

Overview

Plastics play a vital role in many of the products and applications that make modern life possible. They preserve food from spoilage, protect the hygiene of medical products, and transport clean drinking water. They are used to make personal protective equipment, from face masks to helmets, and they serve as key building blocks in green technologies, like solar panels and wind turbines. Plastics also can provide advantages over alternative materials – paper, glass, and aluminum – in terms of key sustainability metrics like water usage, emissions, energy consumption, or waste generation. As a result, global demand for plastics is expected to increase rapidly in the decades ahead, especially in developing countries where a growing middle class seeks access to higher living standards.

This growth has been accompanied by heightened awareness of the challenges associated with plastic pollution including in the marine environment. The Organization for Economic Co-operation and Development (OECD) [estimates](#) that about 9% of plastic waste is currently recycled globally. Too often, mismanaged plastic waste piles up in rivers and oceans. It can also be found on roadways, in forests, or on beaches all over the world. At the same time, increasingly sensitive testing techniques have allowed scientists to confirm the presence of microplastics across a broad array of ecosystems.

Global Plastics Treaty

To address these challenges, policymakers at every level of government are considering a wide range of solutions designed to promote a circular economy that minimizes waste and allows more materials to be reused, recycled, or recovered. Among the most high-profile efforts are those led by an Intergovernmental Negotiating Committee (INC) convened by the UN Environment Program (UNEP) to negotiate a global, legally binding agreement on plastic pollution. Over 2,500 delegates participated in the Committee's most recent meeting, INC-4. Together, they represented 170 governments and over 480 observer organizations, including non-governmental organizations and UN entities.

Through the negotiations, governments are exploring major topics like [Extended Producer Responsibility \(EPR\)](#) and [recycling infrastructure](#). Such elements would promote plastic waste as feedstock for new products, thus incentivizing efforts to keep plastic waste out of the environment and providing an attractive alternative to virgin fossil feedstock. Governments will need to weigh proposals to reduce the use of plastic against the performance characteristics, socioeconomic advantages, and environmental benefits of plastics when compared to products made of other materials, based on life-cycle assessment.

The final negotiating session is scheduled for November 25 to December 1, 2024, in Busan, South Korea.

Collaboration

The global plastics value chain is incredibly complex, consisting of raw material providers, plastic producers, and those who

Center Forward Basics

Center Forward brings together members of Congress, not-for profits, academic experts, trade associations, corporations and unions to find common ground. Our mission: to give centrist allies the information they need to craft common sense solutions, and provide those allies the support they need to turn those ideas into results.

In order to meet our challenges we need to put aside the partisan bickering that has gridlocked Washington and come together to find common sense solutions.

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convert plastic resin into finished materials. Polymer makers alone operate some of the largest and most technologically sophisticated manufacturing facilities in the modern economy, requiring refining infrastructure that can take billions of dollars and decades to build. The value chain also encompasses the brands that rely on plastics to produce, and transport finished products, as well as the recycling and waste management sectors. These can include an informal workforce of waste pickers, especially in nations without well-developed systems for collecting and sorting post-consumer materials.

Given this vast scope, a system-wide approach to circularity will require collaboration with governments, civil society, and academia across the full value chain. Only by working together can stakeholders identify and replicate practical, effective solutions at a meaningful scale.

Getting to Net Zero

There is no one-size-fits-all formula for creating a circular economy. Therefore, policymakers have explored a variety of options for eliminating plastic pollution while providing the flexibility to meet the environmental and socioeconomic needs of individual communities.

The guiding principles behind successful strategies include:

1. **Identifying the greatest value of plastics:** Without strong market signals, used plastic will be treated as waste rather than a valuable feedstock for circular products. By supporting mechanisms that assign value to plastics at each stage of their lifecycle, society can drive the investments needed to increase recycling rates and reduce consumption of virgin materials. For example, many major brands have announced commitments to increase their use of recycled plastics, and the marketplace is responding by investing in new recycling capacity. Increasing demand for circular polymers is also key to accelerating the pace of investment in scaling up advanced recycling techniques that allow a wider range of plastics to be transformed back into usable raw materials.
2. **Resource use efficiency:** A strong circular economy not only gives new life to old materials; it reduces the total generation of waste. For the plastics sector, that means producing lighter, stronger, more durable polymers which are easier to recycle. These can be used to downgauge the thickness of a packaging material without compromising performance. Market participants can also increase efficiency by designing more easily recycled products.
3. **Ensuring appropriate end-of-life waste management:** Plastic waste in the environment is part of a more significant issue related to global waste management infrastructure. At least 3 billion people worldwide lack access to controlled waste-disposal facilities. To stem the flow of mismanaged waste, public and private entities worldwide are investing in systems that can more efficiently divert plastics away from the environment. Accelerating these trends will require international cooperation, robust public-private partnerships (PPP), blended finance, and other unique approaches.

Looking Ahead

As world leaders race to finalize an international, legally binding instrument on plastic pollution, individual countries will formulate localized solutions that account for different national needs, consumption patterns, and circumstances. These ambitions can only be achieved via high-level engagement from the entire plastics value chain, governments, civil society, and academia. By working collaboratively, stakeholders can advance a system-wide approach to circularity, where commercial markets and public policy work in tandem to enable plastics to return to the economy and not become waste or litter.

Links to Other Resources

- American Chemistry Council – [Circularity](#)
- Consumer Goods Forum – [Recycling Q&A with Closed Loop Partners](#)
- Ellen MacArthur Foundation – [Plastics and the circular economy – deep dive](#)
- McKinsey & Company – [A unique moment in time: Scaling plastics circularity](#)
- PLASTICS Industry Association – [UNEA Global Plastics Agreement Negotiations Industry Position and Priorities](#)
- UN Environment Programme – [Road to Busan clear as negotiations on a global plastics treaty close in Ottawa](#)
- World Wildlife Federation – [Circularity will require an entirely new way of thinking](#)