

Position Paper

Sustainable recycling relies on a Mass Balance method that allocates recycled content in a fully transparent, correct and robust manner

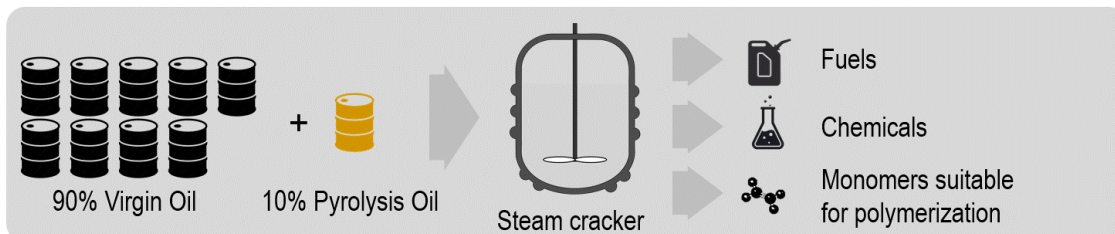
Brussels, July 2, 2023

The European Sustainable Business Federation – Ecopreneur.eu, together with Werner & Mertz, Remondis, Alpla and the 3000 sustainable frontrunners from our membership, welcome the European Commission’s proposed Packaging and Packaging Waste Regulation (PPWR) and the Single-Use Plastics Directive with their ambitious mandatory targets for recycled content to increase circularity of materials.

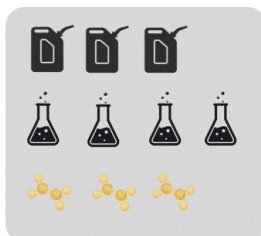
To ensure that plastic packaging will meet the minimum recycled content targets by 2030 and will be recycled at scale by 2035, the EU can rely on existing mechanical recycling technologies that have proven to be highly effective, sustainable¹ and scalable for converting plastic packaging into recycled material of high quality. The current recycling processes already achieve highly reliable PET recyclates for food contact applications and a HDPE approved for cosmetic application. We therefore encourage the European Commission to keep the recycled content targets proposed in the PPWR as planned.

Mechanical recycling of plastic allows full process transparency and an output of up to 100% recycled content at batch level, which facilitates the accounting, reporting and auditing of recycled content for companies and Member States towards the EU’s recycling targets. This is already common practice. Chemical recycling processes, on the other hand, require a mixed input of pyrolysis oil from recycled plastic diluted with fossil-based virgin fuel. In the steamcracker, the oil is converted into monomers, fuels and other chemicals that cannot be traced physically for their recycled or virgin content.

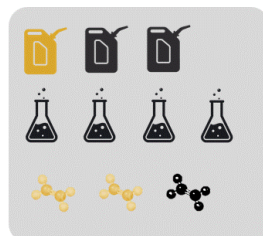
Chemical recycling process: Pyrolysis oil, gained from processing plastic waste, is mixed with virgin oil process at steam cracker. The produced outputs are always several types of materials.



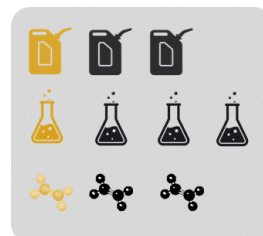
How should the „recycled content“ be allocated?



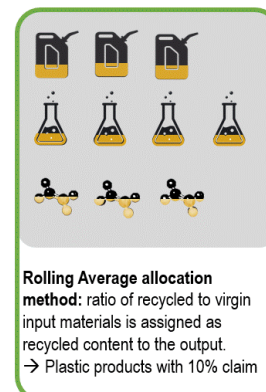
Polymers Only allocation method: proportional part of pyrolysis oil in the polymer fractions is allocated to one fraction only
→ Plastic products with 100% claim



Fuel use excluded allocation method: proportional part of pyrolysis oil in fuel product is deducted from available amount for free allocation
→ Plastic products with 100% claim



Proportional allocation method: proportional part of pyrolysis oil in all product types and free allocation within product type
→ Plastic products with 100% claim



Rolling Average allocation method: ratio of recycled to virgin input materials is assigned as recycled content to the output.
→ Plastic products with 10% claim

Source: Remondis

¹ Eunomia, “Chemical Recycling State of Play” (2020), <https://www.eunomia.co.uk/reports-tools/final-report-chemical-recycling-state-of-play>

The technically most viable, transparent and robust mass balance chain of custody method is based on a “rolling average” allocation of the input ratio to all output generated products. With a free allocation approach in mass balancing, new plastic products could be marketed as “recycled” even though they may contain only little or no recycled content at all.

For this reason, we strongly oppose any credit-based or free allocation method of mass balance for making declarations about a specific percentage of recycled content in a product. This practice would be against the principles of traceability and transparency manifested in EU consumer protection laws² and the “Substantiating Green Claims Directive”³. To avoid confusion and a potential loss of consumers' trust in the credibility of recyclers, brands and regulators, the use of mass balancing accounting methods must be fully transparent when making declarations about recycled content for a packaging product.

We therefore call on the European Commission to decide on a clear definition⁴ and fair chain of custody method of mass balancing, where recycled content must be allocated to all products of a recycling process at a batch, and not at a facility or company level, according to their input-output ratio, so that claims regarding recycled content reflect the actual proportion present in a material.

This “rolling average” allocation method is technically feasible and solution-ready to meet the recycled content objectives of both the PPWR and SUP and will boost circular economy in Europe while increasing the trust of European citizens in legislation and industry. It would allow multi-output technologies like chemical recycling to produce plastic material with potentially 10% recycled content and thus achieve compliance with the PPWR for sensitive applications with current outlook of technology implementation.

Consumers will be empowered to take informed purchasing decisions based on clear and trustworthy information, enabling them to play an active role in the green transition. Drawing on free allocation methods in mass balancing to communicate a calculated amount of recycled content in a packaging product, however, would undermine consumers' trust. To this end, declarations about recycled content should always be based on the actual amount included in a packaging item. A label claiming "Made of 100% recycled content", for example, should only be allowed for packaging products fully made from recycled content. Otherwise, it should be considered a misleading environmental claim according to the labelling rules specified in the "Substantiating Green Claims" Proposal.

Moreover, a free allocation and trading with recycled content certificates would boost the demand for virgin plastics, which is required to complement recycled content from chemical recycling to produce new packaging. Consequently, high-quality recyclate would become increasingly scarce and expensive, which eventually would stop our industry from further investing in mechanical recycling. Expanding the capacities of mechanical recycling, on the other hand, would ensure sufficient volumes of recycled plastics in the EU market and fulfil the recycling quotas for contact-sensitive packaging.

² European Commission, Consumer Rights Directive: Article 1 - Amendments to Directive 2005/29/EC): Ban of environmental claim about the entire product when it actually concerns only a certain aspect of the product

³ European Commission, Substantiating Green Claims Directive, Art. 21 - para 3c : Substantiation of specific environmental claims on environmental aspects or impacts such as recycled content

⁴ European Investment Bank, “Cutting plastics pollution” (2023): "Mass balance certification for chemical recycling needs to match that of mechanical recycling.", <https://www.eib.org/en/publications/20220248-cutting-plastics-pollution>

To stimulate further investment in mechanical recycling capacity and innovation⁵, regulatory incentives are of the essence. To this end, packaging formats made of recycled content up to 100% should benefit from harmonised eco-modulation systems across the EU, as well as the level of their mechanical recyclability performance in the format of a grading system, as proposed by the PPWR. For the European industry, mechanical recycling of packaging waste will create new business opportunities and employment, especially for family businesses and SMEs. It will strengthen the EU's recycling capacities, decrease the need for - and dependency on - fossil resources and thus help them stay on track for climate neutrality by 2050.

About Ecopreneur.eu

[Ecopreneur.eu](https://ecopreneur.eu) is the European Sustainable Business Federation of currently seven national associations representing about 3000 sustainable companies - mostly SMEs. A member of the Coordination Group of the European Circular Economy Stakeholder Platform, Ecopreneur.eu is the only cross-sectoral EU business organisation committed to ambitious measures, rules and regulations for a low-carbon circular economy. We advocate a new economic framework in which sustainability is promoted, the environment respected, and ecological principles are followed. Ecopreneur.eu and our members bring concrete experience from pioneering companies into the political debate, show best practice examples and represent the needs of green SMEs in a credible way.

Co-signatories

Kaya, Figures & More, ConsomAction, SunShine.bio, Heisenberg Corporation, Beelieve, Urbike, Evari, Shapership, Kalani, Limit, Atelier 80.

About Werner & Mertz

[Werner & Mertz](https://www.werner-mertz.com) is a family-owned business in the hands of the fifth generation. With our brands, particularly the trusted brands Frosch and Green Care Professional, Werner & Mertz is established and recognized as an innovative market leader for cleaning products and laundry detergents. Sustainability is our foundation. We want to make a substantial contribution to conserving our natural resources. Consequently, we live our commitment to a functioning, energy-saving circular economy that protects the climate and maintains biodiversity. Every employee is supported and asked to contribute to achieving our goal according to his/her individual needs and abilities. We aim to make such an integrally sustainable lifestyle attainable for the majority by offering ecological, high-performance cleaning products and laundry detergents.

About Remondis

[REMONDIS](https://www.remondis.com) is a family-run company with headquarters in Lünen, Germany, and a history that stretches back over 80 years. More than 30 million people and many thousands of public and private sector clients benefit from the REMONDIS Group's services. Remondis operates in over 800 locations in more than 30 countries with more than 42,000 employees and an estimated revenue of 12.1 billion Euro in 2022. Globally, it ranks among the biggest recycling firms. The REMONDIS Group operates in many fields of

⁵ The EIB report suggests that an estimated investment gap of €6.7-8.6 billion must be closed to achieve Europe's recycled content targets by 2025. Achieving these targets requires substantial investment and a reliable end market for the recycled content. This investment would enable the European Union to add 4.2 million metric tonnes (Mt) of annual plastics sorting capacity and 3.8 Mt of annual recycling capacity by 2025 in pursuit of its 10 Mt annual target for recycle (re)use across the continent.

business: it recovers raw materials from waste, develops innovative recycled products, offers alternative fuels and plays an important role in the water management sector supplying water and treating wastewater. In addition, REMONDIS removes pollutants from residual and hazardous wastes – which are unable to be recycled with today's technology – and disposes of them using eco-friendly methods.

About Alpla

The family-run [ALPLA](#) Group with its 190 locations and 23,300 employees in 46 countries worldwide is one of the leading global plastic converters and a growing recycler with a revenue of 5.3 billion Euro in 2022. We develop and produce innovative rigid plastic packaging solutions, while ensuring that our products become lighter, more durable and by 2025 fully recyclable. Our high-quality packaging is used in a wide range of areas, including food and drinks, cosmetics, household cleaning products, detergents and cleaning agents as well as pharmaceutical products. An estimated 4 billion people hold one of our packaging solutions in their hands every day. We have more than 25 years of experience in recycling, operating recycling plants for PET and HDPE in Austria, Germany, Poland, Mexico, Italy, Spain, Romania and Thailand. As a “family of global pioneers” the principle of our actions is to meet our responsibility for people, communities and the environment. “Closing the loop” for a true circular economy of plastic packaging is therefore one of our most important goals.

Contact information

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