

European PET Bottle Platform

Closer to a more sustainable PET recycling industry in Europe ...

An Vossen

Member of EPBP Technical Committee



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Agenda for today

- EPBP why?
- Objectives EPBP
- Members EPBP
- Assessment structure
 - Application
 - Evaluation
 - Test design
 - Validation
 - Communication
- Design for recycling
- Summary and contacts



European Platform - Why ?

- Collection of PET bottles in Europe is still increasing, whereas PET bottles are becoming more and more complex (eg colour, enhanced barrier properties, labels, closures, etc.).
- By creating synergies and by working in partnership with other stakeholder in the field of PET packaging and recycling, we can ensure the effective recycling of PET bottles across Europe.

European Platform - What ?

- The European PET Bottle Platform is a voluntary initiative of different partners across the PET value chain.
- The European PET Bottle Platform consists of a number of technical experts in the field of PET production, design and recycling.
- Together they aim to provide an objective evaluation of new technologies and an independent assessment on their impact on the PET recycling processes across Europe.

European Platform - Objectives

- The main objective of the European PET Bottle Platform is to evaluate technologies / products and to allow new PET bottle innovations, while optimising the economic and environmental consequences for the European PET recycling industry.
- The Platform has established several test procedures in order to assess the recycling profile of new packaging technologies, such as barriers, additives, closures, labels, etc. Products that pass the tests should not experience any problems during recycling.

European Platform - Goals

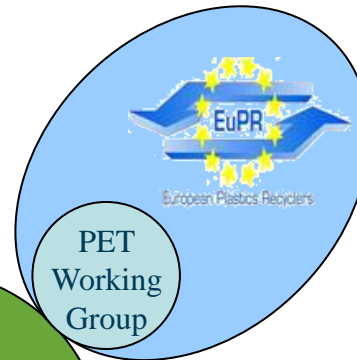
- This expanded Platform will promote the recyclability of PET bottles on the market by:
 - Establishing European harmonised guidelines for PET bottles recyclability that will be accepted across the whole value chain.
 - Encouraging industry to test new PET bottle concepts and/or materials before market launch according to the harmonised guidelines.
 - Giving advice and recommendations to the different stakeholders.
 - Sharing information and knowledge across the whole value chain.

European Platform - Members

European non-alcoholic beverages association AND European Federation of Bottled Waters



European Plastics Recyclers

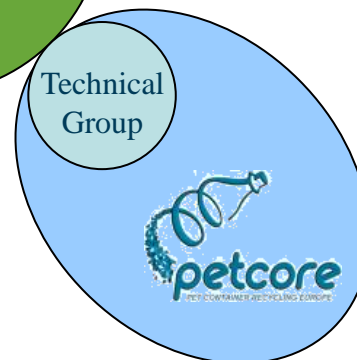


European PET Bottle Platform

European Association of Plastic Recycling and Recovery Organisations



PET Containers Recycling Europe



About Petcore

PETCORE, PET Container Recycling Europe, is a not-for-profit association formed in 1993.

PETCORE's objective is to facilitate the economical recovery of plastic containers (with emphasis on PET bottles) through collection, reclamation and development of end uses for post-consumer bottles.

Positions in organisation:

Roberto Bertaggia – Chairman of Board

Mike Neal – Chairman of Technical Committee

Sue Ward – Secretary General

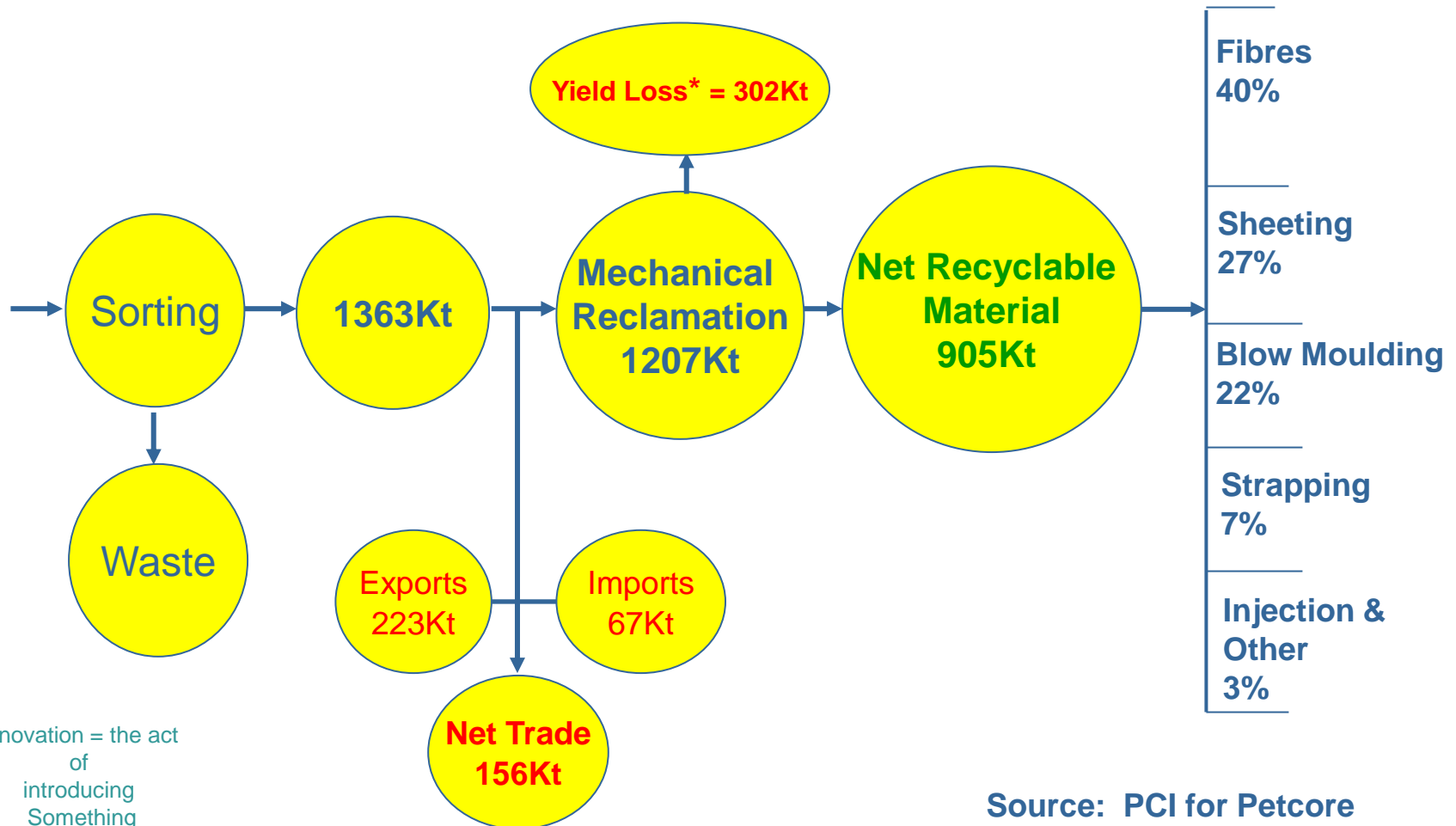


Petcore Mission Statement

1. To facilitate sustainable growth for post consumer PET collection.
2. To support all PET recycling processes as a key integrated part of European Plastics Waste Management initiatives.
3. To validate and support innovative PET solutions from a recycle perspective.

Innovation = the act
of
introducing
Something
new

PET Recycling Outlets 2009



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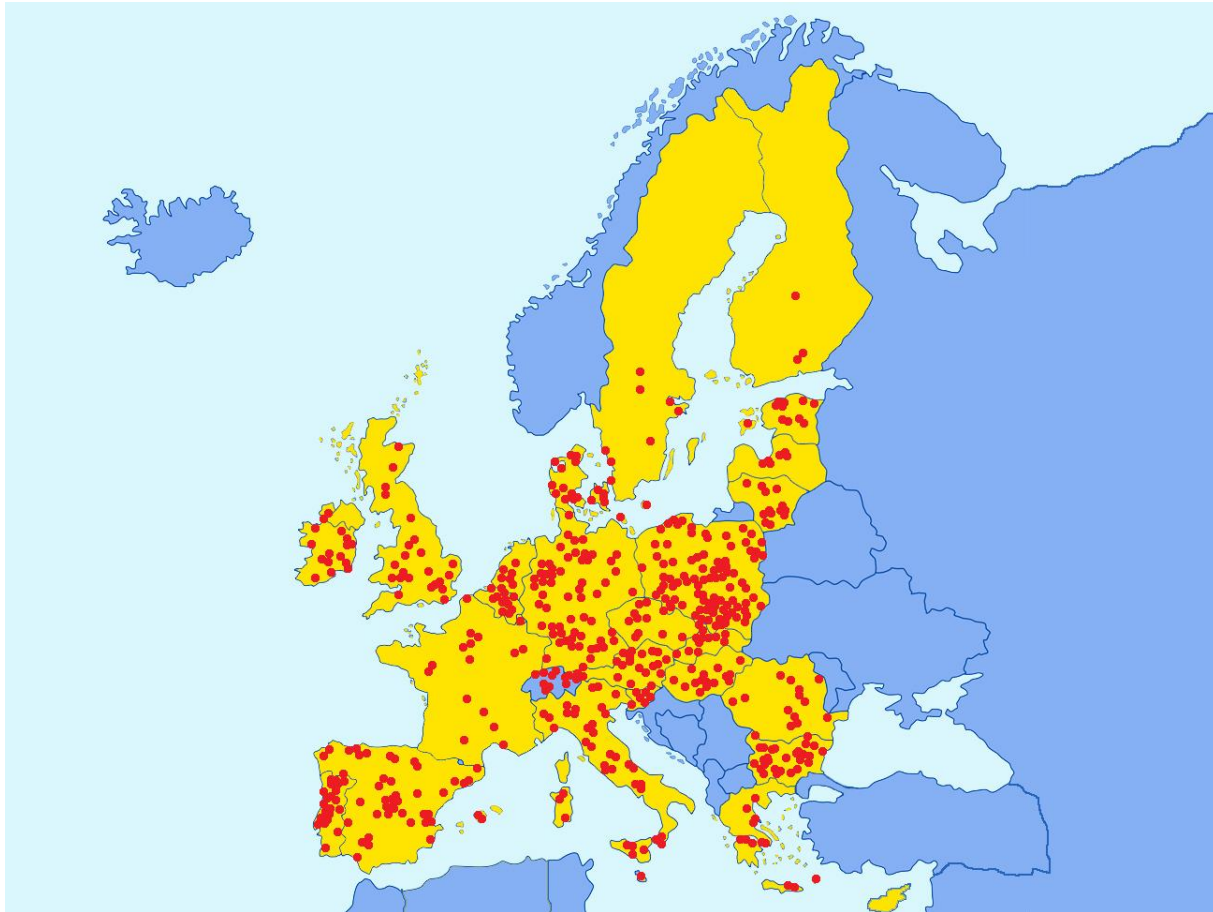
Source: PCI for Petcore

* Majority of streams of yield loss are recycled by other means in many countries

Who is UNESDA?

- UNESDA is the industry association covering all non-alcoholic beverages that do not contain 100 % juices
- Volumes in Europe are 55 billion litres - value of approx. 40 billion Euros
- Key players:
 - large companies eg. Coca-Cola, PepsiCo, Orangina Group, GlaxoSmithKline, Nestlé Waters, Danone Waters
 - SMEs represented by national associations
- UNESDA was founded in 1958. The creation of the European Economic Community, and its plans to harmonise the laws affecting non-alcoholic beverages, led to the need for a special body to deal with all such European legislation

Representing a responsible local industry



1.071 production plants in Europe

What is UNESDA's role?

UNESDA primary role is to promote members' interests at European and international level, supporting the increased acceptance, growth and development of non-alcoholic beverages in responsible and sustainable way

About EFBW



- **European Federation of Bottled Waters**

EFBW is a non-profit international trade association representing the bottled water business (natural mineral water, spring water, other waters)

- **Our Members**

- ✓ 24 national trade associations
- ✓ 22 countries across Europe
- ✓ representing 500 producers of bottled water

- **Our Aim**

- ✓ To provide expertise to our Members
- ✓ To be the voice of the bottled water industry at both the EU and international level
- ✓ To promote high quality standards within the industry

About EFBW



Our Mission

- Provide regulatory, scientific and technical expertise on all aspects of bottled waters
- Facilitate the exchange of information between members and enable a platform for discussion
- Maintain active membership within the International Council of Bottled Waters Associations (ICBWA), the European Food and Drinks Association (CIAA) and as an NGO observer at Codex Alimentarius

What is EPRO?

- EPRO, European Association of Plastics Recycling and Recovery Organisations
- Registered in Brussels
- 19 members – 16 countries
- Aim: To exchange experiences and thus optimise national effectiveness through international co-operation



www.epro-plasticsrecycling.org

EPRO's mission

- EPRO provides a unique forum for the leading specialists in plastics waste management in Europe:
 - to develop improved strategies for prevention, recycling and recovery of plastics packaging waste with regard to the EU thematic strategy on waste and recycling.
 - to support technological projects designed to improve the efficiency and cost-effectiveness of plastics recycling and recovery throughout Europe.
 - to evaluate new technologies and to stimulate improved quality and value of used plastics on a scientific basis.

EPRO members



EPRO associated member

EuPR in Brief

- **EuPR** represents since 1990 National Associations and Individual Member Companies covering 80% of the European market, while offering a service platform for its members.
- The focus is on the **promotion of plastics recycling** and the **creation of conditions** which enable **profitable and sustainable business**.
- Further information:
 - ▣ www.plasticsrecyclers.eu



EuPR Structure in Working Groups

Standard & Certification WG

REACH WG

Communication WG

**PET
WG**

**PVC
WG**

**PE Film
WG**

**Crates &
Pallets
WG**

**Technical
Plastics
WG**

European Platform - Members

European non-alcoholic beverages association AND European Federation of Bottled Waters



European Plastics Recyclers

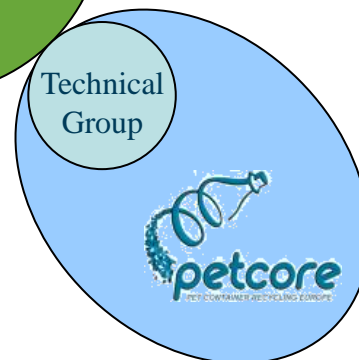


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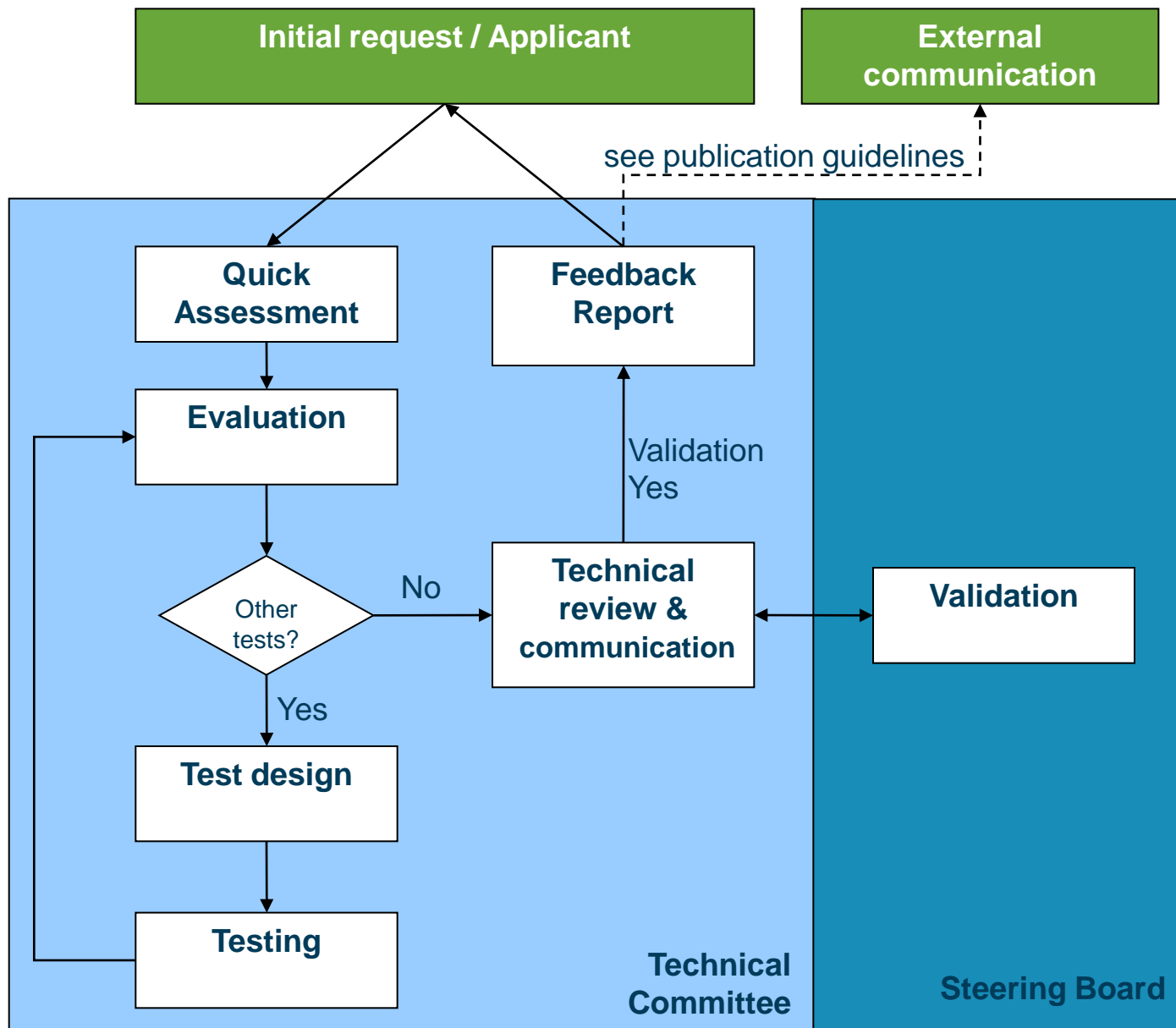


PET Containers Recycling Europe



Assessment

- Organisation and goals of the Platform
- Description assessment process steps
- Assessment process
 - *Tool 1 : List of designated representatives*
 - *Tool 2 : Application form*
 - *Tool 3 : Agreement with Applicant*
 - *Tool 4 : Test design & report*
 - *Tool 5 : Evaluation report*
 - *Tool 6 : Feedback report*
 - *Tool 7 : External communication*
 - *Tool 8 : Publication guidelines*



Test design

- The European PET Bottle Platform has established several test procedures in order to assess the recycling profile of new PET bottles, including barriers, additives, closures, labels, etc.
 - The first set of test procedures are relatively rapid and low-cost techniques for the quick assessment of the recycling profile of PET bottles, including oven test, optical sorting test, glue separation, etc.
 - In addition, the Platform establishes specific test procedures using up-to-date testing methods that produce qualitative and/or quantitative test results.
- For more information, including application form and an overview of the assessment process:
www.e-pro-plasticsrecycling.org/PETbottleplatform/

Evaluation

- Full compatibility (YES)
 - no impact on collection, sorting schemes or recycling process.
 - Communication to contribute to the development or to promote market introduction thereof.
- Limited compatibility (CONDITIONAL)
 - Limited impact on collection, sorting schemes or recycling process.
 - The conditions of approval are specified.
 - Violation of these conditions may result in a statement by the Platform.
- Low compatibility (NO)
 - negative impact on collection, sorting schemes or recycling process.
 - In the event of market introduction, the Platform may release a statement.

Communication

- The results of the assessment process can be published according to the publication guidelines, using one of the following communication tools.
 - Design for Recycling Guidelines
 - Fact sheet
 - Press release
- All communications is made available via our website or via the different member organisations.

Costs

- The total assessment process by the Platform – from application and test design, to decision and communication – is free of charge.
- However, the Platform will not be responsible for any costs relating to the execution of the tests by the Applicant or a third party, or any other associated costs.

Confidentiality

- The European PET Platform undertakes all reasonable steps to maintain the confidentiality of disclosed information provided by the Applicant.
- The Platform will not discuss the details of a specific application with anyone, unless the Platform has written authorisation from the applicant, specifically naming those persons to whom information can be provided.

Starting the procedure

- The Applicant makes a request to the European PET Bottle Platform by sending a list of essential information via an application form.
 - Contact details
 - Commercial name
 - Product description (with details)
 - Applicable market
 - Research partner
 - Available recycling studies (!)
- It is very important to get good and complete information about the innovation, from both technical and market perspective. This allows the applicant and EPBP to design the most appropriate test program, and to select only the relevant tests from the total test list.

Design guidelines

		YES	CONDITIONAL (1)
B O D Y (2)	Container	PET	
	Colour	clear / light-blue / green	other transparent
	Barrier	clear plasma coating	extended barrier
	Additives		UV stabilisers / layer blends
L A B E L	Direct printing	production or expiry date	other direct printing
	Labels	HDPE / MDPE / LDPE EPS (density < 1 g/cm ³)	PVC / PS (density > 1 g/cm ³)
	Sleeves	PE / PP / PET	PVC / PS (density > 1 g/cm ³) PET-G / full body sleeves
	Glue (3)		adhesive not removed in water or alkali at 80°C
	Ink		bleeding / reactive / hazardous
A P P	Cap	PE+PP / PP	metal / aluminium / PS / PVC / thermosets
	Cap	PE+EVA / PP	PVC / EVA with aluminium
	Cap	PE+PP / OPP / EPS / foamed PET	PVC / silicon / aluminium
C		silicon (density ≤ 0,95 g/m ³)	
		HDPE / PP / PET	PVC / RFID / non-plastic

The information contained in this document is for general guidance only. Any details given are intended as a general recommendation based on the best of our knowledge at the time of publication. More tests can be done in future that might change the product/material classification. It does not necessarily guarantee compliance with the different recycling schemes. This is by no means a comprehensive list. Users are therefore advised to make their own enquiries to check for specific and up-to-date information

(1) Some bottle components are recyclable under certain conditions. Please check with EPBP, recyclers or recycling organisations.
 (2) All components must meet the legal requirements for materials and articles intended to come into contact with food.
 (3) Ref. EPBP positive glue list

Summary

- Sustainable recycling starts with a recyclable bottle.
- EPBP is facilitating a new assessment protocol for innovations in PET bottle design.
- Establishing harmonised design guidelines for PET includes all parts of the bottle.
- The classification in “full”, “limited” or “low compatibility” for the design should stimulate the transparency for a recyclable bottle
- EPBP has now started this new assessment and is looking for cooperation with industry for a more sustainable future for the PET bottle

Thank you for your attention.

- E-Mail: avossen@plarebel.be
 epbp@epro-plasticsrecycling.org

- Web: www.PETbottleplatform.eu
 or
 www.epro-plasticsrecycling.org
 www.eupr.org
 www.petcore.org
 www.unesda.org
 www.efbw.org

