## MEMBERS OF THE R-CYCLE INITIATIVE























www.r-cycle.org





Visit our Website The major challenge in the plastic industry is to build up a working circular economy. Plastic is a high-performance material in many fields, but we have to improve the recycling quotes significantly, following the commitment of the international brand owners or as called for in political agendas worldwide. The motivation behind R-Cycle is to provide a technological solution for transferring plastic packaging into a working circular economy.

Dr. Benedikt Brenken
Director R-Cycle Initiative





If you want to contribute to a true circular economy while making use of the many benefits of R-Cycle, we will be delighted to hear from you. Contact us now to apply your ideas, know-how or technology.

#### Contact:

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# TRACING RECYCLABLE PLASTICS

R-Cycle ensures recyclability by seamless documentation of all recycling-relevant packaging properties based on established technologies. In the recycling process, packaging can thus be precisely identified in order to collecting pure waste fractions and gaining high-quality recyclates that can be processed into diverse and high-quality plastic products.

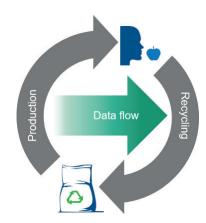
R-Cycle is developed to market maturity by various technology companies and organizations across the entire value chain. The data platform behind R-Cycle is based on the already globally established EPCIS standard.



## R-CYCLE MAKES PACKAGING DATA AVAILABLE







Identification in the recycling process



## ESTABLISHING A CIRCULAR ECONOMY

R-Cycle enables circular economy for plastic packaging by documenting all recycling-relevant properties or any other dynamic data of packaging along its value chain in a standardized platform.

It is connectable with any production facility, from plastic film or injection molding machines to converting, printing and filling machines. To make the collected information retrievable, a marker – for example a QR or digital watermark code – is applied to the packaging. These codes can be detected in recycling facilities by state-of-the-art camera technology. The tracing technology behind R-Cycle is based on EPCIS standards by GS1 – the global leading network for cross-industry process development and known from more than six billion scanned barcodes every day.

Enabling precise sorting of plastic packaging waste to extract pure recyclates is the key to true cradle-to-cradle recycling and avoids downcycling or thermal utilization of recyclable material.

The practical suitability of R-Cycle is currently tested and verified in several pilot projects, which are carried out together with raw material producers, packaging manufacturers, brand owners, wholesalers and retailers.



Read more about practical applications

www.r-cycle.org/en/pilot-projects

