



NEWS RELEASE

For Immediate Release

Aluminum Cans Show Highest Circular Performance of U.S. Beverage Packages, New Analysis Finds

Washington, DC (October 19, 2020) - A new report assessing three U.S. beverage packaging types - aluminum cans, glass bottles and plastic PET bottles - finds aluminum cans have the highest circular performance. In the current U.S. system, more than 80 percent of beverage cans collected for recycling are recovered and turned back into new beverage containers, compared with 59 percent of glass bottles and only 13 percent of plastic PET bottles.

In addition to the analysis of current circular performance, the report analyzed the carbon emission reduction potential for the three beverage packaging types under three future scenarios – 100-percent collection, 100-percent sortation and a national deposit system. In each future scenario, the aluminum can delivered the highest carbon emission reduction potential. For example, once a 100 percent deposit collection rate is achieved for each material type, the total emissions impact reduction potential for recovering one metric ton of aluminum cans is three times higher than plastic PET bottles and 42 times higher than glass bottles.

The analysis, [Recycling Unpacked: Assessing the Circular Potential of Beverage Containers in the United States](#), published by Metabolic as part of a study commissioned by the Can Manufacturers Institute (CMI), examines the role of a circular economy in creating clean, stable material streams that can displace primary resource production as they are recycled and repurposed.

According to the report, the production of virgin aluminum carries significant environmental impacts, which makes the use of recycled aluminum in beverage can production an industry imperative.

“Aluminum cans are unique in that they were designed with recycling in mind and that is a large part of why the aluminum can is the most recycled beverage container in the United States and the world,” said CMI Vice President of Sustainability Scott Breen. “Since metal, such as aluminum, recycles forever, and we already recycle aluminum cans at scale in the United States

with 5 million aluminum cans recycled every hour, there is the potential for essentially all of the aluminum in beverage cans to be recycled multiple times, generating significant environmental and economic benefits.”

But to achieve a truly circular system, recycling collection rates must be greatly improved. Of the around 90 billion aluminum cans used in the United States each year, only around half are recycled. The other half end up in landfills.

This study provides new numbers around the potential impact if those landfilled aluminum cans were recycled instead and achieved their full circular potential. Based on a material flow analysis and dynamic model for future scenarios, the report finds that, compared to a 2020 baseline, reaching a 100-percent collection rate for used beverage cans has the potential to save an additional 6 million metric tons of carbon dioxide equivalent (CO₂e) each year – the equivalent of the annual CO₂e emissions from electricity used in over 1 million U.S. homes.

The study also illustrates the impact that comes with the aluminum can’s ability to be recycled multiple times. One aluminum can recycled over and over again has the potential to displace up to 15 cans’ worth of material over 40 recycling loops. If all the 45 billion aluminum cans currently being landfilled each year in the United States were to be collected and recycled 40 times, and if all that material were to displace primary aluminum production, the greenhouse gas emission savings would be the equivalent of taking more than 25 million cars off the road each year or charging 15 trillion smartphones.

To unlock the full circular potential of all materials analyzed, the report underscores the need for a systemic transition, bolstered by coordinated action from all stakeholders across the value chain. The report recommends the expansion of deposit return systems across the United States to increase collection rates. For glass, the report recommends focusing on reuse. Glass bottles can be washed and refilled up to 25 times before needing to be recycled. For plastic PET, investment in new recycling technologies is needed, including energy-efficient chemical recycling processes for purer material streams.

“It’s important to keep in mind that a product only achieves a high circular performance in a properly functioning circular system,” said James Souder, lead author and sustainability consultant at Metabolic. “All materials could be handled in a non-circular way. So it’s critical that we look not only at each material’s properties, but also at the systemic factors that influence how each material is collected, processed and reintegrated into new products, while finding key points to shift the system towards a more circular and sustainable future.”

Media contacts:

Can Manufacturers Institute – contact Vice President of Marketing and Communications Sherrie Rosenblatt (Phone: 202-232-4677; Email: srosenblatt@cancentral.com)

Metabolic – contact Communications Director Kate Black (Phone: (+31) 6 555 75083 or Email: kate@metabolic.nl)

About the Can Manufacturers Institute:

The Can Manufacturers Institute (CMI) is the national trade association of the metal can manufacturing industry and its suppliers in the United States. The can industry accounts for the annual domestic production of approximately 119 billion food, beverage and general line cans; which employs more than 28,000 people with plants in 33 states, Puerto Rico and American Samoa; and generates about \$17.8 billion in direct economic activity. CMI members are committed to providing safe, nutritious and refreshing canned food and beverages to consumers in the most sustainable packaging.

About Metabolic:

Metabolic works with businesses, governments, and non-profits around the world to accelerate the transition to a sustainable and circular economy. Headquartered in Amsterdam with an international and interdisciplinary team, the company advises organizations on how to adapt to a fast-changing global context, while creating disruptive solutions that can shift how the economy functions. With an approach grounded in systems thinking and data-driven analysis, the team conducts leading research, develops strategies and tools, and builds scalable solutions to critical sustainability challenges.