

National Recycling Strategy



DRAFT: October 5, 2020

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Acknowledgements

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- The America Recycles pledge signatories, whose activities informed the development of the *National Framework for Advancing the U.S. Recycling System*, upon which this draft strategy was built.
- Federal offices and agencies, including the Council on Environmental Quality (CEQ), the U.S. Department of Commerce (DOC) (including the National Oceanic and Atmospheric Administration and the National Institute of Standards and Technology (NIST)), the U.S. Department of Agriculture, and the Department of Energy (DOE).
- EPA's state, tribal, and local partners, including the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), Environmental Council of the States (ECOS), South Carolina Department of Commerce, the U.S. Conference of Mayors, and tribal representatives.
- Recycling professional and industry associations and private companies, including the Institute of Scrap Recycling Industries (ISRI), the National Waste and Recycling Association (NWRA), the Solid Waste Association of North America (SWANA), and Waste Management (WM).
- Non-profit organizations, including the Environmental Research and Education Foundation (EREF), GreenBlue, Keep America Beautiful (KAB), the National Recycling Coalition, The Recycling Partnership (TRP), and the U.S. Chamber of Commerce Foundation (USCCF).

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1. The Case for a National Recycling Strategy

The National Recycling Strategy identifies strategic objectives and actions needed to create a stronger, more resilient, and cost-effective U.S. municipal solid waste recycling system.

Recycling has been a critical component of the Environmental Protection Agency's (EPA) decades-long efforts to implement the Resource Conservation and Recovery Act (RCRA) and its more recent efforts to pursue a Sustainable Materials Management (SMM) approach, which

aims to reduce the environmental impacts of materials across their lifecycle. EPA's SMM program provides data, information, guidelines, tools and technical assistance on resource conservation, recycling, resource recovery, waste reduction, and landfiling issues. Through SMM, EPA and U.S. stakeholders strive to help meet the material needs of the future by providing methods to decrease environmental impacts of materials use while increasing economic competitiveness.

Recycling is a key driver of the U.S. economy and a way to conserve resources and protect the environment.

Environmental benefits include reducing the amount of waste sent to landfills and incinerators, which can reduce the amount of air emissions released into the atmosphere. In 2017, over 94 million tons of municipal solid waste was recycled or composted saving over 184 million metric tons of carbon dioxide equivalent (MMTCO₂E) (USEPA, 2019a). Benefits also include conserving natural resources, such as timber, water and critical minerals; and preventing pollution by reducing the need to collect new raw materials. Economic and community benefits include increasing economic security by tapping a domestic source of materials; supporting American manufacturing; conserving valuable resources; and creating jobs in the recycling and manufacturing industries. For example, EPA's Recycling Economic Information Report for the United States shows recycling and reuse activities accounted for approximately 757,000 jobs, \$36.6 billion in wages, and \$6.7 billion in tax revenues (U.S. EPA, 2016).

In 2018, in response to recent international policy changes and other challenges, EPA began an effort to focus on recycling challenges in the United States, which led to the first America Recycles Day Summit in 2018. One year later, EPA published the [National Framework for Advancing the U.S. Recycling System](#) to highlight the current challenges in the U.S. recycling system within four key areas: promoting education and outreach, enhancing infrastructure, strengthening materials markets, and enhancing measurement. It also identifies specific voluntary actions, ongoing and planned, that EPA and recycling stakeholders would take to improve the resiliency of America's recycling system (U.S. EPA, 2019b).

EPA's Sustainable Materials Management (SMM) Program

While the focus of the *National Recycling Strategy* is recycling, EPA's SMM program broadly covers those areas not addressed in this strategy, including source reduction and reuse. See: www.epa.gov/SMM for more information.

Recycling

For purposes of this Strategy, *recycling* refers to mechanical recycling, which is the series of activities by which discarded or used materials are collected, sorted based on physical/mechanical characteristics, processed and/or converted into feedstock and used in the manufacture of new products.

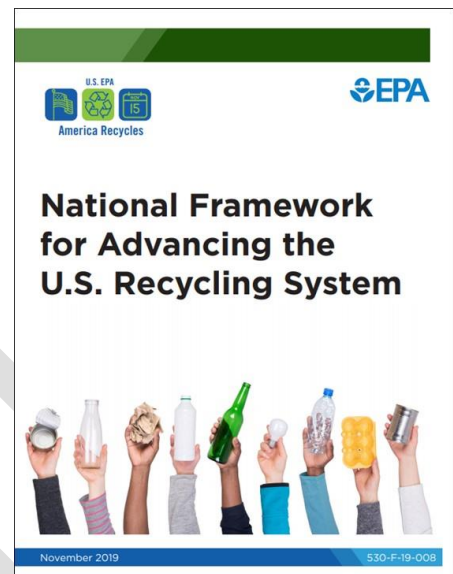
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Building on the *National Framework* and EPA's long history of providing data, tools, information and other resources to support recycling in the United States, EPA developed this draft Strategy to identify the actions needed to create a strong, resilient, and cost-effective U.S. recycling system. The draft Strategy will align with and support implementation of the national recycling goals, which EPA intends to announce in November 2020.

1.1. Developing the Draft National Recycling Strategy

EPA's SMM program broadly covers materials use in the United States and EPA's activities have been covered by the [*EPA Sustainable Materials Management Program Strategic Plan for Fiscal Years 2017 – 2022*](#) (U.S. EPA, 2015). EPA has several long-standing programs and efforts underway to advance SMM, including the sustainable management of food and electronics management, through its SMM program, which are described in Appendix A. These programs will be leveraged, as necessary, to move activities under the draft Strategy forward.



The draft Strategy continues the progress made by the *National Framework* on municipal solid waste (MSW) recycling. The following key sources of information, ideas and collaborative input also informed the draft Strategy:

- **Federal Agency Input.** EPA sought the input of other federal agencies in the development of the Strategy, including the U.S. Department of Agriculture, the Department of Commerce (including the National Oceanic and Atmospheric Administration and the National Institute of Standards and Technology), and the Department of Energy. EPA also consulted with the Council on Environmental Quality.
- **State, Tribal, and Local Agency Input.** EPA obtained preliminary input from the Environmental Council of the States (ECOS), the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), South Carolina Department of Commerce, U.S. Conference of Mayors, and tribal representatives.
- **EPA's America Recycles Network.** In April 2020, EPA conducted a survey of the America Recycles Network members to identify relevant actions that could make meaningful improvements to America's recycling system. Their ideas and suggestions have been incorporated into the draft Strategy. (See Appendix B for a complete list of America Recycles Network members.)

EPA intends to provide several opportunities for input on this draft Strategy, including: a public comment period from October 5, 2020 to December 4, 2020; a publicly accessible, recorded webinar providing an overview of the draft Strategy in fall 2020; and discussion and dialogue with participants at the November 2020 America Recycles Summit.

1.2. Overview of the Recycling Process

While the recycling process often differs by commodity and locality, there are essentially four main steps: generation, collection, processing and remanufacturing into a new product. Figure 1 depicts a simplified materials flow of the U.S. recycling system.

- **Generation:** Materials are generated by residents (e.g., households), public spaces (e.g., parks), institutions (e.g., universities), commercial businesses (e.g., retail stores) and industrial facilities (e.g., manufacturing facilities).
- **Collection:** Materials are collected by a private hauler or government entity through curbside recycling, via transfer stations, on-site collection, drop-off centers, and/or scrap yards.
- **Secondary Processing:** The materials are transported by the collector to a processing facility, such as a materials recovery facility or paper processor. At the processing facility, the recyclables are sorted, cleaned of contaminants and prepared for transport to a milling facility or directly to a manufacturing facility. Some commodities may require more processing for additional sorting and decontamination. For example, glass and plastic are often sent to glass beneficiation plants and plastics reclaimers, respectively, where they are processed into mill-ready forms.
- **Manufacturing:** After all necessary processing has been completed, recyclables are made into new products at a recycling plant or other facility, such as a paper mill or bottle manufacturing facility.

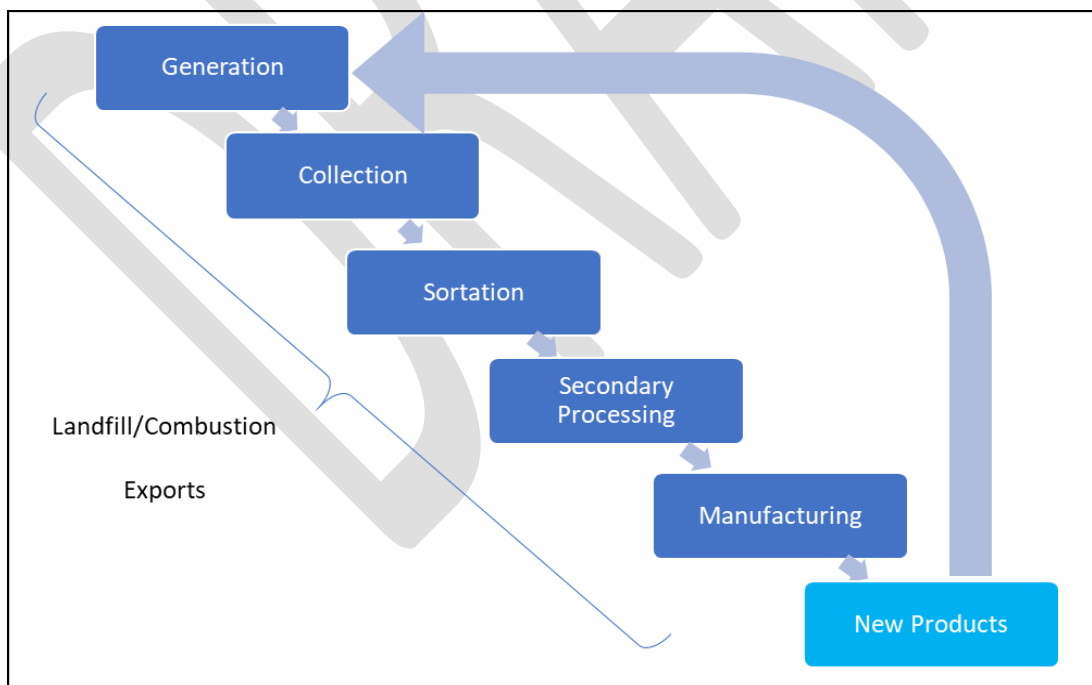


Figure 1: Material Flow of the U.S. Recycling System

1.3. Drivers, Opportunities, and Challenges Facing the U.S. Recycling System

The *National Framework for Advancing the U.S. Recycling System* articulated a number of challenges, including: confusion about what materials can be recycled, which often leads to placing recyclables in the trash or throwing trash in the recycling bin or cart; recycling infrastructure that has not kept pace with today's diverse and changing waste stream; reduced markets for recycled materials; and varying methodologies to measure recycling system performance. This Strategy builds on existing successes and federal, state, tribal, and local efforts to advance the U.S. recycling system. It will seek to identify the critical technology, policy, and programmatic issues we must address as a nation to enhance the resilience of our recycling system.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

Beginning on January 1, 2021, when the plastic scrap and waste restrictions take effect, U.S. imports and exports of plastic scrap are expected to decrease. These international policies, while limiting U.S. exports of recyclable material, offer new incentive to develop domestic market opportunities.



COVID-19 Impacts

The recent COVID-19 public health emergency is affecting recycling programs and markets for recyclables. With more people working from home, residential trash and recyclable collections have increased while commercial trash and recyclables have decreased (Staub, 2020). This has changed the composition of recyclables – for example, less office paper is being generated. Nationwide, office and school closures have lowered the supply of printing and writing paper for recycling; however, the increases in e-commerce and home grocery delivery have resulted in a surge of packaging paper. Containerboard mills are running at 95 percent operating rates, and the need for corrugated boxes has substantially raised old corrugated container (OCC) prices. The higher prices have lifted residential mixed paper prices (Miller, 2020).

2. National Recycling Goal, Strategic Objectives and Actions

On November 15, 2019, EPA committed to develop national recycling goals to galvanize action that will further strengthen the U.S. recycling system. EPA intends to announce the recycling goals in the fall of 2020. EPA developed a list of potential strategic objectives, measures, and associated draft indicators in early 2020 to support the recycling goals and obtained input from the America Recycles Network. EPA proposes three strategic objectives that will contribute to strengthening the U.S. recycling system, and which serve as the organizing framework under which proposed actions in this draft Strategy are organized:

- 1. Reduce Contamination**
- 2. Increase Processing Efficiency**
- 3. Improve Markets**



EPA is seeking public comment on the actions in this section and specifically asks for the following information:

Key questions to consider in the comment period include:

- Of the proposed actions, which are the most important and would have the greatest positive impact at the local, regional, and national level?
- What are the key implementation steps and milestones necessary to successfully implement these actions?
- Is your organization willing to lead an action? Or collaborate with others to implement the actions? What factors would your organization take into account when considering whether to lead an action?
- What are the most important roles and/or actions for federal agencies to lead?
- Are there other actions that should be included in the Strategy?
- Do you have additional information or recommendations to inform these or other proposed actions?

Following the comment period, EPA intends to narrow the actions to the most important and impactful while ensuring the inclusion of key actions that may not be included in this draft; identify the leaders, partners, and collaborators whose contributions are needed for success; and establish the measurement methodology and targets for the national recycling goals to track and report on progress. EPA anticipates that this process may result in a smaller set of actions than what is proposed in this draft Strategy and will focus on actions that:

- Address key opportunities and barriers to strengthening the recycling system,
- Recognize the different needs of geography, capability, and community size,
- Support the role of states, tribes, and local governments, and
- Create momentum for future actions and success.

Objective 1: Reduce Contamination in the Recycling Stream

Contamination can occur at various times throughout the recycling process and negatively affects the ability of a material recovery facility (MRF) or secondary processing facility to produce high-quality, clean recycled materials that can serve as feedstock for new materials and products. Reducing contamination in the recycling stream will enable more material to be recycled and can result in less material being discarded and higher quality recycled materials produced for manufacturing feedstock.



1.1. Enhance education and outreach to consumers on the value of recycling and how to recycle properly.

1.1.1. Develop messaging and educational materials about the importance and value of recycling. While it is generally understood that recycling is one action consumers can take to help protect the environment, additional messaging and educational materials emphasizing the environmental, social, and economic benefits of recycling need to be produced and made available to state, local and tribal governments. For example, the America Recycles Network plans to publish a jobs infographic to help consumers understand the economic benefits of recycling.

1.1.2. Develop common recycling messages on key issues to promote awareness, increase recycling participation and ensure a more consistent stream of recyclable material. Common messages on key recycling issues are critical to reducing contamination and ensuring a more consistent material stream. For example, the America Recycles Network plans to publish an infographic to highlight positive recycling messages.

1.1.3. Identify effective ways to educate the public about recycling, test those methods with pilot educational campaigns, and then incorporate into a national program. There are a variety of approaches and strategies to develop effective messaging campaigns. For example, one approach, community-based social marketing (CBSM), emphasizes direct contact among community members and the removal of structural barriers, since research suggests that such approaches are most likely to inspire behavior change (McKenzie-Mohr, 2011).

1.1.4 Enlist the assistance of traditional and social media, governments, and product manufacturers to disseminate messaging. Elevating the awareness of the importance of recycling and developing new educational materials and campaigns can be supported and advanced by traditional and social media, governments, and product manufacturers to increase their impact. For example, several states and local governments already create recycling toolkits, direct mailers, “oops” cart tags, and brochures.

Connecting governments and product manufacturers could be a strategy for amplifying and more broadly disseminating messaging through traditional and social media.

1.1.5. Improve consistency of labels for recyclable products, recycling bins, and trash bins. Consistent labels, signage, symbols, and messaging for recyclable products, recycling bins, and trash bins can reduce consumer confusion about what products can be recycled and which bins are appropriate for different recyclable materials.

1.2. Increase coordination, availability and accessibility of information on recycling programs and policies at the federal, state, tribal and local levels.

1.2.1. Strengthen federal coordination to support and encourage actions to strengthen the U.S. recycling system. To support and encourage action to address the challenges facing the U.S. recycling system, federal partners could formalize their collaboration through a workgroup dedicated to identifying opportunities to leverage existing programs and funding. Actions could include developing a common policy statement supporting the national recycling goal.

1.2.2. Conduct an analysis of different state and local policies that could address recycling challenges. State and local governments have adopted various policy approaches to address the challenges facing the recycling system. Conducting an analysis of these different state and local policies for their effectiveness could help inform decision makers nationally.

1.2.3. Increase awareness of and continue voluntary public-private partnerships. Public-private partnerships are a proven, effective way to leverage government and private sector commitments and translate them into results. For example, WasteWise is one of EPA's longest-standing partnership programs and has involved thousands of organizations, ranging from corporations and businesses to educational institutions and governments.

1.2.4. Share best practices on policies, programs, funding opportunities, and outreach through a free, publicly accessible on-line clearinghouse. Through the America Recycles Network, the U.S. Chamber of Commerce Foundation launched an online, virtual clearinghouse as part of its Beyond 34 initiative, which is aimed at increasing the recycling rate in the United States by providing a scalable model to optimize recycling and recovery systems. The clearinghouse was created to include information about effective education and outreach campaigns, existing reports about recycling policies in other countries, information on free, open-source, downloadable labels for recycling bins, lessons learned from COVID-19, and more.

Objective 2: Increase Processing Efficiency

Recycling infrastructure in the United States has not kept pace with the rapidly changing recyclables stream. Investment and innovation are needed to increase the efficiency of materials processing infrastructure and create a more resilient recycling system. Examples of efficiencies that can be attained through additional investment include: decreasing the cost of sorting recyclable materials; decreasing the amount of residuals that are removed from the recycling stream to produce properly sorted recyclable products; improving the quality of recyclables exiting the materials sorting process; and increasing the proportion of recyclable materials post-sort compared to the amount of recyclables entering the MRF.



Anticipated benefits from infrastructure investment include adoption of innovative technologies for processing equipment; improved data availability and granularity for a range of recyclables, and economic benefits and job creation from expanding recycling capacity.

2.1. Improve understanding of available recycling infrastructure and needs.

2.1.1. Create a national map of existing recycling infrastructure to depict available recycling system capacity. Develop a map of existing recycling infrastructure, that includes key elements of the recycling system, from available collection points (e.g., drop-off centers, scrap yards, MRFs), sortation and secondary processing facilities (e.g., MRFs, baling operations, scrap yards, plastics reclaimers, pulp mills, glass beneficiation facilities), and ultimately remanufacturing centers (e.g., plastic/products manufacturers, paper/paperboard mills, steel/aluminum mills, glass product/packaging manufacturers).

2.1.2 Conduct a needs assessment of recycling infrastructure in the United States. Using information in the national map and other sources, conduct a needs assessment of the nation's recycling infrastructure. The needs assessment could then be used to improve infrastructure in the most effective way possible.

2.2. Increase awareness of available public and private funding and incentives and effective strategies to access the funding.

Public and private funding sources to support enhancements to infrastructure exist, but they are dispersed and not easily identifiable for state, tribal and local governments. Best practices and successful models addressing key issues, such as environmental impacts, collection costs, processing costs, and revenue from material sales, should be compiled and made publicly accessible. Available funding sources at the federal level should be compiled and shared.

2.3. Continue to fund research and development of new technologies and processes that result in environmental gains from improvements in manufacturing and processing efficiencies.

Funding through grants and other mechanisms can support identification and evaluation of strategies and new technologies that can be scaled up and replicated across the country.

2.4. Increase consideration of the sorting process in the design of new products.

Manufacturers of new products and packaging designs may not be aware of the impacts their design choices have on the ability of MRFs and secondary processing facilities to recover their materials from the recycling stream. The use and promotion of design guides for recycling, as well as collaborative dialogues among MRFs and product designers and manufacturers, are strategies that should be explored.

2.5. Develop and implement national recycling system definitions, measures, targets, and performance indicators.

As part of the development and implementation of the final National Strategy, EPA anticipates announcing key metrics that have been selected as national goals in November 2020. Following that announcement, EPA will work to develop standardized definitions, measurement methodologies, baselines, and targets for each of the national goals. EPA will also work to identify and develop additional metrics that will help advance the understanding of how the recycling system is performing. This effort will improve data availability and granularity for a range of recyclables and support tracking and measuring progress nationally.

Objective 3: Improve Markets

There is a need to improve domestic markets for recyclable materials and recyclable products, as well as to better integrate recycled materials into product and packaging designs. The decrease in available markets for recyclable materials has impacted the economics of recycling both within the United States and worldwide.



Benefits of increasing the use of recycled materials include local job creation, added resiliency to market disruptions, cost savings to local municipalities from improved/more robust recycling markets, increased opportunities for consumers to “buy recycled” and support recycling markets, and new markets for less-often-recycled materials.

3.1. Conduct market development workshops and dialogues to spur market development for recycled materials, educate stakeholders on the value of secondary materials, and identify solutions to recycling system challenges.

Coordinate dialogues among private and public recycling programs, manufacturers, and other relevant stakeholders on actions that can be taken to strengthen markets for recycled materials at both the regional and local level. Market development workshops, such as those held by EPA, the Northeast Recycling Council (NERC), and the Southeast Recycling Development Council (SERDC) in 2019, are one mechanism to bring together targeted stakeholders to engage in discussions about specific market development issues.

3.2. Produce an analysis of different types of end markets that considers resilience, environmental benefits, and other relevant factors for decision makers.

Markets vary in their economic viability, stability, and how much they benefit the environment. An analysis of end markets can inform decision makers about the value and potential benefits associated with investing in activities to strengthen the nation’s recycling system.

3.3. Increase data availability and transparency about recyclable materials generated and the materials manufacturers need.

Data about the amount of recycled material generated, type of materials, and location of materials, often is not readily available or easy to find. Improving the availability and transparency of data about recycled materials would be beneficial to governments, industry, and others. For example, it could enable potential buyers and sellers of materials to be more easily matched.

3.4. Increase manufacturing use of feedstocks in the regions where they are generated.

Often, manufacturers are not aware of the recycled material feedstock in their area or aware of the potential to use that material. Communities do not always generate enough recycled material that is worthwhile to transport long distances to other manufacturers who might be able to use the material. One way to help strengthen and increase the use of recycled material as feedstock is by ensuring that manufacturers in the regions where they are generated can take advantage of the available supply.

3.5. Increase demand for recycled materials through policies, programs, initiatives, and incentives, focusing on materials with less mature markets.

3.5.1. Identify strategies for addressing materials with less mature markets.

Consider ways to assist less mature markets across the country, possibly partnering with companies and manufacturers or connecting markets across regions.

3.5.2. Identify strategies to address barriers to using recycled content in products.

Address barriers to recycled content use in products, such as supply or contamination, and collaborate with stakeholders and manufacturers to identify strategies to tackle those barriers.

3.5.3. Develop public messaging about buying products made with recycled content.

Determine best approaches and strategies to develop effective messaging campaigns encouraging closing the recycling loop by buying new products made from recycled materials. There are thousands of products that contain recycled content, e.g., aluminum cans, cereal boxes, newspapers, and car bumpers.

3.5.4. Host dialogues with manufacturers and other stakeholders to learn what policies, programs, and incentives would promote greater use of recycled content in products. Encourage communication between EPA and manufacturers and stakeholders to identify programs, challenges, incentives and policies that fit best within their market to increase recycled content.

3. Next Steps: Finalize the draft *National Recycling Strategy*

Following release of the draft Strategy, EPA will open a public comment period. Due to the action-oriented nature of this draft Strategy and the need for commitments to help ensure its execution, ongoing outreach and engagement will continue during the comment period and during finalization of the Strategy. EPA will continue to work with stakeholders to develop metrics for each objective in the Strategy.

Implementation of the Strategy is expected to be an iterative process as resources, entities to lead efforts, and needs change over time. EPA will help facilitate the implementation of actions in the Strategy and provide routine status updates to interested stakeholders.

4. References

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Appendix A: Examples of Existing National Recycling Efforts for Specific Materials

EPA's SMM program broadly covers materials use in the United States and EPA's activities have been covered by the [EPA Sustainable Materials Management Program Strategic Plan for Fiscal Years 2017 – 2022](#). EPA has several long-standing programs and efforts underway to advance SMM, including the sustainable management of food and electronics management. These programs will be leveraged, as necessary, to move activities under the draft Strategy forward.

Organic Waste

Composting and the sustainable management of food are key aspects of managing organic waste. The following are examples of national efforts in these areas:

- The [Winning on Reducing Food Waste Initiative](#) is a U.S. Environmental Protection Agency (EPA), U.S. Food and Drug Administration (FDA), and U.S. Department of Agriculture (USDA) effort to lead the nation in reaching its 50% reduction in food waste by 2030 goal. The Winning on Reducing Food Waste Federal Interagency Strategy lays out a path to prioritize and coordinate actions in food loss and waste such as: education and outreach, research, community investments, voluntary programs, public-private partnerships, tool development, technical assistance, event participation, and policy discussions on the impacts and importance of reducing food loss and waste.
- ReFED's (Rethink Food Waste Through Economics and Data) [Roadmap to Reduce Food Waste](#) report maps a national plan to reduce food loss and waste in the United States. It identifies four priority actions that are needed to significantly reduce wasted food: increased funding for food waste reduction, policy changes to tax incentives, safety regulations, and permitting procedures; innovation to develop new technology and business models; and a broadscale education and awareness campaign to change consumer and food business behaviors.
- [The Further with Food: Center for Food Loss and Waste Solutions](#) website hosts a suite of tools and information focused on preventing food loss and waste in the United States. Further with Food is a public-private partnership and supported by the following organizations: the Academy of Nutrition and Dietetics, Feeding America, the Food Marketing Institute, the Grocery Manufacturers Association, the Innovation Center for U.S. Dairy, the Keystone Policy Center, the National Consumers League, the National Restaurant Association, Natural Resources Defense Council, the Rockefeller Foundation, and the U.S. Department of Agriculture, the U.S. Environmental Protection Agency, the World Resources Institute, and the World Wildlife Fund.

Electronic Waste

Electronic waste is a growing part of the waste stream as electronics become more integrated into our daily lives. Recycling these products once they reach the end of their life both protects the environment and allows us to recover valuable materials for reuse in new products.

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- EPA promotes responsible electronics recycling through its voluntary [SMM Electronics Challenge](#). The Challenge focuses on electronics manufacturers, brand owners, and retailers and encourages them to send used electronics (collected from the public, businesses, and within their own organizations) to third party certified electronics refurbishers and recyclers. The program also recognizes significant achievements to incorporate sustainability and life cycle thinking into products, programs, and services. The Challenge aims to:
 - Increase rates of responsible electronics recycling and reuse,
 - Promote data transparency and accountability by making data publicly available, and
 - Reduce negative environmental effects across the lifecycle of electronics.

In 2018, Challenge participants diverted 194,500 tons of end-of-life electronics from landfills. Currently there are 11 companies participating in EPA's Electronics Challenge (U.S. EPA, 2019b).

Appendix B: List of America Recycles Pledge Signers

(as of 10/2/20)

- 8-hz
- AB&I Foundry
- Allegany County Recycling
- Amazon
- American Beverage Association
- American Biogas Council
- American Chemistry Council
- American Forest & Paper Association
- American Iron and Steel Institute
- AMERIPEN
- Ames Laboratory
- AMP Robotics
- Arcadis
- Argonne National Laboratory
- Arkansas Department of Energy and Environment, Division of Environmental Quality
- Artist at Heart
- Associated Builders and Contractors
- Association of New Jersey Recyclers
- Association of Plastic Recyclers
- Associated Recyclers of Wisconsin
- ASTSWMO
- Austin Rubber Company
- Axion Structural Innovations, LLC
- Ball Corporation
- Battery Council International
- Benton County Solid Waste District, AR
- Berry Global
- Bioko, LP.
- Brightmark
- Cabka
- California Metals Coalition
- Camden County Division of Environmental Affairs
- Can Manufacturers Institute
- Carilion Clinic
- Carton Council of North America, Inc.
- Cascadia Consulting Group, Inc.
- Cast Iron Soil Pipe Institute
- Central Virginia Waste Management
- Chemehuevi Indian Tribe
- Church of the Ascension
- Circular Matters LLC
- City of Boston
- City of Lebanon Solid Waste
- City of Milwaukee, WI
- City of Phoenix, AZ
- City of San Jose
- Civil Agents
- Clackamas County
- Closed Loop Partners
- Closed Loop Plastics
- Coalición de Reciclaje de Puerto Rico
- Coca-Cola
- Colgate-Palmolive Company
- Colorado Department of Public Health and Environment
- Comanche Nation Environmental
- Compology
- Construction & Demolition Recycling Association
- Construction and Demolition Recycling, Inc.
- Continuum Materials
- Copper Development Association Inc.
- County of Greenville, SC
- Cozzi Recycling, LLC

List of America Recycles Pledge Signers (continued)

- CTC Foundation
- C-Square International Trading
- Curb My Clutter
- Danone
- Dart Container Corporation
- Deer Valley Resort
- Delaware River and Bay Authority
- Delta Institute
- Display Pack
- District of Columbia Department of Public Works
- Diverse Recycling Solutions, LLC
- Divert Organics
- Donegan Elementary School (Bethlehem, PA)
- Don't Waste Durham
- Dutton Polymer Group
- EcoGlobal
- EcoRich LLC
- EFS-plastics, Inc.
- End of Waste Foundation
- Environmental Council of the States
- Environmental Packaging International – Lorax
- Environmental Paper Network
- Environmental Research and Education Foundation
- ePower Systems and Battery Inc.
- ERA Environmental Consulting
- ExxonMobil
- Fabri-Kal Corporation
- FABSCRAP
- First Solar
- Food Rescue
- Foodprint Group
- Foodservice Packaging Institute
- Ford Motor Company
- Fort Peck Tribes Office of Environmental Protection
- Fortune WEEE Solutions, Inc.
- Foundation for Plastic Recycling
- Frontline Waste
- General Mills
- General Motors
- Georgia State Society Daughters of the American Revolution
- Glass Packaging Institute
- GLASS WRX SC
- Global Co Lab Network
- GO Box Reuse Systems
- Green Minds Group
- GreenBlue Institute
- Grove Collaborative
- Hallotex
- Hartsburg-Emden Community Unit School District, IL (Hartem) Green Team
- Healthy Communities of Brownsville, TX
- Highland Park Student Recycling Committee
- Household & Commercial Products Association
- Igloo Products Corp.
- Illinois Environmental Protection Agency
- Innovative Injection Technologies (i2-tech)
- Institute of Scrap Recycling Industries
- Interior Removal Specialist, Inc.
- Intertape Polymer Group
- iWastenot Systems
- JEE Foods
- JRMA | Architects Engineers
- Kathleen Stroud Global
- Keep America Beautiful
- Keep California Beautiful

List of America Recycles Pledge Signers (continued)

- Keep Louisiana Beautiful
- Keep Thomas County Beautiful
- Keurig Dr Pepper
- Kheops International, Inc.
- Kimball Sustainable Healthcare
- La Pastorale
- Lane County, OR
- Lane County's Waste Management Division
- Li-Cycle
- Lid Vizion, LLC
- LifeFund NPO
- Long Beach Township, NJ
- Love for Learning Foundation
- Machinex Technologies Inc.
- MariMatic Oy
- Mars, Inc.
- Maryland Environmental Services
- Massachusetts Department of Environmental Protection
- Mattress Recycling Council
- McDonald's
- McWane, Inc.
- Mercury Polymers, LLC
- Middlesex County SWM
- Midwest Elastomers Inc.
- Minnesota Pollution Control Agency
- Miss Mother Nature, Inc
- mobius pcb
- Monroe County Department of Environmental Services
- Monterey Regional Waste Management District, California
- Montgomery County Environmental Services, Ohio
- Montgomery County, Maryland
- More Recycling
- MSW Consultants
- Mycocycle, Inc.
- National Association of Convenience Stores
- National Association of Counties
- National Association of Manufacturers
- National Association of Regional Councils
- National Center for Electronics Recycling
- National League of Cities
- National Recycling Coalition
- National Waste and Recycling Association
- necoPlastics
- Nestle
- Net Your Problem
- Nevada Division of Environmental Protection--Nevada Recycles Program
- New York City Department of Sanitation
- New York State Department of Environmental Conservation
- North Carolina Department of Environmental Quality
- Northeast Recycling Council, Inc.
- Ohio Recycling Coalition Primary
- Old Unicoi Trail Chapter, NSDAR
- Oregon Department of Environmental Quality
- Oxner Legha Law Firm
- PakTech
- Paper Recycling Coalition
- PepsiCo
- Phoenix Used Clothing Corp
- Plastics Industry Association
- Portland Cement Association
- PourAway
- Precious Plastic Southwest

List of America Recycles Pledge Signers (continued)

- Professional Recyclers of Pennsylvania
- Puerto Rico Solid Waste Management Association
- re:3D
- re:nü Waste Management
- ReCollect Systems, Inc.
- Recology
- Recycle Across America
- Recycle Coach
- RecycleGO
- Recycling Equipment, Inc.
- Recycling Rules, Inc.
- Recyclist
- Refresh Glass, LLC
- Repolytex, LLC
- Republic Services
- Retail Industry Leaders Association
- Sonoran Studio Foundation
- Sony Electronics, Inc.
- South Carolina Department of Commerce
- South Carolina Department of Health and Environmental Control
- South Carolina Department of Labor, Licensing and Regulation
- Southeast Recycling Developing Council
- Specialty Graphics Imaging Association
- Steel Manufacturers Association
- Suppliers Partnership for the Environment
- Sustainable Research Group, LLC
- Sunshine Recycling
- Target
- TCL North America
- Technologies International Corporation (TIC)
- Revolution Plastics
- Revolution Systems
- Royal Biotech Inc
- Rubicon Global
- Samsung Electronics America
- San Luis Valley Ecosystem Council
- Sane J
- SBK Recycle
- SBM Management
- SC Johnson
- SCRAPP
- Sequoia Custom Cabinetry
- Shark Solutions
- Sherando DECA Chapter
- Sipayik Environmental Department
- Smithsonian Conservation Commons
- Solid Waste Association of North America
- Tejas
- The Aluminum Association
- The Dow Chemical Company
- The Metropolitan Environmental Trust
- The Procter & Gamble Company
- The Recycling Partnership
- The U.S. Conference of Mayors/MWMA
- The Vinyl Institute
- Think Zero LLC
- Titus MRF Services
- TOMRA
- Topolytics
- Town of Branford
- Tri-State Area Scholarship Organization
- Trivium Packaging
- Tyler Pipe and Coupling
- Unilever North America
- Upcyclers Network

List of America Recycles Pledge Signers (continued)

- Urban Mining Northeast
- U.S. Chamber of Commerce
- U.S. Chamber of Commerce Foundation
- U.S. Environmental Protection Agency
- Van Dyk Recycling Solutions
- Verdex Technologies Inc.
- Verizon
- Vermont Department of Environmental Conservation
- Walmart, Inc.
- Washburn University
- Waste Management Recycle America
- WasteCap Resource Solutions, Inc.
- Wilborne Consulting
- Winter Bros. Waste Systems
- Young Minds Inspired
- Zero Waste Society
- Zerocycle
- Zhang and Company