

## Plastics recycling deadlines loom—will companies meet their goals?

October 13 2021



Credit: Unsplash/CC0 Public Domain

Many of the world's largest consumer product companies, including Cocoa-Cola, Unilever and PepsiCo, have set ambitious targets for replacing virgin plastics with recycled ones—typically 25% of their total



packaging by 2025. So far, however, most companies have made only modest progress and will need to ramp up their efforts to reach these lofty goals, according to a new cover story in *Chemical & Engineering News*.

In the U.S., only about 10% of plastics are recycled into new products, compared with nearly 33% in Europe, writes senior editor Alex Tullo. Facing mounting consumer pressure, many companies have made big promises to increase the amount of recycled plastics they use in packaging to 25–50% by 2025 or 2030. However, most currently hover at a recycling rate between 2 and 12%, meaning that they will need to greatly accelerate their efforts in order to succeed. Meeting these goals will require new technologies to help make plastics easier to recycle, as well as widespread collaboration and investment among brand owners, consumers, recycling facilities, chemical companies and others.

In traditional mechanical recycling, facilities sort through consumers' recyclables collected by local trash haulers, separating plastics from metal, glass and other materials. To ease this tedious process, AMP Robotics has developed a machine learning-based technology that identifies different types of plastics and pulls unwanted materials off the line with a pneumatic arm. Next, the separated plastics are shredded, washed, melted and repelletized. Then, plastics destined for food packaging undergo additional finishing steps. Although recycling firms have developed new technologies, such as solvent extraction, to recycle different types of plastic more efficiently, consumer product companies must redesign their packaging, for example, by removing multiple plastics and metalized layers, to make them easier to recycle. Also, experts say that consumers need to do their part by putting more of their used plastics into the <u>recycling bin</u>.

**More information:** "Will Plastics Recycling Meet Its Deadline?", cen.acs.org/environment/recycl ... meet-deadline/99/i37



## Provided by American Chemical Society

Citation: Plastics recycling deadlines loom—will companies meet their goals? (2021, October 13) retrieved 11 May 2024 from <a href="https://phys.org/news/2021-10-plastics-recycling-deadlines-loomwill-companies.html">https://phys.org/news/2021-10-plastics-recycling-deadlines-loomwill-companies.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.