



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 its production is expected to [increase by more than 30%](#) over the next decade. At a current national recycling rate of [5%](#), recycling will not 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 it is generated. But recycling is challenging and not always the most effective solution. Plastics often contain [harmful additives](#) that make recycling difficult or that are recycled back into products.

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 environmental equity and justice considerations and key policy options. The policies highlighted have been identified using criteria that:

- Center environmental justice and equity
- Prevent further petrochemical buildout
- Protect public health
- Avoid “false solutions” and single-use alternatives
- Drive momentum away from resource extraction

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Opportunities for Intervention Across the Plastics Life Cycle

- **Eliminating Petrochemical Extractions**

- » More than [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 investing heavily in creating a new market for these petrochemicals by turning gas into [ethylene and propylene](#) 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 problem and can be addressed to make policy approaches more 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 while providing significant environmental benefits.

- **Recycling and Extended Producer Responsibility (EPR)**

- » 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). To be more effective, recycling policies can 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](#) — often described as “advanced recycling” or “chemical recycling” — use heat, pressure, and/or toxic chemicals to convert plastic waste into a new commodity. These industry-driven fixes can create enormous amounts of toxic pollution, compound environmental injustices, incentivize the creation of more plastic waste, and exacerbate climate change.

