Circularity and food safety are a great match

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THE MYTH: RECYCLED FIBRES ≠ FOOD SAFE

Common perception in the moulded fibre industry

Rooted in **generalisation,** not in **differentiated risk assessment**

Often driven by:
mixed input streams, past **technology limits** and **unclear regulatory** interpretation

~~**Recycled = Unsafe**~~ → **Decision Framework**

THE WEPA GROUP, LEADING IN RECYCLED HYGIENE PAPER SOLUTIONS IN EUROPE

- **Top 3** manufacturer in Europe
- **910,000 t** paper production capacity at **15** sites in Europe
- Around **4,500** employees and **1.9 bn EUR** turnover
- **Expert** in manufacturing materials from recycled and alternative fresh fibres
- Bringing **hard-to-recycle material back in the loop**
- **First** supplier of Premium Recycled Pulp in Europe

4ever green

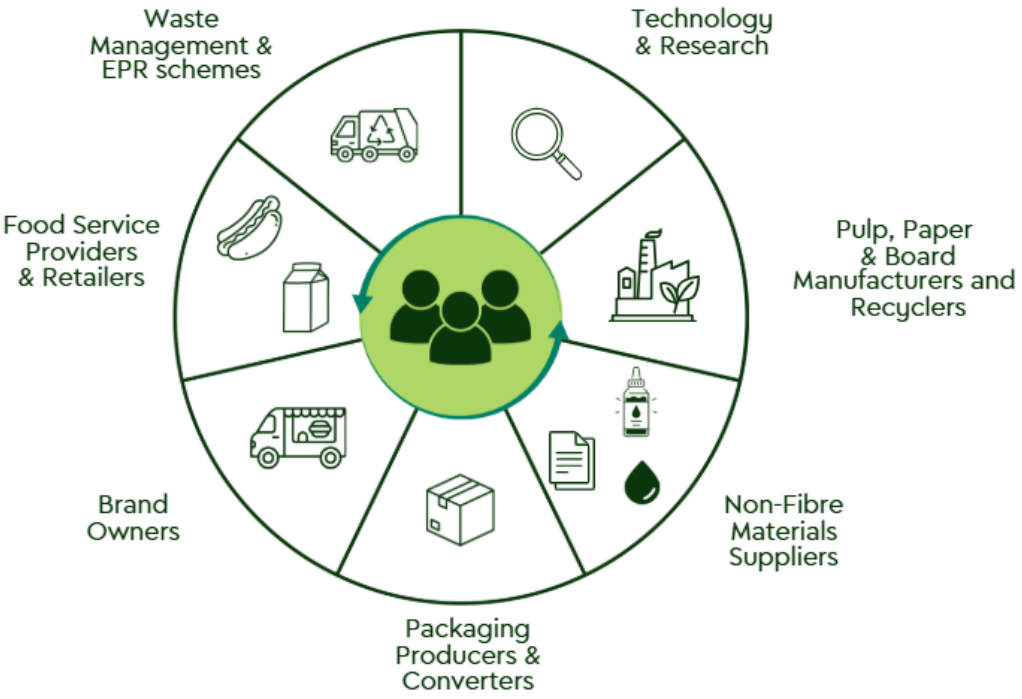
4evergreen is a cross-industry alliance of over 100 members representing the entire lifecycle of paper-based packaging. Together, they share expertise to develop tools and guidelines for an even more sustainable sector.

4evergreen's goal is to raise the overall recycling rate of paper-based packaging in Europe to:

90% by 2030

100+

COMPANIES FROM THE EUROPEAN paper-based PACKAGING VALUE CHAIN



WHY **NOW**?

Packaging and Packaging Waste Regulation

- Increased recyclability & recycled content
- Closed circular loops

EU Deforestation Regulation

- Targets forest-risk commodities
- Applies to virgin fibres while recycled fibres are excluded

Food Safety Framework

- Harmonised EU safety framework
- No paper & board specific EU rules
- Industry standards ensure compliance

WEPA actively engages with this framework, closely monitoring regulatory developments and working on solutions where food safety and recycling go hand in hand.

THE RECYCLING PROCESS FROM PAPER FOR RECYCLING TO PREMIUM RECYCLED PULP

GRADES

EU Standard EN 643

1.04 /1.05 qualities

2.05 / 2.06 qualities

others

COMPOSITION

75% fibres

23% fillers

2% others

SOURCES

85% local (France)

15% UK, Benelux countries...

PULPING

- **WP recipe**
- **Pulping**
- **Prescreening**

1st LOOP

- **Flotation**
- **Screening**
- **Bleaching**
- **Cleaning & Thickening**
- **Dispersing**

2nd LOOP

- **Flotation**
- **Screening**
- **Bleaching**
- **Cleaning & Thickening**
- **Dispersing**

3rd LOOP

- **Flotation**
- **Cleaning & Thickening**

COMPLIANCE READINESS IS A **SYSTEM,**

NOT A SINGLE STEP

- **Cleanliness: 99,7%** non paper contaminants extracted
- **99%** ink removed
- **99%** glue removed

Valid for WEPA's PRP & tested in accordance with BfR XXXVI & PPWR

Food safety starts with the fibre – ensured by fibre quality, process control, material structure and targeted measures.

COMPLIANCE READINESS IS A **SYSTEM,**

NOT A SINGLE STEP

Barrier tests conducted*

- No difference between coatability of recycled and virgin paper
- Double coating efficient to compensate for paper surface defects
- Oil & grease barrier of coated recycled match virgin paper
- Reduction of HVTR of barrier coated paper indication for effective mineral oil barrier

Barriers are optional but broaden application scope.
Key factor is the layer structure of the barrier, not the fibre source.

*Barrier studies conducted by an independent third-party.
All double-coated open papers (5gsm coating weight per layer) demonstrated very good grease resistance with a KIT value of 12 (maximum value). The double-coated barrier additionally enabled a heptane vapour transmission rate (HVTR) of <5 g/m^2/d for both recycled and virgin paper indicating an effective mineral oil barrier.

USE CASE FIT

Non-food

- Household and Consumer Goods
- Home and Living
- Apparel and Lifestyle
- Electronics
- Leisure and Sports
- Packaging and materials

Dry Food

- Unpeeled and uncut fruits and vegetables
- Cereal grains and flour
- Dry pasta
- Dried and roasted nuts
- Crystal and powdered sugar
- Cocoa powder and coffee
- Salts, herbs and spices
- ➢ **Use of recycled fibres unproblematic**

Fatty Food

- Fats and oils and emulsions of such
- Foods with lipids on the surface (e.g. pastries and confectionery)
- Liquid and cooked eggs
- Milk and dairy products
- ➢ **Partially suitable with the use of functional barriers**

Moist food

- Beverages
- Peeled or cut fruits and vegetables
- Syrup and honey
- Meat and fish if not of oily texture
- Soups and sauces if not of oily texture
- Ice cream

The **decision** is not “recycled or not”, it is **“fit or not fit for purpose”**

Safe to use without barriers

Food safety may be obtained through functional barriers (such as coatings and laminations)

TAKEAWAY

Why **recycled fibres** deserve a **differentiated view**

Recycled fibres and **food safety** are **compatible** in defined applications

Compliance is driven by **process control** and **risk assessment**

Premium recycled pulp supports:

- **PPWR compliance**
- reduced **energy consumption**
- competitive **production costs**

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