

Waste-Management in America. Can we take 'Pollution Down to Zero'?

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When I was a kid, I thought throwing my empty plastic water bottle into my recycle bin was going to help save the planet. After all, [Captain Planet](#) told me I had an important role in taking 'pollution down to zero', and I wanted to help. As I grew up, seeing images of overflowing landfills haunted me. I couldn't understand why this was such an immense issue. Wasn't everyone taking the advice of a cartoon superhero with green hair as seriously as I was?

After landing a job in the packaging industry, I started to do my own research on the impact of packaging on the environment and what solutions were being created to work toward a circular economy. What I found was shocking. While I wholeheartedly believe we, consumers and manufacturers, should all do our part to minimize our carbon footprint and keep our environment clean, I found that the problem didn't lie solely with consumers, brand owners, or even packaging manufacturers. The biggest problem is the lack of viable waste management systems in the U.S.

America produces about [254 million tons](#) of trash per year. [On average, 55% of our trash is not managed in an environmentally safe way.](#) The packaging industry is well-aware of this and has responded with ambitious sustainability goals to help mitigate this issue. Many of these initiatives are due to be implemented by 2025 and promise to only produce packages that are reusable, recyclable, or compostable and manufactured in an environmentally responsible way. While these solutions sound great, none of them are a one-size-fits-all solution, as waste-management laws and mandates differ drastically from state-to-state.

I live in Connecticut (CT) where since 1991 all households have been mandated to recycle approved paper, plastic, and glass packaging and materials. Once a week, or in some of the more rural areas every other week, a truck comes and picks up the recyclables and brings them to one of six processing plants in the state. This system makes sense in CT because it is a highly populated and compact state where the houses are close together in most areas. However, in U.S. states with mainly less populated and more rural regions, recycling can be costly and waste more resources than what is recovered. Imagine a recycling truck driving several miles from one household to another on a weekly basis just to recover a couple of bottles and a week's worth of newspapers. Is it worth it?

But even in areas where effective curbside pickup programs are in place, recycling isn't a be-all-end-all solution to sustainability. A staggering [91% of all discarded plastic will not end up being recycled](#), partially because certain types of plastics, like plastic films, are not accepted in most standard processing plants, and partially because approved recyclable materials have to meet manufacturers' standards before being processed. For example, if a plastic peanut butter jar still has a significant amount of product left in it, it can contaminate other materials or jam up the processing equipment. In many states, that contaminated peanut butter jar will likely end up in a landfill where it may [never degrade](#). Speaking of landfills- did you know that [every state in the U.S. except for Hawaii and Wyoming has at least one that is operational?](#)

Instead of creating new landfills to handle municipal solid waste (MSW), [twenty U.S. states](#), including CT, have opted to utilize waste-to-energy (WTE) facilities. CT has 5 WTE plants. One plant burns enough trash to power 65,000 homes in CT per year.

However, despite the fact that [WTE facilities meet or exceed the EPA's maximum achievable control technology standards for air emissions and have been proven to produce less greenhouse gases than landfills](#), not everyone wants an incinerator in their backyard. Many WTE naysayers, including zero-waste groups, believe all trash should be repurposed or recycled in some way, and that incineration does not produce as much energy as the repurposed resource would be worth if used in another way. WTE facilities are also expensive. [On average, it can cost upwards of \\$200 million to implement. In many cases, to make a profit and repay investors, incinerator operators sign decades-long contracts with municipalities that guarantee a certain volume of waste comes in each year.](#) Zero-waste advocates believe that this reduces incentives to reduce, reuse, and recycle.

In addition to putting the focus back on recycling, many zero-wasters are pushing for packaging manufacturers to create fully compostable packages. Composting sounds like it is an ideal way to tackle the waste problem because compostable materials not only break down completely in the right conditions, but they help nourish the soil in which they are degrading. More and more companies are listening to consumers, and are successfully producing certified compostable packages, but just because a package claims compostability, doesn't mean that it will actually biodegrade. One caveat with composting is that compostable materials need the right conditions (oxygen, humidity) to break down. That means that if you throw a compostable plate in the garbage, and it ends up in a sealed landfill, [that plate will either not breakdown at all, or it could break down anaerobically, which could produce harmful greenhouse gases like methane.](#) Most compostable packaging won't breakdown in home compost piles, either. Unfortunately, it is likely that most compostable packages are ending up in landfills since only [185 full-scale commercial and municipal composting facilities](#) currently exist in the U.S., and not all of them accept compostable packages. That being said, commercial composting does appear to be growing in popularity. States like Vermont are starting to implement [curbside pickup for compostable materials](#) and are [making it illegal to throw organic compostable materials](#), like food scraps, in the trash. Composting may be a common and realistic waste-management solution in the future, but we still have a long way to go.

Here's the good news. Just because there isn't a one-size-fits-all sustainable waste-management solution for every state doesn't mean we aren't heading in the right direction. Creating a circular economy will take a multi-pronged approach.

The best thing we, as American consumers and citizens, can do is to educate ourselves. [Brushing up on your state's waste-management laws](#) is a great place to start. If you notice that your state laws concerning waste-management are lacking, or don't align with your values, call or email your local government officials and demand more effective and efficient systems. If you don't feel your voice is being heard, use your voting power to put someone into office who will hear you.

Patronizing and supporting brands that are working toward the sustainable solutions that are aligned with your values and learning how to properly and safely dispose of the packaging your favorite products come in is also wise. Just because a plastic product displays the chasing arrows logo doesn't mean it can be tossed in your recycle bin. Similarly, that compostable straw you are using probably won't disintegrate in your trash. Staying informed on the best way to dispose of sustainable packaging in your area can make all the difference.

Remember, Planeteer, *the power is yours*. What will you do with it?