











Cartonnage et Articles de Papeterie (CAP)







Fachverband Faltschachtel-Industrie e.V. (FFI)





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The Recyclability of Folding Cartons

With the adoption of the Circular Economy Package in mid-2018 and the discussions related to the development of the soon to be adopted Single Use Plastics Directive, the recyclability of packaging has come to the forefront of public debate. Specifically, in relation to the folding cartons manufacturing sector, questions have been raised in respect to the recyclability of folding cartons that incorporate a polymeric layer. In this context, **ECMA** would like to confirm the following facts and background.

The Role of Packaging

Packaging is essential to an efficient supply chain for consumer products. It has three roles in protecting, presenting and preserving products to minimize waste at each stage of the production and delivery process. Within the three roles paperboard products also enhance the consumer's experience by providing important information about the product, being easy to open, and providing effective storage of the product in the consumer's home. From a protection perspective, folding cartons are especially effective in facilitating efficient shipping and storage through to the point of sale. Specifically for the food sector, folding cartons help minimise food waste by reducing product damage, food deterioration and premature spoilage. With respect to effective presentation of products, folding cartons have strong aesthetic features, created by gluing or printing processes, to enable brands to create shelf stand out and drive consumer engagement. It is important that the many benefits of folding cartons in a variety of market sectors are fully recognised. It is also key to note that folding cartons are fully recyclable. This statement also applies to 'coated board' cartons; made from cartonboard which incorporates a coating or laminate from a polymer and/or a hot or cold foil to create added functionality or aesthetic value.

Our Contribution to the Circular Economy

100% of the cartonboard fibres used to produce folding cartons are obtained from renewable, nonfossil raw materials (wood fibres and cellulose and/or processed recovered paper). All of these materials used for the production of folding cartons in Europe come from sustainable and, in most cases, certified forestry management schemes (FSC, PEFC). It should be pointed out that forest areas are growing, with a 100% increase of European forests since 1950. Folding carton packaging is an important example of the practical implementation of a circular economy in that the use of renewable materials and a well-functioning recycling system bring great environmental benefits. In addition, the replanting of forestry for the production of cartonboard facilitates the capture and sequestration of CO₂. Furthermore, paperboard packaging provides structural strength in the shipping packaging thus reducing the shipping case fibre requirements and improving the overall environmental profile of the total package.



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Functional Barriers

Some products require specific barrier requirements to be incorporated into the packaging design to further protect the product which cannot be provided by cartonboard alone; for example, to provide a moisture barrier or prevent migration of gases. Depending on the product application and functional requirements, an additional packaging material will be incorporated in to the pack design to provide this barrier, which could be of fossil or biogenic origin. Such combinations (known as 'coated cartons') tend to have a very small percentage of coating (often a polymer) applied to the cartonboard and are preferable to completely plastic-based designs, due to the substantial reduction in plastic use provided by the dual-material solution and can be recycled.

Clear Message to the General Public: Cartons are Fully Recyclable

Cartonboard has a proven reputation for being a sustainable and fully recyclable material. The general public, who are largely already educated that cartonboard is fully recyclable, should also know that cartonboard can, and should be, placed into existing recycling collection systems. This is also true for the recyclability of cartons with a polymeric layer. All folding cartons are currently successfully recycled in conventional recycling mills, where there is good access to water for the fibres. At the same time, the folding carton manufacturing sector is working on the development of non-fossil/ biobased alternative solutions for coatings. However, it should be noted that this is not actually needed from the recyclability perspective for folding cartons.

Coated Cartons are Valuable Resources

Coated cartons should not be considered a 'composite' material. When laminated or extruded coated board combinations are used, these combinations of packaging materials can be effectively separated in the recycling process, with the result that paper fibres are recovered and, to a large extent, recycled into new materials. This is not dependant on how thick or thin the coating layer is, as long as it is an optimised one so that water can separate it from the fibres. In addition, nearly 100% of the fibres are recovered in the pulping process thus recovering a valuable material for reuse in another product. Cartons with a good fibre quality, and a polymeric layer, are valuable to the recycling infrastructure in Europe and should always be entered into the recycling chain. Not to do so would mean that valuable fibre material would be lost and because the fibres can be recycled many times recycling is always the preferred option.

Why We Need to Improve Collection and Recycling

The contamination of the recovered paper flow can come from various sources and should, in general, be limited as far as possible. In certain countries the separate collection of paper and board from other materials is still not fully implemented. The volume of anonymous underground collection in large European cities is unfortunately increasing. The communication towards households on how to separate in the different streams therefore needs to be further improved.

This overview of facts represents the position of the European folding carton industry and should be a basis for further deliberation and action around sustainability and recycling.

About ECMA

ECMA, the European Carton Makers Association, is the international network of folding carton organisations. ECMA represents around 500 carton producers across Europe who account for around 70% of the total carton market volume in Europe, and employ a workforce of about 50,000 people. More information on www.ecma.org.

