



# #DeliverON CIRCULARITY



## The many lives of corrugated fibres

Laboratory test shows that corrugated fibres can be recycled more than 25 times

Paper and board packaging are some of the most recycled materials in Europe. In fact, for sustainable and economic reasons, the supply chain needs recycled fibres in order to function properly. The corrugated industry is extremely efficient in reusing fibres from recovered paper, therefore using fewer primary fibres from natural resources. There is a well-established market for secondary raw materials, and on average corrugated contains 89% recycled content.

### Paper and board champions of recycling

In 2020, the European Commission adopted a new Circular Economy Action Plan (CEAP), a vital pillar of the European Green Deal. Its ambitions are to achieve climate neutrality, preserve natural resources and support the competitiveness of the European economy.

The proposed action plan will contribute to "closing the loop" in product life cycles through greater recycling and re-use, bringing benefits to both the environment and society. The circular economy is about the simultaneous application of waste prevention, re-use and recycling, keeping materials in the loop and minimising the use of resources.

Recycling extends the life span of valuable materials like paper and board. Paper and board packaging already scores high with a recycling rate of 84.6%.

### Corrugated fibre reuse almost endless

Corrugated cardboard is truly circular and achieves the perfect cycle. Fibres are reused and the old is made into new, again and again. But one question remains: how many times can a fibre be reused?

There are many misconceptions around this subject, and in scientific literature it is commonly accepted that paper fibres can be recycled a few times. But for corrugated fibres it is a different story. A scientific study conducted by the University of Darmstadt proved that **corrugated board-based fibres can be used more than 25 times with no significant loss in quality!**

In reality, a small input of virgin fibres is always necessary for the following reasons:

- fibre recovery rate is never 100%
- losses in the preparation process and in the paper machine
- some paper and board types may require fresh fibres (e.g. food contact or dangerous goods packaging)

The study also showed that using "pure" sources of secondary raw materials is key to producing high quality recycled paper. They resist the recycling process better and as a result there is only a limited downgrading of the fibres.

### Separate Collection is key for recycling

This fact is a clear argument in favour of separate collection. It plays a key role in high quality recycling and determines the number of times fibres can re-enter the loop. In 2018, the EU Commission reviewed waste legislation and increased the requirement on member states to implement the separate collection of recyclable waste. For paper this is extremely important and would lead to better quality waste entering the recycling loop.

The circular economy is essential for the future of Europe and the planet. Corrugated packaging plays its part by offering unequalled recycling potential. With more widespread implementation of separate collection across Europe, corrugated packaging will further increase its position as one of the best examples of a product that is **sustainable and circular by nature.**