



CLOSING THE LOOP TOGETHER FOR COMPLEX PLASTIC PACKAGING

Plastic recycling: The biggest challenge

Global plastic production has been steadily increasing for decades. Plastics are also in great demand in the packaging sector due to their advantageous properties. Especially in the field of food packaging, where plastics are the preferred material of choice because of their versatile properties. Therefore, closing the loop for plastic packaging is more than ever the key objective for a truly circular economy.

Mechanical recycling for packaging has been established for years from post-consumer packaging. Even for plastic packaging, mechanical recycling often offers the shortest- and the most ecological route.

However, mechanical recycling in its present form reaches its limits with complex packaging and the quality of the recyclates is often not sufficient. The lack of demand from industry and trade for low-quality granules and the limited application possibilities mean that mechanical recycling often cannot close the loop.

Chemical recycling as a useful addition to mechanical recycling

Chemical recycling offers a solution for closing the loop for hard-to-recycle plastic packaging. In the chemical recycling process, plastics are returned to their basic chemical building blocks. This extensive breakdown of the polymers – compared to mechanical recycling – enables the recycling of even complex plastic packaging in a high-quality manner.

The recyclates obtained through chemical recycling meet the highest quality requirements and are identical to new plastic in this respect.

However, this process has an increased energy requirement. It is therefore always necessary to check which is the ecologically more sensible recycling option.

Leading manufacturers advocate chemical recycling

A position paper published in April 2022 by 16 companies in the Consumer Goods Forum (including Mars, Unilever, P&G and Barilla) concludes that chemical recycling could increase packaging recycling rates and make progress towards recycling targets, particularly for plastics that cannot be mechanically recycled. For 2030 alone, a group of twelve food and consumer goods companies in Europe have formulated a potential total demand for chemically recycled plastic of at least 800,000 tonnes per year for their packaging. These quantities are in addition to their respective needs for mechanically recycled plastics.*

Strong partnership of innovative companies

Together with the leading chemical company, SABIC, Landbell has developed a groundbreaking solution to close the loop for plastic packaging through chemical recycling.

Both companies share a common goal of creating a truly circular solution by eliminating downcycling or incineration for plastic packaging.

Both partners see chemical recycling as a useful addition to mechanical recycling. In this way, the partners are establishing a sustainable solution even for hard-to-recycle plastic packaging and are paving the way for a truly circular economy.

Suitable for food contact

Together with Landbell and SABIC, manufacturers can return complex plastic packaging to higher-value applications. The obtained secondary material is **100% suitable for use in food. packaging.**

* EUWID 42/2022: „Konsumgüterkonzerne signalisieren Bedarf an 800.000 Tonnen chemisch recyceltem Kunststoff“

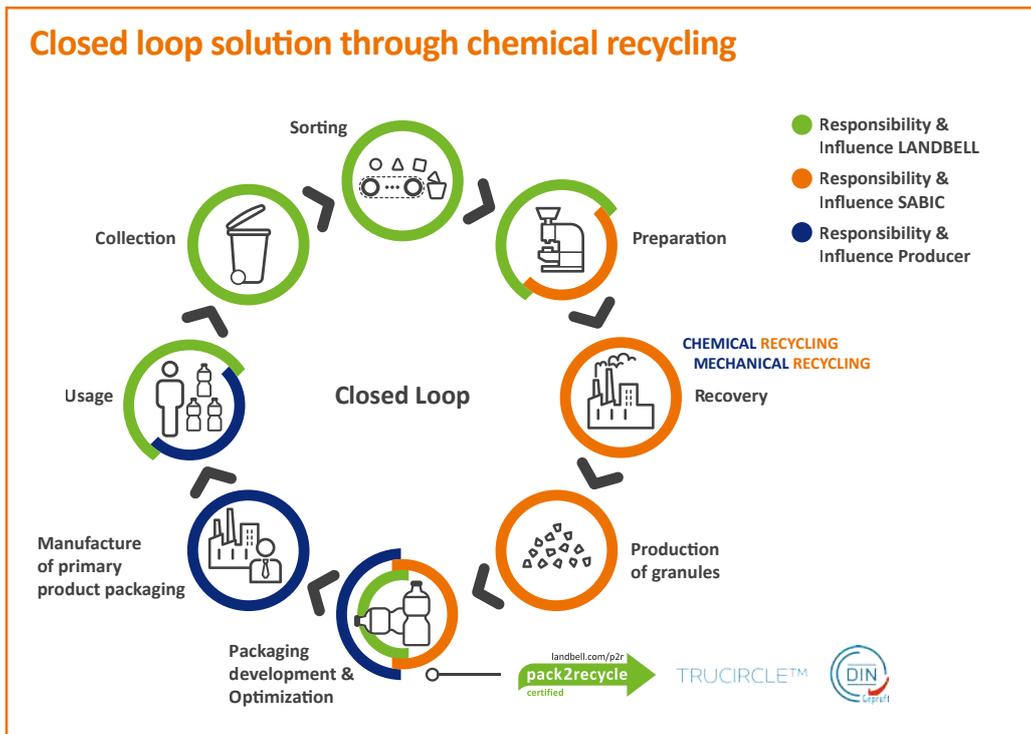
Do you want to close the loop together with LANDBELL and SABIC?

The cycle for plastic packaging is complex and involves stakeholders from different areas. The cycle can therefore only be closed together – and only if all parties involved take responsibility, contribute their expertise and exert influence to create sustainable solutions.

Do you also think sustainably and are you looking for real circular solutions for your packaging? Then become part of this innovative solution with your packaging and contribute to a truly circular economy.

Your advantages as a partner:

- First mover advantage – Limited premium partnerships already possible from 2022
- Access to secondary material with 100% suitability for food packaging
- Highlight your brand's sustainability credentials
- Truly closed loop without downcycling, which ensures consistently high recycling quality
- Useful addition to the established mechanical recycling infrastructure



Together we can achieve a lot!

Contact your account manager for more information or contact us at:

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LANDBELL GROUP is an international provider of comprehensive takeback, consulting and software solutions for environmental and chemical compliance.

Established as a packaging compliance scheme in Germany in 1995 LANDBELL GROUP has since evolved into a global service provider.

Today, LANDBELL GROUP operates in 13 countries producer compliance schemes worldwide for various waste streams, helps over 38.000 customers

in more than 60 countries to fulfil their extended producer responsibilities, and collected over 760.000 tonnes of waste batteries, electronics and packaging in 2020.

Specifically in Germany, Landbell AG operates a certified and independent packaging compliance scheme for producers and retailers to meet their legal requirements.