EU Packaging Regulation:
PROTECTING SUPPLY CHAINS – MAKING WISER USE OF RECYCLED MATERIALS

The use of recycled plastics reduces both dependence on fossil raw material imports and CO2 emissions. In order to increase the demand for recycled materials, the EU Commission has proposed binding recyclate use quotas of between 10 and 35% for the plastic content in packaging from 2030 on – an important political signal on increasing investment in the circular economy. Nevertheless, by 2030, there will not be enough recyclates of the required quality to meet demand in the packaging market. Greater flexibility in the use of recyclates is urgently needed to protect supply chains and to enable the most economically efficient use of recyclates.

Recyclates from packaging in particular replace virgin plastics

More than 80 % of the post-consumer recyclates (PCR) produced in Germany come from the recycling of used packaging. **No other industry thus contributes as much to plastics recycling as the packaging market.** The reuse of plastic packaging has also doubled in recent years (see page 2).

The potential for using PCR depends on the quality requirements the packaging must meet, however. It varies from zero percent, for food packaging, for instance (except PET beverage bottles), to over 80 percent, for paint buckets. The majority of PCR produced from packaging is used as a substitute for virgin plastic in other industries such as agriculture, construction and the automotive field.

Shortage of recycled material looms from 2030 on

In order to achieve the quotas proposed by the Commission, **the reuse of PCR in PP and PE packaging in Germany would have to be more than quintupled (!)**. In view of the development to date, this is highly unrealistic.

The main obstacles:

- the lack of separately collected waste and recycling rates in Europe that are too low (19 EU countries fail to meet plastic recycling targets),
- high quality requirements in the packaging market, such as the lack of approvals for the use of PCR in food and other contact-sensitive packaging in particular.

The risk of an inadequate supply of PCR is exacerbated by the fact that other industries will also be subject to legal obligations to use recyclates.

Shortage of recycled material threatens supply chains & SMEs

Packaging that cannot meet the legal requirements due to insufficient quantities and qualities will thus be banned from the market. This **would have a severe impact on small and medium-sized manufacturers** who will not be able to obtain recyclates in the required qualities on the open market, or only at much higher prices.

Shaping the ecological transformation in an economically and socially acceptable way

Packaging does not necessarily have to be recycled into packaging again. Recyclates should preferably replace new plastic where possible using the least amount of energy and where consumer prices are not increased unnecessarily. Chemical recycling offers yet another chance: plastic waste that is unsuitable for mechanical recycling can thus be used as a raw material for producing new plastic – an important building block in order to be able to completely dispense with fossil raw materials by 2050.

IK Industrievereinigung Kunststoffverpackungen e.V.

www.kunststoffverpackungen.de

What is needed:

1. Introduction of a credit note system

Manufacturers who use **more recyclates** than required should receive credits that they can sell to other manufacturers who **cannot (yet) meet the recyclate quota.**

2. Requirements for quotas should be assessed in advance

The Commission should assess by 01/01/2028 whether recycling targets have been met as well as whether new food contact recycling processes are approved and sufficiently available.

3. Introduction of mandatory collection quotas

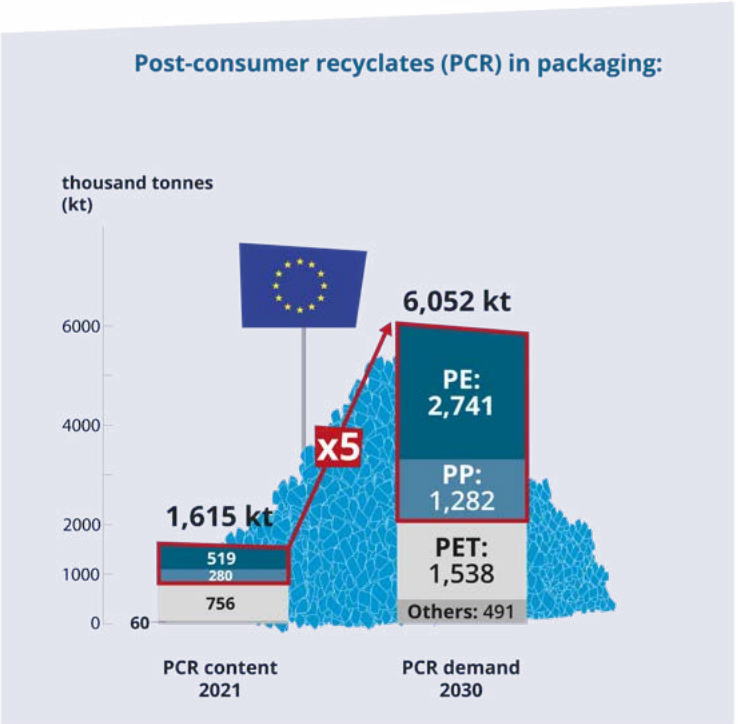
In order to ensure the supply of high-quality recyclates, the separate collection of plastic waste and deposit systems must be massively expanded throughout the EU by 2030.

Cascaded use of packaging waste:

Cascaded use of packaging waste by way of mechanical recycling enables energy-efficient, long-lasting use of the plastic. Diverting to chemical recycling to produce PCR for food packaging would be ecologically counterproductive. Relevant, mechanically non-recyclable waste streams for chemical recycling include:

- Highly mixed and contaminated waste (e.g. electronic shredder residues, contaminated industrial packaging)
- residues from packaging sorting and mechanical recycling
- Thermosets (e.g. foam mattresses)
- Old products that have been mechanically recycled several times with a progressive deterioration of their properties

The use of recycled polyolefins (PE, PP) would have to increase FIVEFOLD to meet the proposed recycled content quotas from 2030 on:



Source: Material flow diagram 2021, Conversio. PCR demand in 2030 is based on an IC estimate for Germany. Simplifying assumptions: 50 % of the processing volumes are contact-sensitive packaging and no company uses more than is legally required by quotas.