The Aluminum Association

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July 25, 2022

Environmental Protection Agency
Office of Resource Conservation and Recovery
1200 Pennsylvania Avenue, NW (5304T)
Washington DC, 20460

Dear Director Hoskinson,

Attached, please find the Aluminum Association's comments in response to the Federal Register notice requesting input on EPA's Recycling Education and Outreach Grant Program & Model Recycling Toolkit.

The Aluminum Association represents the full value chain of aluminum industry manufacturers and their employees in the United States, ranging from primary production to value-added products to recycling. On behalf of the Association and its member companies, I appreciate the opportunity to provide these comments to the Office of Resource Conservation and Recovery.

Please let me know if you have questions or need additional information.

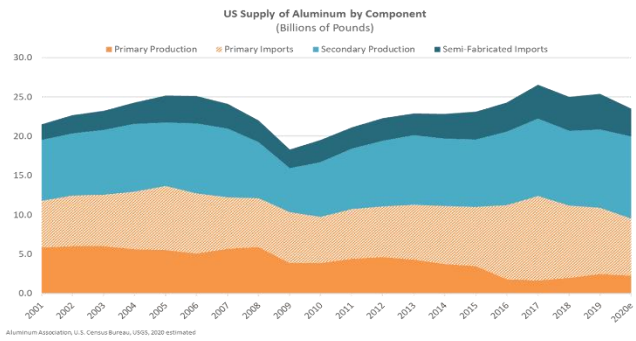
Respectfully submitted,

John J. Richard
Policy Analytics Associate
The Aluminum Association

87 FR 35197: Request for Information: Recycling Education and Outreach; Grant Program and Model Recycling Program Toolkit
Docket ID: EPA-HQ-OLEM-2022-0375-0001
July 25, 2022

Introduction & Background - The U.S. Aluminum Industry

The Association is the voice of the aluminum industry in the United States, representing aluminum producing companies and their workers that span the entire aluminum value chain from primary production to value-added products to recycling, as well as suppliers to the industry. The Association is charged with developing global standards, business intelligence, sustainability research, and industry expertise for its member companies, policymakers, and the public. Altogether, the Association's member companies produce 70 percent of the aluminum and aluminum products shipped in North America, and the U.S. aluminum industry across the value chain directly employs more than 164,000 union and non-union workers and indirectly supports an additional 470,000 workers. Through its activity, the economic impact of the U.S. aluminum industry adds $176 billion to the economy annually.[1]



Aluminum production in the U.S. is increasingly a story of scrap recovery and recycling. Recycled aluminum uses only 7 percent of the energy involved in the smelting of new aluminum and vastly reduces emissions.[2] About 75 percent of all aluminum ever produced is still in use today due to its light weight, corrosion resistance, and ability to be circularly recycled.[3] The utilization of recycled aluminum also reduces dependance on imports, making the domestic aluminum supply chain more resilient.

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[1] The Aluminum Association, *The Economic Impact of the Industry: 2022 Data* (John Dunham & Associates, 2022) https://aluminum.guerrillaeconomics.net/reports/e6a246b2-625d-49a2-a8c1-138ee4883514 (accessed July 25, 2022).

[2] Marshall Wang, *The Environmental Footprint of Semi-Fabricated Aluminum Products in North America: A Life Cycle Assessment Report* (The Aluminum Association, 2022) https://www.aluminum.org/sites/default/files/2022-01/2022_Semi-Fab_LCA_Report.pdf (accessed July 25, 2022).

[3] Miles Prosser, *Global Aluminium Demand to Reach New Highs After Covid* (International Aluminium Institute, 2022) https://www.prnewswire.com/news-releases/global-aluminium-demand-to-reach-new-highs-after-covid--iai-301508086.html (accessed July 25, 2022).

Materials recovery facilities typically process aluminum through foil, aerosol cans, or beverage cans. While all three products are recyclable, beverage cans are by far the most widely researched and accepted by materials recovery facilities. The aluminum can continues to be the most valuable beverage package in the recycling bin, with a value of $991/ton compared to $205/ton for PET and a negative value of $23/ton for glass.[4] Aluminum beverage cans represent 12.5 percent of typical material recovery facility revenues in states with recycling refund/container deposit programs and 33 percent of typical material recovery facility revenues in states without recycling refund laws.[5] Without this important revenue stream, most material recovery facilities would either not be able to operate or have to radically alter their business practices and models. Apart from improvements to materials recovery facilities themselves, which is addressed by 87 FR 35200, the most effective way to strengthen our industry's ability to recover aluminum scrap is through recycling education that is informed by local infrastructure capabilities that is designed to drive engagement with recycling programs.[6]

Recycling Education Must be Locally Evaluated & Informed

The Recycling Education and Outreach Grant Program and Model Recycling Toolkit were authorized under the RECYCLE Act, which was passed into law as a part of the Infrastructure Investments and Jobs Act (Public Law Number 117-58). The intent of this legislation was to "help educate households and consumers about their residential and community recycling programs."[7] The U.S. recycling system is highly localized, which makes evaluation and education one of the primary challenges for the EPA to overcome in order to increase consumer recycling rates. The Recycling Partnership, which the Aluminum Association is a financial contributor to, has recommended recycling education programs be evaluated by changes in local program set out rates, participation

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[4] Marshall Wang, *The Aluminum Can Advantage: Sustainability Key Performance Indicators* (The Aluminum Association & Can Manufacturers Institute, 2021) https://www.aluminum.org/sites/default/files/2021-11/KPI_Report_2021.pdf (accessed July 25, 2022).

[5] Scott Breen, *Aluminum Beverage Can: Driver of the U.S. Recycling System* (Can Manufacturer's Institute, 2020) https://www.cancentral.com/sites/cancentral.com/files/public-documents/GBB%20Report%20Aluminum%20Can%20Drives%20U.S.%20Recycling%20System%20Final%202020-0623.pdf (accessed July 25, 2022).

[6] Elizabeth Schussler, *Start at the Cart: Key Concepts of Influencing Recycling Behaviors to Drive a Circular Economy* (The Recycling Partnership 2021) https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2021/02/Influencing-Recycling-Behaviors-Whitepaper-Recycling-Partnership.pdf (accessed July 25, 2022).

[7] *Portman, Stabenow Introduce Bipartisan, Bicameral RECYCLE Act to Improve Nation's Recycling Programs* (Office of Senator Rob Portman, 2021) https://www.portman.senate.gov/newsroom/press-releases/portman-stabenow-introduce-bipartisan-bicameral-recycle-act-improve-nations (accessed July 25, 2022).

rates, recycling tonnage, and garbage tonnage.[8] Set out rates are measured as the average number of collection carts on the curb at any one time while the participation rate is the average number of homes that participate at least once in a month's time. The EPA should include these criteria in its Model Recycling Program Toolkit to help communities evaluate their pilot programs and projects.

Further, evaluation must include a waste composition study to account for changes in the waste stream and to examine the values of material collected by weight. The Recycling Partnership also recommends collecting data through the incorporation of RFID (radio frequency identification) tags into collection carts. The use of RFID tags also allows the targeting of recycling education materials into areas where program participation is either low or nonexistent, easier asset management, and the attaching of addresses to collection carts. Waste composition studies and RFID tags should be incorporated into EPA's Model Recycling Program Toolkit and RFID tags should be used as a way to target educational materials to underserved communities and issue top contaminant mailers.

The Recycling Partnership also advocates giving community members regular feedback on what is and isn't recyclable through "oops tags" that are issued when materials in the recycling bin are not all recyclable.[9] This can be done either by utilizing ground crews or by looking at RFID data. This type of feedback is essential to reduce contamination or when either non-recyclable items are mixed with recyclable items or recycled items are sorted into the wrong recyclable stream.

EPA should look to the bipartisan, bicameral *S.3743|H.R. 8059 Recycling and Composting Accountability Act (RCAA)* in developing and disseminating best practices in recycling education, which could be pre-developed by proper evaluation practices in EPA's Model Recycling Program Toolkit. As outlined in RCAA, it could also potentially serve as an inventory of recycling programs to establish a comprehensive baseline of data for the United States Recycling System. The data collected through the use of RFID tags could also serve as a preview for the legislation's larger baseline dataset, if signed into law.

Because most areas of the United States practice single stream recycling, informing consumers about what specific products a local materials recovery facility accepts can increase the amount of aluminum collected and decrease the amount of contamination in recovered material such as food waste on foil or plastic bags. If recycling education

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[8] Cody Marshall, Curbside Data & Management (The Recycling Partnership, 2022) https://recyclingpartnership.org/engage-your-residents/ (accessed July 25, 2022).

[9] Elizabeth Schussler, *Start at the Cart: Key Concepts of Influencing Recycling Behaviors to Drive a Circular Economy* (The Recycling Partnership 2021) https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2021/02/Influencing-Recycling-Behaviors-Whitepaper-Recycling-Partnership.pdf (accessed July 25, 2022).

materials are disseminated in a state with a recycling refund program, information on collection sites and accepted beverage containers should be provided to consumers to encourage participation.

Aluminum Industry Best Practices in Recycling Education

The Environmental Protection Agency can drive recycling through education that highlights material circularity and uses standardized, well-understood symbols and statistics. The Recycling Partnership conducted a study in 2021 that evaluated recycling behavior, attitudes towards recycling, and knowledge of the recycling system. The study illustrated 96 percent of people believe they recycle more than the average person and 58 percent of people recycle all the time. [10] The same study illustrated a gap in quality information about recycling.[11] Another study by the Recycling Partnership drew lessons from behavioral science to understand people's interaction with recycling educational material. It found that more information can raise people's awareness of recycling programs, but that awareness does not always drive behavior change.[12] For behavior change to occur, information must be presented in a way that people engage with – and more information is not always more effective.

In 2020, the Can Manufacturer's Institute highlighted a body of research from Pennsylvania State University that found success in increasing consumer recycling rates through engagement-driven education. These educational materials all displayed what products and specific materials can be recycled into rather than emphasizing general resource conservation and environmental benefits.[13] The EPA can utilize the same tactic in its recycling education materials and its Model Recycling Program Toolkit to obtain more buy-in from consumers.

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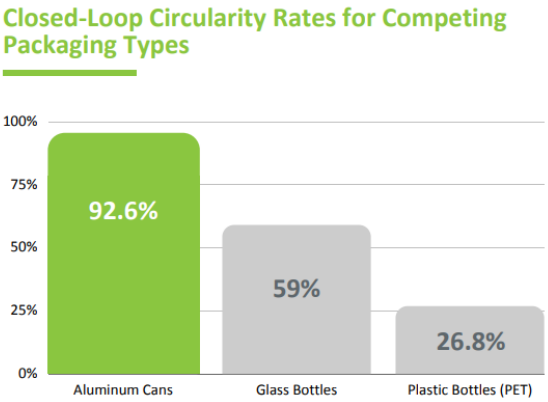
[10] Elizabeth Schussler, and Steve Raabe, *User Testing and Best Practices for Designing Educational Materials for Recycling* (The Recycling Partnership, 2021) https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2021/10/User-Testing-Best-Practices-Designing-Education-Materials-Recycling-Partnership.pdf (accessed July 25, 2022).

[11] Elizabeth Schussler, and Steve Raabe, *User Testing and Best Practices for Designing Educational Materials for Recycling* (The Recycling Partnership, 2021) https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2021/10/User-Testing-Best-Practices-Designing-Education-Materials-Recycling-Partnership.pdf (accessed July 25, 2022).

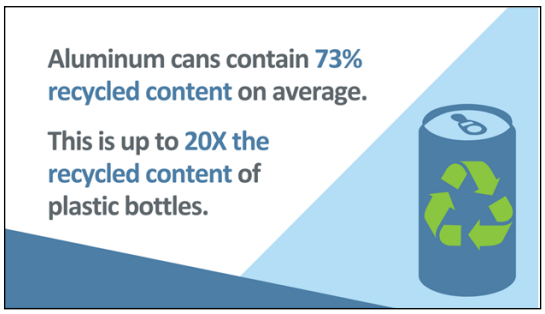
[12] Elizabeth Schussler, *Start at the Cart: Key Concepts of Influencing Recycling Behaviors to Drive a Circular Economy* (The Recycling Partnership 2021) https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2021/02/Influencing-Recycling-Behaviors-Whitepaper-Recycling-Partnership.pdf (accessed July 25, 2022).

[13] Scott Breen, *Aluminum Beverage Can: Driver of the U.S. Recycling System* (Can Manufacturer's Institute, 2020) https://www.cancentral.com/sites/cancentral.com/files/public-documents/GBB%20Report%20Aluminum%20Can%20Drives%20U.S.%20Recycling%20System%20Final%202020-0623.pdf (accessed July 25, 2022).

Recycling education materials should help consumers engage with local recycling programs and make sustainable packaging choices by including the closed-loop circularity rate for each material accepted by a local materials recovery facility. This rate can be calculated by dividing *the pounds of recycled end-of-life beverage containers used to make new beverage containers* by *the total pounds of end-of-life containers recycled domestically*.[14] By highlighting circularity rates for packaging and other recycled materials, recycling education can increase consumer engagement with local programs and increase the overall recycling rate by promoting materials suitable for closed-loop recycling.



EPA can also drive consumer engagement in recycling education programs by including information on how much recycled content is in the average product accepted by a local materials recovery facility. These numbers can be produced by industry-wide surveys that collect data on new material inputs, recycled inputs that were from the same type of product, recycled inputs that were from another type of product, and recycled inputs that were collect post-industrial uses. A 2021 study by the Aluminum Association and the Can Manufacturer's Institute illustrates that aluminum has the highest recycled content rates (73 percent) among competing packaging materials like glass (23 percent) and PET (6 percent).[15]



The placement and type of education materials also have been studied in the aluminum industry. The National Association of Convenience Stores and the Can Manufacturing Institute have conducted research that has found that educational material is most effective when placed directly next to recycling bins, simple statistics and pictures are most effective in promoting recycling, and that different types of recycling education

[14] Marshall Wang, *The Aluminum Can Advantage: Sustainability Key Performance Indicators* (The Aluminum Association & Can Manufacturers Institute, 2021) https://www.aluminum.org/sites/default/files/2021-11/KPI_Report_2021.pdf (accessed July 25, 2022).

[15] Marshall Wang, *The Aluminum Can Advantage: Sustainability Key Performance Indicators* (The Aluminum Association & Can Manufacturers Institute, 2021) https://www.aluminum.org/sites/default/files/2021-11/KPI_Report_2021.pdf (accessed July 25, 2022).

material should reinforce the same messaging.[16] One great example of an effective symbol fitting these criteria that can be placed on educational materials is the Metal Recycles Forever™ logo that is used in recycling programs all around the world.[17] The Metal Recycles Forever logo also has the added benefit of increasing program participation through informing consumers of products' circularity benefits. The EPA should consider its inclusion in its Model Recycling Program Toolkit.

The Aluminum Association and its members thank you for the opportunity to submit these comments and welcome any additional opportunities to provide feedback on the work of the Office of Resource Conservation and Recovery.

Respectfully submitted,

John J. Richard
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[16] *The Value of Can and Bottle Recycling* (National Association of Convenience Stores and the Can Manufacturers Institute, 2019) https://www.convenience.org/Topics/Sustainability/Can-Bottle-Recycling/Can-Bottle-Recycling (accessed July 25, 2022).

[17] *Metal Packaging: Designed for Circularity* (Metal Packaging Europe, 2022) https://www.metalrecyclesforever.eu/ (accessed July 25, 2022).