

## Overview

Fixing the United States' recycling infrastructure has become a major focus in recent years because of a lack of standardization across the industry and low recycling rates across the nation. In the recycling process, recyclable materials are generated by a consumer or business and then collected by a private hauler or government entity. The materials are then transported by the collector to a processing facility where they are sorted, cleaned, and prepared for transport to a filing facility or directly to a manufacturing facility. After the materials have been processed, recyclables are made into new products at a recycling plant or another facility.

Benefits of recycling include reducing the amount of waste sent to landfills and incinerators, conserving natural resources, creating jobs in the recycling and manufacturing industries, and increasing economic security by utilizing domestic sources of materials. Yet, the Environmental Protection Agency (EPA) found that only 34% of recyclable material is actually recycled. For plastic, the rate is even lower, at about 9%. Experts are advocating for new investments to focus on collecting and sorting, as well as major issues of standardization and contamination. This basic will offer a broad overview of the U.S. recycling system and explain challenges and possible solutions to improve the system.

## U.S. Recycling System

Many parts of the U.S. recycling system have not been updated in more than a decade. Recycling rules and regulations also vary greatly by state and even by county. According to the EPA, more than 9,800 recycling systems exist across the U.S. Paper, cardboard, plastic bottles, and metal cans are widely accepted, while Styrofoam, bubble wrap, glass bottles, and plastic bags are more widely rejected. Some recycling systems let residents put acceptable recyclable materials in one recycling bin, while others require bottles, cans, or paper to be separated, and cardboard or paper to be bundled and tied. Packages usually need to be rinsed and dry, and material contaminated by food waste usually is not allowed. Consumers are often confused by the variety of recycling standards across the nation and when surveyed, only 38% of consumers believe that all items marked with a recycling symbol can definitely be recycled in their community, while in reality, it is more complex.

## U.S. and China Partnership

The U.S. recycling system has also been impacted by China. Prior to 2018, China accepted multi-material waste. In 2016, the U.S. exported 16 million tons of plastic, paper, and metals to China. But in 2018, China's National Sword policy banned the import of most plastics and other materials that did not comply with new, more stringent purity standards, ultimately restricting the import of most plastics and many other materials from the United States. This recycling system impacted the environment because 30% of the mixed recyclables were contaminated by non-recyclable material and were never recycled, therefore polluting China's countryside and oceans.

U.S. counties that could once sell recyclables at a profit to China, now have to pay to have them hauled away. Oftentimes these

## 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.

For more information, please visit [www.center-forward.org](http://www.center-forward.org)

products are sent to a landfill or incinerator instead. In 2018 following China's implementation of its newer, stricter rules, the U.S. began sending its plastic waste to other countries, shipping 68,000 containers to Vietnam, Malaysia, and Thailand. When these countries later instituted bans on imported plastic waste, the U.S. diverted its waste to Cambodia, Bangladesh, Ghana, Laos, Ethiopia, Kenya, and Senegal — countries with cheap labor and lax environmental rules. The U.S. still ships more than 1 million metric tons a year of plastic waste abroad. Experts estimate that 20% to 70% of plastic intended for recycling overseas is unusable and is ultimately discarded. One study found that global plastic waste exported to Southeast Asia contributed to other problems including contaminated water, crop death, respiratory illnesses due to toxic fumes from incineration, and a rise in organized crime.

## Challenges and Solutions

A lack of standardization across states and counties is a major challenge in the recycling system. It is difficult for consumers to understand what materials can be recycled and where to recycle the materials. Another major challenge is contamination. Contamination often results from consumer confusion and prevents materials from being recycled and affects other materials that cannot be processed in certain facilities. Solutions include establishing national or regional standards that are uniform and scalable to help consumers, manufacturers, and waste management complete the highest rates of recycling. Another idea for standardized recycling is to create national minimum standards for Materials Recovery Facilities (MRFs). Experts also propose that governments need to make market-based investments in recycling infrastructure and suggest that companies that produce consumer packaged goods (CPG) and other stakeholders help contribute to their funding.

Another proposed solution for updating and improving the plastic recycling system is called advanced recycling. It refers to various technologies that convert post-use plastics into their original building blocks for new plastics and chemical products. Because the U.S. only recycles about 9% of plastics, advanced recycling is an innovative technique aimed at decreasing plastic waste and keeping plastic out of the environment by investing in and incentivizing the reuse of large volumes of used plastic that currently go unrecycled. Additionally, advanced recycling is capable of manufacturing high-functioning, high-performing grades of plastic for food, medical and pharmaceutical uses – an important breakthrough in plastics recycling.

The Recycling Leadership Council (RLC), is a group of stakeholders from consumer-facing industries and packaging and recycling ecosystems committed to rebuilding the U.S. recycling system. The RLC represents organizations that work together to rigorously scrutinize America's recycling system and provide substantive, actionable solutions with broad stakeholder support. The RLC has called for the EPA to create a new best practices framework, including minimum recycling rates at the state level based on the agency's goal of a national recycling rate of 50% by 2030. They also call for standardized recycling programs to be established throughout federal government domestic operations. Because of the lack of standardization across the country, it is challenging for both consumers and businesses to recycle properly.

## Links to Other Resources

- American Chemistry Council — [Advanced Recycling](#)
- Anheuser-Busch — [Anheuser-Busch's 'National Recycling League'](#)
- The Coca-Cola Company — [How and Why Coca-Cola Supports Recycling in the U.S.](#)
- Consumer Brands Association — [Achieving America's Recycling Future](#)
- McKinsey & Company — [Advanced recycling: Opportunities for growth](#)
- Consumer Brands Association — [Blueprint for America's Recycling System](#)
- PepsiCo — [PepsiCo Recycling and Sustainability Initiatives](#)

- Plastic Makers — [What is Advanced Recycling?](#)
- The United States Environmental Protection Agency — [The U.S. Recycling System](#)