

19 MARCH 2026

Fost Plus is accelerating the transition to sustainable management of household packaging by intelligent sorting

Francis Huysman
CEO Fost Plus



Circular Packaging
Holy Grail 2030

INTELLIGENT SORTING COMBINED WITH INNOVATIVE RECYCLING = CIRCULARITY



Current situation of recycling flexibles in Belgium with Fost Plus



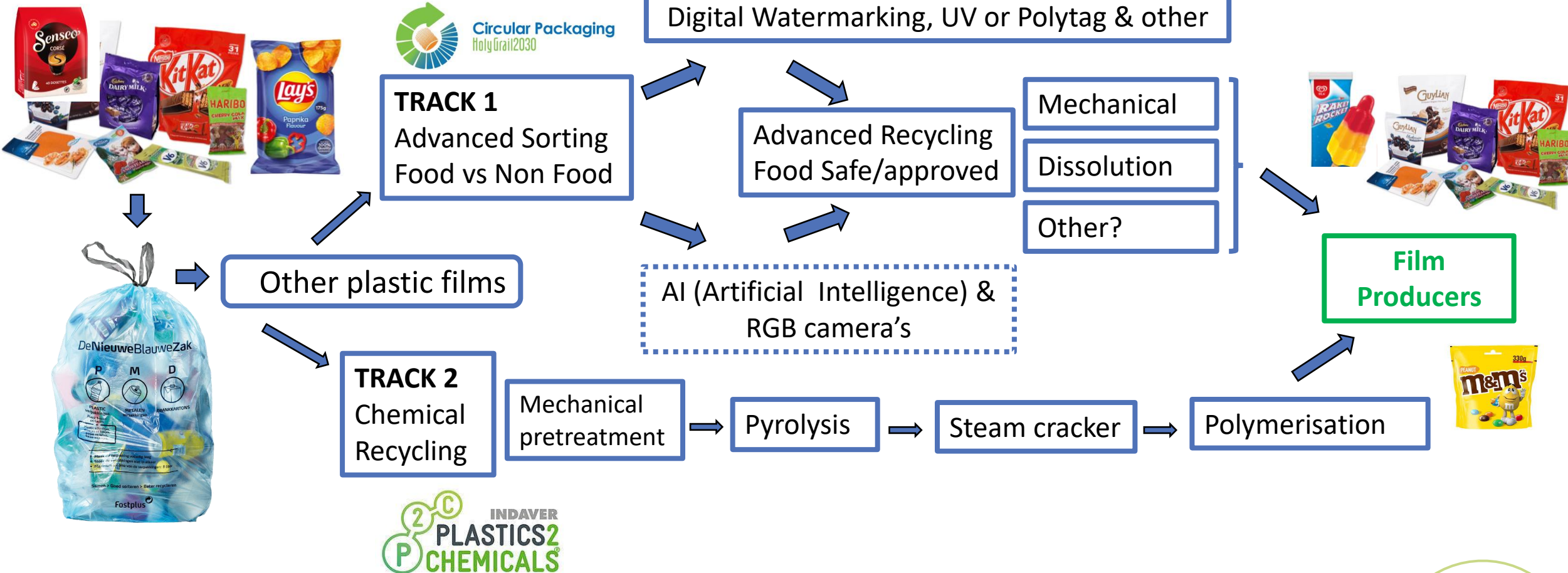
- PMD Blue Bag is **sorted in 16 streams including 2 flexibles streams**
 - PE Flexibles (mono material)
 - Other Flexibles (mainly PP Flex, some PE Flex & some other Flex/multilayer)
- Other Flexibles > 11 kTons/year out of 6 'State of the Art' sorting centres
- **Recycling** is mainly **local** or regional
 - ~ **95 %** through standard mechanical recycling into **massive and/or dark application**



- ~ **5 %** (500 Tons) chemically recycled at Indaver P2C (Pyrolysis) are **circular**
- **Availability** of **food safe rPP** in 2026 is very **LOW** & expensive : only via Chemical Recycling
 - **Estimation of needs rPP/rPE food safe between 5,000 T & 10,000 T per year by 2030**

End2End solutions needed # technologies/partners - FPI roadmap

Focus on PP (PolyPropylene) Food Flexibles



70

Companies and other organisations participating to drive PP circularity in HG2030 as of January 2026

Brand Owners & Retailers



PRO



Sorting Machine & Technology Providers



Research and test centres



Data Management



Sorters & Recyclers



Associations / Organisations



Raw Material Suppliers & Producers



Packaging Converters





Circular Packaging

HolyGrail2030

Our Vision

Driving **availability**,
compatibility and **affordability**
of **food contact recycled**
Polypropylene to support PPWR
compliance in 2030 across the
entire packaging value chain.



Making sure trials include more of
the value chain so that as many current
packaging solutions work with the
emerging supply as possible



Bringing more recycled PP (rPP) to
market, expanding the current pool
of technologies and operators.



Increasing total supply so the
average market price trends
down over time.

In simple terms:
Circularity needs Granularity!



Optimize Sorting for more granularity

- Digital watermarking in combinaison with NIR (example with Pellenc Near-Infrared)
- Different providers : Digimarc, Filigrade/Curvcode, PolyTag (UV) (all part of HolyGrail 2030)



Looks Like This



Performs Like This

More granularity = match making with recycling tech

- FOOD vs NON FOOD
- LOW Viscosity for injection vs HIGH Viscosity for extrusion
- Type of printing (surface vs 'sandwich' / between 2 layers)

More data

- SKU / GTIN level
- specific bales composition
- collection rate Home vs Out of Home
- recycling rate by brand / by member / by SKU

Object Recognition (AI) vs Digital Watermarking for Flexibles

- **All PP flexible packaging has similar features:**

- Rectangular shape
- Opaque and coloured

Shape, opacity, and colour used by AI to identify rigids cannot help identify flexibles.



Food



Non-food

Flexibles are more prone to **crumpling and crushing** in waste stream, posing further challenges to AI.



For PP flexibles, the **GTIN** information is needed to identify the packaging applications:

- Food, detergent, cosmetics, hygiene, etc.
- Reliable and deterministic GTIN-level identification is **only provided by digital watermarks so far**:
- Proven in industrial conditions during HolyGrail trials



Looks Like This



Performs Like This



Circular Packaging
HolyGrail2030



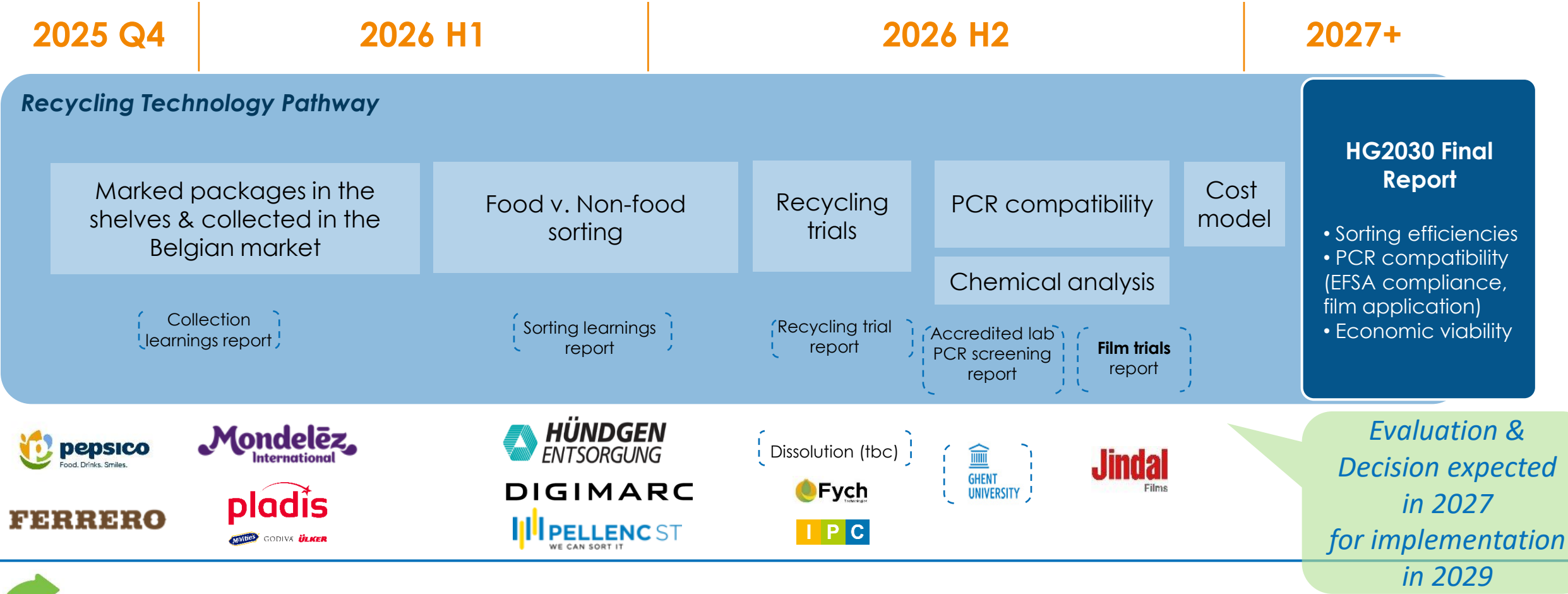
OUR MARKET DEMONSTRATIONS

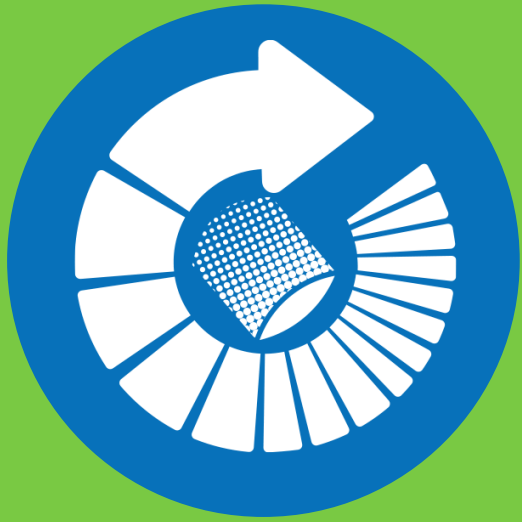
PP FLEXIBLE, BELGIUM



Circular Packaging
HolyGrail2030

Objective: Enabling a market for several recycling technologies based on intelligent sorting of flexible PP.





Reasons to Believe



- ✓ **GS1 is the central data coordinator**
Develop an open, standardized ecosystem for data management, Data Attribute List, Define Confidentiality Protocol and data reporting structure
- ✓ **Real coalition**
A growing list of 70+ brands, retailers, converters, recyclers, raw material suppliers, PROs and NGOs already working on this challenge.
- ✓ **Proven foundation**
The results of prior testing and project phases have demonstrated smart sorting at industrial scale.
- ✓ **Aim to obtain live market results**
Trials within Belgium and Germany are set up to test both performance and economics.
- ✓ **Embedded in an international cooperation**
*Alignment with Citeo, Verpact and Valorlux in the **BeNeFraLux** cooperation to handle cross country sales*
- ✓ **Open Technology Pathway**
Match intelligent-sorting approaches with the most suitable recycling routes to reach food-contact rPP at scale.



Any further questions?

philippe.gendebien@fostplus.be

Fost Plus

Olympiadenlaan 2
1140 Brussel

T +32 2 775 03 50
fostplus@fostplus.be



Volg ons