

# Background on Plastic Reduction Project

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# Intro



Alternative  
Serviceware Guide



Marine Debris  
Projects



Shrink Wrap  
Recycling

# What is plastic?

- Lightweight
- Flexible
- Inexpensive
- Convenient



So, what's the problem?



# The trouble with plastic

## Toxicity

- Contaminates air, water, and land
- Harmful to workers and nearby residents
- Produces greenhouse gases



Plastic production contributes more to global greenhouse gas emissions than Brazil.



# The trouble with plastic

- Toxicity
- Management
  - An estimated **8 million metric tons/year** of mismanaged plastic waste goes into the ocean

8 million metric tons is equivalent to the weight of 1,333 Great Pyramids combined.



# The trouble with plastic

- Toxicity
- Disposal
- Mass
  - Production has increased exponentially and so has the waste - the US produces **42 million metric tons/year** of plastic waste



42 million metric tons is equivalent to 7.5 million adult African elephants.

# The trouble with plastic

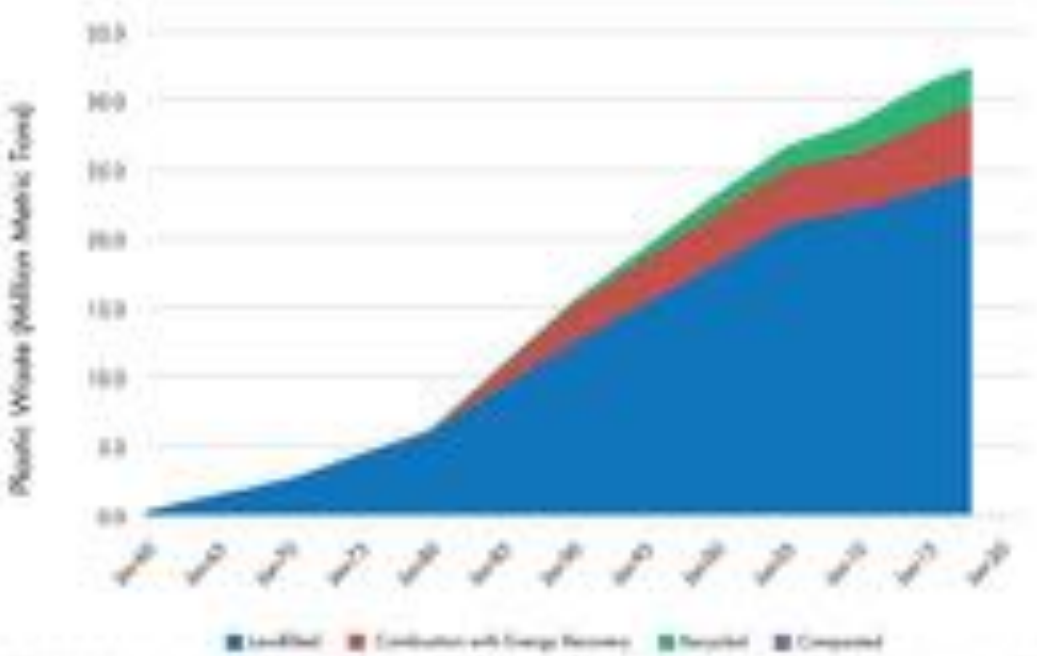
- Toxicity
- Disposal
- Pervasiveness
- Disposal
  - Total landfill capacity in Massachusetts is expected to decline to 90 percent below current levels by 2030.



By 2030, all but one of the state's seven landfills are projected to close.



# We recycle. Isn't that good enough?



**FIGURE 5.1** U.S. plastic waste management of municipal solid waste from 1960 to 2018 in million metric tons (MMT) per year. Composted levels are zero during this period. SOURCE: U.S. EPA (2020a).



Differences in what can be recycled and where.



Recycling is a business and relies on market demand.

# Plastic is a global problem.



# Policy solutions



# Scientific solutions





# Individual solutions





# Thank you!

## Questions?

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