



Testimony of Judith Enck, President, Beyond Plastics and Former EPA Regional Administrator

February 14, 2023 (Happy Valentine's Day)

BEFORE THE NEW YORK STATE ASSEMBLY WAYS AND MEANS COMMITTEE AND SENATE FINANCE COMMITTEE

Thank you for the opportunity to offer testimony today. My name is Judith Enck, and I am the founder and president of Beyond Plastics, a project at Bennington College in Vermont with a mission to end plastic pollution everywhere. I am on the faculty at Bennington, and I served as Regional Administrator for Region 2 at the U.S. Environmental Protection Agency, appointed by President Barack Obama.

It is important that the New York State Legislature adopt a strong Packaging Reduction and Recycling bill this session, but it should not be included in this state budget. This is a complex policy issue that should be addressed after the budget is adopted. There are no implications for state spending in this upcoming fiscal year.

The production, use and disposal of plastic is one of the greatest environmental and health threats of our time and disproportionately impacts low-income communities and Black, Brown, and Indigenous people. The rise of plastic waste, and plastic packaging in particular, has led to immense challenges for frontline communities where these plastics are either produced, landfilled, or incinerated, and has frustrated efforts to reduce waste and greenhouse gas emissions.

As I noted during my testimony on The Climate Law Scoping Plan on January 19, 2023, that plan directs the New York State legislature to pass an Extended Producer Responsibility (EPR) bill for packaging and other materials in 2023 as the main legislative route for reducing waste and greenhouse gas emissions from materials and improving

recycling. EPR can be a powerful tool for mitigating pollution from materials production, use, and disposal. **However, New York must get the details right or Extended Producer Responsibility will NOT decrease the use of virgin materials, plastic pollution, and greenhouse gas emissions.**

The climate scoping plan calls for a complete phaseout of single-use packaging, a reduction of toxics in materials and products, investments in reuse and refill systems, and major improvements to recycling and composting infrastructure, with disposal being the absolute last resort.

The Legislature has three Packaging Reduction and Recycling bills currently proposed: Senate Bill 1064 by Senator May, Senate Bill 4246 by Senator Harckham and a proposal by Governor Hochul in her budget. All of these bills would enact an extended producer responsibility program for packaging with additional elements. Below and attached is a chart that compares all of the bills that are currently before you.

NY Packaging Reduction and Recycling Bills COMPARISON CHART



Recommendation: do not include these policy decisions in the budget. Consider as a stand-alone, post-budget bill.

FEATURES	BEYOND PLASTICS MODEL	SENATOR MAY S1064	SENATOR HARCKHAM S4246	GOVERNOR HOCHUL BUDGET
Reduces wasteful packaging	50% in 10 years	50% in 10 years	50% in 12 years	15% in 10 years
Increases recycling of remaining packaging	70% in 12 years	✓	✓	75% in 30 years
Prohibits toxic packaging and certain toxic chemicals	✓	✓	✓	NO
Establishes a process to ban additional toxic chemicals	✓	✓	✓	NO
Avoids major loopholes	✓	✓	✓	NO
Prohibits chemical recycling/advanced recycling and other false recycling marketing strategies to count as recycling	✓	✓	✓	✓
Funding and considerations for Environmental Justice Communities	✓	✓	✓	NO
Covers state agency costs to manage and enforce the program	✓	✓	✓	✓
Taxpayer relief	✓	✓	✓	✓
Investments in reuse and refill infrastructure	✓	✓	✓	Limited
Establishes a new Office of Inspector General to oversee the program	✓	NO	✓	NO
Strong oversight and accountability	✓	✓	✓	NO
Scope of materials covered	Packaging	Packaging	Packaging, paper, and single-use plastics	Packaging and paper

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I urge you not to include Packaging Reduction and Recycling in the budget, but instead to pass strong Packaging Reduction and Recycling legislation during the regular legislative session. These packaging reduction bills are not budgetary considerations and the legislature needs time to seek public input and craft the best policy for New York that meets the recommendations of the Climate Law Scoping Plan.

There is a lot at stake. Plastic is mostly manufactured in low-income communities of color in Louisiana, Texas and Appalachia – causing serious environmental and health harms. A section of Louisiana has come to be known as “cancer alley.” Your zip code should not be the determining factor of your health, but for communities where there is a concentration of petrochemical facilities, it is.

Pollution from plastic does not stop there—it continues as we use and, ultimately, dispose of it.

Plastic pollution is turning our ocean into a watery landfill – with more than 11 million metric tons entering the ocean each year¹ – threatening marine life and seafood quality. 70-80% of this plastic is from land-based sources.

By 2025, there will be 1 ton of plastic in the ocean for every 3 tons of fish.²

Once in the environment, plastic breaks up into smaller and smaller bits of plastic, known as microplastics and nanoplastics. These particles are everywhere—they have been found in the Mariana Trench³ – the deepest part of the ocean—and in fresh Antarctic snow.⁴ They have been found in drinking water, beer, honey, human blood, human lungs, human breast milk and in the human placenta.⁵

Plastics are speeding climate change. The production, use, and disposal of plastics emits significant greenhouse gas emissions, as documented in the October 2021 Beyond Plastics report “The New Coal: Plastics and Climate Change.”⁶

¹ “From pollution to solution.” United Nations Environment Program (UNEP). Accessed 1/23/23.

² “The New Plastics Economy: Rethinking the future of plastics.” World Economic Forum, 2016.

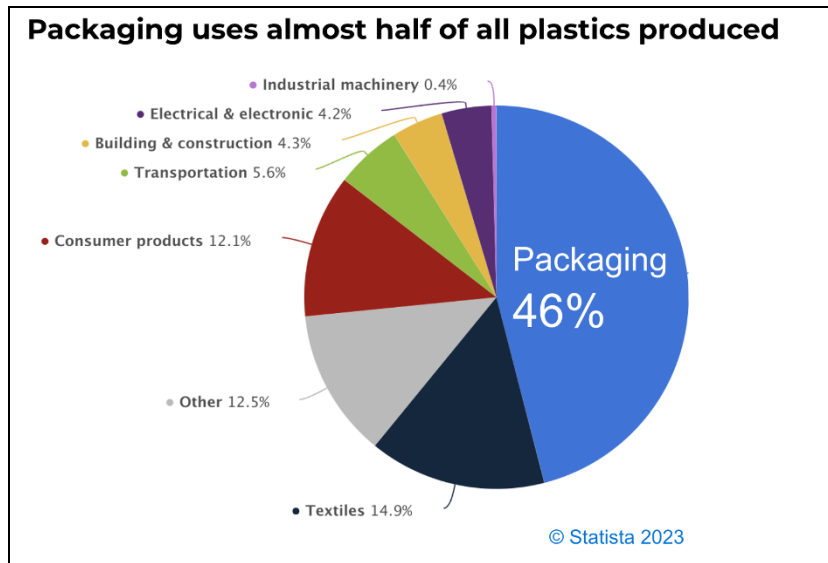
³ “Plastic in Mariana Trench.” National Oceanic and Atmospheric Administration’s Science on a Sphere webpage, accessed Dec. 11, 2022

⁴ “First evidence of microplastics in Antarctic snow.” Aves, A. et al. *The Cryosphere*, 16, 2127–2145, 2022.

⁵ “Plasticenta: First evidence of microplastics in human placenta.” *Environment International*, Dec. 2, 2020.

⁶ “[The New Coal: Plastics and Climate Change](#).” Beyond Plastics, Oct. 2021.

Almost half of all plastic produced is used for packaging, most of it single-use. While metal, paper, cardboard and glass packaging can be made from recycled material and can be recycled many times – most plastics cannot. Plastic is recycled at a 5-6% rate in the United States.⁷ And the latest marketing attempt by the plastics industry, called “chemical recycling” is a dangerously polluting dead end.



The Organization for Economic Cooperation and Development (OECD) predicts that the amount of plastic wasted annually is on track to triple: from the roughly 350 million tons wasted in 2020 to a projected 1 billion tons wasted by 2060.⁸ This growth is spurred by the petrochemical industry rushing to build new plastic production plants that rely on a glut of natural gas from hydrofracking.

Consumers are not asking for more plastics. But we have little choice. It is virtually impossible to avoid plastics in our daily lives – no matter how hard we try.

The projection of a doubling of plastic production in the US in the next 20 years will change only if states like New York adopt strong new policies that reduce the production, use and disposal of plastics.⁹

We need packaging to be reduced and re-designed. The Governor’s policy approach would not spur that kind of innovation, but instead looks at the problem through the lens of current packaging practices. The status quo—business as usual— will not meet the

⁷ “Advancing Sustainable Materials Management: 2014 Fact Sheet Assessing Trends in Material Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling in the United States.” U.S. Environmental Protection Agency, November 2016.

⁸ “Global plastic waste set to almost triple by 2060, says OECD.” Organization for Economic Cooperation and Development (OECD), 3/6/22.

⁹ “The Plastics Pipeline: A Surge of New Production Is on the Way.” Yale Environment 360. Dec. 19, 2019.

challenge before us. It's important to get the details right, and the EPR program as set forth in the Governor's budget proposal contains some very problematic elements:

1. **Waste reduction is inadequately addressed.** The Governor's budget plan contains a low packaging reduction target of 15% over ten years. This number is in conflict with the Climate Law Scoping Plan and New York's 1988 solid waste management statute.
2. **Recycling performance targets are too low and slow.** It would take 30 years for the Governor's proposal to get to an 85% material recovery rate and a 75% recycling rate. This is an unacceptable length of time to reach these numbers.
3. **Large loopholes in the budget bill make these targets non-binding.** In order to meet the recycling and waste reduction targets, companies will need to make a significant effort, including investing in reuse, refill, recovery, and recycling. If companies know that they can apply for waivers when they miss their targets, there's no incentive to improve the system. The Governor's bill would result in producers putting in minimal effort to reach their targets, which will all but guarantee that the targets will not be met:
 - a. **Loophole 1:** §27-3407 (5) Allows Producers to avoid compliance with the Post Consumer Recycled Content standards if they've been granted a waiver by the Department, which can be granted if the Producer shows that the targets are not **technologically or economically feasible**, or because there is **not adequate availability** of recycled material.
 - b. **Loophole 2:** §27-3407 (9) Allows the Department to adjust the minimum source reduction, recycling, and recovery rates if they are determined to be "**infeasible**". No further guidance is given on what would justify an adjustment.
 - c. **Loophole 3:** §27-3407 (10) **Allows the Department to adjust the Post Consumer Recycled Content rates by regulation** after considering market conditions, availability of recycled materials, capacity of recycling or processing infrastructure, utilization rates of materials, or progress made by producers in meeting the targets.
4. **It has an over-reliance on the use of Post Consumer Recycled Content** as a driver of system change and some of the targets take 20 years or more to ramp up.

A strong packaging reduction and recycling policy needs to contain the following elements:

1. Establish Environmental Standards for Packaging

Similar to fuel efficiency standards for cars and appliances, we need environmental standards for packaging: 50% reduction in packaging over ten years—achieved either through elimination or by switching to reuse/refill systems — and the rest must achieve a 70% recycling rate over 12 years at minimum. A major report by the Pew Charitable Trusts entitled “Breaking the Plastic Wave” shows that it is both necessary *and* feasible to **reduce** plastic packaging by 47%.¹⁰

2. Reduce Toxics in Packaging

Packaging that contains toxic chemicals is harmful to human health and the environment and can make it unsafe to use recycled materials in future products. Known toxic chemicals and substances, such as PFAS, formaldehyde, mercury, and lead should be removed from packaging.

3. No False Recycling

False recycling, known variously as “advanced recycling,” “chemical recycling,” or “molecular recycling” has no place in any EPR system and should not count toward recycling performance targets. False recycling is any process that turns plastic into a fuel or fuel substitute; or the general use of plastic in energy production; and/or the following processes: gasification, pyrolysis, solvolysis, hydrolysis, methanolysis, enzymatic breakdown, combustion; or any other chemical conversion process used to transform plastic or plastic-derived materials into plastic monomers, chemicals, waxes, lubricants, chemical feedstocks, crude oil, diesel, gasoline, or home heating oil.

The petrochemical industry may claim that some of these facilities will turn plastic waste into feedstocks for making new plastic products. However, unlike glass and metal, plastics cannot be recycled indefinitely; there are technical limitations to doing so. Ultimately the majority of plastics produced from the end-products of these “chemical recycling” facilities will be discarded as problematic plastic wastes again.

¹⁰ “Breaking the Plastic Wave.” Pew Charitable Trust.

These processes have by-products that are toxic and that end up as air pollution and/or waste ash, and they are almost always placed in low-income communities and/or communities of color— communities that bear the brunt of toxic releases.

These technologies as a whole are ineffective at managing the vast amount of plastic packaging waste being generated, and building more of these facilities involves substantial public risks. These risks are not limited to greenhouse gas emissions or to local health impacts due to air pollution. From an infrastructural and budgeting perspective, it is risky to direct scarce public resources into ineffective technologies that will inevitably ***reduce the amount of funding available for proven, safe methods of waste reduction***, such as building out a reuse and refill infrastructure. We should be spending public dollars on solutions that will **reduce plastic waste at the source**, not use multi-million dollar industrial facilities to transform one form of waste into other forms of waste in a Cat-in-the-Hat-like fashion.¹¹ These technologies should not be considered recycling; the definitions in any EPR policy must make that clear.

The plastics industry is finally acknowledging that traditional mechanical recycling of plastics has been a failure. The public wants to recycle, but the many different plastic resins, the many different colorants and the thousands of chemicals used to make plastics make the material fundamentally difficult to recycle. The plastics industry has known this all along, but still spent millions of dollars deliberately confusing the public about the recyclability of plastics. And they are still doing it: look no further than the iconic chasing arrow recycling logo that companies put on plastic packaging, such as plastic bags and polystyrene, fully knowing that this packaging will not get recycled.

“Chemical recycling” is just the latest tactic by the plastics and fossil fuel industries to avoid taking full responsibility for their waste by greenwashing. More accurately known as “false recycling,” chemical recycling is a multi-step process that superheats or boils plastics down into gasses, chemicals, tars, or oils. There are many different technologies with different and often misleading names—as I list above—but most are not new or innovative.

False recycling is more of a marketing strategy than an actual solution. Currently, there are only eight facilities of this kind operating in the United States, with two

¹¹ “The Cat in The Hat.” [Seuss](#), Dr. (Theodor Geisel), 1957.

under construction. It is estimated that the existing facilities can only process 0.26% of the plastic waste generated in the US each year--that's one quarter of one percent.¹²

The marketing campaign by petrochemical companies and packaging companies is designed to get you to believe that these are new, breakthrough technologies. They are not. These processes have been proposed by the plastics industry for more than 30 years, with no real success.

For example, in its 1991 Congressional testimony, Eastman Chemical Company announced its plans to “close the loop” by producing PET plastic with recycled content for food packaging, including plastic soda bottles.¹³ Eastman stated they would use a methanolysis unit in Rochester, NY to convert recycled PET into raw materials that would be blended with virgin feedstock at Carolina Eastman Company. Eastman claimed that it would produce about 50 million pounds of plastics a year. Despite Eastman’s claims, no evidence could be found that this PET bottle facility ever operated, and the overall facility was fully shut down in 2012.

This is an important environmental justice issue. The Natural Resources Defense Council analyzed U.S. “chemical recycling” facilities in its September 2022 report “Recycling Lies” and found that these technologies generate abundant amounts of hazardous waste, have large carbon footprints, are mostly constructed in environmental justice communities, create small amounts of fuel which generate the same harmful air pollution as burning fossil fuels, and significantly, require the ongoing production of new plastics from fossil fuels.¹⁴ Greenhouse gas emissions from “chemical recycling” facilities can be as bad as those from conventional garbage incinerators, such as the ones operating in Westchester, Glens Falls, and eight other communities in New York.

“Chemical recycling” is not viable. It has failed and will continue to fail for the same real-world reasons that the conventional mechanical recycling of plastics has failed: because the thousands of resin types are not compatible with each other for recycling, and because it is difficult to make collection, processing and re-manufacturing profitable. Worse yet, its emissions of toxics and greenhouse

¹² “Is chemical recycling greenwashing?” Engineering and Technology, Nov. 7, 2022.

¹³ “Circular Claims Fall Flat Again: 2022 Update.” Greenpeace, 2022.

¹⁴ “Recycling Lies.” Natural Resources Defense Council (NRDC), September 2022.

gasses could cause new harm to our environment, the climate, and the health of our most vulnerable people.

This is not innovation. This is just marketing spin. If these “technologies” are allowed to count toward recycling, it will delay and distract from the real progress that needs to be made.

4. Provide Financial Relief to Taxpayers and Consumers

Taxpayers should not have to carry the financial burden of managing packaging. Packaging companies should pay fees that are used to reimburse municipalities and consumers for the cost of recycling packaging material, provide new funding for projects that reduce packaging waste and improve recycling, and fund state agencies for managing the program and enforcing the law. Companies should pay no fees for packaging used in reuse and refill systems.

5. Include Both Residential and Commercial Waste

Commercial waste makes up 40% to 60% of the waste stream. The policy should apply to packaging generated in all sectors.

6. Don't Put the Packaging Industry in Charge

We would not expect the tobacco industry to implement effective anti-smoking efforts—do not allow companies to self-regulate through Producer Responsibility Organizations (PROs). Binding performance targets should be set in statute, with strong accountability and oversight by state agencies—including the ability to completely disband poor-performing PROs.

7. Ensure Strong Oversight and Accountability

A law is only as strong as its enforcement. Just as New York has a Watershed Inspector General and a Medicaid Inspector General, legislation should establish a new Office of Inspector General specifically to enforce the packaging waste reduction program. Furthermore, state agencies must receive the funding necessary to implement and enforce the law.

Thank you for your time and attention to the urgent issue of plastic pollution. I look forward to working with you to get a strong and effective Packaging Reduction and Recycling bill passed this legislative session.