

# Boardpaper



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Stora Enso Consumer Board Newsletter 1/2019

Brown board  
goes aseptic

COOK's new  
board trays

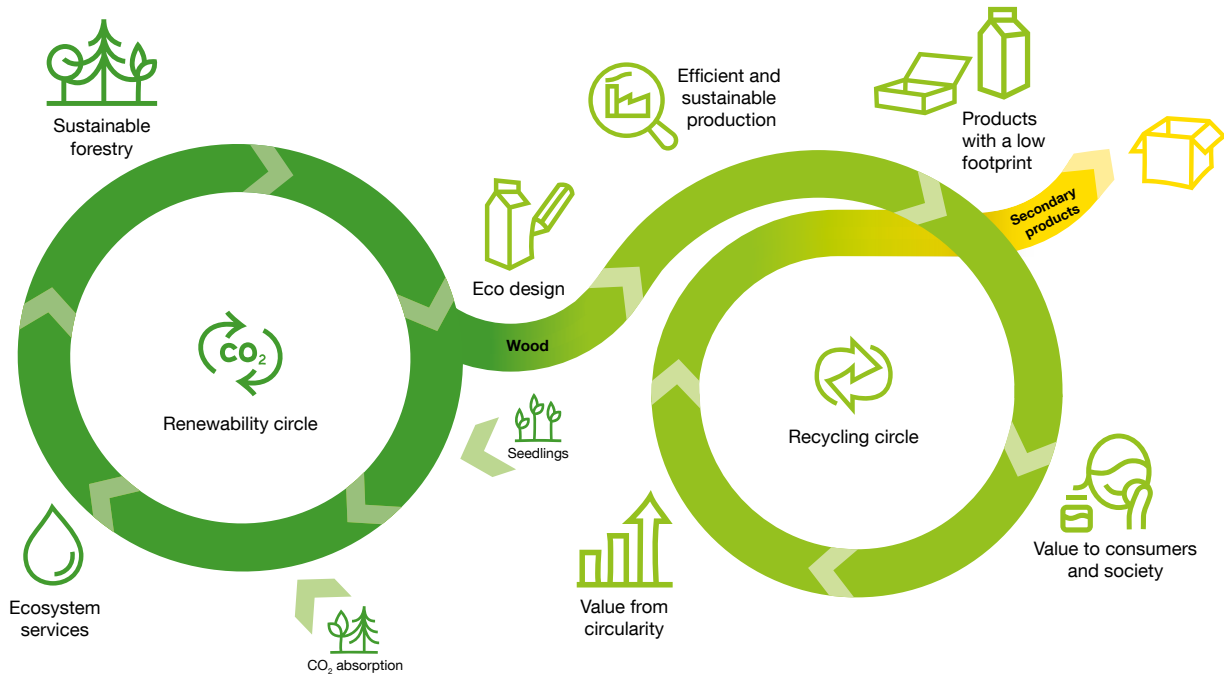
have been a huge success

Circular  
economy

creates value for society



## Circular economy loop



This is the foundation of our sustainability strategy, illustrated by two circles: the renewability circle for the growing trees absorbing carbon dioxide, and the recycling circle, where our packaging materials get recycled into new products.

## Designing for circular economy

Climate change, combined with ongoing legislative changes in the European Union, has resulted in both governments and companies taking action. Consequently, customers and consumers want packaging that reduces waste and is recyclable or reusable. Today, paper and board are the most recycled packaging material in Europe, having a higher recycling rate than glass or metal. Plastic is the least recycled and most polluting

material and thereby the most disliked by consumers.

Ideally, circular economy forms a closed loop, where everything that is consumed can be reused or recycled into something new time after time without creating any waste.

For Stora Enso, when it comes to fibre-based packaging, designing for circular economy is our starting point. In addition, our packaging materials are renewable. This means that our main

raw material, wood, grows back. When wood grows in forests it also absorbs carbon dioxide from the atmosphere.

“Using wood as our raw material, we have a true asset compared with other common packaging materials. Stora Enso uses wood only from traceable sources, from well-managed forests that are maintained according to this principle,” says **Eija Hietavuo**, SVP Sustainability, Consumer Board division.

As trees grow, they absorb CO<sub>2</sub> greenhouse gas from the atmosphere. The CO<sub>2</sub> that is bonded in the fibre remains bonded when the fibre is converted into paperboard, packaging and new products made after recycling.

### Replacing fossil-based materials

For many of Stora Enso's customers and end users, working for a better world often means switching to board packaging to lower the climate impact. At Stora Enso, we are supporting the change through our knowledge and by developing materials and solutions that enable easy recycling and contribute to the circular economy in Europe and globally.

“For Stora Enso, making packaging more sustainable is also about, for example, using the best available resource-efficient

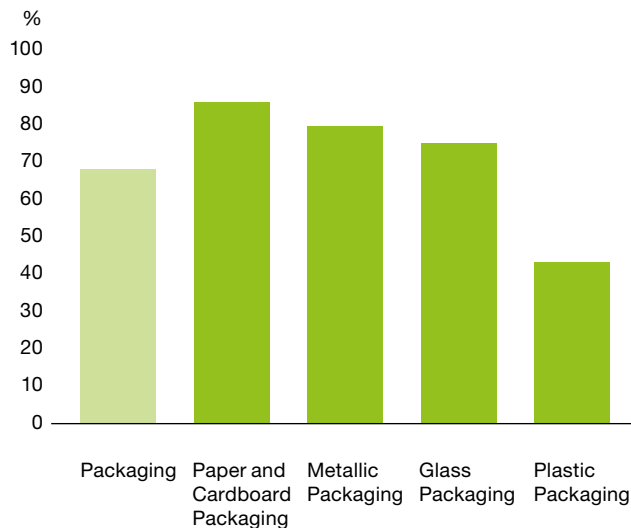
technologies at our production sites, and developing products that can reduce the use of raw material and waste – namely eco design,” explains Hietavuo.

So-called source reduction has been a key focus area of Stora Enso's product development for decades, and with innovations such as microfibrillated cellulose (MFC) we can reach new milestones in that area. Stora Enso has, in recent years, invested in the acceleration of product development for new MFC applications. MFC has multiple advantages. Used in packaging board, MFC contributes to source reduction and light-weighting, while maintaining strength. However, MFC can also be used as bio-barrier layers for grease and oxygen, as well as biodegradable films that can replace aluminium and plastics in paperboard packaging.

## Stora Enso's recyclability actions

- We research and test how our products perform in different kinds of recycling systems.
- We study how paperboard recycling works in different markets.
- We analyse our products' lifecycles and support our customers' LCA studies.
- We work with industry partners to organise and boost recycling.

### Recycling rate EU-28



Source: Eurostat 2016



## Global commitment to combat plastic pollution

Stora Enso has joined the New Plastics Economy Global Commitment to eliminate plastic waste and pollution at the source. The Global Commitment and its vision for a circular economy for plastic is led by the Ellen MacArthur Foundation, in collaboration with UN Environment.

For Stora Enso, signing the commitment is another step to combat the global problem of plastic pollution by providing renewable alternatives. Stora Enso will contribute by cooperating with customers and suppliers to develop circular and low carbon solutions to replace plastic packaging. The materials are based on wood fibres from sustainably managed forests and plantations. This commitment is an example of the increasing demand for alternatives to plastic, also demonstrated by the EU's recent policy on single-use plastics.

“Stora Enso operates at the heart of the circular bioeconomy and we collaborate with customers and partners to create a sustainable future with less plastics,” says **Karl-Henrik Sundström**, CEO of Stora Enso. “We have, for example, developed a renewable, biodegradable drinking straw to replace the traditional plastic straw, and our mouldable biocomposites help reduce the amount of plastic in products.”

The Global Commitment and its vision for a circular economy for plastics are supported by the World

**Stora Enso will contribute by cooperating with customers and suppliers to develop circular and low carbon solutions to replace plastic packaging.**

Wide Fund for Nature (WWF). It has also been endorsed by the World Economic Forum, The Consumer Goods Forum (a CEO-led organisation representing some 400 retailers and manufacturers from 70 countries), and 40 universities, institutions, and academics.

Moreover, more than fifteen financial institutions with in excess of USD 4 trillion in assets under management have endorsed the Global Commitment and over USD 200 million has been pledged by five venture capital funds to create a circular economy for plastic.

The Global Commitment aims to create “a new normal” for plastic packaging. Commitments and targets will be reviewed every 18 months, and become increasingly ambitious over the coming years. Businesses that sign the commitment will publish annual data on their progress to help drive momentum and ensure transparency.

## What's happening in European regulation?

Under the European Union's umbrella of the Circular Economy package there are two separate streams for packaging professionals and companies to follow.

Firstly, there is a legislative review of waste directives. Secondly, there is a circular economy action plan, which has so far produced the Single-Use Plastics (SUP) directive as the first binding legislation to be implemented in countries.

The legislative review will bring us new progressive packaging recycling rate targets, revised extended producer responsibility (EPR) requirements and increased demands for separate collection. A possible change in the methods for calculating recycling rates is under discussion: it would be based on input to the recycling operation, unlike the current method based on input to sorting.

One goal of the SUP directive is to reduce plastic waste by banning plastic products that are typically used only once for a short period of time, for instance in food service. Plastic cutlery, plates and straws will be banned, as will fast food and beverage containers and cups made of expanded polystyrene. The directive also sets a binding target for PET drinking bottles to have at least 25% recycled plastic content.

### What are companies doing?

All these developments require the packaging industry to develop and work together for a circular

economy – and create value from it. More effective recycling will not only prevent waste but also secure sourcing of recycled material for further use.

Paper and board enjoy higher recycling rates than other materials, but not enough for the future. The industry is therefore taking actions to introduce the recycling of paper cups and to increase the recycling of beverage cartons. Stora Enso is an active member in these networks.

Brand owners share the same agenda. For example, both Nestlé and Danone have announced their commitment to make 100% of their packaging recyclable or reusable by 2025.

Recyclability is key in winning eco-aware consumers' hearts, but consumers need to be informed on where and how to recycle. Huhtamaki has introduced cups with a QR code in the UK to help consumers find the nearest cup recycling outlet in the fast-growing recycling infrastructure.

**Fibre-based materials are unique: in addition to being recyclable they can be renewed.**

## EXTR:ACT boosts recycling of beverage cartons

In December 2018, Stora Enso joined EXTR:ACT, a new platform set up by the Alliance for Beverage Cartons and the Environment (ACE) that aims to drive the industry's engagement in carton recycling across Europe.

Sustainable recycling programmes require collaboration both in and beyond the industry. The ACE members – Stora Enso, Elopak, BillerudKorsnäs, SIG Combibloc and Tetra Pak – are driving the value of multi-material recycling with the aim of recycling beverage cartons, including the non-paper components, such as polymers and aluminium.

With this new platform, the beverage carton industry is taking additional measures to increase the recycling of its packages, to scale and drive value for recycling solutions and secure their long-term sustainability.

EXTR:ACT is based in Frankfurt and will also coordinate and drive initiatives to enhance beverage carton collection across Europe in partnerships with stakeholders with similar needs in the recycling of composite packaging.

# Natura Life goes aseptic

Elopak has taken another step forward in sustainable packaging by introducing an aseptic Pure-Pak® carton with Natural Brown Board using Natura Life™ by Stora Enso. The launch of the aseptic carton follows the first Pure-Pak® carton with Natural Brown Board for fresh products introduced a year before. The aseptic carton expands the use of natural brown board for packaging products outside the cold chain.

The development and testing of the aseptic Pure-Pak® cartons were completed in record time during 2018. The first cartons were launched with Zumosol in Spain, and a further three customers have already started supply. The aseptic packaging enables UHT milk products, ambient juices and drinks, plus developing categories such as plant-based beverages (like soy, nut, or grain-based), to become more sustainable, authentic and naturally different.

Natural brown wood fibre is a renewable material that lends an authentic look and visible fibre structure to the carton. It has one layer less than usual, resulting in a reduced carbon footprint and reduced weight that makes this carton a sustainable choice that meets the demands for ethical, ecological and organic products. The product is fully recyclable through the existing collection, sorting and recycling facilities, it is FSC-certified (license code FSC™ C081801), and Elopak has chosen to add Carbon Neutral certification as a standard for this product.

“The CO<sub>2</sub> emissions of the packaging material are neutralised using selected, certified climate protection projects outside our value chain, enabling our customers to further increase the environmental benefits of their packaging,” says **Paul Sweeting**, Director of Strategic Marketing and Product Management at Elopak.





## COOK is gradually changing to paperboard

The UK based frozen food company COOK is set to switch from plastic packaging to paperboard by 2020.

“We started with the highly successful launch of our new range of pies, and continued last year with our Kids Meals. The new trays have been a huge success, and we have received lots of positive comments on social media,” says **Sarah Canning**, Category Manager at COOK. “It’s fantastic to focus on kids first and see such a big impact. This year we are planning to switch our one- and two-portion trays for adult meals from plastic to board, so that means a large volume.”

COOK is a B Corporation, meaning they are committed to reinventing their business as a force for good in society, driving long-term, sustainable and profitable growth. The company was one of the UK’s first certified B Corps.

COOK uses 100% renewable energy. Switching to board trays means that their packaging will also be renewable – made of trees. A small amount of PET coating on the board ensures that the meals stay well preserved in the freezer and can be heated in microwave or conventional ovens. The trays are manufactured by

Southern Cross Packaging from Trayforma PET by Stora Enso.

“When we compare different packaging materials from an environmental perspective, we always come back to board,” says **Richard Pike**, Technical and Sustainability Director at COOK. “It is important for us to know how the board is produced, that it is based on sustainable forestry and an environmentally sound and energy-efficient production process. Partnerships along the whole value chain are becoming essential to make truly sustainable choices and also ensure that the packaging is fit for purpose. Increasing transparency and supporting each other will help businesses achieve their goals and make sure the package tells the same story as its content.”

Companies involved in the food chain can together have a big impact on society by providing sustainable products and packaging that helps to minimize food waste.

“It is very inspiring to work with such an innovative and ethical company as COOK. As a manufacturer of board trays, we



“When we compare different packaging materials from an environmental perspective, we always come back to board.”

are part of a network of businesses who want to do the right thing,” says Sales Manager **Karin Edwards** from Southern Cross Packaging.



## Performa Brilliance enhanced with MFC

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The grammage range of Performa Brilliance™ by Stora Enso has grown with a new and advanced 395 g/m<sup>2</sup> grade, the first ever folding boxboard product enhanced with microfibrillated cellulose (MFC).

MFC is an advanced, renewable, recyclable and biodegradable fibre-based material that can be used to create lighter, stronger and more sustainable material. The new grade of Performa Brilliance is designed for folding cartons for premium and luxury packaging, where higher strength is needed for improved usability, while at the same time meeting end-users' increasing demand for sustainable, renewable packaging material.

"We are excited to be able to offer our customers a more advanced and stronger material. Our microfibrillated cellulose has proved

to improve the properties of our renewable materials and also has considerable potential to replace fossil-based materials in a variety of end-use segments," says **Eva Lundqvist**, Product Manager, Consumer Board division.

Performa Brilliance is designed for folding cartons for pharmaceuticals, cosmetics and luxury packaging, and it also works great in book covers, greeting cards, folders, tickets and tags. Performa Brilliance features high brightness, excellent smoothness and a beautiful visual appearance, and it offers the best whiteness in the folding boxboard market on both the top and reverse side.