



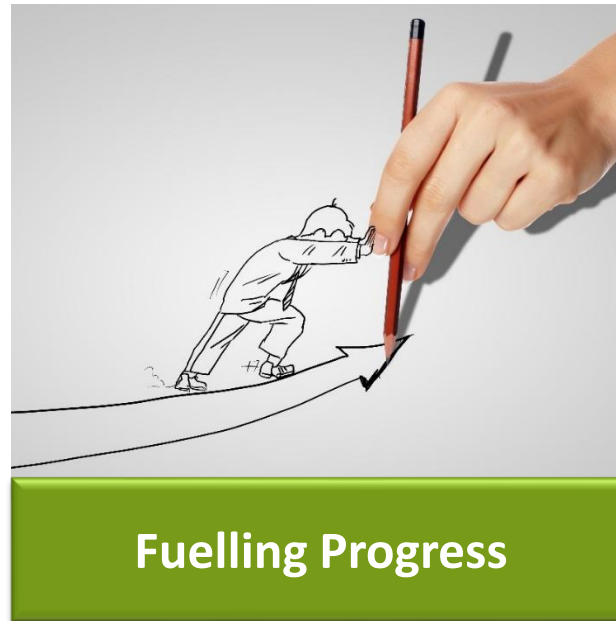
# **PET trays waste management: insights from Belgium and EU collaboration**

27.05.2025 – Petcore thermoforms conference - Dijon

# I. Intro

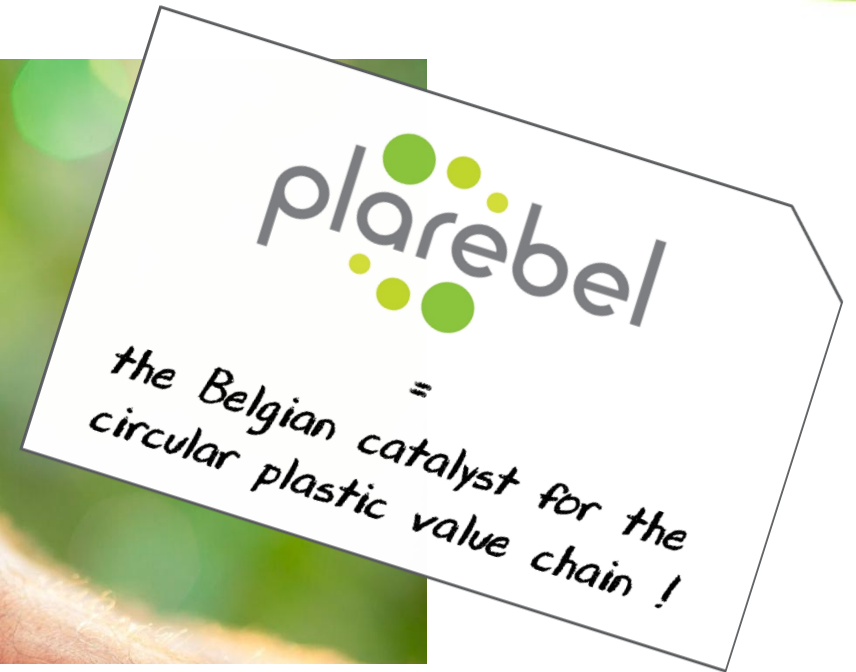
# What is PLAREBEL

PLAREBEL is a non-profit organisation, created in 1999, that is the reference in Belgium for anyone looking for information, advice and guidance on all aspects of circular plastics, including circular design and effective recycling.



# Our mission

To work in collaboration with all stakeholders to promote, develop, stimulate and increase the levels of plastics recycling in Belgium to ensure the transition towards circular economy



# Our members



Fevia

FIEB VIWF



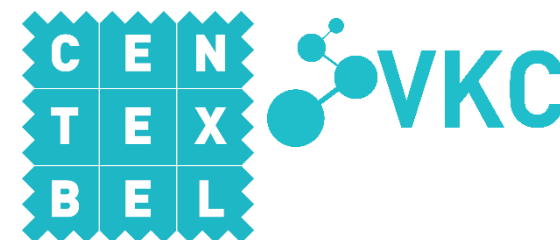
PLASTICS  
EUROPE



Plastipak



*Associated members*



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# Our key activities

01

## Boosting Recycling of Packaging Plastics

Includes improved collection, intelligent sorting and innovative recycling to encourage higher plastic packaging recycling rates.

02

## Driving Circular Design

Smart design is essential to maximise the efficient use of resources and to meet the circular economy goals.

03

## Assuring Quality

Quality plastic recycling begins by checking the conformity and quality of the waste streams.

04

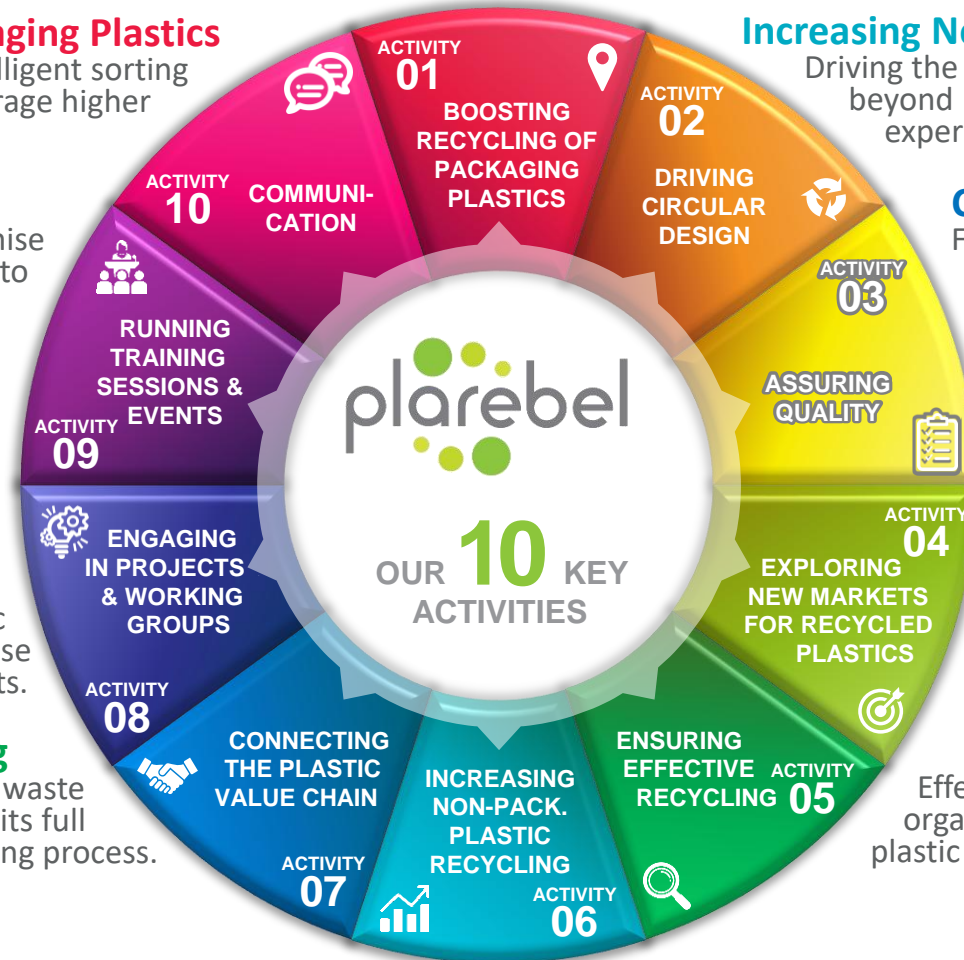
## Exploring new Markets for Recycled Plastics

Identifying new markets for plastic waste recycling & enhancing the use of recycled plastics in new products.

05

## Ensuring Effective Recycling

Providing reassurance that plastic waste is effectively recycled by ensuring its full traceability throughout the recycling process.



## Increasing Non-packaging Plastic Recycling

Driving the circularity of plastics in other sectors, beyond packaging, by using our expertise and experience in the field of plastic packaging.

## Connecting Plastic Value Chain

Foster circularity through partnerships and mutual learning within the value chain and across the various sectors

## Engaging in Projects & Working Groups

Circularity offers unprecedented opportunities for cooperation in an effort to find creative solutions.

## Running Training & Events

Leveraging circular plastics through education and raising awareness to foster innovations in plastic.

## Communication

Effective communication is critical to any organisation. It helps to engage in circular plastic thinking and to initiate circular ideas.



## **II. Context**

# Legislative framework - PPWR

- *By 2030, all packaging within the EU must be **recyclable** → need effective collection/sorting/recycling systems + Design for Recycling*
- ***Recycled content** obligations → require recyclates available and suitable for PETt (quality, quantity) → need to develop effective waste management systems*
- *By 2035, recyclable packaging will need to be **recycled at scale** → need effective systems for PETt and collaboration*
- ***Recycling targets** for plastic → PETt should contribute to reach plastic recycling rate targets*



### **III. Belgium**

# Plarebel, partner of Fost Plus

- PLAREBEL is a long-term partner of Fost Plus (ie. Belgian Green Dot organisation), acting as a centre of expertise with regard to the organisation of the collection and sorting, the recycling of household plastic packaging waste in Belgium; thus contributing to an efficient implementation of the recycling activities in Belgium.
  - **Competence centre.** Plarebel accumulates and develops knowledge and expertise on the collection, sorting, and recycling of plastic packaging and packaging waste. They monitor technological developments in packaging and recycling, maintain contacts with existing and potential recyclers, and study the recyclability of new packaging.
  - **Monitoring.** Plarebel carries out administrative and operational checks in the field in sorting centres and recycling plants. They characterise the streams and perform on-demand analyses for Fost Plus. In case of complaints about quality, they provide Fost Plus with expert advice.



# Collection in the “new blue bag”

Fostplus 



Plastic bottles



Metal packaging



Drink cartons



Plastic pots, tubs & trays



Plastic film

+8  
kg/inh/y

# PMD collection





# State-of-the-art sorting centres



# Sorting

Fostplus 





# Sorting – PETt fraction

- Thermoform PET packaging: rigid PET packaging such as cups, pots, tubs, trays, clamshell packaging, etc.
- Bales composed of clear (and light blue) transparent trays.  
Separate projects ongoing on opaque PET trays circularity
- Mix of mono- and multilayer trays
- Bales specifications min. 96% purity
- Tolerance of max. 5% PET bottles and coloured PET trays



# Recycling



- Production: **~15kT/y sorted PETt bales** from PMD collection (*official data 2023*)
- Fost Plus has different contracts with plastics recyclers:
  - Short-term contracts to acquire bales (incl. PETt) by participating at the yearly plastics tender
  - Long-term contracts by participating at the long-term call in Belgium (incl. PETt)



# Recycling – MOPET België B.V.

- Project from Morssinkhof Rymoplast
  - Neufchâteau, Belgium
  - 40kT capacity
  - Partnership with Idelux and Fost Plus
  - 9-year contract with Fost Plus: **10,5kT/year PETt** and 17,5kT/year PET bottles
- Want to know more? Click [here](#)



# Mono and multilayer trays – R&D

- Fost Plus and Plarebel are working on **recyclability**:
  - Theoretical/practical definition of multilayer trays and impact on recyclability
  - Communication with the citizens (e.g. remove lidding films)
  - Design for recycling guidelines
  - Eco-modulation of green dot fees
- We are also working on different scenarios with the recyclers in order to find the optimal balance **quality-yield** and develop suitable **end-markets/applications**.
- Option 1: Recycle mono- and multilayer trays together → greenish applications
- Option 2: Over-sorting of the bales to separate mono- from multilayer trays
  - Monolayer trays: tray-to-tray mechanical recycling for transparent applications
  - Multilayer trays: mechanical recycling with delamination/chemical recycling/other  
→ different end-markets according to the process (e.g. packaging, non-packaging)



## **IV. Luxemburg**



# PETt sorting-collection-recycling

- Valorlux is the EPR system for household and C&I packaging in Luxembourg
- PETt waste management:
  - Extended collection in PMD blue bag
  - Dedicated sorted fraction incl. mono- and multilayer trays
  - Since Q1 2025, PETt bales are sent to recyclers in Europe





## **V. Collaboration at EU level**

# Plarebel, an active member of EPRO

- EPRO and its working groups provide a **unique forum for the leading specialists in plastics waste management** in Europe to exchange information on technological projects, new technologies, improving quality, etc. about plastic circularity throughout Europe.
- **Aim:** To exchange experiences and thus optimise national effectiveness through international co-operation.
- Working groups:
  - Technical WG and chemical recycling WG – co-chaired by Plarebel (Manon M.)
  - Regulatory WG
  - Recyclability WG
  - Communication WG
  - Agricultural plastics WG
  - Plastics Trading & Export WG



# EPRO - PETt

- Twice a year, members meet for in-person meetings and country specific perspectives
- PET trays discussed from several angles:
  - Recycled content and recycling rate
  - Mono and multilayer trays – sorting, recycling
  - Recycling capacity in Europe
  - Sorting and recycling technologies & innovations
  - Sorting specifications and strategies in different countries (Belgium, France, Spain, Italy, Austria, Netherlands, Sweden, etc.)
  - Design for recycling guidelines and recyclability
  - Management of coloured PET trays
  - ...



# Contact



*the Belgian catalyst for the  
circular plastic value chain !*

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