

Resolved: The United States federal government should ban single-use plastics.

Overview:

Plastic Bans have become a popular way to combat plastic waste and climate change. Many cities and states have imposed bans on individual single-use plastic products such as bags but a federal ban on all single-use plastics does not exist. Many alternatives are available but whether or not they are more sustainable depends on several factors. Some people also require single-use plastics for medical reasons. Single-Use plastics, however, are a major contributor to waste and releasing pollution into the atmosphere. It's a big issue with strong advocates on each side.

Additional Sources:

<https://www.doi.gov/reducing-single-use-plastic-pollution#:~:text=Single%2Duse%20plastic%20products%20include,be%20used%20once%20and%20discarded.>

<https://www.nrdc.org/stories/single-use-plastics-101>

<https://www.cnn.com/2023/02/05/energy/single-use-plastics-volume-grows-climate-intl-hnk/index.html>

<https://www.unep.org/news-and-stories/story/how-reduce-impacts-single-use-plastic-products>

<https://www.doi.gov/pressreleases/interior-department-announces-progress-phase-out-single-use-plastics-across-public>

<https://www.sustain.ucla.edu/zero-waste/single-use-plastic-policy/>

Affirmative

We stand in affirmation of the following:

The United States federal government should ban single-use plastics

Definitions

Single-use Plastics

Haaland 22

Deb Haaland, Secretary of the Interior for the US, Secretary's Order 3407 (SO 3407), US Department of the Interior, June 8th 2022, Issued on June 8, 2022, Secretary's Order 3407 (SO 3407) aims to reduce the procurement, sale and distribution of single-use plastic products and packaging with a goal of phasing out all single-use plastic products on Department-managed lands by 2032. SO 3407 is part of the implementation of President Biden's Executive Order 14057, which calls for federal agencies take actions to reduce and phase out procurement of single-use plastic products to the maximum extent practicable, (<https://www.doi.gov/reducing-single-use-plastic-pollution>)-MKM

Sec. 3 Definitions. Under this Order, **the term "single-use plastic products" means plastic items intended to be disposed of immediately after use, including plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags.**

Framework

Cost-benefit analysis

The framing for today's round ought to be cost benefit analysis. If we demonstrate that the United States federal government banning single-use plastics does more good than harm, we should win the round.

Contention 1: Bans Solve

City and State Bans Are Effect Winters 2024

Joseph Winters, Staff Writer at Grist a non profit dedicated to climate solutions, he holds a degree from Harvard University in Environmental Science and Public Policy, “Plastic bag bans have already prevented billions of bags from being used, report finds”, Grist, January 23rd 2024, <https://grist.org/solutions/plastic-bag-bans-have-already-prevented-billions-of-bags-from-being-used-report-finds/>-MKM

Over the past several years, **U.S. cities and states have passed hundreds of policies restricting the sale and distribution of single-use plastic bags.** A new report says **these laws have largely succeeded in their goal of reducing plastic bag use.** **The report** — copublished by three nonprofits, Environment America, U.S. Public Interest Research Group Education Fund, and Frontier Group — **draws on industry and government data to suggest that plastic bag bans can eliminate nearly 300 single-use plastic bags per person per year.**

“The bottom line is that plastic bag bans work,” said Faye Park, president of the **U.S. PIRG Education Fund**, in a statement. “People realize quickly it’s easy to live without plastic bags and get used to bringing a bag from home or skipping a bag when they can.”

Billions of Bags Have Already been Saved. Meiffren-Swango 2024

Celeste Meiffren-Swango, B.A. University of Arizona, State director of Environment Oregon Research & Policy Center, “Plastic bag bans work”, EnvironmentAmerica Research & Policy Center, January 17th 2024, <https://environmentamerica.org/center/resources/plastic-bag-bans-work/>-MKM

Single-use plastic bags pollute communities with litter, degrade in the environment and harm marine life.

The good news is that **states and cities with well-designed single-use plastic bag bans have successfully reduced plastic bag use and associated litter and pollution.** **Bans in five states and cities that cover more than 12 million people combined – New Jersey; Vermont; Philadelphia; Portland, Ore.; and Santa Barbara, Calif. – have cut single-use plastic bag consumption by about 6 billion bags per year. That’s enough bags to circle the earth 42 times.**

Adopting a ban on single-use plastic bags that’s similar to those policies could be expected to eliminate roughly 300 single-use plastic bags per person per year, on average.

Contention 2: Oceans/Warming Impacts:

Single-use Plastic Harm Ocean Life

Warner 2020

Kimberly Warner, Dr. Kimberly Warner is a senior scientist at Oceana a advocacy group for the world's oceans, she has a Ph.D in Marine, Estuarine and Environmental Sciences from the University of Maryland 1999, PBS, November 1st 2023, <https://www.pbs.org/wnet/peril-and-promise/2023/11/how-single-use-plastics-hurt-our-oceans-and-warm-our-planet/-MKM>

Oceana surveyed dozens of government agencies, organizations and institutions that collect data on the impact of plastic on marine mammals and sea turtles in the United States. We found records of almost 1,800 animals from 40 different species swallowing plastic or becoming entangled in it.

The biggest problem we found was animals consuming plastic. This was the story in 90% of the cases we examined. This happens because animals can mistake plastic for food or inadvertently swallow plastic while feeding or swimming. The result is that it can obstruct their digestion or lacerate their intestines, and all of this can interfere with their ability to feed and obtain the nourishment they need. These problems can lead to an animal's starvation and death. When animals become entangled in plastic, they can drown, choke to death or suffer physical trauma, such as amputation and infection. Entanglement can also lead to malnutrition when it prevents their ability to feed properly. The animals reflected in this report are far fewer than the true number of sea turtles and marine mammals that consume or become entangled in plastic in U.S. waters. Not every animal is reported, and many animals are too decomposed to determine why they died. Those not observed and reported to sea turtle and marine mammal stranding response networks likely far outnumber the nearly 1,800 animals we report on here. These networks rely heavily on reports from the general public and have limited resources for recovering and examining animals. Marine mammals and sea turtles already face a plethora of problems: pollution, habitat loss and destruction, harmful or deadly encounters with commercial fishing gear, vessel strikes, illegal poaching, harmful algal blooms and a host of climate-driven changes, such as sea level rise and warming oceans, which can affect food supply and habitat.⁶⁻⁸ The added danger from plastic pollution is one more stressor these animals, especially the threatened and endangered ones, cannot afford to suffer. If we do not reduce the amount of plastic flowing into the oceans, the problems documented here will get worse. Scientists now estimate that 15 million metric tons of plastic wash into the ocean every year.⁹ That equates to about two garbage trucks' worth of plastic entering the ocean every minute. This will increase. Plastic production is expected to quadruple by the year 2050, and if nothing changes, the amount of plastic entering the ocean is projected to triple by 2040. The struggling populations of threatened sea turtles and marine mammals cannot bear the often deadly impacts posed by a material that is, in many cases, unnecessary and too often used for just a few moments before being discarded. Plastic is designed to last forever yet so much of it goes toward producing items that are used only once. This makes it an obvious target for policies aimed at reducing harmful ocean pollution. The unnecessary use of non-medical single-use plastics is a habit we must break in order to prevent undue risks to endangered and threatened marine animals.

Ecosystem Impact

McDermott 2016

Kristin L. McDermott, Researcher at Salve Regina University, Bachelor's in Biology-Environmental Science from Salve Regina University "Plastic Pollution and the Global Throwaway Culture: Environmental Injustices of Single-use Plastic", Salve Regina University, May 4th 2016, https://digitalcommons.salve.edu/env434_justice/7/-MKM

Throwaway culture is performing a multitude of injustices in regards to **plastic pollution**. Throwaway culture **has destroyed ecosystems robbing impoverished communities of natural resources and of a healthy and safe living environment. Every person has a right to access to an environment free of plastic debris and toxins associated with its improper disposal. The issue of plastic pollution in its scale is debilitating.** It is frightening to change our imagined order and collective thought. It is difficult to give up convenience and ease. But this is what I am calling for. It is the way to end the injustice. I am not suggesting recycling more or 7 reusing single use plastic. **The issue is far too grand for small-scale changes; instead we must halt the use and the excessive production and overconsumption of plastic. The numbers are overwhelming and perhaps to the point of being unrelatable to human understanding. Not everyone can visit the pacific garbage patches, the isolated midway atoll, or the plastic ridden coastline of impoverished Philippines.** You cannot directly stand in front of the issue at hand. And so it is important that we do not turn away from human emotions such as fear, frustration, grief, or anger created by this issue of plastic pollution. Being overwhelmed with these emotions must not paralyze us but instead we must allow ourselves to feel those natural emotional responses so that we can connect to the issue at hand. As Morton suggests we have separated ourselves from nature. We have become disconnected from the natural world but our human emotions are a tool that can reconnect us.

Contention 3: Alternatives Fill In

Alternatives Exist and Can Be Used Instead

Singleton-Cabbage 2023

Krista Singleton-Cabbage, PhD in international environmental law, 10 WORST SINGLE-USE PLASTICS AND ECO-FRIENDLY ALTERNATIVES, WWF, June 26th 2023, <https://wwf.org.au/blogs/10-worst-single-use-plastics-and-eco-friendly-alternatives/-MKM>

Plastic is built to last.

So what's the deal with single-use plastics? **Around 30% of plastics consumed are single use.** While convenient, they're discarded after just one use. The amount of time, energy and effort that goes into producing, exporting and importing these products just doesn't add up - especially if they're made to last forever. Australians have one of the biggest single-use plastic footprints per person in the world - we're second after Singapore.

Where do single-use plastics go once we've used them? Shockingly, only 12% of plastics used in Australia ends up recycled. **We're using too many single-use products,** we're not recycling enough, and **the vast majority is ending up in landfill or littered in our parks, nature and oceans. Something needs to change.**

Here are 10 of the worst single-use plastics and how we can ditch them for good. **The best thing we can do for wildlife and the planet is to make a permanent switch to reusables and leave single-use behind where it belongs. Making the switch is easy.**

1. Plastic straws

In Australia, nearly 1.3 billion straws were used in 2020. They're lightweight, so once they're dropped or discarded, plastic straws easily blow into waterways and enter our oceans. Once in our oceans, they're extremely dangerous for our marine wildlife. Thankfully, these are now banned in most Australian states and territories, with a national ban complete by 2025.

Plastic free alternatives: If you can, go straw free! Or try **stainless steel straws, bamboo straws, pasta straws and rice straws**(yes, they're a thing!). For those that like the flexibility of plastic straws, there are other eco-friendly alternatives including **paper straws, reusable silicone straws and compostable plant-based straws.**

2. Plastic drink stirrers

Cocktail stirrers are a fun accessory for drinks, but most are made from plastic and only used once before the novelty of them fades and they're thrown away. They end up in the trash, on our beaches and in our oceans.

Plastic free alternatives: Reusable glass or bamboo stirrers, or spoons! Or try a stick of celery, carrot or cucumber. Why not go herbal and try a stick of rosemary?

3. Balloons

What goes up must eventually come down. Helium balloons may be pretty, but they're also deadly. CSIRO research shows they're one of the highest-risk plastic debris items for seabirds. And many balloons labeled as biodegradable simply aren't.

Plastic free alternatives: Plan a planet-friendly party and skip the balloons. Opt for more eco-friendly decoration options like paper lanterns, reusable bunting, DIY bubble blowers and flowers.

4. Plastic cotton buds

Did you know that **1.5 billion cotton buds are produced every day**? Sadly, many of these cotton buds end up in our oceans. Once the cotton tips dissolve, all that's left is essentially a small, rigid plastic stick which is easily ingested by birds, fish and other marine wildlife. These are already on the way out in Australia, with many states and territories including them in single-use plastic bans.

Plastic free alternatives: Fluid ear washes, bamboo cotton buds, organic cotton makeup pads or a reusable silicon swab. (And like my granny used to say - "Stick nothing in your ears smaller than your elbow!").

5 & 6. Coffee cups & lids

Australians use around 1.8 billion cups every year and 1.5 billion coffee lids, and **most of these end up in landfill. It's important to note that the vast majority of takeaway coffee cups and lids aren't recycled or composted.** And when you BYO cup, you're gently nudging others to take up more sustainable practices.

Plastic free alternatives: Reusable cups, porcelain mugs or dine in and take a moment to enjoy the incredible coffee we're lucky to have in Australia.

7. Plastic cutlery

Eating out and getting takeaway often comes with more than just food. Plastic cutlery and plastic bags often come in the mix.

In Australia, **plastic cutlery isn't easily recycled. Recycling machines generally can't sort them due to their shape, so many end up sitting in landfills for decades - potentially centuries.**

Plastic cutlery is now banned in many Australian states and territories.

Eco-friendly alternatives: Next time you order takeaway, make a special request to opt out and say no to disposables. Switch to **reusable bamboo utensils, a travel cutlery** set that you can take with you wherever you go or bring your own from home! **Chopsticks** are also a great alternative to have in your bag if you're planning on getting takeaway.

8. Plastic cups

910 million plastic cups are consumed every year in Australia. While lightweight and convenient, foam cups (made from polystyrene) can't be collected by most council kerbside recycling services and often end up as trash in landfills.

Plastic free alternatives: Bring your own reusable cup or a mason jar if you're planning a trip to your favourite juice or smoothie shop. You can also help encourage your favourite cafes and food **retailers** to **switch to eco-friendly and compostable alternatives**.

9. Plastic containers

The good news is, polystyrene food containers are on the way out, with states and territories bringing in laws to ban them over the next few years. But single-use plastic containers are still everywhere, from supermarkets to our local cafes and takeaway restaurants.

Plastic free alternatives: Choose nature-friendly takeaway! Next time you order takeaway, choose cuisines like pizza or Mexican that don't often come in plastic containers and avoid pre-packaged meals. Most food outlets will happily put the food directly into your own reusable container if you ask. Some options for containers include glass containers, stainless steel lunch boxes and mason jars. You can also shop at bulk food stores and bring your own containers to fill. If you're eating out, why not ask your favourite outlets to switch to compostable and eco-friendly alternatives?

10. **Plastic plates**

Plastic plates might be cheap and handy when hosting parties or at picnics or food courts, but once they're thrown away, they usually end up in landfills. **Most recycling centres are unable to sort these plates due to their shape**. These are also on the way out in many states and territories, but you can get ahead of the curve by switching to reusables right now!

Plastic free alternatives: Reusable plastic, glass or porcelain plates. Alternatively, palm leaf or bamboo pulp plates.

AFF Extension Cards:

Extension: Bans Solve

Plastic Bans Work Billions Saved

Andrei 2024

Mihai Andrei, Ph.D. in geophysics and archaeology and founder of ZME Science, “Plastic bans work. Billions of plastic bags were avoided in the US alone”, ZME Science, January 31st 2024, <https://www.zmescience.com/science/news-science/plastic-bans-work-billions-of-plastic-bags-were-avoided-in-the-us-alone/-MKM>

Plastic ain't all that fantastic

Plastic bags are a victim of their own success. When they were first patented in Europe in 1965, society was shocked to see how cheap and durable they could be. Within a decade or two they became mainstream on the continent and in North America, and it wasn't long before they started being widely used on the entire planet.

But plastics were just a little too durable. They didn't go away. They started accumulating in landfills and in the oceans. The environmental impact of plastic bags gained attention with the discovery of the Great Pacific Garbage Patch in 1997. Plastic bags (and plastic in general) had left its mark on the planet in an unprecedented form of pollution.

Fast forward a couple more decades, and countries started fighting their urge to use cheap plastics and implement bans or other measures against plastic bags — and finally, there's some good news.

San Francisco pioneered the movement in the U.S. by passing the nation's first plastic bag ban in 2007. Several other U.S. cities and states implemented plastic bag bans or restrictions. By 2023, ten states had statewide bans, with similar laws proposed in others. To get a state of how much this of a difference this made, five studied bans resulted in an average elimination of almost 300 plastic bags per person per year. Overall, in the US alone, billions of plastic bags were avoided with anti-plastic bag measures.

The case against plastic

The case against plastic bags is straightforward. Plastic pollution kills at least 100,000 marine mammals and 1 million seabirds every year and entanglement in plastic and other types of litter kills roughly 1,000 turtles per year. Plastic bags aren't responsible for all of that, but they make up an important part of the problem.

The results, which were published in a report, also highlight that imperfect measures leave loopholes or encourage buyers to opt for other single use bags.

Well-designed single-use plastic bag bans across the country have successfully reduced single-use plastic bag consumption, cut down on plastic bag litter and driven consumers to make more sustainable bag choices.

Bans Prevent Waste and Change Mindset Lindwall 2020

Courtney Lindwall, Writer at Consumer Reports, bachelor's degree in journalism University of Florida, "Single-Use Plastics 101", National Resource Defense Council, January 9th 2020, <https://www.nrdc.org/stories/single-use-plastics-101#what-MKM>

What do the bans accomplish? They prevent millions of tons of plastic from entering the waste stream each year. And when it comes to waste that lasts forever, every ton counts. In New York, 23 billion plastic bags are used by residents each year. **Not only does banning single-use plastic reduce pollution, but it also reduces demand for plastic production that's contributing to global climate change. But beyond these impacts, the bans have cultural effects. Companies are forced to innovate, rethinking their designs and sourcing sustainable materials. And they help shift consumer mind-sets,** as people begin to recognize that exorbitant and avoidable waste is not sustainable.

Similar Bans Have Been Passed in Australia ARA 2024

Australian Retailers Association, Australia's top retail body employing 1.3 million Australians and \$400 billion market share, ARA, January 2024, <https://www.retail.org.au/plastics-MKM>

Australian Capital Territory

From **01 January 2024, ACT banned all plastic shopping bags with handles of any thickness, paper or cardboard bags with a plastic laminate, and non-woven polypropylene bags that are less than 90gsm in weight and do not have stitched seams. These bans are in addition to those commencing in 2023, including single-use plastic plates and bowls, polystyrene trays and packing fill, and products with plastic microbeads.** Click here to find out more.

South Australia

South Australia has taken gradual steps in eliminating plastic, with tranches of newly banned items annually from 2021 to 2025.

In September 2023, this ban will extend to plastic stemmed cotton buds, single-use plastic bowls and plates and plastic pizza savers

A number of additional plastic products will be banned from September 2024 and September 2025 including produce bags, coffee cups and thick plastic bags.

The US produces the most plastic, banning single use plastics will significantly reduce this.

Crawford 2022

Iris Crawford, MIT Climate Portal Contributor M.S. in Science Writing MIT, “Would stopping plastic pollution help with climate change? How do we do it?”, Climate Portal Ask MIT Climate, August 16th 2022, <https://climate.mit.edu/ask-mit/would-stopping-plastic-pollution-help-climate-change-how-do-we-do-it-MKM>

The US produces more plastic waste than any other country. Most of this waste, even if it was intended for recycling, **goes to landfills, or is incinerated or exported**—often to countries that don't have the infrastructure to prevent it from winding up in water systems. Plastic pollution also comes from urban runoff, industrial debris, illegal dumping, particles from clothing and personal care products, and fishing and aquaculture industries, to name a few.

The plastic industry emits greenhouse gases at every stage, from materials extraction to incineration, and production is increasing. A 2019 report from the Center for International Environmental Law projects that **the industry will release up to 1.34 billion tons of greenhouse gas emissions annually by 2030—about equal to the emissions of the entire continent of Africa** today. And the resulting plastic waste will continue releasing more emissions the longer it sits around. **The most commonly used plastics have been shown to release the greenhouse gases ethylene and methane as they decompose**, the latter of which traps atmospheric heat at 25 times the rate of carbon dioxide over the course of a century.

Extension: Oceans/Warming Impacts

Massive Amount of Fossils Fuels are used to produce Single-used Plastics.

Vasarhelyi 2023

Kayla Vasarhelyi, University of Colorado Boulder Zero Waste Outreach Team Member & B.A. in Ecology and Evolutionary Biology, “The impact of plastic on climate change”, University of Colorado Boulder, December 15th 2023,
<https://www.colorado.edu/ecenter/2023/12/15/impact-plastic-climatechange#:~:text=Because%20single%2Duse%20plastic%20is,metric%20tons%20of%20greenhouse%20gases.-MKM>

Because **single-use plastic is produced from fossil fuels, extracting and creating these plastics emits vast amounts of greenhouse gases.**

It is estimated that **just the extraction of these fossil fuels and their transportation to plastic factories emits 1.5 to 12.5 million metric tons of greenhouse gases.**

Removing forested land for oil extraction and pipeline construction has also released more than 1.6 billion metric tons of carbon dioxide into the atmosphere. This land clearing also limits the amount of carbon dioxide removed from the atmosphere.

The refinement of plastics emits an additional 184 to 213 million metric tons of greenhouse gases each year.

Landfills, where single-use plastics are sent, account for more than 15% of methane emissions. The disposal of more plastics in landfills leads to increases in landfill size and these emissions.

There is an enormous floating mass of plastic in the Pacific Ocean, twice the size of Texas, that continues to grow.

Plastic pollution affects the most vulnerable communities first. Developed countries, such as the United States, send plastic to developing countries for processing. Eventually, the amount of plastic can become so overwhelming that these communities run out of ways to dispose of it and become covered in plastic trash.

Oceans are filled with plastic.

Zhang 2022

Alex Zhang, Forbes contributor on the behalf of the Columbia Business School – the Eugene Lang Entrepreneurship Center, “The Plastic Alternative The World Needs”, Forbes, May 17th 2022,
<https://www.forbes.com/sites/columbiabusinessschool/2022/05/17/the-plastic-alternative-the-world-needs/?sh=5714831b1461-MKM>

Preventing traditional plastics from entering the ocean is crucial to the health of our planet. **For many decades,** plastic has been improperly disposed of by society, which has caused plastics to build up in the ocean at an alarming rate. **An Environmental Investigations Agency (EIA) study says that plastic will outweigh fish in the planet’s oceans by 2050.** Since traditional plastics are made of petrochemicals and designed to be durable, their products are not naturally

biodegradable and often contain harmful toxins. **Unless these materials are removed by humans, plastic that ends up in the ocean will remain there indefinitely.** Traditional plastic products have also been found to break down into microplastic. **Marine animals sometimes eat microplastics, which in turn endangers human food safety by ending up on our plates.**

PHA has been found to be one of the only bioplastics that will properly and efficiently break down in the ocean. Products made of PHA are denser than water, which means PHA is more likely to sink compared to other plastics. The soil at the bottom of the ocean helps with the biodegradation process and allows for the PHA to decompose faster than if it were to be free-floating. According to studies, the rate of degradation depends on the surface area of the product. Smaller products, such as straws, take just six months to disappear.

Plastic is a significant contributor to Climate Change Zhang 2022

Alex Zhang, Forbes contributor on the behalf of the Columbia Business School – the Eugene Lang Entrepreneurship Center, “The Plastic Alternative The World Needs”, Forbes, May 17th 2022, <https://www.forbes.com/sites/columbiabusinessschool/2022/05/17/the-plastic-alternative-the-world-needs/?sh=5714831b1461-MKM>

However, **traditional plastics are typically made from fossil fuels, and therefore contribute to the ongoing climate crisis. According to a UN Environment Program (UNEP) report, fossil fuel-based plastics alone account for an estimated 15% of the world’s carbon budget, equivalent to approximately 1.7 gigatons of CO2. Emissions from producing these harmful plastics are equivalent to 116 coal-fired power plants last year.**

Fossil fuel-based plastic is also kind of immortal. **These materials do not break down efficiently in the environment and end up sitting in landfills for hundreds and thousands of years; or they are burned with other trash, releasing toxic gas into the environment.**

Extension: Alternatives

Status Quo Has Strong Alternatives That Can Be Implemented Vasarhelyi 2023

Kayla Vasarhelyi, University of Colorado Boulder Zero Waste Outreach Team Member & B.A. in Ecology and Evolutionary Biology, “The impact of plastic on climate change”, University of Colorado Boulder, December 15th 2023,
<https://www.colorado.edu/ecenter/2023/12/15/impact-plastic-climatechange#:~:text=Because%20single%2Duse%20plastic%20is,metric%20tons%20of%20greenhouse%20gases.-MKM>

Easy ways to help reduce plastic use

The best way to reduce the impact of single-use plastics on climate change is to stop using this type of plastic. This task can seem quite tricky in a world full of plastic packaging. However, even small changes can have a significant impact. Here are some things to do to limit your single-use plastic waste.

Use a reusable water bottle.

Bring a reusable bag to the store.

Avoid overly packaged items at the grocery store, such as pre-cut fruits and vegetables.

Grocery shop at a bulk foods store.

Repurpose old bottles or containers.

Cook at home instead of ordering takeout, which often includes extra plastic packaging.

Get a travel cutlery set.

Use bar soaps and shampoos instead of liquids in plastic bottles.

Bioplastics are a good alternative.

Zhang 2022

Alex Zhang, Forbes contributor on the behalf of the Columbia Business School – the Eugene Lang Entrepreneurship Center, “The Plastic Alternative The World Needs”, Forbes, May 17th 2022,
<https://www.forbes.com/sites/columbiabusinessschool/2022/05/17/the-plastic-alternative-the-world-needs/?sh=5714831b1461-MKM>

Unlike traditional plastic, bioplastics are typically made from renewable sources such as plants, starches, and sugars. One of the most advanced bioplastic materials is called PHA (Polyhydroxyalkanoates). It’s an excellent alternative to traditional fossil fuel-based plastic because it offers a completely compostable solution, biodegradable in all types of natural environments. **Products made of PHA will completely decompose without any special treatment, which is crucial for preventing single-use plastic pollution.**

For example, single-use straws made of traditional plastics can take up to 200 years to degrade on land or in the ocean. However, single-use straws made of PHA will degrade in just 90 days when buried in soil and 180 days in the ocean.

Plastic Substitutes Will Decrease Pollution UNCTAD 2023

United Nations Conference on Trade and Development, United Nations organization that examines trade and its impacts on the development of nations, “Scaling up plastic substitutes is key to tackling pollution”, February 3rd 2023, <https://unctad.org/news/scaling-plastic-substitutes-key-tackling-pollution-MKM>

The world traded about 369 million tonnes of plastics in 2021 – enough to fill over 18 million trucks. The queue would wrap around the globe 13 times.

Since less than 10% of all plastics produced have been recycled, most of the products in those trucks will end up littering our streets and flooding our seas.

But nature abounds in sustainable materials like bamboo, sand, banana plants and algae that could be used to make eco-friendly versions of the straws, shopping bags, bottles, food wrappers and other plastic products we consume daily.

According to research by PEW, plastic substitutes could cut global plastic waste by around 17% by 2040 – about 63 million tonnes less, or 3.5 million fewer trucks in the queue.

Negative

We stand in negation of the following:

The United States federal government should ban single-use plastic.

Definitions

Single-use Plastics

Haaland 2022

DebHaaland, Secretary of the Interior for the US, Secretary's Order 3407 (SO 3407), US Department of the Interior, June 8th 2022, Issued on June 8, 2022, Secretary's Order 3407 (SO 3407) aims to reduce the procurement, sale and distribution of single-use plastic products and packaging with a goal of phasing out all single-use plastic products on Department-managed lands by 2032. SO 3407 is part of the implementation of President Biden's Executive Order 14057, which calls for federal agencies take actions to reduce and phase out procurement of single-use plastic products to the maximum extent practicable, (<https://www.doi.gov/reducing-single-use-plastic-pollution>)-MKM

Sec. 3 Definitions. Under this Order, **the term "single-use plastic products" means plastic items intended to be disposed of immediately after use, including plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags.**

Framework

Cost-benefit analysis

The framing for today's round ought to be cost benefit analysis. If we demonstrate that the United States federal government banning single use plastics causes more harm than good, we should win the round.

Contention 1: Banning Plastics Doesn't Solve

Bans Mask the Problem

Stanislaus 2018

Mathy Stanislaus, Doctor of Law from Chicago-Kent College of Law, Illinois Institute of Technology, “Banning Straws and Bags Won’t Solve Our Plastic Problem”, World Resources Institute, August 16th 2018, <https://www.wri.org/insights/banning-straws-and-bags-wont-solve-our-plastic-problem-MKM>

Unfortunately, while these laws may reduce the most visible form of plastic pollution, it could be at the expense of other environmental impacts. That’s because, somewhat ironically, **disposable plastic bags require fewer resources** (land, water, CO2 emissions, etc.) to produce **than paper, cotton or reusable plastic bags**—by a wide margin.

For example, **Denmark’s Ministry of Environment and Food found that you would need to reuse a paper bag at least 43 times for its per-use environmental impacts to be equal to or less than that of a typical disposable plastic bag used one time. An organic cotton bag must be reused 20,000 times to produce less of an environmental impact than a single-use plastic bag.** That would be like using a cotton bag every day for nearly 55 years. (Note that these figures aggregate the bags’ impact on water use, CO2 emissions, land use and more, but they do not include their impact on plastic pollution.)

Banning plastic straws is also increasingly popular. Starbucks recently announced that it would phase out use of plastic straws by the year 2020. Straws don’t provide as much utility as bags, so for many this is an easy adjustment.

But **these bans leave the impression that they solve the plastics pollution problem without much discussion of systematic solutions.** As a society, we should think holistically about the products we use and their impacts. We can’t just ban bad products—we must invest in alternatives.

Bans are not a “Silver Bullet.”

Sharp 2022

Annkathrin Sharp, Marine Plastics Programme Officer, MS Imperial College London in Conservation Science, “Alternative plastic: Is it the answer to ending marine plastic pollution?”, Fauna & Flora International, 2022, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.fauna-flora.org/wp-content/uploads/2023/05/2022_FFI-Alternative-plastic-briefing.pdf-MKM

We conclude that **there is no ‘silver bullet’ alternative to plastic,** that more attention must be paid to the most suitable materials for specific applications, and that there is an overriding need to reform single and wasteful resource use. **Further research and development is needed to identify a material that meets key criteria to be truly considered an ‘environmentally friendly’ alternative to plastic.** In the absence of sustained behaviour change that moves away from linear, single use models, **the switch to alternative plastics simply risks reinforcing a culture of disposability, unfettered production and resource consumption, and continued pollution of**

the environment. As with other materials, measures that facilitate a sustainable transition to a more circular economy for plastic are needed to prevent the loss of this valuable resource to the environment.

Bans Just Shift the Problem

Macintosh et.al 2019

Andrew Macintosh, Ameila Simpson, Teresa Neeman, Kirilly Dickson, Andrew Macintosh is a leading environmental law and policy scholar and is the associate dean at the Australian National University College of Law, ScienceDirect, December 9th 2019, <https://www.sciencedirect.com/science/article/pii/S0921344919305440> -MKM

Bans on single-use plastic shopping bags are amongst the most popular policy interventions taken by governments to address the harms associated with plastics. Yet, there are few published studies on their effectiveness and durability. **This article addresses** this gap, presenting **the results of a study on the impacts of a ban on single-use plastic bags introduced in the Australian Capital Territory in 2011.** The study assessed whether the ban has reduced plastic bag consumption and litter, and whether community support for the ban was sustainable. **The results suggests the ban has not been overly effective in reducing plastic bag consumption or litter. Over the almost seven-year study period, between 2011 and 2018, the ban reduced consumption of single-use conventional polyethylene bags by ~2600 tonnes. However, these reductions were largely offset by increases in the consumption of other bags. The net effect of the ban on plastic consumption over the period was relatively minor; a 275 t reduction.**

Contention 2: Alternatives Don't Work.

Alternatives Pollute and Lack Infrastructure

Baker 2023

Aryn Baker, senior international climate and environment correspondent at TIME, “The Dirty Secret of Alternative Plastics”, TIME, November 28th 2023, <https://time.com/6339914/plastic-alternatives-pollute/-MKM>

One proposed solution is to replace these plastics with alternatives: biodegradable utensils, compostable wrappers, plant-based bottles, and compressed-fiber plates and bowls.

Theoretically, these products could seamlessly slot into existing supply chains, requiring no sacrifice on the part of consumers, who are clamoring for more sustainable options. **But production is limited in scale, more expensive than conventional plastic, and it's not yet clear that the alternatives are actually better for human and planetary health: most plant-based plastics are, on a molecular level, identical to their fossil-fuel-sourced siblings and last just as long in the environment. Other substitutes require many of the same toxic chemical additives as conventional plastics to keep them waterproof, flexible, durable, and colorfast.**

Perhaps the biggest problem is that the infrastructure to ensure these bioplastics actually biodegrade or compost is very limited. That means that despite the best intentions of manufacturers and consumers, supposedly compostable plastic bags and supposedly biodegradable single-use cutlery may be causing just as much climate damage as conventional plastics.

Alternatives are unregulated and confusing.

Ramirez 2022

Rachel Ramirez, B.A. Communication, writer on CNN's Climate team, “Compostable plastic doesn't live up to its environmental claims. Here's what you can focus on instead”, CNN, November 3rd 2022, <https://www.cnn.com/2022/11/03/world/compostable-plastic-impact-alternatives-climate-scn/index.html-MKM>

A new study conducted in the UK found that 60% of products labeled as compostable do not fully break down in home compost. And unlike conventional plastics, these alternatives are largely unregulated, despite their advertised benefits.

“In the lab, where [these plastics] have been tested and have been paid for by a manufacturer, they behaved in one way and they've been determined to be compostable in a home composter,” Danielle Purkiss, researcher and lead author of the study, told CNN. “But what's happened is we've seen a lot of these pieces of packaging with certification still don't break down in these different home composting conditions.”

The study shows **“there's a problem with the lab testing versus the real-world conditions where these materials are being disposed,”** Purkiss told CNN.

The real impact of 'compostable' plastic

Although compostable and biodegradable packaging and flatware are touted as being environmentally friendly, they are still resource- and energy-intensive to produce, according to Judith Enck, a former Environmental Protection Agency regional administrator and now president of Beyond Plastics, a non-profit focused on research and consumer education.

In addition to the greenhouse gases released from industrial facilities making these products, the crops used as feedstock, such as corn or sugar beets, also require significant amounts of fossil fuels, farmland and water to create them — all resources that could instead go to actual food, Enck said.

Though compostables are still slightly better than conventional plastics, Enck told CNN, "people shouldn't fool themselves into thinking that it actually gets composted."

"There's a bit of greenwashing going on here," she added.

Researchers say **the messaging has not been clear around how sustainable these compostable options are**. One of the key findings of the report, Purkiss said, is that **people are confused and don't know the meaning of the labels on compostable and biodegradable plastic items**.

The bottom line is that **companies still use some fossil fuels in these products, yet continue to market them as sustainable**, which leads to improper disposal of plastic waste. Biodegradable plastic for instance, while bio-based, can still be made at least in part with fossil fuels.

Contention 3: Medical Reasons for Single Use Plastics

Easy to Use and Safe

Gibbens 2019

Sarah Gibbens, Editor at National Geographic with a degree from The University of Texas at San Antonio, "Can medical care exist without plastic?", National Geographic, October 4th 2019, <https://www.nationalgeographic.com/science/article/can-medical-care-exist-without-plastic-MKM>

Single-use plastic can be an attractive option for hospitals—cheap, durable, and easily tossed out—and each new fresh plastic container or covering offers a newly sterile environment. That's why clinicians cover themselves and everything they use in plastic.

Single-use Plastic are Efficient for medicine.

Gibbens 2019

Sarah Gibbens, Editor at National Geographic with a degree from The University of Texas at San Antonio, "Can medical care exist without plastic?", National Geographic, October 4th 2019, <https://www.nationalgeographic.com/science/article/can-medical-care-exist-without-plastic-MKM>

"Plastics for biomedical applications have many desirable properties, including low cost, ease of processing, and [ability] to be sterilized easily," says Bridgette Budhlall, an engineer at the University of Massachusetts Lowell.

She notes that plastics can even be modified with coatings that make them particularly resistant to microbes.

A fact sheet published by the American Chemistry Council, a plastic trade group, says: **"Single-use plastics are the cleanest, most efficient way," to facilitate health and hygiene in hospitals.**

Single-Use Plastics are particularly important for disabled people.

The Big Plastic Count 2024

The Big Plastic Count, British advocacy group trying to reduce plastic use, "Disability Justice", The Big Plastic Count, 2024, <https://thebigplasticcount.com/disability-justice#:~:text=Disabilities%20and%20plastic,and%20peeling%20difficult%20or%20impossible.-MKM>

In Britain, 14.1 million people have a disability, and globally they represent around 15% of the population. However, far too often this community is left out of environmental conversations,

a key area of this being the campaign against plastics where the needs of disabled people have not historically been taken into consideration at all.

DISABILITIES AND PLASTIC

Single use plastic items can be essential for people with disabilities to live independently.

Premade and pre-peeled food are vital for people with accessibility issues which make chopping and peeling difficult or impossible. People may rely on online shopping and home deliveries, which often is delivered in layers of plastic packaging which isn't recyclable.

Alternatives to plastic also aren't always appropriate for people with disabilities. Take plastic straws - their flexibility is a key element for people with disabilities which many alternative materials cannot provide, metal/glass straws can pose a safety risk and the constant washing of reusable straws can be a struggle for many people.

Items such as reusable bottles can also be expensive. Disabled people's living costs are on average 25% higher than non-disabled people, there is a 33% unemployment gap and the proportion of disabled people living in poverty is 8% higher. Given these economic inequalities, it shouldn't be assumed that everyone has access to these alternatives.

A LACK OF TRUST

Currently, the majority of disabled people in the UK do not trust in environmental organisations to deliver campaigns that are disability-inclusive. This is because many disabled people feel that campaigns by environmental organisations do not consider or centre their needs.

Market research conducted by Ananya Roa-Middleton found that out of 154 UK-based disabled people, only 11.7% trust environmental organisations to create disability-inclusive campaigns around themes like plastic pollution.

These are shocking statistics and as an organisation committed to intersectionality, climate justice and just transitions - it's vital that we address this.

NEG Extension Cards:

Extension: AT Environment Advantage

Plastic Bag Bans Have Limited Success

Muposhi 2021

Asphat Muposhi, Department of Marketing Management, Midlands State University, Zimbabwe, "Considerations, benefits and unintended consequences of banning plastic shopping bags for environmental sustainability: A systematic literature review", ISWA, April 20th 2021, <https://journals.sagepub.com/doi/10.1177/0734242X211003965-MKM>

Although the ban on plastic bags is gaining in prominence as a policy option to manage plastic bag litter, there are mixed views on its rationale and effectiveness. **This study employs a systematic literature review to understand considerations, benefits and unintended consequences of banning plastic bags. The review's results pointed to the limited success of a plastic bag ban owing to lack of suitable alternatives, limited state capacity to monitor and enforce the ban, thriving black market, structural and instrumental power of the plastic industry.** The power of the industry was manifested by the covert practice of deflecting accountability to consumers by focusing on business-oriented solutions, including an inclination towards self-regulation. **The findings of this study underscored the need for a global treaty to address the transient nature of plastic bag litter and moving away from the symbolic gesture of targeting only plastic shopping bags but considering the environmental impact of all forms of plastic such as straws, foamed plastics, plastic bottles and caps. There is a general consensus in literature that the end of plastic shopping bags is not nigh due to their utilitarian benefits.** This study therefore recommends the promotion of a circular economy focusing on ecological modernisation, sustainable plastic bag manufacturing and recovery strategies such as recycling as a long-term strategy. A significant strand of literature reviewed also recommends the adoption of community-driven approaches such as voluntary initiatives as opposed to a plastic bag ban as they proved to be effective in promoting environmental citizenship behaviours in countries such as Finland.

Paper Bags are also Single Use

Gollom 2020

Mark Gollom, Senior CBC reporter, "Why a plastic bag ban could lead to unintended environmental consequences", CBC News, Oct 09 2022, <https://www.cbc.ca/news/canada/plastic-grocery-bag-ban-environment-1.5755723-MKM>

The problem with something like a paper bag alternative, however, is that it's also single use, and its production leaves a carbon footprint that is greater than that of the manufacturing of disposable plastic grocery bags, experts say.

The process of producing paper bags includes the environmental impact on forests and land use, as well as the use of machinery to cut down trees. The pulping process inside pulp and paper mills also produces pollution, and since paper bags are thicker than the disposable plastic bags, they require more energy to manufacture.

Alternatives Negative Impacts

Grist 2016

Grist, Climate Advocacy Group, "Banning Plastic Bags is Great for the World, Right? Not so Fast", WIRED, Jun 10th 2016, <https://www.wired.com/2016/06/banning-plastic-bags-great-world-right-not-fast/-MKM>

But what if reusable bags aren't good either? As the Australian study noted, **a cotton bag has major environmental impacts of its own. Only 2.4 percent of the world's cropland is planted with cotton, yet it accounts for 24 percent of the global market for insecticides and 11 percent for pesticides, the World Wildlife Fund reports. A pound of cotton requires more than 5,000 gallons of water on average**, a thirst far greater than that of any vegetable and even most meats. **And cotton, unlike paper, is not currently recycled in most places.**

Extension: Hurts the Economy

Plastic Bags Help the Economy

Plastics Industry Association 2024

Plastics Industry Association, a association that specializes in plastic use, “How Plastic Bag Bans Impact the Economy”, Economics PIA, 2024, <https://thisisplastics.com/economics/how-plastic-bag-bans-impact-the-economy/-MKM>

Certain policies can have unintended negative consequences. These include efforts to ban or tax products such as plastic bags. While these initiatives likely arise from a sincere effort to prevent litter and help the environment, **officials often overlook the negative economic impact, and overstate the environmental impact, of these policies.**

Plastic bags help sustain 30,900 American jobs

Plastic bag taxes and bans create challenges for both consumers and business owners

A study by the National Center for Policy Analysis shows **that plastic bag bans have a negative effect on retail sales in areas where bans are in place, as they encourage shoppers to take their business to areas neighboring the ban regions**

Seattle’s plastic bag ban is causing store owners to spend 40 to 200 percent more on alternative carryout bags, directly affecting their bottom lines

A tax on plastic bags at grocery and retail stores hurts those people who are poor and already food insecure

Plastic Bags Have the Lowest Overall Environmental Impact

Phillippe 2020

Isabelle Philippe, ABC Production Associate at Good Morning America and Writer, MFA Creative Writing NYU, B.S. Cornell University Biology and Society, “As plastic bag bans go into effect some question the unintended consequences”, ABC News, Feb 23 2020, <https://abcnews.go.com/US/plastic-bag-bans-helping-environment-results/story?id=68459500-MKM>

However, **the shift from plastic to reusable and paper bags has been met with skepticism by some consumers, manufacturers and industry experts**, who fear banning plastic will result in additional environmental problems and hurt consumers.

A 2017 study conducted by Recyc-Québec, a government recycling agency in Canada, looked at the life cycles of different disposable bags used within the province.

Results indicate that though conventional plastic bags tend to have higher environmental impacts when released into the environment, when compared to alternatives (such as compostable bioplastic, paper, thick plastic, and oxo-degradable plastic bags), **they appear to have the least overall environmental impact** (except as litter).

“Because of its thinness and lightness, being designed for a single use, its life cycle requires little material and energy,” the report says. “In addition, it avoids the production of garbage bags since it is commonly used for this function as well.”

Extension: AT Bioplastics/Alternatives

Not enough Supply of Alternatives

Baker 2023

Aryn Baker, senior international climate and environment correspondent at TIME, “The Dirty Secret of Alternative Plastics”, TIME, November 28th 2023, <https://time.com/6339914/plastic-alternatives-pollute/-MKM>

Practically speaking, there isn’t enough global supply of alternative materials to replace the amount of single-use plastic being produced today, and that may be a good thing, says Paula Luu, project director for the Center for the Circular Economy at impact investing firm Closed Loop Partners. That’s because, **while plastic alternatives show a lot of promise, it won’t be realized unless their implementation is accompanied by an upgrade of current waste-collection systems, ongoing scientific research, and policy change.** “Before we do a full switchover, we really need to focus on addressing a number of different challenges, including customer education, waste-recovery infrastructure, and the economic incentives to a full transition,” says Luu. **“If it’s not done thoughtfully, with a whole-system view, it could result in unintended consequences.”**

Most People Do Not Have Access to Composting

Baker 2023

Aryn Baker, senior international climate and environment correspondent at TIME, “The Dirty Secret of Alternative Plastics”, TIME, November 28th 2023, <https://time.com/6339914/plastic-alternatives-pollute/-MKM>

In the U.S., only 27% of the population has access to food waste composting programs, and only 142 out of the 201 industrial composting facilities nationwide that process food waste will accept compostable packaging as well, according to a new survey conducted by the composting website BioCycle and the Composting Consortium, a business group that promotes effective composting. **That means that the country is producing far more compostable cups, plates, and take-out containers than it can actually process,** says BioCycle’s editor and publisher, Nora Goldstein.

Plant-Based isn’t Inherently Better

Baker 2023

Aryn Baker, senior international climate and environment correspondent at TIME, “The Dirty Secret of Alternative Plastics”, TIME, November 28th 2023, <https://time.com/6339914/plastic-alternatives-pollute/-MKM>

Add plant-based plastics into the mix, and you have even more problems. **Polyethylene terephthalate, the PET plastic used for most soda bottles (and also in many other single-use packaging products), is usually extracted from fossil fuels, but, in a process similar to turning corn into ethanol, it can also be manufactured from plants. The plant- and fossil-fuel-based**

versions are chemically indistinguishable—the only way to tell the difference is through radiocarbon dating (carbon molecules extracted from fossil fuels are older than ones that come from plants)—and like conventional PET, plant-based PET can be recycled.

Extension: Medical Reasons for Single Use Plastics

Otherization of Disabled People

Nahm, 2021

Gabriela Nahm, Davidson College BA Environmental Studies, Project Green Challenge Ambassador, "Not All Policies are Created Equal: Why Plastic Bans are an Injustice to Disabled Populations", Turning Green, Jun 24 2021, <https://turninggreen.org/tg-collective/not-all-policies-are-created-equal-why-plastic-bans-are-an-injustice-to-disabledpopulations/#:~:text=Disabled%20people%2C%20who%20are%20commonly,safe%20for%20them%20to%20use.-MKM>

Disabled people, who are commonly left out of environmental justice discussions, often rely on single-use plastics in order to live independently. Plastic alternatives are not always accessible or safe for them to use. Additionally, alternatives such as metal or wooden utensils, cups, and straws are typically more expensive, making them inaccessible to those of a lower socioeconomic level. **This necessary reliance on single-use plastics, combined with social stigma and implicit bias surrounding disability, has led to the 'othering' of disabled people.**

Ableism of Straw Bans

Vallely 2023

Erin Valley, lives with a rare form of muscular dystrophy and is a proud wheelchair user, B.A. in Sociology and Anthropology Wells College, MPA Cornell University, "Grasping at Straws: The Ableism of the Straw Ban", 2023, <https://cdnrnys.org/blog/disability-dialogue/grasping-at-straws-the-ableism-of-the-straw-ban/-MKM>

For many individuals with mobility and strength issues, they cannot lift cups high enough to drink from them. Some individuals with poor motor coordination cannot safely hold a drink steady without spilling it. Certain medicines must also be taken via straw. Bendable plastic straws allow individuals to nourish themselves and avoid spilling things on themselves, and others.

In some cases, reusable straws can be substituted for a single use one but that isn't always the case. Such straws must be properly sterilized after every use. For those whose disability or living situation makes this impractical, if not downright impossible, **reusable straws are simply not an option. Additionally, metal, bamboo, glass and acrylic straws pose injury risks,** especially for those with tremors, spastic episodes, and temperature sensitivity conditions. Paper and pasta straws also put individuals at risk of choking. **Compostable straws made of other natural materials increase the likelihood of allergic reactions, which can be deadly,** and often require special processing to compost safely and correctly. **Reusable and/or alternative straws are also significantly more expensive for consumers and can be cost prohibitive. Further, completely banning straws will lead to increased stigmatization of disabled individuals if we have to carry around our own, or request them.** Many of us already have to preplan all our outings and carry medical supplies and equipment with us everywhere we go. **Adding another**

thing to the list of vital things we have to carry with us creates more opportunities for something bad to happen if we forget or there is a spur of the moment change of plans. Lastly, even if businesses are supposed to have straws available upon request, it does not mean they will comply.