



National Caucus of Environmental Legislators

Zero Waste Policy Roadmap Overview

Our Plastic Problem

Plastic pollution is infiltrating waterways worldwide, accumulating as toxic debris in marine life, and ultimately harming human health. Single-use plastics are the most pervasive plastic pollutants and, like all plastics, slowly break down into smaller particles that stay in the environment.

Plastic is largely made from fossil fuels and production is expected to increase by more than [30%](#) over the next decade. At a current national recycling rate of [5%](#), recycling won't ever be able to keep pace with the production or generation of single-use plastics.

Recycling Alone is Not Enough

In the current system, an ever-increasing quantity of plastic waste is being generated with many policies focusing on how to manage waste once generated. But recycling and composting are challenging and not always the best solutions. Plastics often contain harmful additives that make recycling difficult or are recycled back into products magnifying the impact of these chemicals.

Solutions Within the Roadmap to Zero Waste

This roadmap is intended to strengthen the analysis of policy solutions so that decision-makers can transform our waste system into a just, toxic-free, circular economy. To do this, the roadmap connects policy solutions to environmental justice and climate goals. Each section within the roadmap contains equity and justice considerations and key policy options. The policies highlighted have been identified using criteria that:

- Centers justice and equity
- Prevents further petrochemical buildout
- Protects public health
- Avoids regrettable substitutions
- Drives momentum away from resource extraction



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Opportunities for Intervention Across the Plastics Life Cycle

- **Eliminating Petrochemical Extractions**

- » Over [99% of plastics](#) are made from petrochemicals i.e. fossil fuels. As we transition to renewable energy, extraction is becoming [less profitable](#). As a result, the petrochemical industry is massively investing in creating a new market for these petrochemicals by turning natural gas into [ethylene and propylene](#) used to make significantly cheaper plastic.

- **Plastics and Toxic Chemicals**

- » Plastic creates serious toxic impacts across its entire life cycle. The chemicals used to make plastic are associated with a staggering array of [health effects](#) including cancer, neurological harm, birth defects, immune system suppression, reproductive harm, hormone disruption, and asthma. As such, toxic chemicals and pollution are at the heart of the plastics crisis and should be addressed for any policy approach to be truly effective.

- **Source Reduction and Reuse**

- » By reducing as many single-use products as possible and transitioning to non-toxic reusable products and packaging, states can dramatically decrease waste management costs for residents and businesses and provide significant environmental benefits.

- **Recycling and Extended Producer Responsibility**

- » Recycling is a key element of [successful local zero waste programs](#). However, recycling attracts a disproportionate amount of attention compared to its place on the waste hierarchy (reduce reuse, and then recycle). Recycling policies must be accompanied by ambitious reduction and reuse policies that include targets, funding, and enforcement.

- **False Promises: Recycling vs Waste Incineration and Toxic Technologies**

- » As pressure builds against plastic pollution, the petrochemical and plastics industries increasingly promote the burning of plastic waste incineration, and other toxic technologies. These [false solutions](#) -- including so-called “advanced recycling” or “chemical recycling” -- use heat, pressure and/or toxic chemicals to convert plastic waste into a new commodity. Such industry-driven fixes will create enormous amounts of toxic pollution, compound environmental injustices, incentivize the creation of more plastic waste, and exacerbate the climate crisis.

