



Cepi

RENEWABLE
RECYCLED
RESPONSIBLE
EUROPEAN PAPER

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Sub-title



EU waste legislation & solutions developed by the paper value chain

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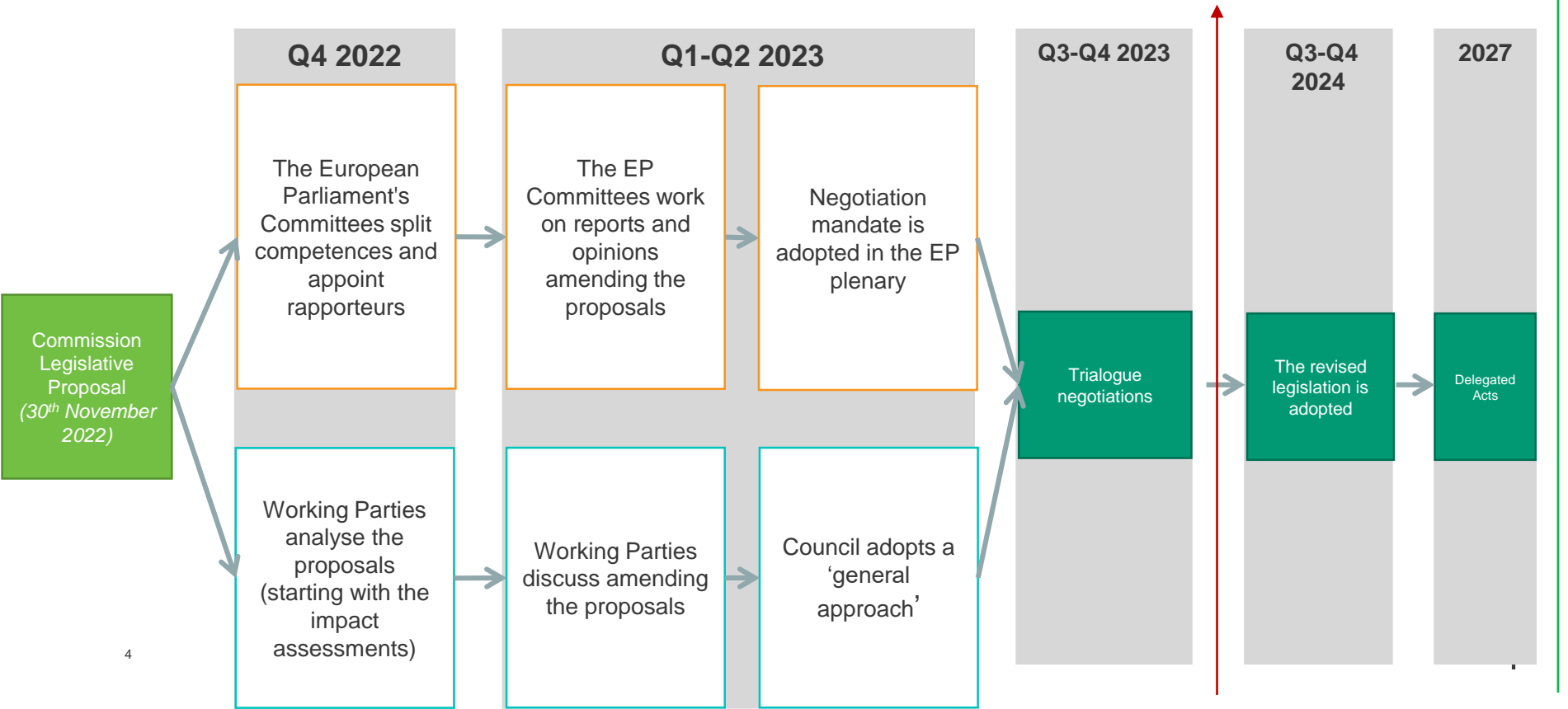
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Revision of the Packaging and Packaging Waste Directive

PPWR timeline: Ordinary Legislative Procedure

**Commission mandate:
all packaging reusable or recyclable by 2030**

Elections: European Parliament June 2024

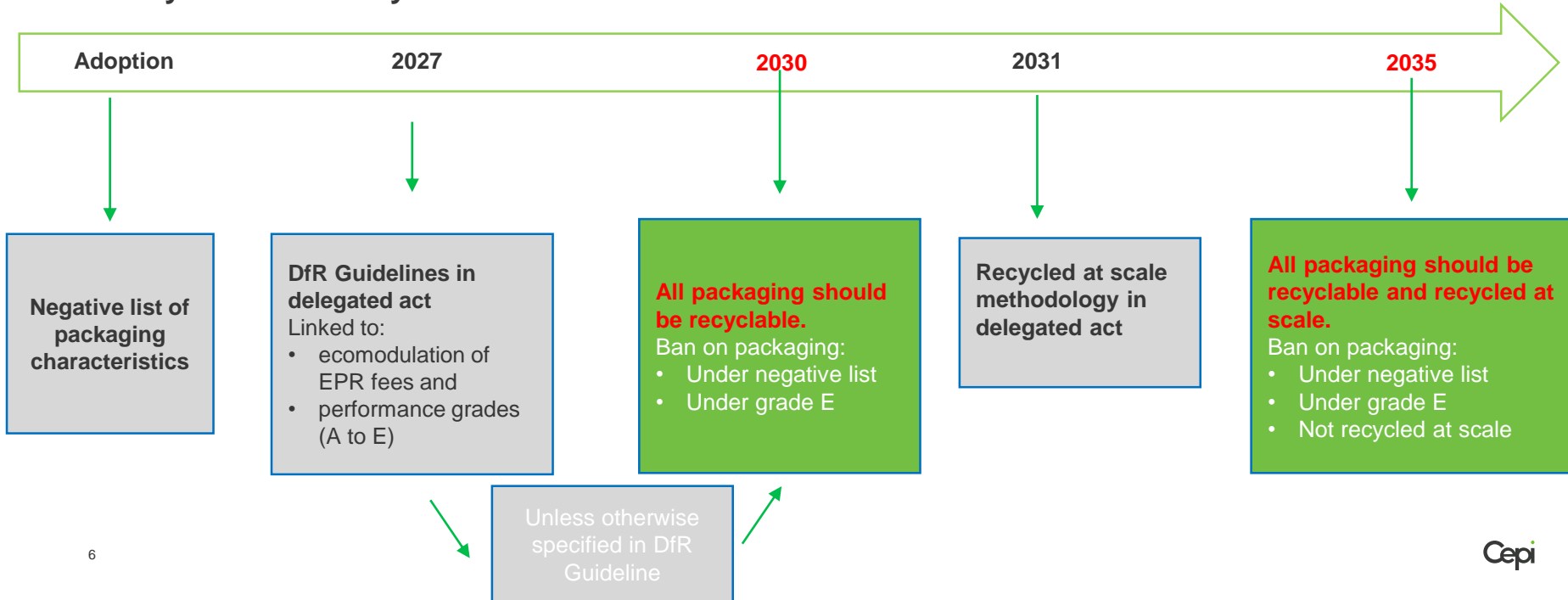


Leaked draft Commission proposal

Timeline – Recyclable Packaging

Recyclable packaging should comply with 2 requirements:

1. Design for Recycling guidelines by 2030
2. Recycled at scale by 2035.



Performance grades

Recycling performance grades: packaging to be assessed according to the score of compliance with the DfR criteria and will be calculated in terms of weight of the unit of packaging.

Recycling performance grades	
Grade A	≥95% score: packaging is fully compatible . The generated SRMs can feed a closed-loop scheme to be used in the same quality application.
Grade B	≥90% score: packaging has some minor recyclability issues that slightly affect the quality of the generated SRM. The SRMs from this packaging can still potentially feed a closed loop.
Grade C	≥80% score: packaging presents some recyclability issues that affect the quality of the generated SRMs and may lead to material losses during recycling.
Grade D	≥70% score: packaging has significant design issues that highly affect its recyclability or imply large material losses during recycling.
Grade E	<70% score: packaging is not recyclable because of design issues

Recyclable packaging – Negative list of packaging characteristics for paper and cardboard

Commission introduces a negative list of packaging characteristics:

- Paper-based packaging with plastic components that cannot be separated in established processes
- Silicone/ wax coatings
- Insoluble adhesives + hot-melt adhesives with softening point < 68°
- Mineral oil colours and inks that do not contain substances of concern
- Two-sided plastic barrier/ coating/laminates
- Inks/ decorative elements using PP/PET metallised laminates, PET-metallised film

Recycled content for plastic packaging

- By 2026 the Commission will adopt an implementing act to establish the methodology for calculation and verification for the percentage of recycled content.
- By 2029 comply with rules of the calculation and verification

Exemption: In cases where there is risk of availability or excessive prices of specific recycled plastics, the Commission may adopt a delegated act to temporarily amend the targets.

Broadened scope: The Commission might also adopt delegated act to establish minimum percentages of recycled content in packaging materials other than plastic, if there is evidence that the uptake of recycled content is not sufficient

The definition of ‘plastic’ is taken from the Single Use Plastics Directive. The **‘main structural component’** however is not defined.

Recycled content targets

Type of Packaging	2030	2040
Contact sensitive plastic packaging	25%	50%
Single use plastic beverage bottle	50%	65%
Other plastic packaging	45%	65%

*Recycled content recovered from post-consumer plastic waste, per unit of plastic packaging.

Reuse and refill targets – article 27

Obligation to	Packaging type/use	Immediate	2030	2040
Final Distributor	Cold & hot beverages (HORECA)		30%	95%
	Take away food		20%	75%
Manufacturer & Final Distributor	Alcoholic (excl. wine and spirits) & non-alcoholic beverages (excl. milk)		20%	75%
Economic Operator (EO)	Transport packaging (pallets, crates, foldable boxes, pails and drums)		50%	90%
	Transport packaging for non-food made available for the first time via e-commerce		20%	80%
	Transport packaging for stabilisation and protection during transport (pallet wrappings and straps)		20%	75%
	Grouped packaging		10%	50%
	Transport packaging used between different sites on which the operator performs its activity and other linked enterprise	100%	100%	100%
	Transport packaging delivering goods from one EO to another EO within the same MS	100%	100%	100%

Concerning elements

Measure	Impact
Reuse targets – especially for transport packaging	detrimental impact on the paper and board packaging sector
Negative list of packaging characteristics	ban on certain paper and board packaging products (e.g. paper-based packaging with plastic components/ two-sided plastic barrier)
Parameters for DfR criteria	paper packaging with barriers/coatings and composite packaging could score low in performance
Unclear definition of plastic packaging	recycled plastic targets could disproportionately apply to paper and board packaging
High recycling performance grades linked with closed loop recycling	set unnecessary barriers and result in low recyclability score for highly recyclable packaging

Some considerations

- The reuse targets for all packaging, regardless of the material used and systemic approach would disrupt the competitiveness of the internal market while replacing a significant part of renewable and recyclable paper and board packaging with fossil-based alternatives.
- The negative list of packaging characteristics for paper and board is not justified. Moreover, paper-based packaging with such functional barriers can still be recycled.
- Mandatory recycled content is not an appropriate tool in regulating well-functioning markets of secondary raw materials, such as the one of Paper for Recycling (PfR). Paper for Recycling is a well - functioning secondary raw material market.
- Separate collection is key to further increase recycling rates and uptake of recycled content.

Solutions developed by the paper industry

Cepi Recyclability Test Method version 2

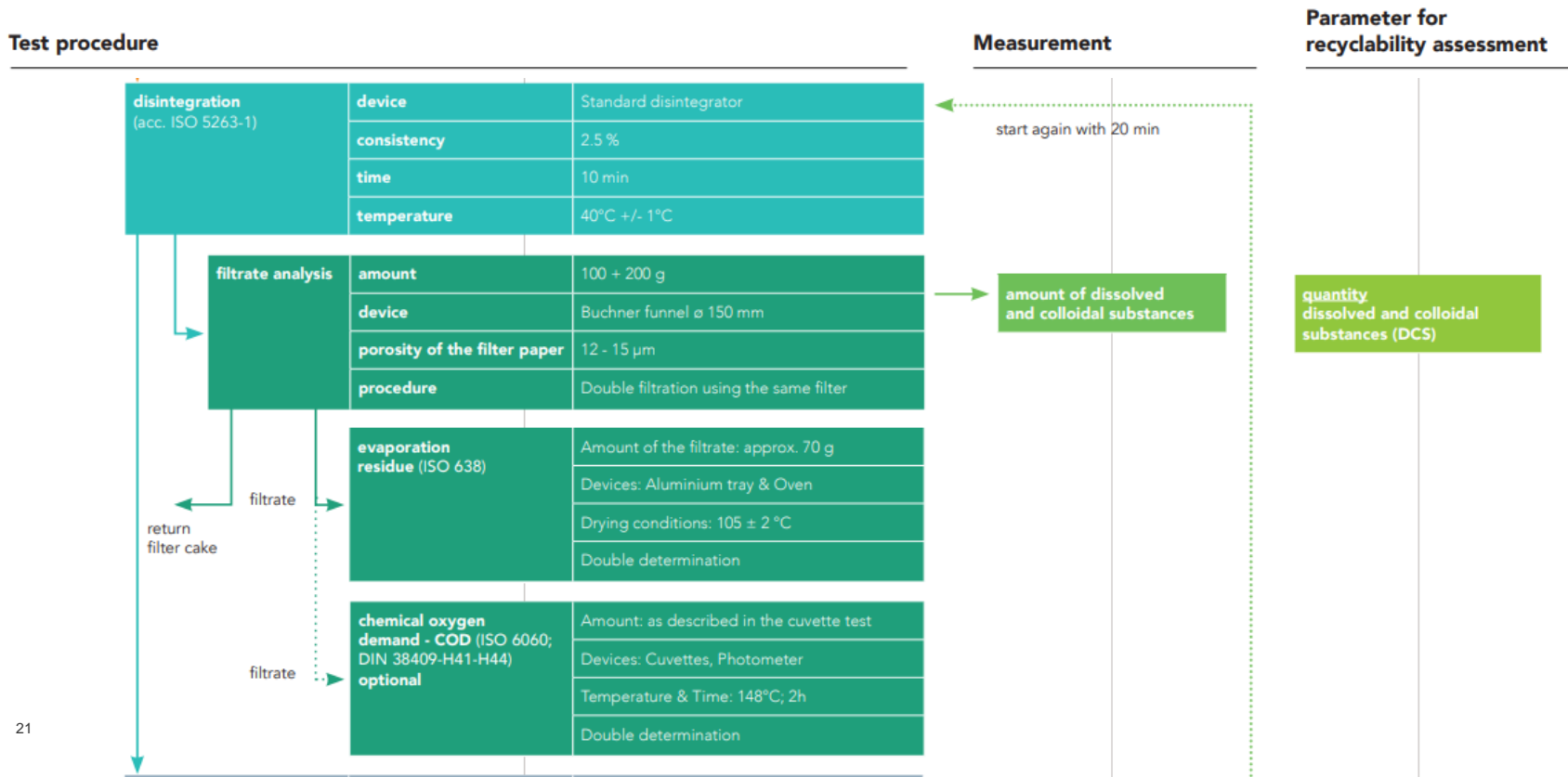
Cepi Recyclability Test Method version 2

- In January 2021, Cepi published version 1 of its recyclability laboratory test method.
- The test method defines a laboratory procedure emulating the most relevant phases (pulping, screening, sheet formation) of a typical paper mill dedicated to the recycling of the most common grades of paper and board without deinking technology or other special features.
- Cepi recyclability laboratory test method version 2 was finalised in October 2022.

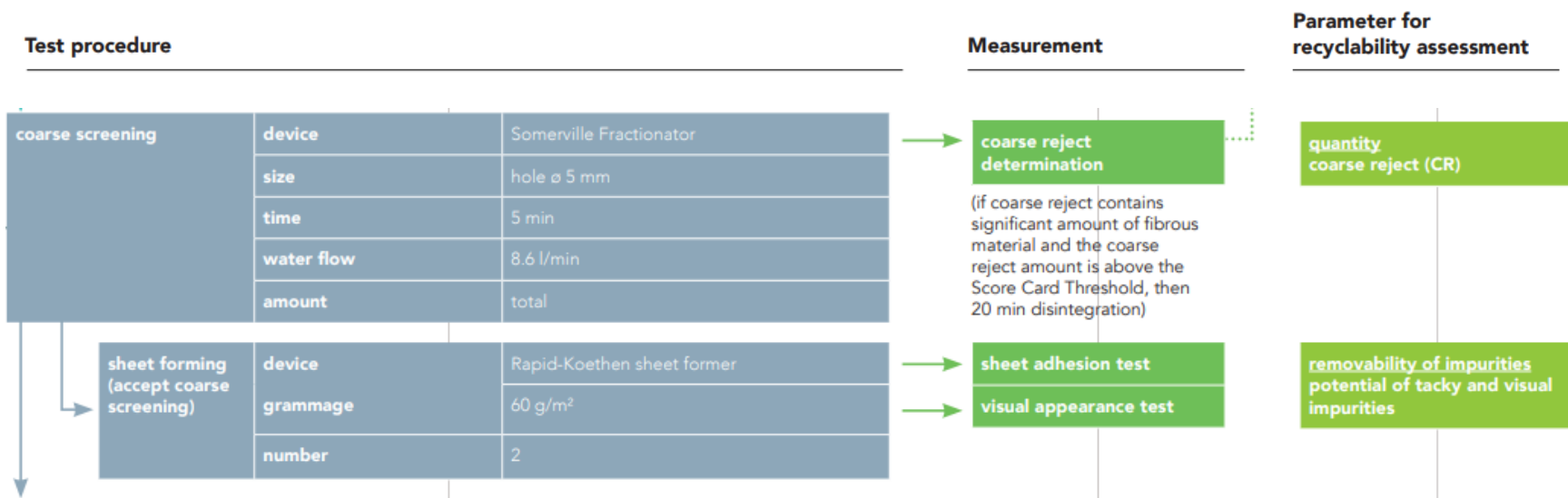
Harmonised European Test Method for Paper and Board Recyclability Assessments – Annex A Flowchart

Test procedure			Measurement	Parameter for recyclability assessment
paper & board material and product	amount	250 g (at least one piece)		
	ageing	Sample without wet strength agents (WSA) should be older than 15 days, then no artificial ageing needed. If WSA present and sample not older than 30 days, artificial ageing needed acc. to Ingede Method 11 (3d, 60 °C)		
representative sample				
preparation	size	3 cm x 3 cm (+/- 0.5 cm)		
	amount	50 g aliquot of dry weight		
	method	cutting		

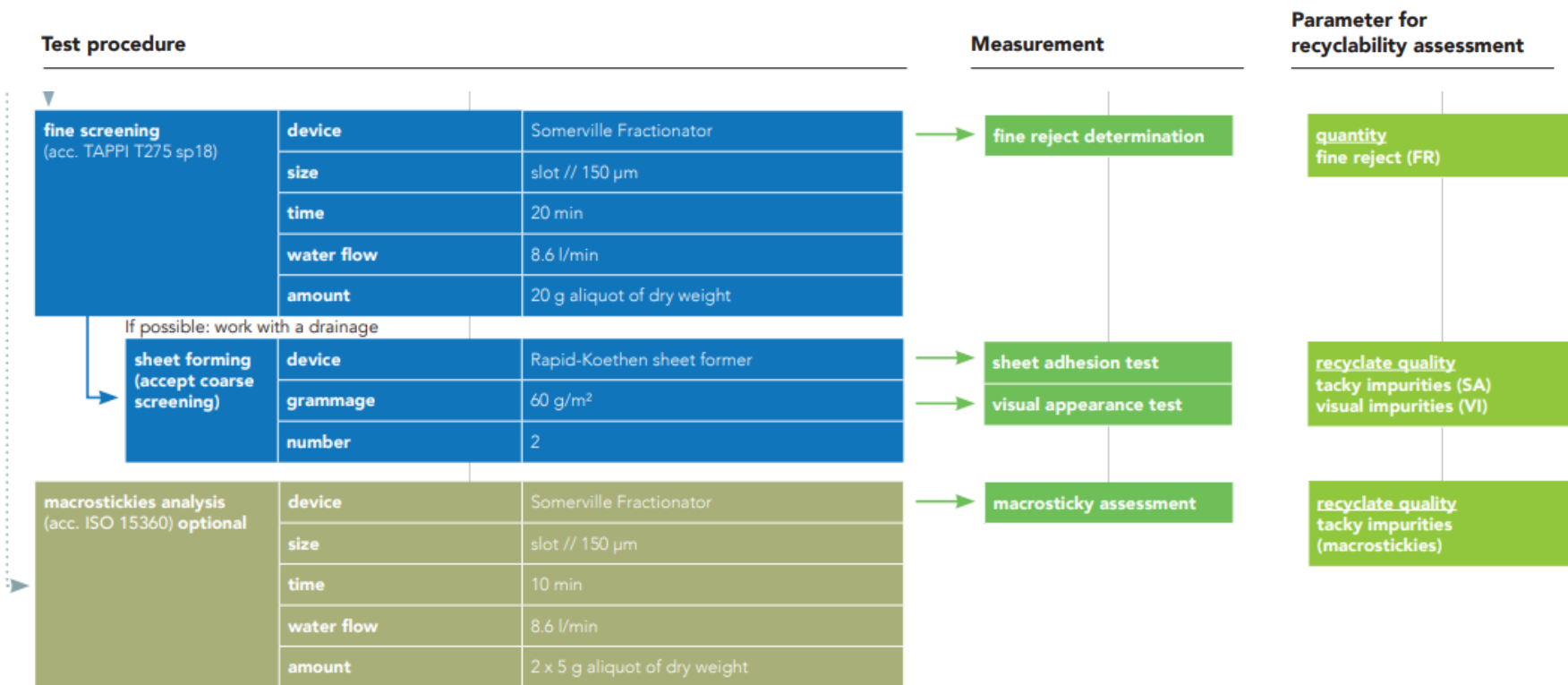
Harmonised European Test Method for Paper and Board Recyclability Assessments - Annex A Flowchart



Harmonised European Test Method for Paper and Board Recyclability Assessments - Annex A Flowchart



Harmonised European Test Method for Paper and Board Recyclability Assessments - Annex A Flowchart



Cepi Recyclability Test Method version 2 – next steps

- The test method is a living document - Cepi will continue working with the labs to further develop the test method.
- Additional information and experiences from tests based on the test method will enable further analysis/advancing of:
 - the determination of macrostickies (currently optional)
 - the filtrate analysis, with a special focus on the evaporation residue.

Link with 4evergreen recyclability evaluation protocol

The test method and the values it generates was used by 4evergreen workstream 1 as a basis for the development of a protocol to evaluate the recyclability of fibre-based packaging in standard recycling mills.

In order to evaluate the recyclability of paper-based packaging in standard recycling mills, the method can be used in combination with the 4evergreen recyclability evaluation protocol.

4evergreen

A Circular Future for Packaging





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.



90%

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

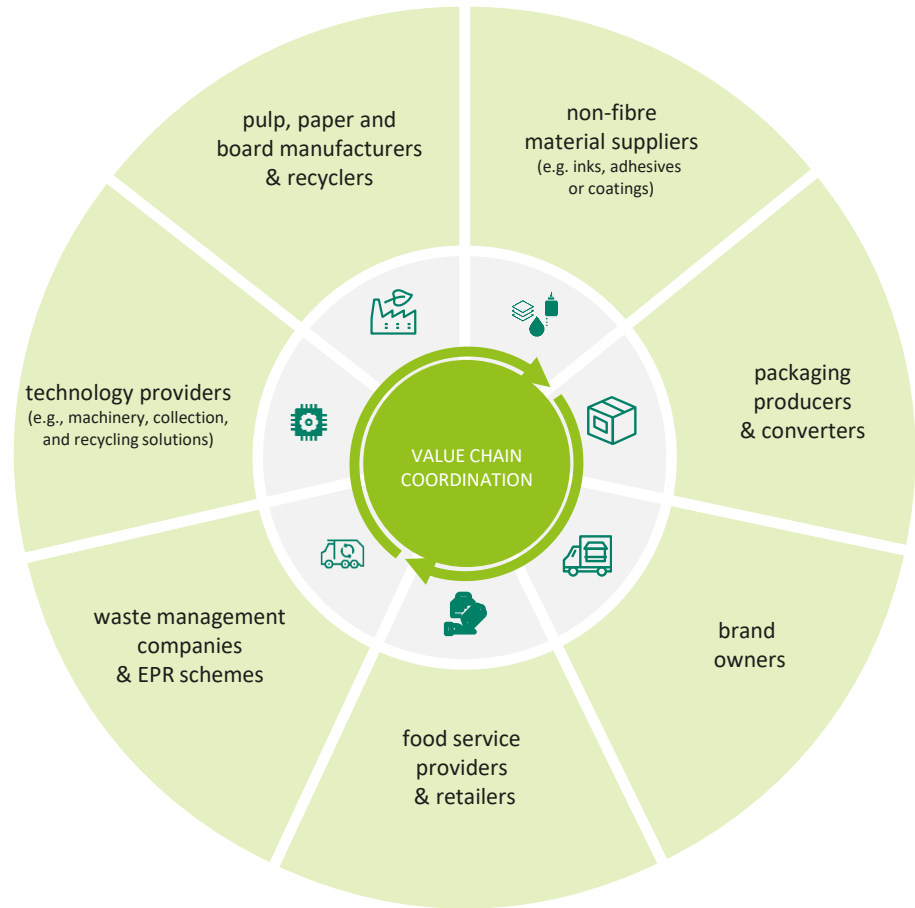
We will focus on the types with a low performance today, in particular household and on-the-go food packaging.



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

4ever green

Partners represented include:

- KCL 4563 R&D
- BILLERUDKORSNÄS
- amcor
- ASPAPEL
- PAPER BOTTLE COMPANY IN
- Koehler PAPER GROUP
- KURZ
- MM
- L'ORÉAL
- ACTEGA
- burgo
- celabor
- HEIDELBERG
- PEPSICO
- PHILIP MORRIS INTERNATIONAL
- Nestlé
- Metsä
- PTA
- PTA FIBRE based solutions
- CTP CENTRE TECHNOLOGIE DU papier
- Dr.Oetker
- cardbox packaging
- RISE Research Institutes of Sweden
- mondi
- NEXTGEN CONSORTIUM
- one • five
- RdM
- DOW
- ELOPAK
- DS Smith
- IMERYS
- Apple
- Schur
- SIG
- INNOVHUB STAZIONI SPERIMENTALI PER L'INDUSTRIA
- Valmet FORWARD
- covestro
- EASTMAN
- DANONE DE NUTRIZIONE
- Fostplus
- Seda
- SCA
- SIEGWERK
- FUJIFILM Value from Innovation
- IKEA
- Graphic Packaging INTERNATIONAL
- Suzano
- Tetra Pak
- TOMRA
- PULPEX THE FUTURE OF SUSTAINABLE PACKAGING
- hubergroup print solutions
- Huhtamaki
- kemira
- 재일제당
- SONOCO
- walki
- SECURITY MATTERS
- WestRock
- EXTR:ACT
- Expra
- Henkel
- INTERNATIONAL PAPER
- MICHELMAN
- SONOCO
- walki
- SECURITY MATTERS
- WestRock
- CITEO
- comieco
- hp
- PAPTIC
- kuraray
- MARS
- VTT
- P&G
- VOITH
- sappi
- comieco
- hp
- FH CAMPUS WIEN UNIVERSITY OF APPLIED SCIENCES
- FERRERO
- HOLMEN
- HEINZEL GROUP
- KOENIG & BAUER
- stordenso
- UPM
- 4ever green
- PulPac
- Basf We create chemistry
- Smurfit Kappa
- NISSHA METALLIZING SOLUTIONS

how we make a difference

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.

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



Thank you

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