



BUILDING A CIRCULAR ECONOMY FOR ALL:

Progress Toward Transformative Change



EPA Office of Resource
Conservation and Recovery
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Material processing and waste affects people and the environment at many levels. About half of total global greenhouse gas emissions result from the extraction and processing of materials, fuels, and food.¹ Greenhouse gas emissions from plastics production alone are expected to double by 2060.² Locally, communities—particularly those with environmental justice concerns—experience the environmental and human health impacts of waste more than others.

One important way to tackle these problems is through recycling. Yet, 50 years after the introduction of the recycling symbol on the first Earth Day, the U.S. recycling system has not kept pace with the new types of materials, products, and waste generated. And EPA understands that recycling alone will not be enough to solve the climate crisis, environmental injustice, or pollution.



“We need a transformative vision for our waste management system—one that is inclusive, more equitable, and reflects the urgency of the climate crisis.”

—EPA Administrator Michael S. Regan,
2021 EPA National Recycling Strategy

Meeting these challenges requires a transformative vision coupled with bold action. Our economy must transition to a more sustainable, circular approach focused on reducing material use, redesigning materials to be less resource intensive, and recapturing “waste” as a resource to manufacture new materials and products. EPA recognizes that this transition must be grounded in social and environmental equity.

EPA, led by the Office of Resource Conservation and Recovery (ORCR), has already made significant progress toward achieving a **circular economy for all**. This document highlights ORCR’s progress toward this goal.

We Are on a Path Toward Transformative Change

Congressional commitment to reinventing and reinvesting in recycling is embodied in new legislation, new initiatives, and unprecedented funding. This support drives and shapes ORCR’s vision and path toward a circular economy. First, ORCR is undertaking ambitious work authorized under the December 2020 Save Our Seas 2.0 Act. Enacted to address the threat of plastic pollution and support grants to invest in recycling, Save Our Seas 2.0 set the stage by defining a circular economy. Then, in November 2021, Congress passed the Infrastructure, Investment and Jobs Act—also referred to as the Bipartisan Infrastructure Law—to provide historic funding to develop and implement the vision reflected in EPA’s Circular Economy Strategy Series.



1 <https://www.resourcepanel.org/reports/global-resources-outlook>

2 <https://www.oecd.org/environment/plastics/increased-plastic-leakage-and-greenhouse-gas-emissions.htm>

We Are Making Progress Toward a Circular Economy for All

ORCR has already made significant progress on the path toward building a circular economy for all.

Published Part One of the Circular Economy Strategy Series



The Circular Economy Strategy Series outlines a transformative 10-year vision that embraces circularity and sustainable materials management and addresses climate change and environmental justice. EPA launched the **National Recycling Strategy**, the first part of the series, on the same day that President Biden signed the Bipartisan Infrastructure Law: November 15, 2021, America Recycles Day. The National Recycling Strategy—published in English and Spanish—highlights the actions needed from governments, industry, and others to modernize our recycling and waste management system.

Eighteen actions identified in the strategy are underway. This includes **13 EPA-led actions**, as well as actions led by the National Institute of Standards and Technology and the Department of Energy. Actions include creating a national map of existing recycling infrastructure, conducting a financial needs assessment related to recycling infrastructure in the United States, researching domestic and international circular economy policies, providing grants to support community recycling programs, and developing a recycling measurement guide for state, local, and tribal governments.

To date, **2,008 entities** have signed up to stay informed about the National Recycling Strategy activities and accomplishments!



**2,008
ENTITIES**

requested updates about
National Recycling Strategy
activities and accomplishments

Developed Comprehensive Information on Strategies to Reduce Plastic Waste

At least 14 million tons of plastic end up in oceans every year, threatening coastal ecosystems, affecting our communities, and harming marine life.³ The plastics crisis demands innovation and incentives to transform material design, use, and disposal.

The 2020 Save Our Seas 2.0 Act is the most comprehensive legislation ever passed to address the issue. It mandates EPA to collaborate with key partners to identify innovative uses for plastic waste, recommendations for overcoming barriers to recycling, incentives to create new end-use markets for recycled plastics, and opportunities to minimize new plastic waste. The Act also authorizes EPA to create and administer the new Solid Waste Infrastructure for Recycling grant program, funded by the 2021 Bipartisan Infrastructure Law.

ORCR has teamed up with EPA's Office of Water and other federal agencies including the National Oceanic and Atmospheric Administration, the U.S. Department of Transportation, and the National Institute of Standards and Technology to **lead the development of studies and strategies under the Save Our Seas 2.0 Act** that will help break barriers and incentivize innovation to reduce plastic waste. ORCR also contributes to this work as part of EPA's role in the Interagency Marine Debris Coordinating Committee.⁴



**Unless We
Transform Our
Business as Usual...**

Global plastic production is projected to grow by 40% over the next decade.

Greenhouse gas emissions from the plastics lifecycle are projected to more than double by 2060.

Engaged with Diverse Groups Nationally and Across All Regions

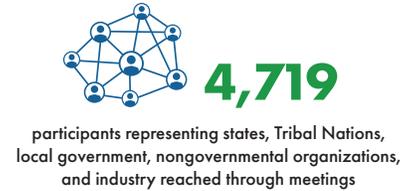
The 2021 Bipartisan Infrastructure Law provides EPA with immense federal funding to develop and implement new initiatives

³ <https://www.iucn.org/resources/issues-brief/marine-plastic-pollution>

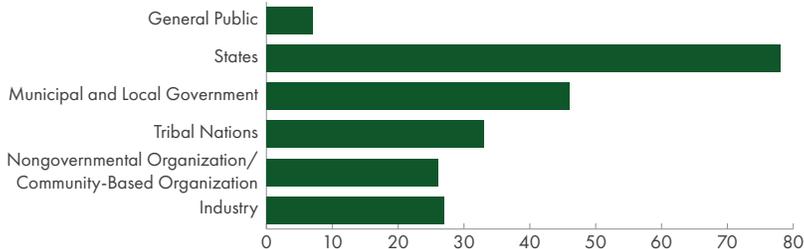
⁴ https://marinedebris.noaa.gov/sites/default/files/IMDCC%20Charter_Final_updated%2003-21-2022.pdf

to support communities and spur industry toward creating a circular economy for all. This funding supports implementation of EPA's Circular Economy Strategy Series and the Solid Waste Infrastructure for Recycling grant program authorized under the Save Our Seas 2.0 Act. The Bipartisan Infrastructure Law also authorizes a new Recycling Education and Outreach grant program, as well as Battery Collection Best Practices and Labeling Guidelines.

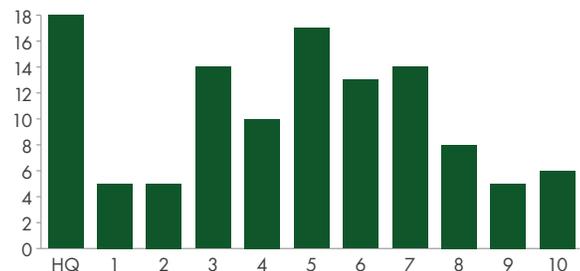
ORCR is designing the new grant programs and battery guidelines with meaningful input from a wide range of groups. ORCR has **conducted 115 feedback sessions nationally and across all EPA Regions**. The discussions generated valuable insights on recycling challenges, barriers, and needs. ORCR has compiled and referred to this feedback to inform each program's design. The goal is to create programs with requirements and resources that are equitable and effective. Both of the grant programs established by the Bipartisan Infrastructure Law are covered under President Biden's Justice 40 Initiative.



MEETINGS ATTENDED BY PARTICIPANT TYPE



MEETINGS CONDUCTED BY EPA REGION



Issued Requests for Information on Recycling Grants and Battery Best Practices and Labeling Guidelines

On June 9, 2022, ORCR issued Requests for Information for the Bipartisan Infrastructure Law-funded initiatives to further engage diverse organizations and communities to inform the grant programs and best practices and guidelines for batteries.

Solid Waste Infrastructure for Recycling grant program. This program will help address organizations' recycling infrastructure needs and challenges. Improving recycling infrastructure is key to improving recycling rates and decreasing contamination across the country.

Recycling Education and Outreach grant program. This program will help increase awareness and decrease confusion around what is recyclable.



Battery Collection Best Practices. This resource for states, territories, tribes, and local governments aims to provide information on increasing the circularity of batteries and critical minerals, as well as the safe management of batteries.

Voluntary Battery Labeling Guidelines. This resource for battery producers and consumers will provide information about the recyclability of batteries.

Next Steps Toward Building a Circular Economy For All

Over the rest of 2022, ORCR expects to complete the following Bipartisan Infrastructure Law and circular economy efforts.

1 Releasing New Circular Economy Strategies

Because recycling alone will not achieve a circular economy and reduce greenhouse gas emissions, EPA is developing other strategies in the Circular Economy Strategy Series to identify the actions needed to reduce impacts associated with material use, consumption, and disposal. EPA is developing a food waste and organics strategy (working closely with the U.S. Department of Agriculture) and a plastics strategy and plans to release drafts to the public in 2022. Earlier this year, EPA began engagement activities to inform the development of its critical minerals and electronics strategy, which will include actions to support the recovery of critical minerals through recycling.

2 Developing the Model Recycling Program Toolkit

This resource for states, tribes, local governments, nonprofit organizations, and the private sector will educate consumers about recycling, promote participation in recycling programs, and reduce recycling stream contamination. The toolkit will include a community self-assessment guide to identify gaps in existing recycling programs, training modules to enable states and nonprofit organizations to provide technical assistance to local governments, consumer educational materials that can be adapted for use in recycling programs, and a guide to measure the effectiveness of funding received under the Recycling Education and Outreach grant program.

3 Publishing Innovative Approaches for Reducing Plastics

EPA is developing the reports requested under the 2020 Save Our Seas 2.0 Act and plans to release them for public comment in the coming months. These reports identify challenges and solutions in managing and reducing plastic waste.

4 Putting Recycling Grants and Resources to Work

EPA plans to finalize details on the first round of funding for the Solid Waste Infrastructure for Recycling grant program and the Recycling Education and Outreach grant program and **release Requests for Applications in the fall of 2022**. We will also continue research to finalize the Battery Collection Best Practices and Voluntary Battery Labeling Guidelines resources. These initiatives are poised to make real change in communities soon.

Stay Informed on Our Progress, Help Us Achieve Our Vision

ORCR is leading the way on building a circular economy for all, but we need your ideas and involvement to keep the momentum going.



Visit the [RCRA Bipartisan Infrastructure Law Website](#)



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