

My partner and I affirm the resolution: *Resolved: The United States federal government should ban single-use plastics.*

Observation: The pro can affirm the resolution while still allowing for certain exceptions to a blanket ban because the resolution uses the phrase “single-use plastics” without any modifiers. Jake Nebel of Princeton, 2019: “Bare plurals are typically used to express generic generalizations, as in “[Birds can fly].” Unlike universally quantified statements, generics tolerate exceptions. For example, “[Birds can fly]” is true even though “[All birds can fly]” is false.” Similarly, if a blanket ban with exceptions is enacted, the statement “single-use plastics are banned” would still be true. **Possible exceptions can include** plastics produced for and used by the medical industry and plastics used during disaster relief.

Definitions: Per the [National Resources Defense Council](#) *single-use plastics* are “[plastics] made primarily from [petrochemicals] and are meant to be disposed of right after use”

Contention 1: Plastics pose a threat to our health.

Sub-point A) Microplastics

[Dr. Mohammad S. Islam](#), 2023, writes “Millions of tons of [...] microplastic particles have been found in water, air, and soil [...] Humans [...] inhale about 16.2 bits of plastic every hour, which is equivalent to [...] a credit card in an entire week.” Microplastics pose a variety of threats to our health. Per the [National Institutes of Health](#), 2023, “[ingestion of] microplastics elicit adverse health effects [including] inflammation, oxidative stress [...] and neurotoxicity, [...] Microplastics also [...] cause [...] metabolic disorders, developmental disorders, and even reproductive disorders.”

Sub-point B) Plastic chemicals

[Trasande et al, 2024](#) find that “[Plastic chemicals cause] cancer [...], brain damage [...], obesity[,] [...] diabetes, heart disease[,] and early deaths in adults.” [Rutsagi et al.](#), 2011, “Exposure [...] [occurs] during manufacturing, leaching in [...] stored food items[,] [...] or [even] chewing of plastic teethers and toys by children.” [Professor Almroth of the University of Gothenburg](#) writes, “3,000 [chemicals used to make plastics] are known to have hazardous properties” [Trasande et al 2](#) estimate that, “The social costs of disease and disability in the United States due to [plastic chemicals] [...] [are] on the order of \$400 billion annually.”

Contention 2: Climate Change

Sub-point A) Single use plastics drive climate change

Per [Lindwall, 2020](#): “Plastic production contributes to planet-warming greenhouse gas emissions at every point in its life cycle. [...] Drilling for plastic’s source materials [...] leads to methane leak[age] and [...] [deforestation] [...]. [Plastic Refineries] makeup one of the most greenhouse gas-intensive industries in the manufacturing sector. [...] In 2015, a mere 24 [...] ethane cracker facilities in the United States had the combined carbon output of 3.8 million passenger vehicles. [...] If plastic production continues unabated, its greenhouse gas emissions could reach 1.34 gigatons per year by 2030.” Plastic emissions

even continue post-production. According to The CIEL, [2019](#), “In 2019, the [...] incineration of plastic will add an estimated 859 million metric tons of greenhouse gasses to the atmosphere—equal to the emissions from 189 five-hundred-megawatt coal plants.”

Sub-point B) The climate cliff edge is close—urgent action is needed now

Per [Michael O’Boyle, 2021](#), “The United Nations Intergovernmental Panel on Climate Change reiterated [...] a ‘code red for humanity’ for the world to reach net-zero emissions by 2050 to avoid the most dangerous climate effects.” [Prof. Luke Kemp et al, 2022](#), write, “the ultimate consequences of climate change [is] potentially ‘second only to a global nuclear war.’...50 to 75% of the global population could be exposed to life-threatening climatic conditions by [2100].” [Hoehn and Shanker of the Rand Corporation, 2023](#), write, “Once-in-a-century ocean storms happen several times each season. Drought prompts food shortages, civil unrest, and mass migration. Island nations [...] could vanish under rising seas [...] Melting ice caps could release horrific pathogens that have been frozen in suspended animation for ages.” In addition, [Cabernard et al.](#) estimate that “local air pollution [alone] from plastics production and disposal resulted in 159, 000 deaths globally in 2015.”

Contention 3: A ban is necessary

Following the implementation of plastic bans, [Beyo Global 2019](#) find that “Hotel companies and airlines have started to reduce their single-use plastic consumption [...] Marriott International has [...] cut down on plastic shampoo and conditioner bottles. [...] Sweden[’s] [2018 ban on plastics] [...] forced companies to redesign their products, business strategy and shape, [and] opened gaps in markets allowing new companies to grow and be innovative. [One company][...] swapped plastic carrier bags for brown paper bags [...] reducing over 900 tonnes of single-use plastic.” Bans accelerate green innovation across many fields- [Perunović et al, 2014](#) explain that “The OPA 90 act[...] banned [single-hull tankers] from sailing in U.S. waters [...] [and] put pressure on the industry to speed up development of double-hull tankers [...] which provide additional security [and] [smaller] oil spills.” [Day, 2024](#) finds that “A ban [...] will [...] result in significant progress in the development of bioplastics and plant-based materials.”

Because single-use plastics pose critical health dangers and catastrophic climate change, we affirm that a single-use plastic ban in the US must be implemented to prevent their harms.