# Paper Packaging The Natural Choice



**TWO SIDES** 

"There aren't many industries around that can aspire to becoming genuinely sustainable. The paper industry, however, is one of them; it is inherently sustainable."

Jonathon Porritt, Co-Founder, Forum for the Future.

# Paper Packaging The Natural Choice

With a recycling rate of 85%, paper packaging is the most recycled packaging material in Europe.

Eurostat, 2016



In recent years, the wider business community has evolved. It has developed an increased awareness of corporate responsibility and accepts its accountability for maintaining standards of ethical, social and environmental performance.

The paper, packaging and allied industries recognise a responsibility to continually improve their environmental credentials and also address consumer concerns about the environmental impacts of their products.

Consumer, business and political interest in the packaging debate has never been so apparent. Now is the time to ensure that the fundamental sustainable attributes of paper packaging are actively communicated to all those for whom paper touches their lives every day.

Paper packaging is durable, attractive, renewable and recyclable and will be an invaluable material as we move towards a regenerative, circular economy.

This booklet sets out 7 powerful reasons why paper packaging is the natural choice for brands, retailers and consumers.

### About ECMA

ECMA, the European Carton Makers Association, is an international network for carton converters, national carton associations and suppliers to the carton industry. ECMA provides the European folding carton industry with a dynamic business network.

With its seat in The Hague, The Netherlands, and an office in Brussels, ECMA represents around 500 carton producers in nearly all countries in the European Economic Area. ECMA members account for around 70% of the total folding carton market volume in Europe, and a current workforce of about 50,000 people.

Find out more, www.ecma.org



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Print and Paper have a great environmental story to tell

TWO SIDES

THE FACT: Paper packaging can minimise environmental impacts







Well-designed, efficiently produced, appropriately used and responsibly disposed of packaging provides multiple benefits. It's essential for minimising damage to products and extending their useful life, for example the shelf-life of food, so that all the resources used to make those products are not wasted. It allows efficient distribution and safe and convenient access to goods. It communicates vital information to the customer and it can provide pleasure to those receiving gifts or enjoying luxury items.

Excessive and inappropriate use of materials, or thoughtless disposal, cannot be excused, but it's important to consider each packaging solution on its own merits and in relation to the job it has to do.

Paper packaging is the natural choice for minimising environmental impact and provides an effective and sustainable packaging solution.

Packaging exists to deliver products to consumers in perfect condition. Well-designed packaging meets the requirements of the product while minimising economic and environmental impacts of both the product and its package. Good packaging uses only as much of the right kind of material as necessary to perform this task.

Europen, 20191

The high recyclability of paper and cardboard can also help consumers to 'do their bit' by allowing responsible disposal and maximum recycling.

Sustainable packaging is also the preferred solution with 96% of brand owners and retailers stating that the use of sustainable packaging is important to their business with just over half (52%) saying this is either 'very important' or 'critical'.

Pro Carton / Smithers PIRA, 2017<sup>2</sup>

Paper offers inspiration – a widely used and recyclable packaging material that is relatively benign if leaked into the environment.

World Economic Forum, 2016<sup>3</sup>

Paper packaging (which includes paper, card, corrugated cardboard, cartons and sacks) is often the sustainable packaging choice. Its key raw material, wood fibre, is a renewable resource and it's also the most recycled of all packaging materials.<sup>4</sup>

The European paper industry can demonstrate a long-held commitment to resource efficiency<sup>5</sup> and to minimising its contribution to climate change.<sup>6</sup> THE FACT: Paper packaging is recycled more than any other packaging material Recyclable packaging is high on consumer priorities and is increasingly driving product design and the choice of sustainable packaging materials.

Packaging being easy to recycle and being made of natural, renewable materials are in the top three attributes rated by consumers as most important.<sup>7</sup> Brand owners and retailers also recognise that recycling of packaging is important to the consumer – 81% find it important and 48% even say it is critical for their brand.<sup>8</sup> Turning waste into a resource is key to a circular economy.<sup>9</sup>

The paper industry has been recycling for centuries. As environmental awareness has grown, the ease with which paper can be recycled is an increasingly valued attribute. Recycling is ecologically and economically sound and recovered paper is a vital raw material for paper production.

European Recovered Paper Council, 2017<sup>10</sup>

The good news is that most packaging is already recycled, especially paper-based packaging. According to data from the European Commission's Eurostat database, an average of 67% of packaging (across all material types) was recycled in 2016. For paper and cardboard, the recycling rate was 85% - the highest of any packaging material.<sup>11</sup> In Europe, 67% of packaging (across all material types) was recycled in 2016.

- Paper & cardboard packaging 85%
- Metallic packaging 78%
- Glass packaging 74%
- Plastic packaging 42%

Source: Eurostat, 2016.

Globally, only 14% of plastic packaging is collected for recycling. When additional value losses in sorting and reprocessing are factored in, only 5% of material value is retained for a subsequent use.

World Economic Forum, 201612

For paper and cardboard, despite having the best recycling record, further progress is being made with targeted initiatives for drinks packaging. In 2017, 48% of all beverage cartons sold in Europe were recycled.<sup>13</sup> For paper coffee cups, technical requirements for a barrier material to prevent leaks can make recycling trickier and their 'on the go' appeal hinders efficient collection. But the industry, working with brand owners and other stakeholders, has committed to tackling this issue and initiatives such as co-collection with beverage cartons are showing promising signs of progress.<sup>14</sup>

Paper and cardboard packaging, besides being recyclable are also made from recycled fibre! About 51% of cartons in Europe are made from recycled fibre<sup>15</sup> and recycled paper provides 88% of the raw material for new corrugated boxes.<sup>16</sup>

### THE FACT: Paper packaging protects more resources than it uses

Packaging is essential for minimising damage to products and extending their useful life. Without sufficient packaging, there would be a greater risk of all the resources used to make the product being wasted and, on average, ten times more resources – materials, energy and water – are invested in products compared with the resources used to produce their packaging.<sup>17</sup>

It is important that packaging is welldesigned, efficiently produced, appropriately used and responsibly disposed of.

If there were no packaging, food and other goods would be lost due to handling damage, lack of hygiene and insufficient information on product use. Using folding cartons to package goods has many environmental advantages.

ECMA, 201918

Corrugated Paper Packaging is visible wherever goods are produced, transported and displayed! Since its invention almost 150 years ago, it has ensured the safe and hygienic transit of goods, protecting and wrapping about 70% of the world's products from producer to consumer.

FEFCO, 201919

Well-designed packaging meets the requirements of the product and consumer while minimising environmental impacts of both the product and its package.

Pro Carton, 2017<sup>20</sup>

Paper packaging is fundamental to a circular economy and has the benefit that it is based on wood fibres which are renewable, recyclable and sustainable. 60% of European pulp and paper mills' energy consumption is bioenergy and 96% of on-site electricity production is through efficient combined heat and power (CHP) units. The European paper industry has achieved (between 1991 and 2017) substantial reductions in energy and water consumption, as well as emissions to air and water, despite a 45% increase in production.<sup>21</sup> The European forest fibre and paper industry is at the forefront of a climate-friendly bioeconomy in which renewable raw materials replace fossil resources and are "kept in the loop", improving both the environment and the quality of everyday life.

#### CEPI, 201722

Producers of paper-based packaging continually demonstrate ongoing improvements in resource efficiency. For example, the beverage carton industry now produces 40% more cartons with the same amount of wood fibres as 20 years ago<sup>23</sup> and the carbon intensity to produce one tonne of paper sacks has been reduced by 20%, partly by reducing their weight through improved paper quality.<sup>24</sup>

## THE FACT: Paper packaging supports healthy forests in Europe



While there are serious pressures on natural forests around the world, most of these are found in the tropics and are due to a variety of issues. 50% of the world's wood harvest is used for energy and just 18% for pulpwood, with 32% going to other uses such as construction.<sup>25</sup>

The most common pressures causing deforestation and severe forest degradation are: large and smallscale agriculture; unsustainable logging; mining; infrastructure projects; and increased fire incidence and intensity.

WWF, 2018<sup>26</sup>

The European pulp and paper industries are committed to use wood that has been legally harvested and, ideally, comes from responsibly managed forests (such as those certified to FSC or PEFC standards). This is reflected in the reality: 90% of the wood used by the industry is from within the European Union, where the risk of illegal logging is low; and 60% of the wood used by the industry is third-party certified as coming from wellmanaged forests.<sup>27</sup>

Production of packaging grades is growing and now accounts for 52% of European paper and board production.<sup>28</sup> Yet Europe's forest cover is growing too. Between 2005 and 2015, European forests grew by 44,000 Square Kilometres - that's an area bigger than Switzerland and amounts to over 1,500 football pitches of forest growth every day!

FAO data, 2005-201529

Packaging made from forest-fibre has the potential to be both renewable and recyclable/biodegradable, but only when it is responsibly sourced and sensitively processed. FSC certified packaging can help to demonstrate a commitment to responsible sourcing.

FSC, 201930

As the packaging industry faces a worldwide demand for paper and board, and because paper cannot be recycled indefinitely, virgin fibres from trees are needed to maintain the cycle of packaging production. This makes sustainable management of forests an essential requirement for the packaging industry.<sup>31</sup> Of course, a lot of paper-based packaging is made from recycled fibre but those items that rely on virgin wood fibre, because of technical requirements, are contributing to the demand for well managed forests. For example, beverage carton producers are sourcing 100% wood fibre from legal and acceptable sources.<sup>32</sup>

Consumers expect packaging to be responsibly sourced, easily recycled with a minimal impact on the environment and ultimately, the world's forests. Recognising the importance of meeting customer expectations, more and more manufacturers are now producing packaging certified as sustainable through assurance programmes such as PEFC's.

PEFC, 201733

Paper packaging is the natural choice for sustainable packaging.

THE FACT: Paper packaging helps to tackle climate change

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Through its contribution to the green economy, the forest products industry plays a critical role in mitigating the negative impacts of climate change and reducing GHG emissions through carbon sequestration and improved resource efficiency.<sup>34</sup>

Choosing paper packaging is one way to tackle climate change. As the provider of a renewable and recyclable resource, forests of all types play a critical role in the global carbon cycle.

Trees absorb carbon dioxide from the atmosphere as they grow and a proportion of it is locked-up in the wood fibre; in fact, roughly half of the dry weight of wood is carbon. In addition, while a healthy forest will contain about 30% of the sequestered carbon in its biomass, another 70% will be held in the soil. With appropriate replanting and responsible forest management, long-term carbon stocks are maintained – therefore, the forest acts as a 'carbon sink', withholding carbon from the atmosphere and so helping to mitigate the effects of climate change.<sup>35,36</sup>

EU forests, for example, absorb the equivalent of nearly 10% of total EU greenhouse gas emissions each year. Land use and forestry – which include our use of soils, trees, plants, biomass and timber – can thus contribute to a robust climate policy. Carbon remains locked-up within wood products for the duration of their life cycle, equivalent to removing 693 million tonnes of  $CO_2$  from the atmosphere annually.<sup>38</sup> While paper products typically have a relatively short life span (with a few exceptions such as books or archived documents), the climate change benefit of wood fibre is extended through recycling, as it continues to store sequestered carbon.

The European paper industry has reduced carbon emissions by 26% since 2005, (now accounting for less than 1% of EU GHG emissions), has reduced energy consumption by 11%, and increased the share of renewable energy consumption to almost 60%.

CEPI, 201839

While the carbon footprint of paper or board may compare well to other materials, there are many other factors, including design, that also influence the carbon footprint of a specific piece of packaging.

A 'life cycle' approach must be taken towards packaging which includes; the use of all materials from sustainable sources; designfor-recycling; maximising lorry loads; efficient stacking; fast filling speeds, ease of use and many other practical and functional requirements.

Also, it should be remembered that packaging's main purpose is to protect the product and on average ten times more resources – materials, energy and water – are invested in products compared with the resources used to produce their packaging.<sup>40</sup>

The direct costs associated with using packaging are relatively small compared to the value it adds to the supply chain in ensuring that these embedded resources do not go to waste.

Food & Drink Federation / INCPEN, 2017<sup>41</sup>

European Commission, 201937

### THE FACT: Paper packaging is attractive and impactful

## Paper and cardboard is a versatile and effective packaging material, whether in storage or transit, displayed in-store or used in the home.

In recent years, unboxing has gone from being a seasonal pleasure, to an online fad, to a powerful ecommerce marketing tool... Using materials that are not recyclable could cause your brand to be regarded as 'wasteful', and customers may share their unboxing experience for the wrong reasons. In the reverse, using sustainable products will go a long way to helping your brand to cultivate an image of strong ethics and social responsibility.

BigCommerce, 201942

In aid of efficient logistics operations, paper and cardboard can be just the right fit. It is robust and protective, allowing easy stacking and economical use of space. For example, a truck loaded with filled beverage cartons transports about 95% product and only 5% packaging.<sup>43</sup> As well as being safe and hygienic, paper packaging provides a wealth of design options. It can be engineered into almost any shape and directly printed with essential information and high-quality graphics. It can be given a range of special finishes, whether to provide a touch of luxury or a sense of what's inside (as for example with braille embossing).

Paper packaging is also efficient. In addition to providing protection during transit, shelf-ready packaging promotes the product in-store, where many final purchasing decisions are made.

Research with consumers in the United States found most people agree that the design of a product's packaging (72%) and the materials used to package a product (67%) often influence their purchase decisions when selecting which products to buy. Package design is seen to be even more important when buying a gift, with 81% agreeing that packaging design can influence their gift selection. 67% of consumers agree paper and cardboard packaging makes a product more attractive than other packaging materials, and similar a proportion (63%) agree that paper and cardboard packaging makes products seem premium or high quality.<sup>44</sup> The advertising value of paper packaging continues to build brand recognition and loyalty in the home, where its attractive look and feel endures. These are two important 'touchpoints' - pure visual contact, where the consumer sees the packaging, and tactile contacts, where the consumer holds the packaging to obtain information about the product or use it. The tactile contacts are particularly important here as they are intense and long-lasting.<sup>45</sup>

Cartons achieve pure visual contacts and – particularly for products used regularly in the household - a considerable number of tactile contacts. Touchpoints in the true sense of the word.<sup>46</sup>

### THE FACT: Paper packaging is preferred by consumers



Many people look to the product's packaging to help them make a decision about what to buy. Packaging provides an in-depth source of information to help consumers make their purchasing decisions and, regardless of age or purchasing habits, all consumers hold packs in their hands to gain information about product features.<sup>47</sup>

The practical benefits of the packaging material can also be a point of preference. Based on a survey of UK consumers, 47% appreciated the light-weight nature of paper packaging (more so than for plastic, at 22%). 37% feel that paper packaging is safer to use and 36% find it easier to open and close. Almost half (48%) prefer the 'touch and feel' of paper and cardboard rather than other packaging materials and around a third of consumers (36%) have a preference for paper packaging because it is all-round more practical. Packaging is also important for communicating environmental performance. 91% of all consumers would shop at a supermarket or retailer that proactively encouraged environmentally friendly packaging from its suppliers and 77% of consumers would pay a premium for more environmentally-friendly packaging.<sup>48</sup> In contrast, 87% of EU citizens are worried about the environmental impacts of plastics (74% are also concerned about the impact on health) and 94% think that industry and retailers should make an effort to reduce plastic packaging.<sup>49</sup>

Products that are more vocal about how easy they are to recycle should win the loyalty of consumers by presenting a more proactive and environmentally responsible image.

Mintel, 2019. Global Packaging Trends<sup>50</sup>

Paper packaging is the choice now for environmentally conscious companies who should understand that consumers appreciate that paper packaging is based on natural and renewable raw materials. In a European study, 'easy to recycle' was considered the second most important packaging feature in every country surveyed (after product protection), followed by 'made of natural, renewable materials'. Not surprising then that 52% of all Europeans believe cartonboard/ cardboard is the most environmentallyfriendly packaging and four out of five consumers (81%) said that, given the choice, they would choose cartonboard/cardboard packaging over plastic.51

No wonder consumers love paper packaging.

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