Presidential Policy Brief:

Recycling



Aluminum is a unique and foundational element of American manufacturing, with growing demand driven by innovative applications that support aerospace, transportation, construction, defense, packaging, infrastructure and many other segments of the U.S. economy.

The Aluminum Association represents the U.S. aluminum industry across the entire value chain. The U.S. aluminum industry generates more than \$70 billion in direct economic output, directly employs more than 166,000 workers across the country and indirectly supports an additional 494,000 workers.

The Circular Economy Needs Expanded & Improved Aluminum Recycling

Aluminum is infinitely recyclable, and it can operate in a true closed loop by being recycled over and over again without losing its quality. The U.S. aluminum industry relies on the scrap generated by consumer and industrial recycling as a crucial input for aluminum products like sheet, plate, foil and extrusions that are used to make beverage cans, automotive parts or building components. In fact, more than 70 percent of aluminum sheet used in buildings today comes from recycled material and the industrial recycling rate for aluminum used in vehicles, buildings and other industrial projects is over 90 percent.

In particular, aluminum beverage can recycling is vital to the nation's recycling system and overall economy. Most recycled cans are turned into new cans, making the aluminum beverage can a textbook example of the circular economy. The industry continues to use as much recycled material as possible – with an industry leading 73 percent recycled content in the average aluminum can – but too much aluminum is going to landfills at major economic and environmental cost. Consumer recycling rates in the United States are declining.

Capturing all used aluminum beverage cans currently landfilled in the U.S. would generate an additional \$800 million each year, providing much needed revenue for the recycling system as a whole. Aluminum cans represent less than 2.5 percent of a Municipal Recycling Facility (MRF) material stream yet generate up to one-third of MRF revenues, depending on whether the state has container deposit laws. The environmental impact is also profound. If the United States recycled every can lost in landfill, we could save more than 5 million metric tons of greenhouse gas emissions each year – the equivalent of taking more than 1 million vehicles off the road.

More efficient and cost-effective recycling will reduce waste and emissions, save energy and return a critical input material to U.S. manufacturers. We could power about 4 million homes for a full year with saved energy by simply recycling all of our aluminum cans.

Federal investment could increase recycling rates, expand curbside recycling programs and collection points and improve recycled material quality through material segregation.

- **Recycling Infrastructure Fund:** A recycling infrastructure fund should award grants on a competitive basis to support and expand recycling infrastructure and recycling programs operated by state and local governments and to support capital investment into recycling equipment by manufacturers. This, along with our broader agenda on infrastructure, would ensure that the nation can benefit from the sustainable properties of aluminum.
- **Critical Mineral Recycling:** A new Department of Energy program should promote the efficient production, use and recycling of designated critical minerals by providing grants for R&D and capital expenditures as well as accelerated tax treatment for investments in new technology for sorting, segregating and processing material.

- **REMADE Institute:** Strong funding support for the existing DOE programs, such as the REMADE Institute, focused on how best to promote the circular economy through promotion of sustainable manufacturing technologies.
- Recycling Census: The EPA should conduct a nationwide recycling census in order to baseline the current situation with the current patchwork of over 9,000 separate recycling systems currently operating in the U.S. and obtain information insight into best practices and opportunities for improvement.
- **Container Deposit Programs:** Well-designed container deposit programs are particularly impactful. While the recycling rate for aluminum cans is about 35 percent in states without container deposit laws, rates average more than 75 percent in the 10 states with these programs. Expanding and improving state programs, or a federal program, would dramatically increase recycling rates.

In partnership with the Can Manufacturer's Institute, the Aluminum Association recently released "Every Can Counts: An Aluminum Beverage Can Recycling Manifesto," which provides recommendations on tracking KPIs, life cycle analysis, impact modeling and literature reviews. It also provides instruction for industry stakeholders to construct more recyclable cans, message more effectively on the cans themselves, boost recycling at convenience stores and advocate for more aluminum can capture equipment at MRFs.

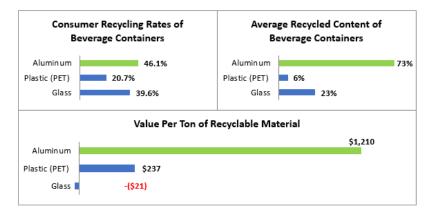
The Association also endorses the Recycling Partnership's "Accelerating Recycling: Policy to Unlock Supply for the Circular Economy" recommendations, to advance public-private partnerships in support of recycling. Topline recommendations include:

- A packaging and printed paper fee that supports education and infrastructure investment.
- A disposal surcharge to support recycling operations.

Further Reading:

The Aluminum Can Advantage Sustainability Key Performance Indicators

This December 2020 report is a result of our partnership with the Can Manufacturer's Institute and provides metrics on the value of aluminum vs competing beverage containers.



Four Keys to Circular Recycling: An Aluminum Container Design Guide

Key #1 – Use Aluminum: To maintain and increase the efficiency and economics of recycling, aluminum container designs should maximize the percentage of aluminum and minimize the use of non-aluminum materials.

Key #2 – Make Plastic Removable: To the extent that designers use non-aluminum material in their designs, this material should be easily removable and labeled to encourage separation.

Key #3 – Avoid the Addition of Non-Aluminum Design Elements Whenever Possible: Minimize the use of foreign materials in aluminum container design. PVC and chlorine-based plastics, which can create operational, safety and environmental hazards at aluminum recycling facilities, should not be used.

Key #4 – Consider Alternative Technologies: Explore design alternatives to avoid adding non-aluminum material to aluminum containers