

7 Report





Roadmap – main focus

Key focus areas	Circular economy
	Brexit
	Technical compliance
	Statistics
	Standardisation
	Lobbying
	Communication



Lobbying & Advocacy

- Active involvement within the Circular Plastics Alliance
- Increased profile with the Commission
- Two virtual meetings with MEPS to introduce ERFMI and the work we are doing

Standardisation

- Active work on standardisation for Circular Economy within WG10 - Terms and Definitions
- Convenorship WG 7
- Liaison TC 249 Plastics WG 11 recycling

Technical Committee

- Responding to consultation on CPR
- Project on unintentional release of microplastics
- Keeping members updated on REACH and otherr technical matters
- Responding to draft delegated act AVCP reaction to fire

Circular Economy

- Establishment of a working group to define a vision and mission for the circular economy
- Working on active projects within the Circular Economy including researching identification and sorting technologies and recycling technologies
- Trials on extraction of legacy plasticisers using superciritical Co2
- Circular Flooring Horizon 2020 project
- Additional €225,000 via VinylPlus for Revinylfloor recycling and collection projects

Communication and Information

- Series of webinars to inform our members on important topics including Extended Producer Responsibility (EPR),
- Working with Kalei, on document regarding actions needed to prepare for the French Law on Circular Economy and EPR for Construction Products
- update on website text
- Information on Covid response
- Copy on Cleaning



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Lobbying for a favourable policy environment

Establish relationships with main regulatory bodies so as to:

- Anticipate future regulatory requirements.
- Exert a positive influence in shaping regulations.
- Exploit and measure effectiveness of regulations.

Active role in Circular Plastics Alliance, the Commission's initiative to increase the use of recycled plastics in new products placed on the market in Europe Meeting with MEPs: Maria SpytakiMember of the Committee on Industry, Research and Energy (ITRE) and Substitute in the Environment Public Health and Safety (ENVI) Committee. Sirpa Pietikänen: Substitute on the Committe for Environment , Public Health and Food Safety; one of the authors of the 2015 Circular Economy Action Plan Response to Commission: CPR consultation Response to Commission: French Article 13 of Circular Economy Law Response to Commission: Draft Delegated Act AVCP reaction to fire



Circular Plastics Alliance (CPA)

- EU Commission target: by 2025, use of ten million tonnes of recycled plastics in new products
- Key points:

Improvement of formulations and design of plastic products towards optimised <u>recyclability</u>. Identification of previously unused potential within the value chain and in waste management,

5 working groups :

Construction products

Automotive Industry

Packaging

Agriculture

Electrical and electronic equipment.



How is the CPA organised?





Circular Plastics Alliance

Important for ERFMI

- The commission has agreed that pre consumer waste can be included for construction products as it was included in the original pledges
- However definition of recycled content is still subject to discussion

Monitoring of recycled content:

- Importance of definition of recycled content pre and post consumer waste
 - er still
- ERFMI's definition in guidance document, however still under discussion with Plastics Recyclers Europe



Developing a Vision and mission for the circular economy: To what extent are members willing to work together and on what topics

Circular Flooring Horizon 2020

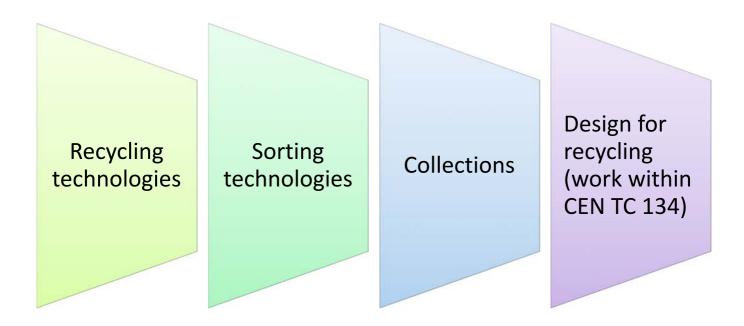
Revinylfloor projects:

Research into recycling technologies
Research into identification and sorting
Supercritical CO2 extraction trials

CiSuFlo: Circular Sustainable Flooring



Our key focus areas





Revinylfloor research

- Project under ERFMI, co-funded by VinylPlus
- 2020 : €200,000 total expenditure €154,000
- 2021: € 225,000

Carry over to 2021: € 46,000 for collection trials



Revinyfloor

- Recycling technologies that can be used for the recycling of PVC floor coverings
- Identification and sorting technologies that can identify flooring containing legacy additives and sort it from flooring that does not contain legacy additives.
- Scope: technologies that have been tried in the past, that are emerging or used for other applications
- Work undertaken:
 - o Thorough literature and patent search
 - o More than 1000 patents were found in total
 - Narrowed down to a long list of 600
 - Creation of a detailed data base including
 - List of 140 relevant companies/ technology providers
 - o Interviews with providers



Outcomes

Created a long and short list of recycling, sorting and identification technologies based on Applicability, impact, complexity, maturity etc.

Next steps: Technology trials - Feasibility testing

Extraction:

- Ultrasound Assisted Extraction
- Microwave assisted extraction

Sorting and Identification

- MIR Mid-Infrared, 3–50 μm
- FTIR/ATR Fourier-transform infrared spectroscopy /Attenuated total reflection



Current status

- Sample preparation by AgPR
- Extraction trials at lab scale starting on 19th April
- Mid Infrared sorting trials at sensor- based sorting manufacturer TOMRA - 7th June



Extraction using supercritical CO₂

- Feasibility trials
- Pre prepared samples Critical Polymers to undertake trials on the feasibility of extracting legacy plasticisers using Supercritical CO₂.
- $\leq 0.1\%$ legacy plasticizer left in the samples after extraction, SVHC limit
- Next steps to be discussed in Revinylfloor platform



Collection trials

- On hold due to Covid
- Would like to run trials in Europe, particularly France working with Kalei on collection of **resilient flooring** from large distribution sites or retailers
- If accepted: investigate feasibility by June 2021





Circular Flooring Project- EU funded

Aim: to enable the circular use of plasticized PVC from waste flooring by developing a recycling process to eliminate legacy phthalic acid esters that are not conform with the EU REACH directive.

Main objectives:



Develop a process for recovering end-of-life flooring waste and producing secondary phthalate-free PVC, thus preventing usable resources from landfill and/or incineration

Demonstrate circularity of PVC in flooring and applicability of phthalate-free plasticizers that are compliant to the REACH directive from waste flooring

Determine environmental, health and safety impacts and techno-economic feasibility

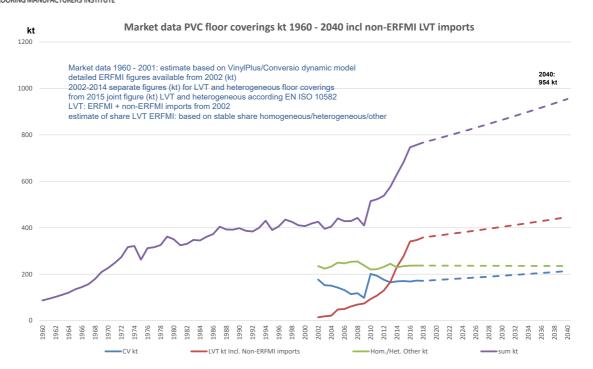




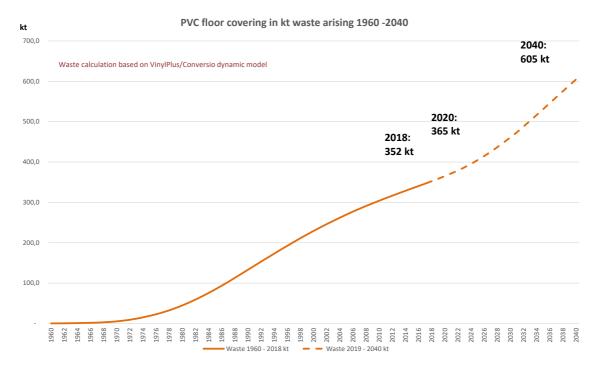
Key results to date

- Valuable status quo information of PVC flooring waste was generated (production, sales, waste generation, waste collection)
- A recycling process was established at lab scale
- Phthalate level in r-PVC was brought below the legal limit
- Harmful phthalates were safely hydrogenized at lab scale
- Construction of pilot plant building and aquisition of processing machines
- Production of r-PVC flooring sheet and evaluation of r-PVC quality
- Business Model Canvas (cost elaboration)

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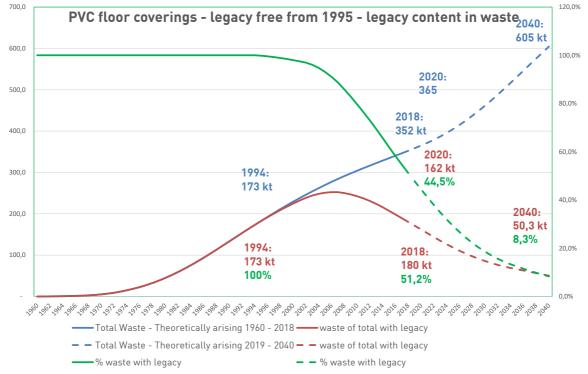




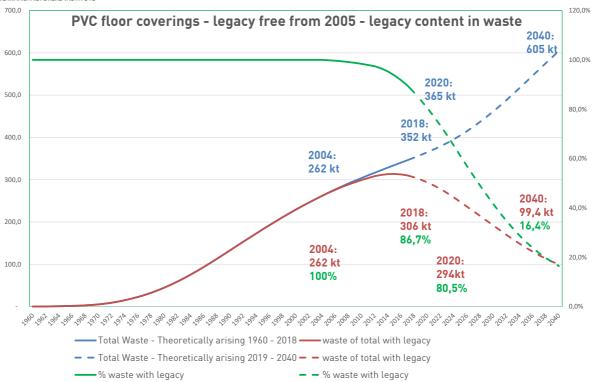


ERFMI.











CiSuFlo

- Circular Sustainable Flooringcoverings.
- Project leader Centexbel
- Flooring association partner EUFCA
- Number of Partners 19
- Budget : 7,7 M€
- Duration: 48 months, starting from June 2021
- Role EUFCA and associations:
- Member of steering group
- Active role in work packages JG project lead for collections



Project Objective

- systemic framework for circular and sustainable floor coverings Setup Integrated Product information system
- Define and evaluate circular business models and related socioeconomic impact.
- Demonstration of circular flooring via 6 pilots
- · Perform sustainability assessment.
- TransfBeyond flooring and clustering
- Dissemination and exploitation

Pilot projects

- · Manufacturing of circular floorings
- Sorting of flooring waste
- Separation of material fractions from complex flooring waste - EuPolySep
- · Laminate flooring recycling
- Vinyl flooring recycling
- Textile flooring recycling



Circular flooring

Research into recycling technologies

Research into sorting technologies

Collection and sorting

CiSuFlo- Circular Sustainable Floorcoverings

Increased recycled material

Increased recycled content



Communication

- Webinars held on the following topcis
 - Extended Producer Responsibilty November 2020
 - UK REACH February 2021
 - Overview of Building market in Europe March 2021
- Copy on cleaning
- Circular economy position paper





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EUFCA

- CiSuFlo project
- Information on UKCA marking distributed
- Following CPR Review
- Leading on Design guidelines within TC 134