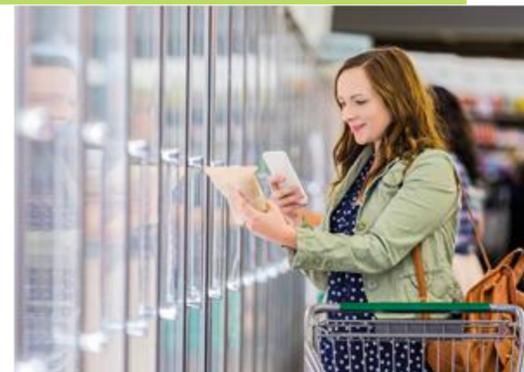


4evergreen

A Circular Future for Packaging

Susanne Haase, Programme Director
Thursday 17 November 2022





4evergreen

brings together companies across the fibre-based packaging value chain who are committed to raising circularity and sustainability

where we come from



Today, 82% of paper and board packaging is recycled.* As we discussed how our sector could become more circular, it became clear that **finding innovative and practical solutions is best done together.**



In 2019, many companies in the packaging value chain contacted Cepi to discuss and **understand the implications of the Single Use Plastics Directive.**



After several successful workshops organised by Cepi, it became evident that there was a need to create **a platform to continue collaborating.**

* Source: Eurostat, 2019

aim, goal and approach



Our aim is to contribute to a climate neutral and sustainable society by **perfecting the circularity** of fibre-based packaging.



Our goal is **to raise the overall recycling rate of fibre-based packaging to 90% by 2030.**

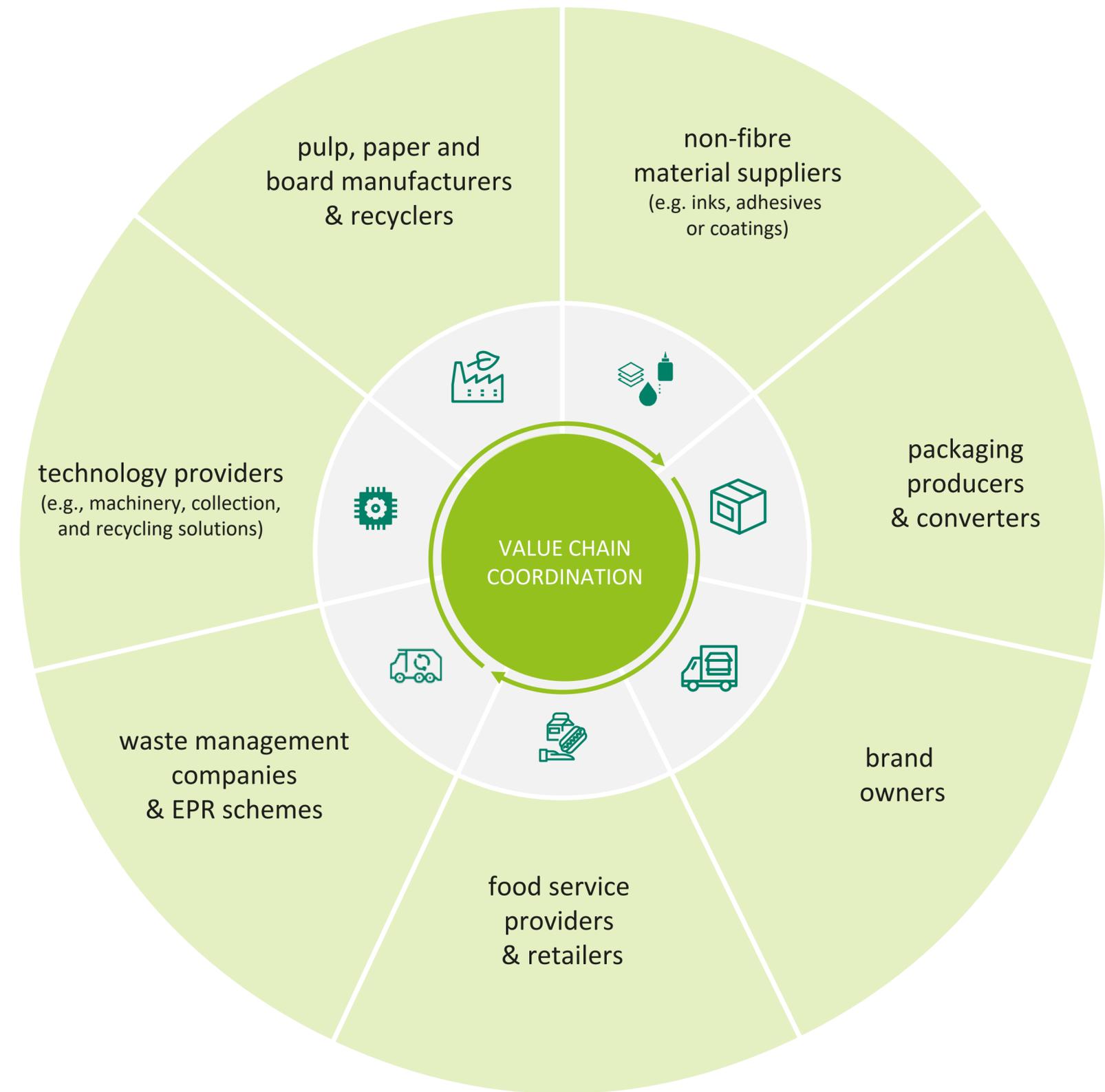
We will focus on the types with a low performance today, in particular household and on-the-go food packaging.



Our approach is **holistic** in identifying and promoting **innovative solutions towards climate neutrality.**

value chain

Together, we can adopt a holistic approach and look at the full life cycle of fibre-based packaging.



who we represent

The central diagram features a green circle with '4ever green' and a recycling symbol. It is surrounded by icons for a factory, water drop, cardboard box, truck, and recycling symbol. The surrounding logos include:

- Top Row:** KCL, 4563 R&D, BILLERUDKORSNÄS, amcor, ASPAPEL, PAPER BOTTLE COMPANY, Koehler PAPER GROUP, KURZ, MM, L'ORÉAL
- Second Row:** ACTEGA, burgo, celabor, HEIDELBERG, PEPSICO, PHILIP MORRIS INTERNATIONAL, Metsä, ONMA
- Third Row:** Dr.Oetker, cardbox packaging, RISE Research Institutes of Sweden, mondi, NEXTGEN CONSORTIUM, PTS FIBRE based solutions
- Fourth Row:** DOW, ELOPAK, DS Smith, IMERYS, Apple, Schur, SIG, INNOVHUB STAZIONI SPERIMENTALI PER L'INDUSTRIA, one • five, RdM
- Fifth Row:** covestro, EASTMAN, DANONE, Fostplus, Seda, SCA, SIEGWERK, Valmet FORWARD
- Sixth Row:** FUJIFILM Value from Innovation, IKEA, Graphic Packaging INTERNATIONAL, Suzano, Tetra Pak, TOMRA, PULPEX THE FUTURE OF SUSTAINABLE PACKAGING
- Seventh Row:** hubergroup print solutions, Huhtamaki, kemira, CJ 제일제당, MICHELMAN, SONOCO, walki, SECURITY MATTERS, WestRock
- Eighth Row:** EXTR:ACT, Expra, Henkel, INTERNATIONAL PAPER, kuraray, MARS, VTT, P&G, VOITH, sappi
- Ninth Row:** CITEO, PAPTIC, Kellogg's, AVERY DENNISON, HOLMEN, HEINZEL GROUP, KOENIG & BAUER, storaenso, UPM, hhs Baumer Group
- Tenth Row:** comieco, hp, FH CAMPUS WIEN UNIVERSITY OF APPLIED SCIENCES, FERRERO, Smurfit Kappa, UPM, hhs Baumer Group
- Eleventh Row:** 4ever green, PulPac, BASF We create chemistry, NISSHA METALLIZING SOLUTIONS



achievements

This is what we have achieved so far:

expertise

100

industry sponsors

15

elected steering group members

132

packaging engineers & circularity experts in workstreams



486

representatives engaged



action

5

active workstreams

4



intermediary targets

3

landmark reports



SMITHERS

McKinsey & Company



+80

tests performed



3

deliverables



communication

in 2022

7

interviews



138

engaged journalists

3

releases



510

media mentions



3

videos



3164

followers



604

followers



1 goal

raising the overall recycling rate of fibre-based packaging to

90% by 2030



political support

“It's a pleasure to welcome the commitment of the paper industry to act together towards an ambitious goal, 4evergreen.

This alliance is clearly in step with our thinking and with our objectives for a circular, low-carbon future. A future where sustainability goes hand in hand with innovation and creates exciting business opportunities.

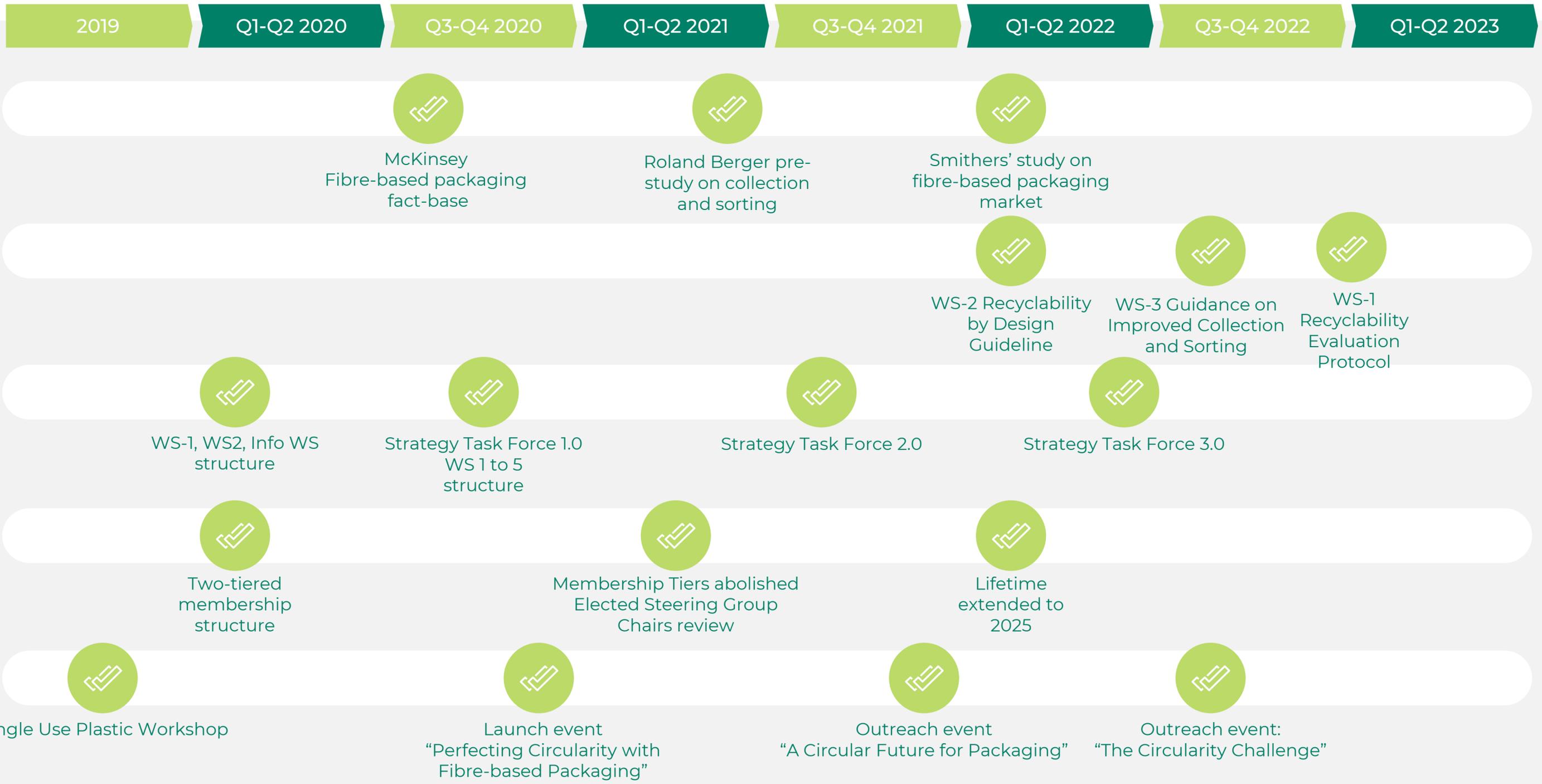
That's the future the Commission laid out in the European Green Deal.”



—
Virginijus Sinkevičius
European Commissioner for
the Environment

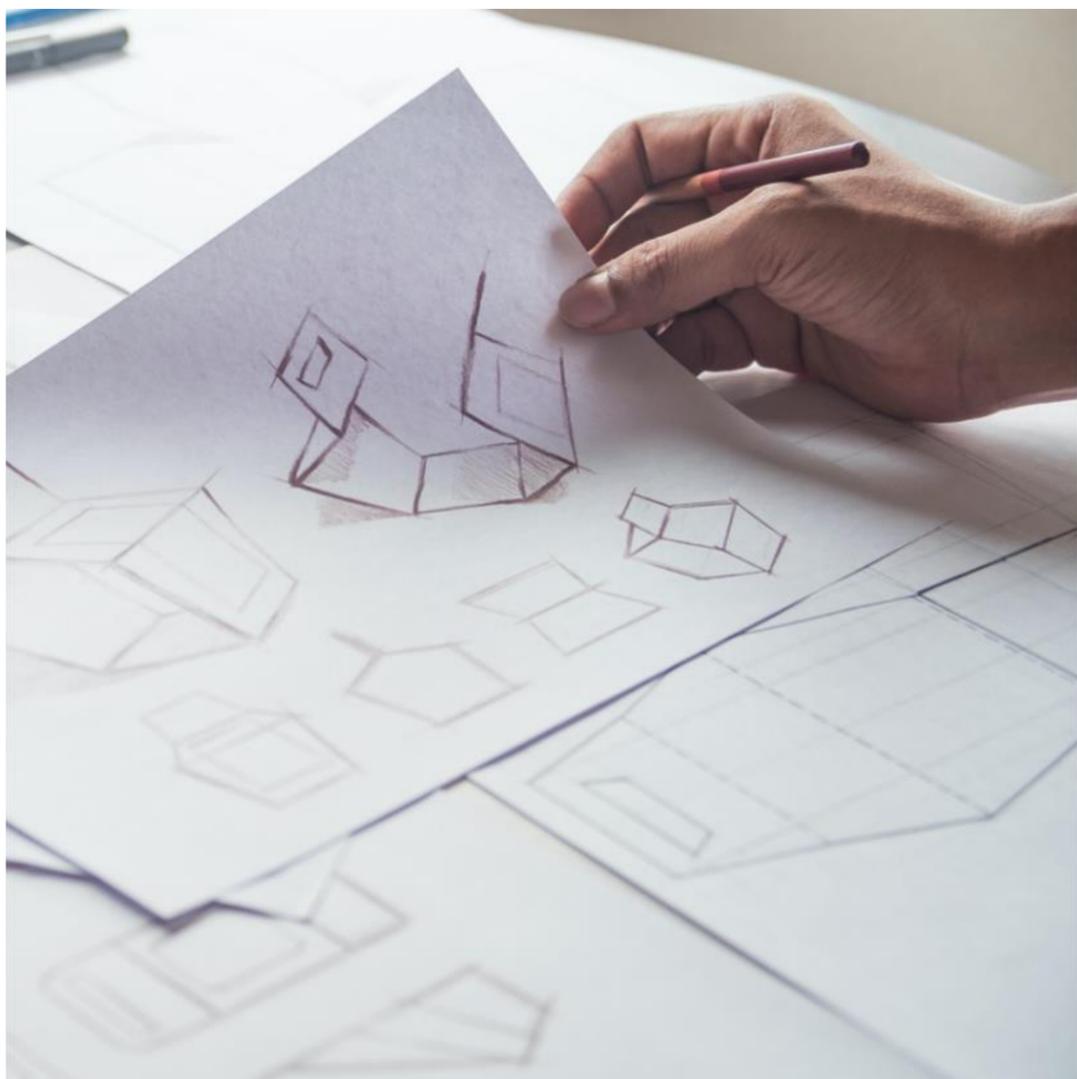
statement made at the 4evergreen launch
conference on 25 November 2020

4EG – timeline



PART 2

What we do



how we make a difference (1/2)

PERFECTING CIRCULARITY TOGETHER



SPREADING THE WORD



WS-5

Translating the work of the technical workstreams into digestible and educational messages for industry & policymakers.

Building consistent views and collaboration, enabling efficient & effective engagement with decision-makers and stakeholders.

Involving the customer (usage) and inform on how to dispose of their consumed fibre-based packaging product.

What is the Recyclability Evaluation Protocol?

A tool allowing a technical evaluation of recyclability of a given fibre-based packaging item. Based on consistent and reliable lab procedure across Europe.

I

Aims to imitate a “standard” mill’s capabilities, thus tackling the largest chunk of fiber-based packaging.

II

Focuses on imitating a mill with de-inking capabilities where extra process units are available.

III

Imitating mills with more specialized equipment and processes, able to recycle materials not fitting “standard” mills.

Why do we need a European recyclability evaluation protocol?



There is a strong focus from the European Commission on circular economy and recycling is the perfect embodiment of circularity



To increase the recycling rate of fibre-based packaging to 90% by 2030



Circularity is not infinite and therefore it is reliant on new fibres entering the loop

What is the Circularity by Design Guideline?

And why do we need it?



Design is the first step in creating packaging and the beginning of the whole fibre-based packaging life-cycle. But it's also our first opportunity to boost circularity.



We are focused on **saving resources** and ensuring that the highest volume of material will be kept in the loop **for us to reach our target of a 90% recycling rate.**



Bringing confidence to designers to create packaging that is designed for circularity across Europe and the world.

Guidance on the Improved Collection and Sorting of Fibre-Based Packaging for Recycling



Challenges

- **Collection and Sorting** are key to improving the recycling rate of fibre-based packaging
- **Collection systems vary** across Europe and should allow **volume and quality**

Our Contribution: the Guidance



A state of the art **review of the collection and sorting systems across Europe**



Provides **best practices** to guide the implementation of future collection, sorting and recycling infrastructure



Focus on household collection and recommends collection and sorting in **2 co-existing streams** for paper & board (PB) and lightweight packaging (LWP)

Guidance on the Improved Collection and Sorting of Fibre-Based Packaging for Recycling



4evergreen key recommendations

- **Existing and well-functioning collection and recycling systems should not be hampered**
- **Legislative initiatives** to incentivise participation of all relevant stakeholders & Extended Producer Responsibility fee structures that **reflect real costs as much as possible**
- **Continuous communication to consumers** to increase awareness & change behaviours
- **Separate recycling targets** for household collection (>85%) and industrial & commercial (>90%)
- **Mandatory separation** of packaging at sorting facilities from household lightweight packaging

Three projects on innovation

1

Novel sorting technologies

Investigating the **efficiency of technologies for complex waste-paper bales** containing barrier paper and board.

- Testing for selected technologies
- Piloting promising technologies
- Insights for future industrial implementation

2

Novel recycling technologies

Investigating technologies for small-scale, decentralized, and **novel recycling or mixed paper waste while efficiently dealing with rejected material.**

Lab scale tests for selected technologies focusing on fibre recovery.

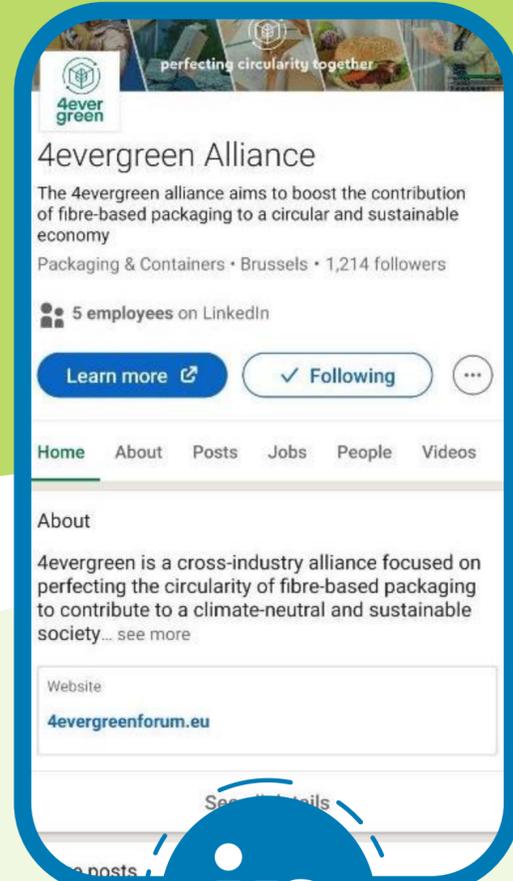
3

Comparative recyclability impacts

Explore the fate of each fraction in the fibre stock and waste or process waters. **Understand the compatibility of materials with different recycling mill** and potential improvements needed.

Run lab tests and validate that the Recyclability Evaluation Protocol cover the needs of barrier materials.

social media



4evergreen alliance

<https://4evergreenforum.eu>



@4evergreenNews





**4ever
green**

Thank you!

Connect with us

4evergreen@cepi.org

