

Plastics and Climate Change

Plastics and other petrochemicals are the world's fastest-growing industrial source of greenhouse gases. They are a significant part of the climate-and-fossil-fuels crisis. Every step of the plastics supply chain releases greenhouse gases and other harmful pollutants—from extraction of the fossil gases that become the building blocks of plastics to processing, production, transport, use, and incineration.



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The world's fastest-growing industrial source of greenhouse gases

Scientists have found that the annual greenhouse gas emissions from the U.S. plastics industry are as much as the average emissions released by 116 coal-fired power plants in 2020. This amount is equivalent to the climate pollution from 50 million cars.

It is predicted that by 2040 as much as 19% of global greenhouse gas emissions will come from plastics. The greatest share of emissions from plastic is from its production. Incineration of plastic waste is the heaviest polluting disposal method—releasing vast amounts of climate-heating gases and toxic air emissions.

The fossil fuel industry is on track to triple plastics production by 2050, which would exponentially increase greenhouse gas pollution.



Without immediate action to stem the production of unnecessary single-use plastics, human well-being will be in serious jeopardy from the cascading impacts of climate change—such as floods, heat waves, droughts, and acute water and food insecurity.

Higher risks for communities

Many of the people hardest hit by the impacts of climate change live in the southern and eastern parts of the U.S.

Those who are living near petrochemical production and plastic incineration facilities are particularly vulnerable since they face the interconnected risks from petrochemical air pollution and climate disasters—everything from pipelines bursting in extreme heat to startup, shutdown, and malfunction events, in which facilities release massive amounts of uncontrolled hazardous air pollution in anticipation of hurricanes, tornadoes, and other climate-related disasters.



Plastics never stop polluting

About 35% of potential climate emissions from plastics are released as part of the manufacturing process. The other 65% is “embedded” carbon, meaning it is temporarily sequestered in plastic products. Plastics continue releasing greenhouse gases after we throw them away, even when they have become microplastics in our agricultural soils and oceans.

The oceans play a critical role in carbon storage, as they hold about 50 times more carbon than the atmosphere. At projected rates of plastics production, however, the oceans may have more plastic than fish by midcentury. Plastics and microplastics in the ocean create myriad problems, including interfering with carbon fixation and endangering wildlife. There is also evidence that the smallest microplastics damage zooplankton, the tiny organisms that are critical in the ocean’s ability to absorb carbon. Meanwhile, the microplastics themselves keep releasing greenhouse gases into the atmosphere.

Solutions are within reach

The plastics problem is too entrenched for any individual to tackle alone, but together we can raise our voices and demand change. We can:

- Tackle our school cafeterias. Speak up at school board meetings. Call for the installation of filtered-water dispensers, which can be used to refill reusable bottles, and for bans on single-use Styrofoam trays, plastic utensils, and condiments sachets.
- Fight the so-called “advanced recycling” plastics-burning facilities coming into our towns.
- Create incentives for people to bring their own bags, cups, and other containers to the store—it is amazing what we will do to save 10 cents.
- Call or write our favorite companies and urge them to cut back on plastic packaging.

And that is only the beginning.

Take Action

Join us in demanding that the President, lawmakers, and regulators:

- Cap and reduce plastics production;
- Stop subsidizing the buildout of new and expanded petrochemical facilities;
- Establish full transparency of toxic chemicals at every stage in plastics processing, manufacture, and transport;
- Ban the most toxic polymers and plastics chemicals;
- Strengthen and enforce laws protecting people at every step of the supply chain, from fossil extraction to petrochemical processing, manufacture, use, transport, and disposal;
- Address the harm that plastics are inflicting on our planet and our climate; and
- Accelerate the transition to safer processes and to materials and products not made from fossil fuels and toxic chemicals.

It will take systemic, structural changes to address the plastics crisis and fortitude to hold the polluters who set us on this dangerous path responsible.

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Full list of sources: [moms-clean-air-force.org/sources-plastics-and-climate-change](https://www.moms-clean-air-force.org/sources-plastics-and-climate-change)