Circular economy for printed packaging

Focusing on design and recycling processes

The transformation to a circular economy does not stop at packaging: the importance of recyclable packaging will continue to increase as a result of new requirements in a revised regulation on packaging and packaging waste. While the recycling rate for paper and cardboard packaging in the EU is around 80%, it is just under 40% for plastics. In order for the transformation to a circular economy to succeed in this area, the design aspects AND the recycling processes must further be optimised. Deinking should play a major role in printed plastic packaging in the future.

Packaging in the circular economy

In order to ensure a functioning circular economy in line with the ambitious goals of the Green Deal and the new Packaging and Packaging Waste Regulation (PPWR), it is important that the packaging material (paper, plastic, etc.) can be recycled efficiently. For the print, this means that it must not hinder the recyclability of the packaging material.

Thinking circular economy holistically

The „design for recycling“ of the packaging, including the printing ink, plays a major role. The printing ink industry is very aware of its responsibility and is prepared to make its contribution. However, it lies in the nature of the circular economy that all players involved must work together and do their part to improve the recycling rate. This applies not only to the design phase, but also to the optimisation of recycling processes and efficient collection and sorting. In particular, the interaction between printing and the recycling process must be considered holistically.

Establishing deinking for plastic packaging

In order to obtain high-quality recyclates, it is important to remove the printing ink using a so-called deinking process before recycling. Such deinking processes are already established in the recycling of graphic paper and are the technical standard there. Deinking must now also be established in the field of plastics recycling in order to achieve the ambitious recycling targets.

Trials on a laboratory scale and in pilot plants, as well as the first industrial processes based on aqueous washing solutions, have demonstrated their effectiveness in deinking a wide range of ink and coating categories. It has even been possible to produce completely transparent recyclates by removing the pigments, which increases the value of the recyclates. This represents an important milestone on the way to a functioning circular economy.

This is what we are calling for

Thinking circular economy holistically – utilizing all parameters

The circular economy is based on looking at the entire product life cycle and ensuring that all stakeholders play their part. Only then all levers can be used to optimize the results. This applies to the design phase, but also to the optimisation of recycling processes and efficient collection and sorting.

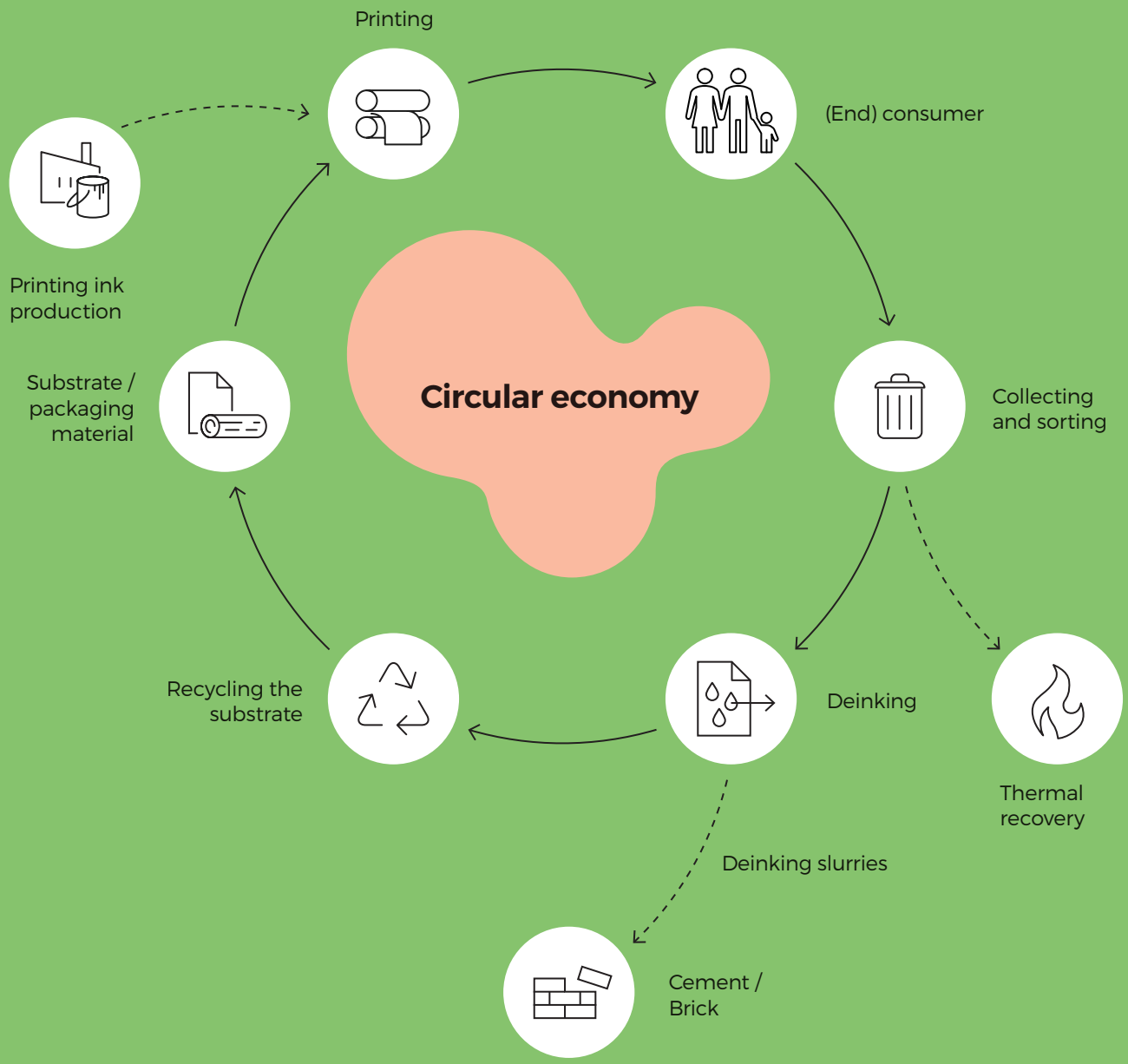
Establishing deinking for plastic packaging

In order to increase the circularity of printed packaging, it is important to remove the printing ink using a so-called deinking process before recycling. The widespread establishment of deinking steps in the recycling of printed plastic packaging is crucial in order to achieve the ambitious recycling rates. Deinking represents an important milestone on the way to a functioning circular economy.

Verband der deutschen Lack- und Druckfarbenindustrie e.V.

Printing inks in the circular economy

To ensure that the printed packaging material can be efficiently recycled, the right recycling technologies, in particular the deinking step, are crucial in addition to the design for recycling of the packaging and the printing ink.



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