



ISRI is the voice of the recycling industry, promoting safe, economically sustainable and environmentally responsible recycling through networking, advocacy and education.



October 2, 2020

Office of Resource Conservation & Recovery  
U.S. Environmental Protection Agency  
Washington, DC  
Email: [ORCRMMeasurement@epa.gov](mailto:ORCRMMeasurement@epa.gov)

### **REF: Comments on National Recycling Goals**

Thank you for the opportunity to provide comments on the USEPA’s draft National Recycling Goals. I submit these comments on behalf of the Institute of Scrap Recycling Industries, Inc. (ISRI), and we look forward to working with USEPA on their final development.

Please note that across all the objectives, we recommend consistency when referring to “Material Recovery Facilities (MRFs) and secondary processing facilities.” We have attempted to add references to both in all objectives and metrics.

### **OVERVIEW**

The Overview paragraphs presented as part of this call for comments should be repurposed as an overview for these National Recycling Goals. It would provide an opportunity to summarize the intent of these goals and to connect them to the National Recycling Strategy. Further, we recognize that an overarching goal is for economic opportunity and job creation; as noted below, we do not believe job creation itself is a good metric for evaluating improvement in the recycling system, but making note of it in the overview connects this important objective with the National Recycling Goals.

The following is our recommended version of the overview as an explanation of the purpose of the National Recycling Goals.

Begin text:

#### *National Recycling Goals: Overview*

U.S. EPA Administrator Andrew Wheeler announced at the 2019 America Recycles Summit that EPA would work to establish national recycling goal(s) in 2020 to inspire action and drive participation, innovation and progress across the entire value chain, including consumers. EPA recognizes that collective and collaborative commitments are best achieved when there are common goals. Thus, these National Recycling Goals were developed to align with the [draft] National Recycling Strategy that identifies objectives and actions needed to create a strong, more resilient U.S. recycling system and leads to economic opportunity and job creation.

The National Recycling Goals aim to create standardized definitions for the recycling industry to keep pace with today’s diverse and changing waste and recycling system. These objectives include metrics that will



quantify the performance of different components of the recycling system by setting benchmarks for effective evaluation of the success of collective efforts to significantly improve recycling in the United States. Progress made in recycling will support further economic opportunity for manufacturers that rely on critical feedstock from the recycling supply chain, leading to growth in manufacturer demand for recycled materials. The result will be direct job creation in the recycling industry expanding to meet that demand growth and indirect job creation in manufacturing and supportive industries that will continue to consume recycled materials.

The metrics outlined below are based on the broad objectives of the [draft] National Recycling Strategy and are divided into four categories: assessing recycling performance, reducing contamination, increasing processing efficiency and strengthening recycled material markets. The draft strategy identifies actions needed to address these challenges, building on the collaborative efforts by stakeholders from across the recycling system that began under the [National Framework for Advancing the U.S. Recycling System](#).

End text.

## I. SYSTEM-WIDE RECYCLING MEASURES TO ASSESS RECYCLING PERFORMANCE

Edits: The sentence, “Investment and innovation are necessary to strengthen the U.S. recycling system and support industry-wide job creation” – while correct – does not line up with what appears to be the purpose of this objective: measuring performance today and tomorrow. Investment and innovation can help move the needle on the objective, but ultimately we are talking about measuring performance. We would recommend removing that sentence since its place belongs in one of the other objectives.

Furthermore, although job creation is critical for any industry, there are recycling operations that incorporate a range of technical and technological solutions that require different levels of human resource. Thus, the number of jobs in recycling would not be a good measure of recycling performance.

New text is underlined, deleted text has a cross-through:

A stronger, more resilient U.S. recycling system is a critical component in reducing the environmental impacts of materials across their lifecycle. ~~Improvement of~~ Increases in the U.S. recycling rate, access rate, participation rate, ~~job creation,~~ capture rate and a decrease in tonnage of recyclables landfilled are needed for a more robust recycling system. ~~Investment and innovation are necessary to strengthen the U.S. recycling system and support industry-wide job creation.~~ Below are metrics that are under consideration to assess the system-wide performance of recycling.

- **Recycling Rate:** The percentage of the total amount of ~~discarded or~~ collected used materials ~~generated~~ that are utilized as feedstock for the manufacture of new products.
- **Recycling Access Rate:** The percentage of households that have access to recycling ~~on par with trash collection~~ services.
- **Participation Rate:** The percentage of ~~eligible users~~ households that have access to recycling services that are regularly using a the recycling service.
- **Recycling Jobs:** ~~The number of jobs supported directly and indirectly by the recycling industry, including upstream supply chain economic activities.~~
- **Capture Rate:** The percentage of recyclable material generated that are recycled.
- **Recyclables Landfilled:** The tonnage of recyclable materials that are landfilled.

Availability of Data: The good news is that good data is already available for all of these metrics, although there is always room for improvement.

Rank Order: As noted above, we recommend eliminating the metric on jobs. The other metrics are very useful, but if we had to prioritize them, we recommend the following:

1. Recycling Rate: Knowing that materials successfully pass through recycling **AND** are consumed by manufacturers is the most effective measurement for the recycling system's resiliency.
2. Capture Rate
3. Recyclables Landfilled
4. Participation Rate
5. Recycling Access Rate

## II. REDUCING CONTAMINATION IN THE RECYCLING STREAM

Definition: The summary paragraph is generally clear, but requires a definition of contamination. The ISRI Inbound MRF Specifications ([www.scrap2.org/specs/](http://www.scrap2.org/specs/)) define contamination "as anything not considered acceptable in the specification." The Specifications have clear guidelines on what is forbidden because such materials, by their presence in a collection of recyclables, renders the recyclables unusable and thus prevents the recyclables from successfully being recycled.

Edits: This objective is the only of the three not focused on the overall system that does not describe a way to make improvements. ISRI believes that an EPA-directed, nationwide education and awareness campaign would be the most effective means to improving consumer understanding of the steps they can take to enhance recycling through lower contamination in their recycling bins.

New text is underlined, deleted text has a cross-through:

Contamination – defined as anything not considered acceptable in recycling or renders materials unrecyclable – 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. Contamination occurs at multiple points including curbside, in-bound and out-bound and in residuals. Enhancing consumer education and awareness about the steps citizens can take at home to reduce contamination in the recycling bin will bring contamination rates down and successful recycling output up. Below are metrics expressed as a percentage that could be used to assess contamination.

- **Curbside Contamination**: The percentage of materials that residents place in their recycling collection that are not accepted in their curbside program or acceptable materials that have high amounts of residue that render the materials unrecyclable.
- **MRF In-Bound Contamination**: The percentage of materials arriving at the MRF or secondary processing facility that are not accepted by the facility or acceptable materials that have high amounts of residue that render the materials unrecyclable.
- **Recycled Commodity Contamination**: The percentage of contaminants in out-bound recycled commodity materials that exceed the commodity's specifications for the presence of off-spec materials and/or residue that renders the materials unusable such as paper, plastic, glass and metals.
- **Residual Rate**: The percentage of unrecyclable materials coming out of the MRF or secondary processing facility that are sent to combustion facilities or landfills.

Availability of Data: Data on contamination rates is inconsistent across regions but there may be enough to provide a generalized picture of what is passing through MRFs that are recyclable or not recyclable. Much depends on setting clear federal definitions for recycling, recyclable materials, contamination and MRFs.

Rank Order: The metrics are all very useful, but if we had to prioritize them, we recommend the following:

1. MRF In-bound contamination: This metric is the best at universally understanding contamination issues within recycling, especially as materials come from a variety of sources (not just residences) and the recycling capabilities (*e.g.*, recycling infrastructure) will always vary on output.
2. Residual Rate
3. Curbside Contamination
4. Recycled Commodity Contamination

### III. INCREASING MATERIALS PROCESSING EFFICIENCY

Edits: The first sentence of the summary paragraph addresses a matter that is somewhat different from what is being defined by this objective. It relates to the development of a vast array of packaging and products that incorporate a wide range of materials and design elements but without life-cycle considerations. We suggest this sentence be modified to properly reflect the issue.

New text is underlined, deleted text has a cross-through:

~~Recycling infrastructure in the U.S. has not kept pace with t~~ The evolving recyclables stream has affected recycling efficiency. 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 improving the capacity utilization rate, decreasing the cost of sorting recyclable materials and increasing the percentage of recyclable materials post-sort compared to the amount of recyclables entering the MRF or secondary processing facility. Below are metrics that could be used to assess materials process efficiency.

- **Capacity Utilization Rate**: The total tonnage of materials processed by MRFs or secondary processing facilities as compared to the total tonnage of materials that MRFs or secondary processing facilities are capable of processing.
- **Processing Cost**: The per-ton operating and capital costs for MRFs or secondary processing facilities to receive, separate and prepare recyclable materials for end-user markets.
- **Processing Yield**: The percentage of materials recovered by a MRF or secondary processing facility through sorting and processing compared to the volume of materials entering the MRF or secondary processing facility. ~~incoming materials~~.

Availability of Data: MRFs and secondary processing facilities will have this data, but for some, such data may be considered business confidential. As USEPA pursues a national recycling strategy to support these goals, proper mechanisms for data protection will need to be incorporated.

Rank Order: The metrics are all very useful, but if we had to prioritize them, we recommend the following:

1. Processing Yield: Although the other two metrics help us to understand if a recycling operation is running efficiently, we can best learn that efficiency through the amount that successfully passed through the operation, correlating with a decline in materials sent to landfill.
2. Processing Cost
3. Capacity Utilization Rate

#### IV. STRENGTHENING MARKETS FOR RECYCLED MATERIALS

Edits: Increasing consumption of recyclable products is necessary, but it is not related to this objective's focus on increasing manufacturer demand for recycled materials. We recommend removing that component from the opening sentence so that the objective's summary is more clear about the objective's intent.

New text is underlined, deleted text has a cross-through:

There is a need to improve domestic markets for ~~recyclable materials and recyclable products, as well as to~~ recycled materials through better integration of recycled materials into new products and packaging designs. Policies, programs, initiatives and incentives should focus on boosting demand for recycled content and materials, including with a particular focus on building ~~with~~ less mature markets. Strengthening markets for recycled materials will provide local jobs, add resiliency to market disruptions and create cost savings for local municipalities. Below are metrics that could be used to assess markets for recycled materials.

- **Recycled Commodity Quality:** The quality of post-processed recycled materials marketed to ~~for~~ manufacturers based on standard industry specifications.
- **Domestic Utilization:** The percentage of recycled materials used domestically as compared to the amount exported.
- **Recycled Content:** The percentage of recycled content within manufactured goods.
- **Commodity Value:** The average per-ton value of post-processed recycled materials.

Availability of Data: Data should be generally available on these metrics, although commodity quality and recycled content could vary depending on the means of reporting by both recyclers and manufacturers.

Rank Order: The metrics are all very useful, but if we had to prioritize them, we recommend the following:

1. Recycled Content: This metric is the strongest for monitoring changes in market demand for recycled materials through changes in the amount of recycled materials that are incorporated into new products. It is further supported by innovation and investment in materials processing efficiency that lead to enhancements in the other metrics (in this objective as well as the other objectives) and ultimately result in more consumption of recycled commodities.
2. Recycled Commodity Quality
3. Domestic Utilization
4. Commodity Value

If we can be of further help, please do not hesitate to contact me at [aadler@isri.org](mailto:aadler@isri.org), (202) 662-8514.

Sincerely,



Adina Renee Adler  
Vice President of Advocacy