

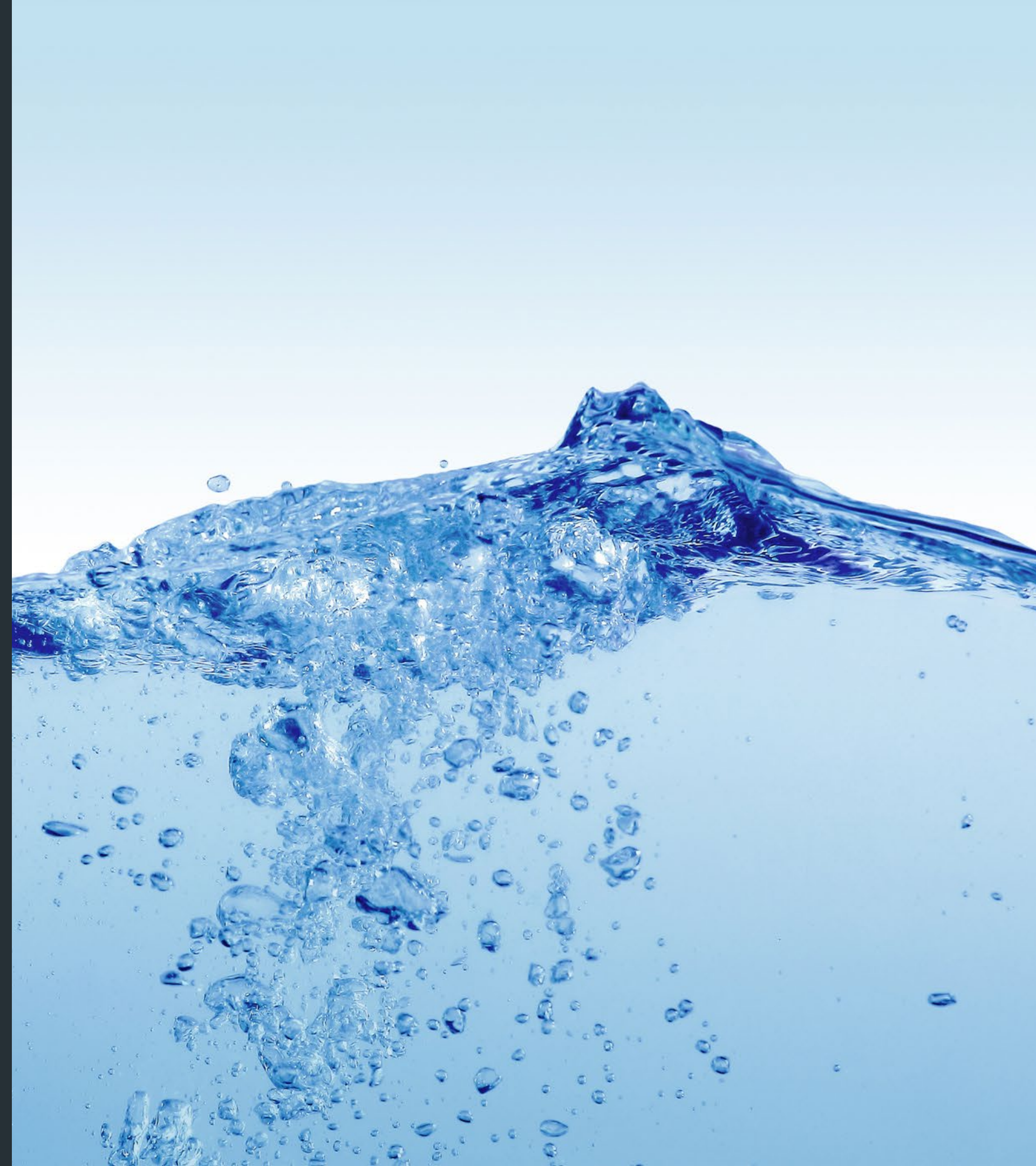


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SOLVING THE PLASTIC PROBLEM

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REPORTS

- National Academies (2022) Reckoning with the U.S. Role in Global Ocean Plastic Waste
- Environmental Law Institute and Monterey Bay Aquarium (forthcoming) Existing U.S. Federal Authorities to Address Plastic Pollution



WHAT DOES PLASTIC HAVE TO DO WITH CLIMATE CHANGE?

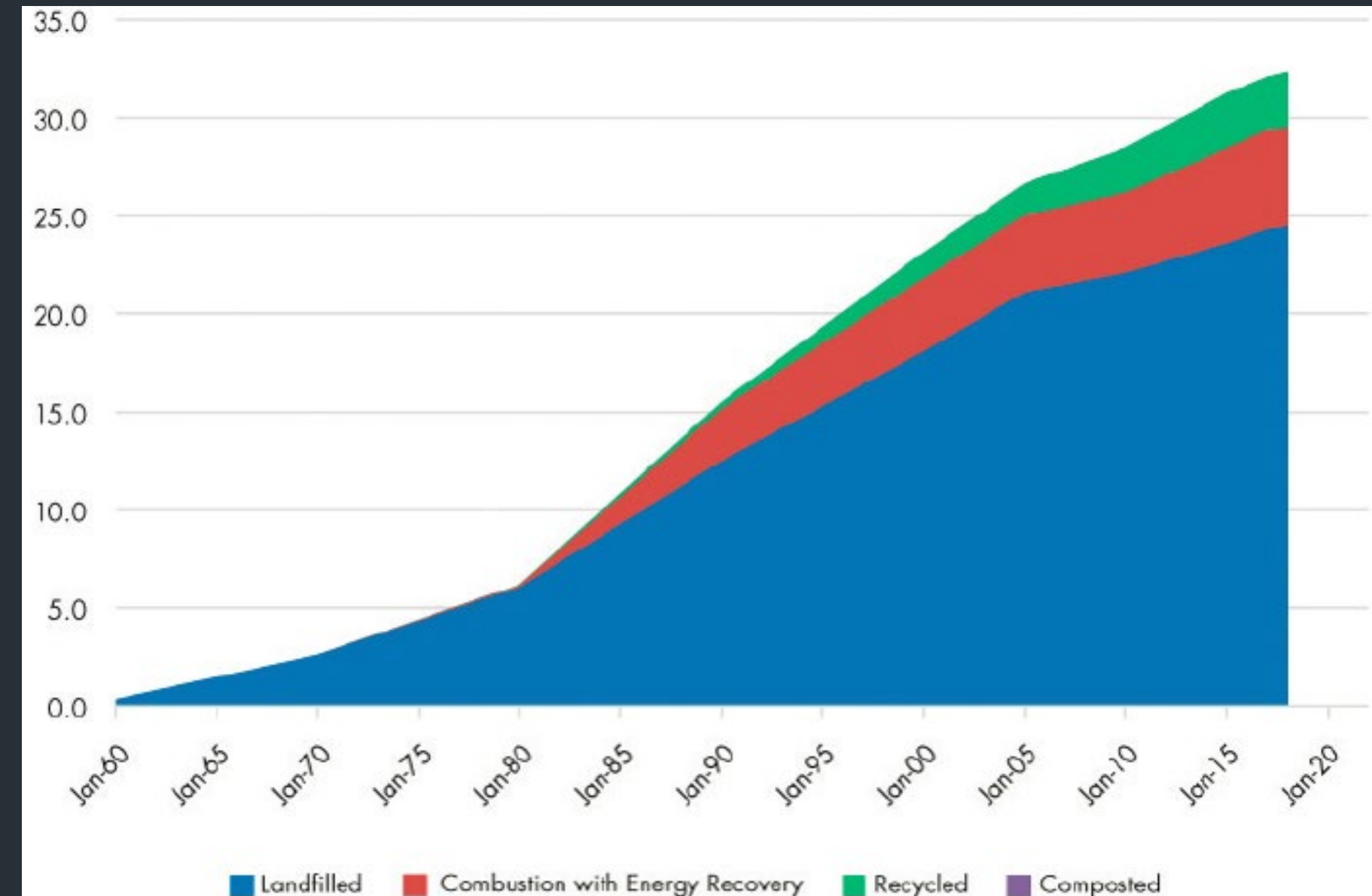
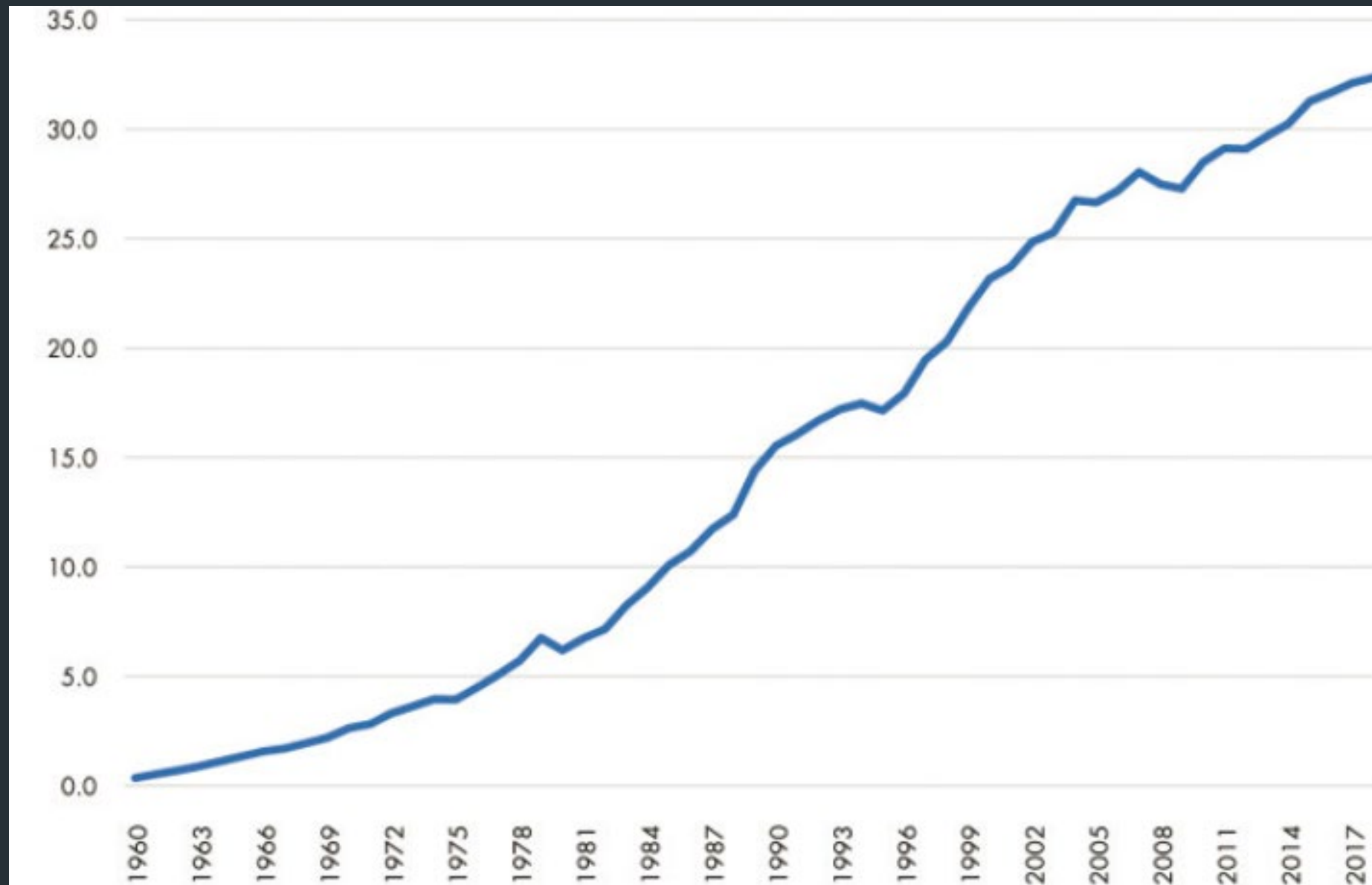
The plastic life cycle contributes *directly* to climate change

Plastic pollution can *exacerbate the impacts* of climate change and environmental degradation on humans and ecosystems

In the *solutions space*, some analogies can be drawn between the climate and plastic problems

THE PROBLEM

U.S. plastic solid waste generation (left) and management (right) in MMT



INTERVENTIONS ACROSS THE FULL LIFECYCLE

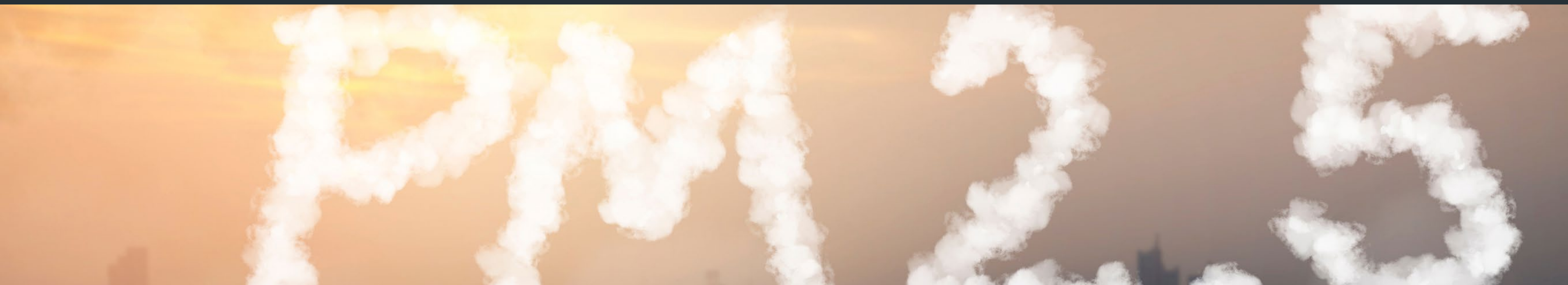
Interventions



EXAMPLE OF STAGE 1 (PRODUCTION) INTERVENTION

Strategy: Regulate production capacity and associated pollution

Example of existing authority: Under the **Clean Air Act**, EPA can consider microplastic as a unique “air pollutant” and propose rulemaking specifically governing microplastic particles as a fraction of the criteria pollutant PM_{2.5} pursuant to the **National Ambient Air Quality Standards** and the **New Source Performance Standards**, and a hazardous air pollutant pursuant to the **National Emission Standards for Hazardous Air Pollutants**.



EXAMPLE OF STAGE 2 (MATERIALS AND PRODUCT DESIGN) INTERVENTION

Strategy: Enact enforceable product standards for manufacturers

Example of existing authority: The EPA can enact enforceable product standards on manufacturers through **Toxic Substances Control Act (TSCA)**.



EXAMPLE OF STAGE 3 (WASTE GENERATION) INTERVENTION

Strategy: Plastic product bans

Example of existing authority: EPA could also leverage **TSCA** to restrict the commercialization of plastic products based on their use of certain additives, plasticizers, or other chemicals.





EXAMPLE OF STAGE 4 (WASTE MANAGEMENT) INTERVENTION

Strategy: Disposal, collection, and recycling improvements

Example of existing authority: With NOAA, EPA could administer grants under the **Coastal Zone Management Act**.

EXAMPLE OF STAGE 5 (PLASTIC WASTE IN THE ENVIRONMENT) INTERVENTION

Strategy: Remove Plastic Waste from waterways

Example of existing authority: Under the **Safe Drinking Water Act**, EPA could enact a binding national primary drinking water regulation for microplastics, which would require certain monitoring and technological improvements for publicly owned and private water supplies.



EXAMPLE OF STAGE 6 (PLASTIC WASTE IN THE OCEAN) INTERVENTION

Strategy: Increase enforcement for at-sea disposal

Example of existing authority: EPA and other coordinating agencies (NOAA, ACE) have authority under the **Marine Protection Research and Sanctuaries Act** and the **Ocean Dumping Ban Act** to enforce the prohibition of the dumping of wastes from plastics and petrochemical refineries, as well as synthetic or natural plastic materials into the oceans.





(BONUS!) Information & Data Collection, Research & Development, Outreach & Education

Emergency Planning and Community Right-to-Know Act (EPA)

- Requires plastics manufacturing facilities to report information on use, storage, and disposal of toxic chemicals such as PFAS

Public Health Service Act, amended by Health Research Extension Act

- Agencies within HHS collect data and information, as well as conduct research related to human health effects of plastics

Consumer Product Safety Improvement Act (CPSC)

- Fund and lead research examining human health risks from exposure to plastic and plastic products; and issue public safety warnings

CONCLUDING THOUGHTS

1

Reducing plastic waste requires targeting each stage of its **full life cycle**

2

Existing federal authorities to address plastic waste abound

3

Mitigating plastic waste and climate change can have **environmental** and **public health** co-benefits



Existing U.S. Federal Authorities to Address Plastic Pollution

A Synopsis for Decision Makers



March 2024



<https://go.eli.org/plastics>