, “Today, 95% of plastic packaging material value, or \$80–120 billion annually, is lost to the economy after a short first use.”

Further, those plastics that do get recycled (only 14% of all plastic packaging and an even smaller percentage of general use plastics) are made into lower quality plastics that may not be recycled again ([WEF](#)).

And what about oil?

The World Economic Forum also explains that the vast majority of plastics are “derived from virgin fossil feedstocks,” which means oil that hasn’t been used for anything else. In total, plastic production uses the same amount of oil as the air travel industry worldwide.

“If the current strong growth of plastics usage continues as expected, the plastics sector will account for 20% of total oil consumption and 15% of the global annual carbon budget by 2050 (this is the budget that must be adhered to in order to achieve the internationally accepted goal to remain below a 2°C increase in global warming).” -- (*The New Plastics Economy Rethinking the future of plastics*, [The World Economic Forum](#))

Human Health Implications

To top it all off, *plastic is bad for us*. While plastic’s implications on our physical health aren’t yet fully known, what researchers have found is alarming.

Wanna get scary for a second? The Ecology Center has put together a [grid of plastic types and their known effects on human health](#), compiled from sources such as the Center for Disease Control and the National Resources Defense Council. Adverse health effects range from general eye irritation to impaired immune function, birth defects, and even cancer.

Pretty scary stuff, especially since people are finding [plastics in rainwater](#), drinking water, and food. The [Harvard School of Public Health](#) quoted Associate Professor of Epidemiology Karin Michels: “The nightmare scenario is that we one day find out that a lot more of our current disorders, including infertility and cancer, may be due to bisphenol A [chemical found in plastics] and only show up after cumulative exposure. But by then, we all have accumulated so much exposure that it’s too late to reverse the effects.” Don, don, donnnnn.

Solutions

Okay, so the plastic problem is serious—and for more than just the lives of our precious sea turtles.

But don’t worry (well, maybe you should worry a teensy bit)! Scientists and researchers are working hard to not only reveal the severity of our plastic problem but also come up with some great solutions.

Interested in seeing what progress has been made?

Check out:

- [What you need to know about plant-based plastics](#) on NationalGeographic.com
- [10 Ways to Reduce Plastic Pollution](#) on the Natural Resources Defense Council's website NRDC.org
- [A running list of action on plastic pollution](#) on NationalGeographic.com
- [5 unexpected solutions to the plastic crisis](#) on BBCearth.com
- [What You Can Do to End Plastic Pollution](#) on EarthDay.org