



# **DECONSTRUCTING THE WAR ON PLASTIC**

*WRITTEN BY: DAVID CLEMENT AND YAËL OSSOWSKI*





# INTRODUCTION

Local governments, state governments, and the federal government have all set their sights on dealing with the issue of plastic waste. The goal of their initiatives is to curb the amount of mismanaged plastic waste that ends up in our environment. This report outlines the current state of mismanaged plastic globally and in the United States, and evaluates the legislative efforts undertaken to combat mismanaged plastic waste. This report concludes with policy suggestions that can be implemented to better curb mismanaged plastic waste.

## THE US FAILS TO RECYCLE, BUT CONTRIBUTES LITTLE TO THE WORLD'S MISMANAGED PLASTIC PROBLEM

Less than 9% of all plastic waste is recycled in the United States, which unfortunately means that the bulk of that waste is left to sit in landfills, taking decades to decompose.

Although the United States is failing when it comes to recycling plastic products, Americans are not significant polluters when it comes to global mismanaged plastic waste. Up to 95 percent of all plastic found in the world's oceans comes from just 10 [source](#) rivers, all of which are in the developing world.

In total, the United States is responsible for approximately 1% of the world's mismanaged marine plastic waste. That is 27 times lower than China, 10 times lower than Indonesia, 6 times lower than the Philippines, and 5 times lower than Vietnam and Sri Lanka.

COUNTRY	GDP	% OF MARINE PLASTIC WASTE
 China	14.3 Trillion	27%
 Indonesia	1.11 Trillion	10%
 Philippines	376 Billion	6%
 Vietnam	261 Billion	6%
 Sri Lanka	84 billion	5%
 USA	21.4 Trillion	1%

That remaining 1% of mismanaged plastic should, and can be, eliminated. The question remains, are current legislative efforts to curb plastic going to work, and are these efforts a net benefit for the environment?





# DEALING WITH AND PREVENTING MISMANAGED PLASTIC WASTE

## LOCAL/STATE LEVEL PLASTIC BANS

Across the United States, state governments, or local governments, have sought to ban the use of single-use plastics. The problematic plastics targeted by these bans are traditionally grocery bags, stir sticks, straws, and polystyrene foam containers. Support for the ban comes from the premise that banning these items will reduce plastic waste, and therefore have a net positive impact on the environment. There are two problems with that premise:

1. Alternatives to single-use plastics often have a higher total environmental impact. In fact, when Denmark's Environment Ministry sought to evaluate the issue of single-use plastic bags, they came to the stark conclusion that such bags are often the environmentally conscious choice. In evaluating the total environmental impact of plastic bags versus their alternatives, using 15 benchmarks ranging from climate change to resource depletion, Danish researchers concluded that paper bags would need to be reused 43 times to have the same total impact as a plastic bag. The figures for cotton bags were even

worse, which would need to be reused 7,000 times, while an organic version would need to be used 20,000 times to be on par with a single-use plastic bag. When consumer usage patterns are factored in, forcing consumers to paper or cotton alternatives is a significant net negative from the standpoint of environmental protection.

2. Bans on single-use items do not necessarily result in a reduction of total plastic use. A 2008 research [paper](#) by the Connecticut Office of Legislative Research found that restrictions on the sale of single-use plastic bags had the unintended consequence of exponentially increasing sales for garbage bags, which are traditionally made from thicker plastic. In an [article](#) by the Irish Examiner from January 23, 2003, the paper had recorded that food retailers experienced a "77% increase in the sale of foot-pedal garbage bags in response to restrictions on single-use grocery bags." If the reduction in plastic bag consumption is offset with a considerable increase in garbage bag sales, which need more energy and crude oil to produce, US consumers will have used more plastic than prior to the ban, with a higher negative impact on the environment.



# THE BUSINESS AND CONSUMER COST OF PLASTIC BANS

Beyond the environmental impact of plastic bans, we can not ignore the negative business impact these bans have, especially on the food and hospitality industry. Nationally, [over](#) 110,000 restaurants have so far closed permanently as a result of the Covid19 pandemic. Hundreds of thousands of restaurants barely scraped by, mostly relying on “to-go” orders and delivery to stay afloat. As part of their efforts to meet demand, restaurants that survived relied heavily on single-use plastic takeout containers, bags, cutlery, and straws, all of which are usually targeted by local bans. Local bans on these single-use products are problematic, from a hospitality perspective, for three main reasons:

1. These bans require businesses to shift to alternatives that are often more expensive. Those additional costs are usually passed on to consumers through higher prices. Having to take on additional costs for inputs, as these businesses are trying to recover from the devastation of the pandemic, is misguided at best, and cruel at its worst.
2. Having a patchwork of local bans could make supplying these products to restaurants exponentially more difficult. For example, Florida has recently considered a proposal to allow communities to enact their own plastic bans. If that policy is approved, and communities do pass bans on single-use plastic products, there will be a complicated patchwork of regulations and significant disruptions to supply chains, especially for the chain establishments in the hospitality industry. Different cities with vastly different rules could mean that manufacturers have to repurpose production lines based on Zipcode, which is incredibly costly and time-consuming. Those costs are again, often passed on to consumers.
3. As mentioned above, the alternatives to these products are not necessarily better for the environment, meaning that these local bans could end up being a significant net negative for the environment.





# FEDERAL PLASTIC POLICY

At the federal level, two proposals have recently been introduced to deal with the issue of plastic waste. The CLEAN Future Act and the Break Free From Plastic Pollution Act both seek to address the issue of plastic waste, but unfortunately do so in a way that will have negative outcomes for the environment and for consumers. In summary, the bills propose the following changes to plastic policy in the United States

## 1. A moratorium on the creation of new plastic manufacturing facilities.

The purpose of this is to stop the expansion of this industry, which in theory protects the environment from the emissions associated with production. But this fails to recognize that there are legitimate and environmentally conscious reasons to choose plastic over competing products. Take, for example, the shipment of baby food. Baby food in plastic containers, as opposed to glass alternatives, [generates 33% fewer](#) emissions because of the energy required in the production of plastic and its lighter weight in transportation. Although this is just one niche example, this same principle could be applied to a near-infinite number of plastics.

Beyond questions on sustainability and competing products, the moratorium reeks of regulatory capture. For those unfamiliar, regulatory capture is when new laws are passed that insulate an existing industry from future competition, allowing

them to solidify its market share. The bill's moratorium on plastic facilities shields the existing industry from competition, and ensures that more environmentally conscious competitors are kept out of the market entirely. This is important for both those who oppose cronyism and corporate welfare, and those who want better environmental policies, especially because there are new [almost entirely](#) biodegradable plastic products coming to market. Preventing permits for innovators benefits the existing industry at the expense of consumers and the environment.

On top of that, the recent Texas freeze and snowstorms, as reported by the [Wall Street Journal](#), exposed significant gaps in the supply chain for plastics. As a result of plant closures in response to the freeze, major auto manufacturers were forced to halt production due to a lack of plastic parts, construction companies faced record shortages for adhesives and siding, and PVC piping companies failed to meet their contractual obligations with buyers. A moratorium on new plants mandates that this vulnerable supply chain remain intact in its current and mismanaged state, removing any chance at correction.

## 2. A moratorium on the creation of new advanced recycling (chemical depolymerization) facilities.

Through chemical depolymerization, all plastic can be either recycled, repurposed, or converted. Chemical depolymerization is the process of breaking down plastics, altering their bonds, and repurposing them into other products. There are countless examples of why this technology is key to

dealing with mismanaged plastics, with innovators turning problematic plastic into everything from [resin pellets](#), [roadways](#), [tiles](#) for your home, and high strength [graphene](#). If the US wants to tackle plastic waste, the federal government can't at the same time limit advanced recycling capacity. By capping recycling facilities, these bills prevent the scalability of recycling efforts, which creates a giant hurdle for dealing with plastic waste. The goal of legislation should be to make recycling more affordable, which is only possible through more competition.

### **3. A federal recycled content standard for plastic products.**

This type of mandate has its pros and cons, but it is disastrous if it is enforced alongside a permit cap on advanced recycling.

Creating a recycled content mandate will drastically increase, by decree, the demand for recycled plastic. In fact, the BFFPP Act, if followed through with the CLEAN Future Act, would mandate upwards of 25% recycled content in plastic bottles by 2025, and 80% by 2040.

The issue here is that these mandates will limit the capacity of advanced recyclers to meet that demand. If there is a significant uptick in the demand for recycled plastic, and advanced recycling is not allowed to scale up to meet demand, we could see a situation where demand rapidly outpaces supply, which will only serve to drive prices upwards. Those inflated costs will mostly be shouldered by consumers, who will have those costs passed on to them in the form of higher prices. This trend is exactly what was seen in other countries who passed bio-ethanol mandates, which had the negative effect of significantly increasing prices for the crops used in the creation of ethanol.

## **WHAT ABOUT MICROPLASTICS?**

Microplastics are small pieces of plastic, less than 5mm in length, that end up in the environment and our water systems as plastic degrades. These microplastics pose a real threat to the environment, which is why the issue of microplastics needs to be properly addressed. The presence of microplastics in our environment is largely a consequence of mismanaged plastic waste ending up in the environment, combined with poor landfill management. The following is needed to properly deal with the issue of microplastics:

1. An increased focus on reclaiming plastic and expanding advanced recycling. The more plastic that is reclaimed for the purpose of chemical depolymerization, the fewer plastic ends up in the environment or in mismanaged landfills. A serious expansion of advanced recycling can significantly limit the addition of new microplastics to the environment.
2. The expansion of electrolytic oxidation to deal with microplastics already in our water systems. [Researchers](#) have succeeded in "attacking" microplastics, breaking them down into CO<sub>2</sub> and water molecules, without additional chemicals. The federal government should partner with state/local governments to embrace the science that makes these technologies both scalable and sustainable.

A combination of increased advanced recycling alongside the expansion of electrolytic oxidation ensures that existing and future microplastics will be removed from the environment.



## SUMMARY: A BETTER WAY FORWARD

In summary, plastic waste is a problem in the United States, but local, state and federal initiatives proposed to deal with plastic waste largely miss the mark. A more comprehensive strategy, embracing the following policy items, would be a far superior way for the US to tackle plastic waste while defending consumer choice:

A ban on the export of plastic waste to countries that fail to meet environmental stewardship standards. The US should not offload its plastic waste to countries that mismanage that waste, which results in such waste ending up in the environment. That said, the ban should only apply to countries that fail to properly manage plastic waste. For countries that have advanced recycling capacity, there should be no prohibition on the exportation of plastic waste.

Expansion of advanced recycling technology and chemical depolymerization permits. By inciting private investment into advanced recycling, the US can do a much better job in ensuring that plastic waste is reclaimed, and then either recycled, repurposed or converted. At the same time, policies should endorse technology neutrality and ultimately leave it to the marketplace on whether recycling a product makes sense or not.

Embrace innovation and market solutions to the United States' plastic problem. There are a variety of new and innovative products that are being brought to market to address plastic waste. There are new single-use polyhydroxyalkanoate (PHA) product classes of cups, takeout containers, and straws that are almost entirely biodegradable, solving the issue of mismanaged plastic waste taking decades, or centuries, to decompose.

Evaluate market mechanisms to price waste accordingly, so that the externalities of mismanaged waste are not offloaded onto communities and local waste management agencies. We propose a full review of how the US can effectively price waste appropriately, in consultation with both consumers and producers.



# ABOUT THE AUTHORS:



## **David Clement**

*North America Affairs Manager*

David Clement is the North American Affairs Manager for the Consumer Choice Center and is based out of Oakville, Ontario.

David holds a BA in Political Science and an MA in International Relations from Wilfrid Laurier University. Previously, David was the Research Assistant to the Canada Research Chair in International Human Rights. David regularly publishes in major outlets such as the National Post, Globe and Mail, Toronto Star, Miami Herald, Parliament Magazine, and Honolulu Star-Advertiser.

David is co-host of the internationally-syndicated Consumer Choice Radio on WFBT Big Talker 106.7FM in Wilmington, North Carolina and Sauga 960AM in the Peel Region of Ontario, Canada.



## **Yaël Ossowski**

*Deputy Director*

Yaël Ossowski is a writer, radio host, and deputy director at the Consumer Choice Center.

Since 2010, he has worked as a journalist and grassroots organizer in Europe and North America. He was previously Watchdog.org's Florida Bureau Chief, chief Spanish translator, and national investigative reporter from 2012-2015.

He is a contributor to Metropole Magazine in Vienna and has contributed to The Chicago Tribune, Washington Examiner, Le Journal de Montréal, Les Affaires, Charlotte Observer, Miami Herald, and more. He has had over 600 articles published in newspapers, magazines, and online outlets.

Yaël is co-host of the internationally-syndicated Consumer Choice Radio on WFBT Big Talker 106.7FM in Wilmington, North Carolina and Sauga 960AM in the Peel Region of Ontario, Canada.





CONSUMER  
CHOICE  
CENTER

*[info@consumerchoicecenter.org](mailto:info@consumerchoicecenter.org)*  
*[www.consumerchoicecenter.org](http://www.consumerchoicecenter.org)*

---

700 12th St NW Suite 700 PMB 94982  
Washington, DC 20005