ALUMINUM VS. BIOPLASTICS FOR BEVERAGES

Bioplastics are an increasingly popular way to make single-serve beverage packaging sustainable, but aluminum cans may still be best ... or are they?



RECYCLING RATES

Aluminum cans have a higher recycling rate than plastic containers. Consumers recycle 45.2% of cans but, for example, just 20.3% of PET bottles.

Source: The Aluminum Assn., "The Aluminum Can Advantage: Sustainability Key Performance Indicators"

CONSUMER CONFUSION

Many bioplastics are visually identical to conventional plastics, leading consumers to contaminate recycling streams with non-recyclable packaging.

Source: Life Cycle Initiative, <u>"Single-use beverage cups and their alternatives</u>

ACCEPTANCE

While bioplastics are compostable, only 125 composting facilities in the US accept them.____

Source: Sustainable Packaging Coalition / GreenBlue, <u>"Composting Facilities in the United States"</u>

ENERGY TO PRODUCE

Polylactic acid (PLA) — the most widely used bioplastic — consumes roughly 66% less energy to produce than conventional plastics. Comparatively, recycled aluminum used 95% less energy vs. raw ore

Sources: National Library of Medicine, <u>"Bioplastics for Food</u> <u>Packaging: Environmental Impact, Trends and Regulatory Aspects"</u> and ScienceDirect, <u>"Making sustainable aluminum by recycling scrap:</u> <u>The science of "dirty" alloys"</u>

PREFERENCE

Despite recycled metal's advantages, consumer perceptions show a preference for bioplastics. In the US, 61% of consumers say compostable plastics are "very sustainable," while just 37% say the same about metal containers.

Source: McKinsey & Co., <u>"Sustainability in packaging 2023: Inside</u> the minds of global consumers"