Plastics recycling deadlines loom—will companies meet their goals?

13 October 2021

Many of the world’s largest consumer product companies, including Coca-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 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 plastics 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 recycling bin.

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

Provided by American Chemical Society