

Chemical Recycling Policy Position



Topline Policy Position

Ocean Conservancy does not presently support any form of chemical recycling. In its current form, chemical recycling does not contribute to a circular plastics economy because it is not plastics-to-plastics recycling and creates environmental and social harms that are inconsistent with our goal of a healthy ocean for the wildlife and communities that depend on it.

- A comprehensive approach focused on reducing plastic production is needed to reduce the harms of plastics on our communities, climate, and ocean.
- Any improvements in recycling technology will require upstream policy efforts to increase collection and streamline product design for a more economically viable system with less contamination. These efforts need to be supported by sustainable financing that unburden the ratepayer and hold producers accountable.
- Chemical recycling technologies that recover plastic material (i.e., plastics-to-plastics) are in early development and will likely not operate at scale for some time.
- Conversion chemical recycling¹ technologies can perpetuate historic environmental and social injustices based on their emissions and siting.
- The environmental impacts for emerging chemical recycling technologies (e.g., depolymerization² and purification technologies³) remain unproven at scale and when facing challenges that exist within real waste streams.
- Focusing on chemical recycling or any other single solution as a “quick fix” to the plastic pollution crisis risks delaying the systemic changes needed to build a circular economy.

Guiding Principles

- Any end-of-life treatment for plastics that leads to harmful emissions (including GHG emissions) into communities, air, or waterways are not sustainable and should not be considered part of the circular economy.
- End-of-life processes that do not recover plastic materials (i.e., aren't “plastic-to-plastic”) should not be considered recycling.
- Local communities should be fully engaged in the decision to locate and operate facilities in their communities and have access to transparent information about the facility.
- We recognize the need for innovation to achieve a circular economy and stop the flow of plastics into the ocean. Current chemical recycling technologies do not offer solutions aligned with a transition to a circular economy.

¹ “Conversion” technologies (e.g., pyrolysis, gasification) use high heat and pressure to break down chemical bonds to produce small hydrocarbons (pyrolysis oil/syn gas) largely for use for energy and fuels.

² “Depolymerization” technologies (e.g., enzymatic, methanolysis, solvolysis) use enzymes, chemicals, and/or heat to break down plastic polymers to recover monomers (the basic building block of plastics).

³ “Purification” technologies use chemicals and heat to dissolve and recollect the plastic without changing the basic molecular structure of the plastic polymer.