



Petcore Europe Profile, Activities & Benefits

www.petcore-europe.org



**PET is the most recycled
plastics packaging**





Petcore Europe

representing the PET value chain since 1993

About Petcore Europe

- **Petcore Europe**, based in Brussels and **established in 1993** (as **PETCORE – PET COntainer REcycling**), represents the **complete PET value chain** in Europe.
- It brings together a unique range of specialists from the PET value chain
 - **PET producers (CPME)**
 - **PET packaging converters (EuPC, Forum PET Europe)**
 - **PET recyclers (PRE)**
 - **90+ individual members involved in the PET value chain**



About Petcore Europe

- The PET industry (only PET manufacture, packaging conversion and recycling) comprises about 400 companies operating at 500 sites across Europe, employs 27'000 people who process 4,5 million tonnes of PET (virgin and recycled) per annum, representing a turnover of circa 15 billion €.
- **PET is the largest plastic material recycled in Europe**, with the equivalent of 1,9 million tonnes collected in 2017, representing 58% of containers in the market.



- Ensure the **entire PET industry is well aligned** to enhance its value and sustainable growth
- **Represent the PET industry** at the EU institutions and other stakeholders
- Ensure that **PET is positioned as an outstanding packaging material and recognized as environmentally sound**
- Support and validate **innovative solutions from a recycling perspective**
- Work with all interested parties to ensure a **continuous increase of PET post-consumer collection/recycling**



Eight Associations

- **CPME:** represents 80% of European PET manufacturers - 8 companies – 3 mt installed capacity - 3 bn € turnover
- **EuPC:** represents 46 National and European associations - 50'000 companies – 500mn tons - 260 bn €
- **Forum PET Europe:** primarily represents the PET bottle associations in France (Elipso) and Germany (IK), Logoplaste and Alpla
- **PRE:** Plastics Recyclers in Europe - 500 companies – 6,6mt installed capacity - 3 bn € turnover
- **EuPET:** European association of unoriented polyester films
- **FINAT:** European association for the self-adhesive label industry (new in 2019)
- **AMAPLAST:** Italian plastics and rubber processing machinery and moulds manufacturers' Association (new in 2019)
- **RECOUP:** Registered charity and not-for-profit organization to promote, develop, stimulate and increase the levels of plastics recycling within the UK (new in 2020)

104 Members - Representing the entire value chain

Chemical Industry/ Producers

- Axens
- BASF
- BP
- CARBIOS
- CPME – PET Producers
- Croda
- CUMAPOL
- EMMTEC
- Evonik
- Garbo
- Gr3n
- IFPEN
- Ioniqa
- Loop Industries
- MGC (Mitsubishi)
- M&G
- Moretto
- Perstorp
- Poseidon Plastics
- Rittec
- Toyobo
- Sibur

Packaging Prod./Converters

- AFA Dispensing
- AMB Packaging
- COEXPAN
- Covinil
- DuPont Teijin Films
- Dow DuPont
- EuPC (EU Plastics
Conv. Association)
- Evertis
- FAERCH Plast
- Forum PET Europe
(European PET
Industry)
- Graham Packaging
- Greiner
- Guillin
- Hordijk
- Klöckner Pentaplast
- Logoplaste
- Mitsubishi Polyester Films
- Plastipak
- Polyplex
- RETAL Industries
- Sealed Air
- Sidel
- Sirap
- SRF Ltd.
- TPL

Sleeve/ Label Producers

- Avery Dennison
- CCL Label
- Finat (Label Producers Ass.)
- Fuji Seal Europe
- Multi-Color Corporation
- Sleever International
- UPM Raflatac

Backbone =
Associations

104 Members - Representing the entire value chain

Masterbatches

- Clariant
- ColorMatrix
- Eastman
- Holland Colours
- MacDermid
- Omya
- Penn Color
- Point Plastic
- REPI
- Sukano

Machinery Producers

- AMAPLAST
- Bandera
- Erema
- Folcieri
- Digimarc
- Gneuss
- Husky
- NGR
- Pellenc ST
- Polymetrix
- Reifenhauser
- Sesotec
- SIPA
- Sorema
- Starlinger
- TOMRA
- Uhde Inventa-Fischer

Recyclers/ Waste Managers

- Citeo
- Dentis Recycling
- Fantastic Plastic
- Montello
- **PRE (Plastics Recyclers Europe Association)**
- Recoup
- Remondis
- SUEZ
- Worn Again

Brand Owners

- Coca-Cola
- Danone
- Henkel
- Kraft Heinz
- LSDH
- L'Oréal
- McBride
- PepsiCo
- P&G
- Spadel
- Suntory



Petcore Europe – 104 Members



Membership Conditions

Membership is open to associations and individual companies having legal personality. All PET stakeholders involved in the following activities are therefore welcome and eligible for membership:

- The manufacture of PET, PTA or ancillary chemicals used to make PET
- The commercial manufacture and sale of PET articles made from virgin and recycled PET
- The supply of ancillary chemicals used in the manufacture of PET articles
- The commercial manufacture and sale of solid and liquid foodstuffs filled in PET packaging in Europe, provided that a significant volume of their products are sold in PET containers
- The commercial reclaim of post-consumer PET containers in Europe, the product of which is sold as flakes or pellets
- The sale of equipment used in the value chain from PET manufacture to the production of the final recyclate

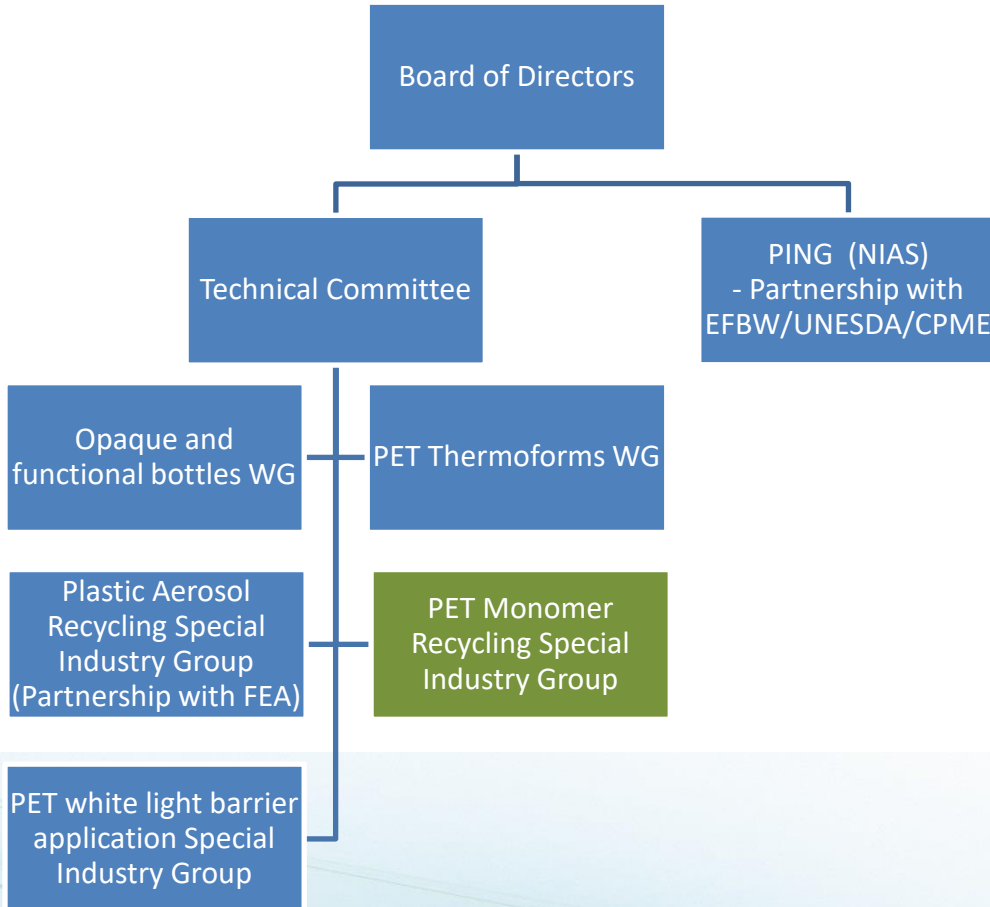
Annual membership fee for individual companies: 3.500 €

Membership Benefits

- Opportunity to participate in setting the objectives of Petcore Europe and its Technical Committee
- Become member of specific Technical Working Group
- Opportunity to influence EU and national regulatory bodies
- Access to a wide range of information on PET
- Exclusive access to the Petcore Europe Document Library including the Annual PET Recycling Survey
- Visibility and sustainable credibility of your organization
- Exclusive access to all Petcore Europe events, including workshops and the annual Petcore Europe Conference



Organisation – to address environmental & recycling issues.

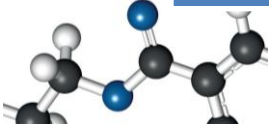
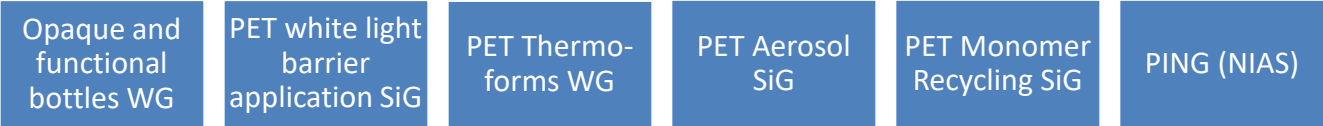




Petcore Europe Membership – PET Value Chain



Board of Directors Technical Committee



Chemical Industry/Producers

Axens, BASF, BP, CARBIOS, CPME, Croda, CUMAPOL, EMMTEC, Evonik, Garbo, Gr3n, IFPEN, Ioniqa, Loop Industries, MGC, M&G, Moretto, Perstorp, Poseidon Plastics, Rittec, Toyobo, Sibur

Packaging Prod./Converters

AFA Dispensing, AMB Packaging, COEXPAN, Covinil, DuPont Teijin Films, Dow DuPont, EuPC, EuPET, Evertis, FAERCH Plast, Forum PET Europe, Graham Packaging, Guillin Emballages, Hordijk, Klöckner Pentaplast, Logoplaste, Mitsubishi Polyester Films, Plastipak, Polyplex, RETAL Industries, Sealed Air, Sidel, Sirap, SRF Limited, TPL, Greiner

Recyclers/Waste Managers

Citeo, Dentis Recycling, Fantastic Plastic, Montello, PRE, Remondis, Recoup, SUEZ, Worn Again Technologies

Sleeve/Label Producers

Avery Dennison
CCL Label
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Fuji Seal Europe
Multi-Color Corporation
Sleever International
UPM Raflatac

Masterbatches

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REPI
Sukano



Machinery Producers

AMAPLAST
Bandera
Erema
Folcieri
Gneuss
Husky
NGR
Pelenc ST
Polymatrix
Sesotec
SIPA
Sorema
Starlinger
TOMRA
Uhde Inventa-Fischer

Brand Owners

Coca-Cola
Danone
Henkel
Kraft Heinz
LSDH
L'Oréal
McBride
P&G
PepsiCo
Spadel
Suntory

- Board of Directors
- General Assembly
- Technical Committee
- Technical Working Groups
- Projects
- Communications & Issues Management
- Website with extranet for members
- Social Media channels (Twitter & LinkedIn)
- Support from member associations



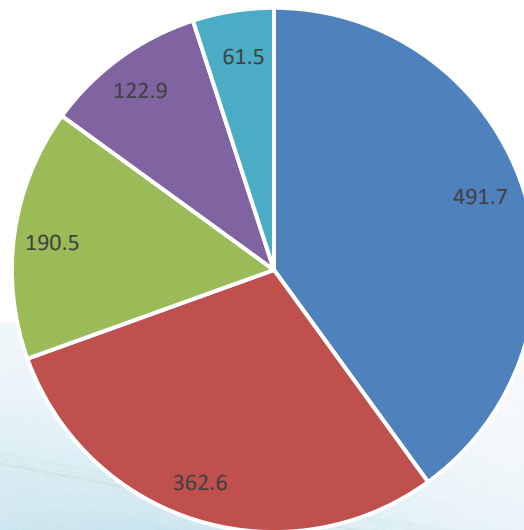
Petcore Europe Activities



Bi-annual survey on PET collection & recycling rates in Europe

PET Recycling – Status 2017 (ICIS Report)

- **Collection – 1.923 Million Tons (Packaging Waste)**
 - **Collection Rate – 58.2 %**
- **Recycling Capacity – 2.104 Million Tons (2018)**
 - **RPET End Market Applications**



■ Sheet ■ Bottle ■ Fibre ■ Strapping ■ Other

- Due to improvements in recycling and increasing quality of materials, rPET could reach as much as 55% of total PET demand by 2030.
- The market for trays and sheets represents 20% of rPET. Estimated 50% of average recycling content of PET trays produced in Europe.
- Main obstacles: collection and design for recycling.

The Eunomia logo, consisting of the word "eunomia" in a lowercase sans-serif font next to a grid of small circles.

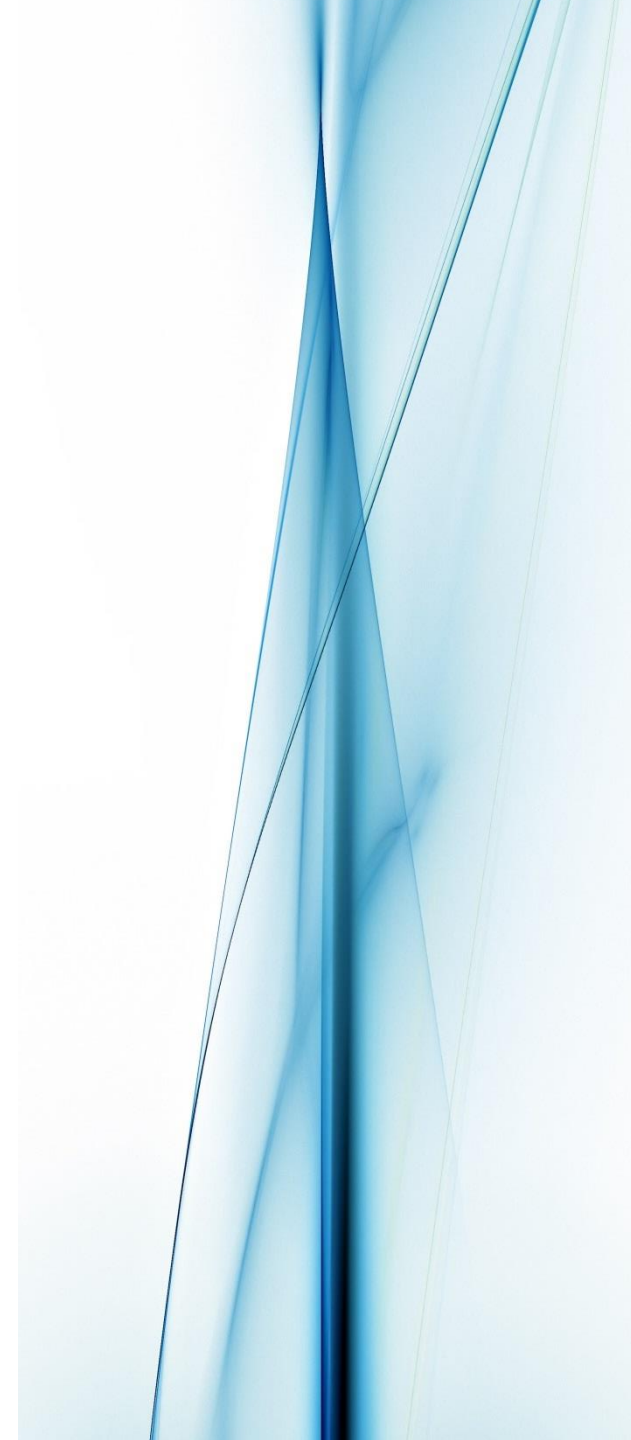
PET MARKET IN EUROPE STATE OF PLAY

PRODUCTION, COLLECTION
AND RECYCLING DATA





Petcore Europe Working Groups & Task Forces



Working Group on Recycling PET Thermoforms

- The Working Group was established in June 2015, following a Workshop on Recycling PET Thermoforms in March 2015.



- It gathers 74 companies and organisations including key players from industry and waste management. The goal is to increase the market share of PET in thermoforms in Europe by providing sustainable and reliable end-of-life solutions for their effective recycling.

Working Group on Recycling of Opaque and functional bottles (formerly ODR)

- The Working Group had its kick-off meeting in May 2016.
- 78 companies and associations focus on the issue of heavily coloured or opaque PET, which is in fast growing demand in new applications such as milk bottles, detergents and family care products.
- Currently recyclers process mainly transparent or light coloured PET. Therefore, the goal of the WG is to find and ensure an end-of-life strategy for these products and to promote their image.

New Special Industry Group (SiG) for PET white light barrier applications

- Switch from HDPE and PS to PET leads to a bigger tonnage
- CPA and Essential Requirements of Packaging require full recyclability
- Launch of a Special Industry Group to convince EPRs as well as European and National Policymakers by developing
 - Technical guidelines
 - Business models including design / collection / sorting / recycling / closed stream proposals for full circularity



PET Industry NIAS Group (PING)

- The three European organisations Petcore Europe, UNESDA - Soft Drinks Europe and EFBW - European Federation of Bottled Water have signed a non-disclosure agreement to work together as an integrated bottle value chain from virgin PET to preforms, bottles and r-PET.
- PING drives compliance with EC Regulation N°10/2011 and subsequent amendments on plastics materials and articles in contact with food, re. NIAS. The group evaluates NIAS test methods, risk assessment and produce an industry wide accepted process. Any identified unacceptable risk will be addressed, and PING will work to find solutions to reduce or remove the risk.



Plastic Aerosol Recycling Special Industry Group (SiG)

- Petcore Europe and FEA – the European Aerosol Federation created a new Plastic Aerosol Recycling Special Industry Group (SiG) in order to anticipate the need to recycle higher amounts of plastic aerosols in 2018.
- In 2020, the Aerosol Dispenser Directive (ADD) will potentially allow plastic aerosols beyond 220 ml in Europe. As this will enable mass market instead of only niche production, the market volume of plastic aerosols is expected to increase. This will eventually lead to a higher amount of plastic aerosol packages in the collection, sorting and recycling systems in Europe, which calls for a solution-oriented group of experts.



PET Monomer Recycling Special Industry Group (SiG)

- In 2019, Petcore Europe launched a Special Industry Group “PET Monomer Recycling” enhancing the circularity of PET.
- PET Monomer Recycling opens a completely new perspective on how to deal with the concerns about plastics and plastic waste. Bringing the PET bottles and food containers as well as polyester textiles back to its constituents, monomers or low molecular weight components that allow purification means in principle endless re-use of these PET building blocks. The Group will work to ensure health and safety aspects as well as product acceptance is achieved.



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Substance Task Force

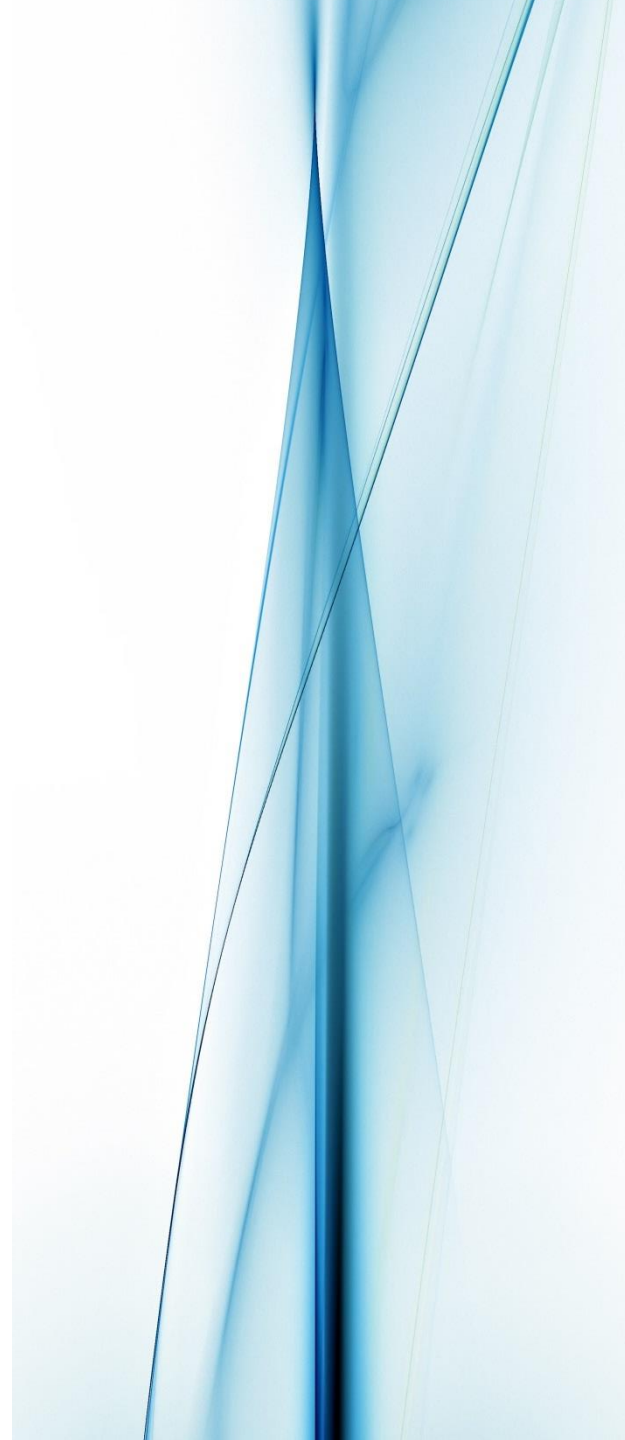
- The Task Force deals scientifically with any chemical substance that might be associated with PET alongside the PET value chain.
- One particular aspect relates to the regulatory compliance with the EU Regulation 10/2011 on plastic materials and articles intended to come into contact with food.

Communications & Issues Management Task Force

- The Task Force closely monitors the PET market & developments, and immediately responds to concerns and issues related to PET.






Petcore Europe Projects & Tools



PET Guidelines and Recycling Certification

1. **European PET Bottle Platform (EPBP)** - European harmonised guidelines for PET bottles recyclability accepted across the complete value chain
Encouraging industry to test new PET bottle concepts and/or material before market launch



YES	CONDITIONAL	NO
Full compatibility – materials that passed the testing protocols with no negative impact	Limited compatibility – materials that passed the testing protocols if certain conditions are met	Low compatibility – materials that failed the testing protocols OR
		

2. **Recycling Certification: EuCertPlast** – assurance that post-consumer plastics processed are treated according to best practices
133 audited and certified recyclers

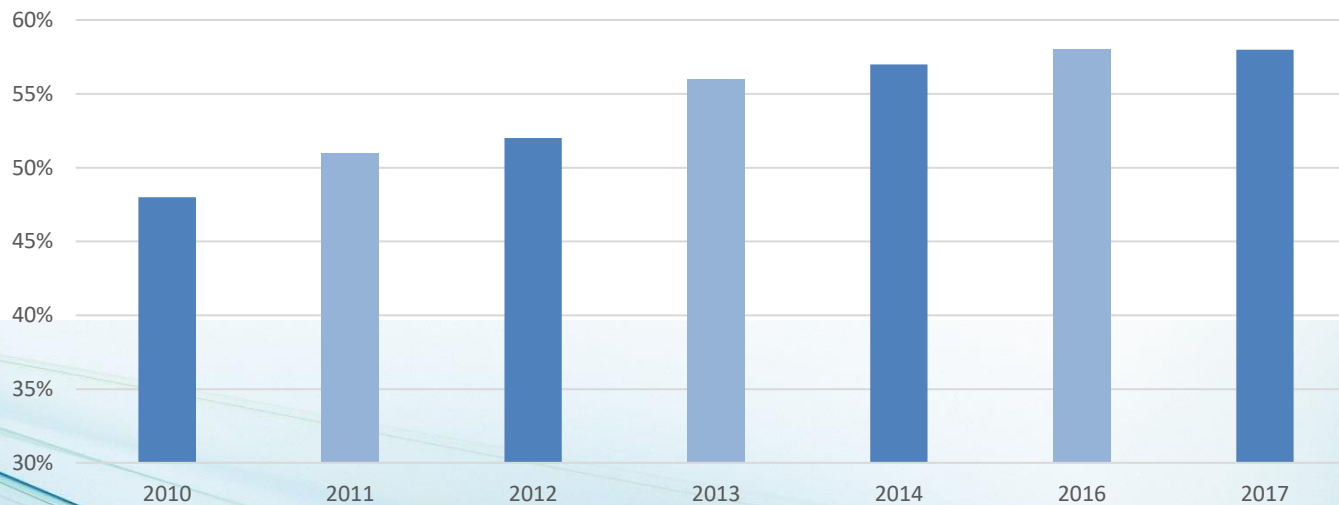


3. **Monitoring the PET industry (see next slide)**

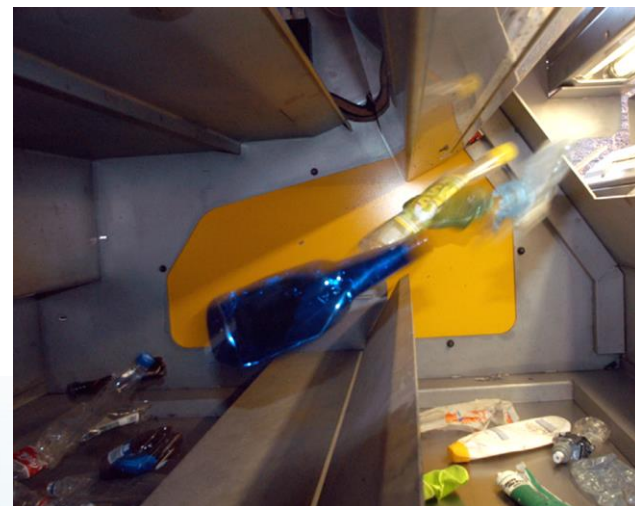
Monitoring the rPET industry since 1993

- Petcore has commissioned a market study since 1993
- Study for “collection & usage” by country mainly for beverage containers
- Two specialised consulting firms used (PCIWoodMackenzie & ICIS)

PET Collection Rates 2010-2017 (Sources PCI & ICIS)

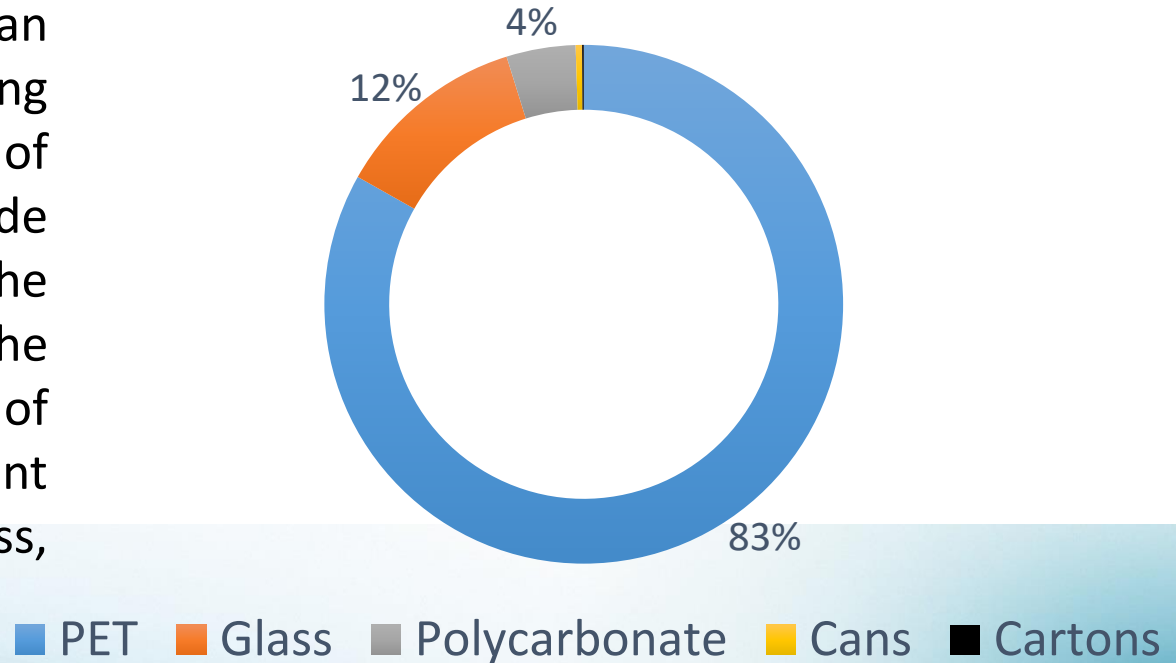


- Polymark was a 1.5 m€ 3-year research project funded by EC
- It aims to maximise the value from recycling and the re-use of this valuable resource, while meeting EU rules on the re-use of food contact and non-food contact PET (and possibly other plastics)
- Develop **a range of marker substances** to encode information on the properties and structure of plastic packaging and to embed these markers in the polymer
- Develop **an identification system** that can detect the markers and decode the information to subsequently separate the waste plastic packaging



The Product Environmental Footprint (PEF) European initiative of the European Commission is aiming towards the development of a harmonized EU-wide methodology for the calculation of the environmental footprint of products including different materials such as glass, cartons but also PET.

Packaging format



Product Environmental Footprint (PEF) European initiative

April 09th 2013, the European Commission published:

Communication: Single Market for Green Products



**Product Environmental Footprint
(PEF) Guide**

**Organisation Environmental Footprint
(OEF) Guide**

Recommendation

Pilot testing phase: 3 years

Resource Efficiency Roadmap

2020

Objective
Higher uptake of green products and of greener practices

Product Environmental Footprint (PEF) European initiative



4 industrial associations



4 bottled water companies



1 LCA consultant

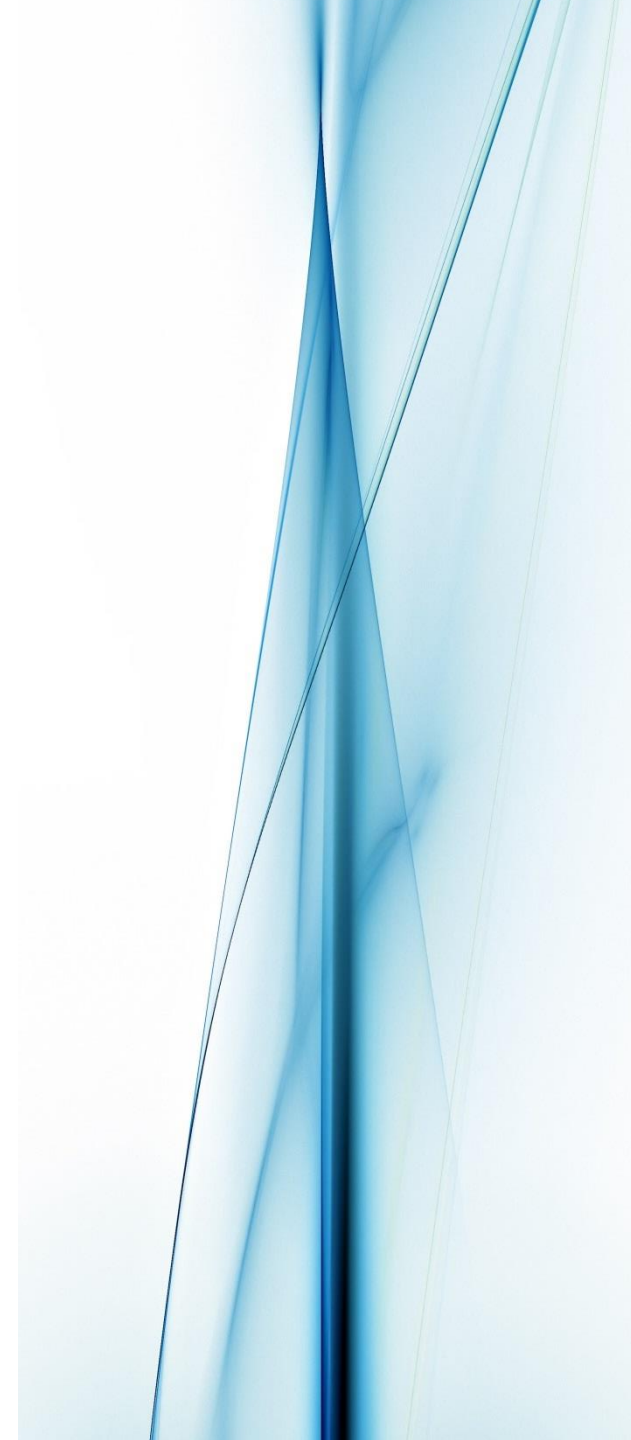
Circular Plastics Alliance

- Signed on 20/09/2019 during a meeting at the European Commission, Petcore Europe among 100+ organizations committed to the CPA's vision for more recycled plastics in Europe. By **2025, 10 million tonnes of recycled plastics** must find their way into products in the EU.





EU Plastics Strategy



The EU Commission message:

PLASTICS HAVE BECOME A MAJOR POLITICAL ISSUE

Ambitious targets:

- All plastics must be recyclable by 2030
- 50% of plastics must be recycled by 2025
- 55% of plastics must be recycled by 2030

More important role required for the polymer value chain

The Commission estimates that key competences are in the value chain and that the value chain must share the environmental responsibility through a commitment:

- **Polymers involved: PET, PO, (PP), (PE), PS and PVC**
- **PET Commitment**

PET Commitment to the EU Commission:

We will,

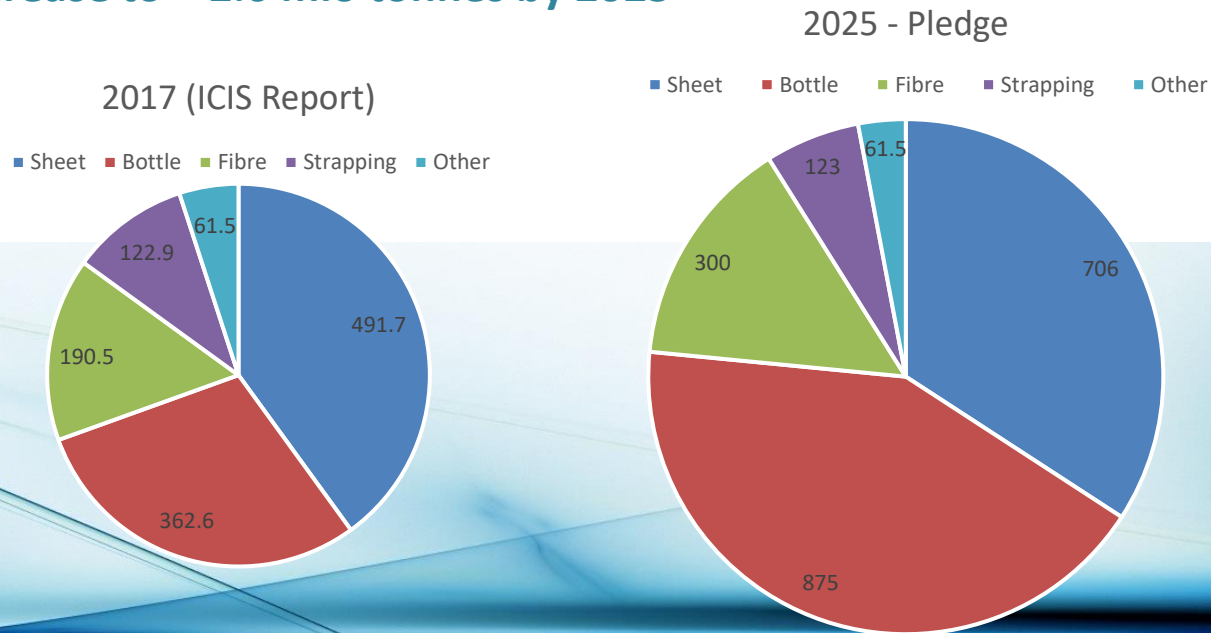
- ✓ focus on the overall objective: 100% recycling of collected PET packaging material.
- ✓ commit to 65% recycling and reuse of PET packaging material collected by 2030.
 - Amongst which, 30% of closed loop
- ✓ continue to commit to improve the Circular Economy by influencing the conditions for appropriate EU and national legal frameworks.
- ✓ develop the requirements for all converters and brand owners to endorse and apply current as well as future Design for Recycling guidelines.
- ✓ influence and demand that EPR schemes will provide stable and standardised, quality sorted PET baled streams.
- ✓ cooperate in finding innovative solutions or remove obstacles for the use of standard recycled qualities.
- ✓ cooperate to develop a positive contribution outside Europe using the established tools in the value chain.

Conditions for our Commitment and Pledge

- **Final SUP Directive Consequences**
- Appropriate European, regional and national **harmonized legal frame for collection**
- Petcore Europe / EPBP PET bottle **design guidelines and protocol to be adopted** by packaging manufacturers and marketing brands
- **Compliance Agencies, EPR Schemes, Governments, Countries** being in a position to provide suitably sorted PET waste streams

Recycled PET Consumption ~ 1.23 mio tonnes in 2017

Target to increase to ~ 2.0 mio tonnes by 2025





Petcore Europe Events: Workshops & Annual Petcore Europe Conference

PET NETWORK DAY 2014

9 October 2014, Brussels

Save the date!

The essential PET event to attend in Brussels!

www.petcore-europe.org

Petcore Europe Conference 2015



Workshop on Recycling Rigid PET Thermoforms – 11 March 2015



Introduction

10.00 - 10.10: Patrick Peuch (*Petcore Europe*)
10.10 - 10.30: Wim Hoenderdaal (*Indorama*)

Collection and Sorting

10.30 - 10.45: An Vossen (*Plarabel*)
10.45 - 11.00: Claire Shrewsbury or Bernard Chase (*WRAP*)
11.00 - 11.15: Thomas Etien (*Valorplast*)
11.15 - 11.30: Michael Heyde (*DSD*)
11.30 - 12.00: Patrick Peuch – Panel Discussion

Packaging Technologies

13.00 - 13.15: Carsten Lauridsen (*Færch Plast*)
13.15 - 13.30: Alan Davey (*LINPAC Packaging*)
13.30 - 13.45: Mark Dawes (*DuPont Teijin Films*)
13.45 - 14.15: Wim Hoenderdaal – Panel Discussion

Recycling Technologies and Legal Environment

14.30 - 14.45: Dario Previero (*SOREMA PREVIERO*)
14.45 - 15.00: Frédéric Durand (*Tomra Sorting*)
15.00 - 15.15: Herbert Snell (*MultiPet*)
15.15 - 15.30: Marion Hasselberg (*EuPET*)
15.30 - 16.00: Paolo Glerean (*Aliplast*) – Panel Discussion

The Next Steps (*Wim Hoenderdaal & Paolo Glerean*): 16.15 - 17.00

Petcore Europe Tracer Workshop

Invitation to Tracer Workshop How to improve plastics sorting efficiency?

Cross-industry discussion to harmonize the use
of tracers into plastic packaging materials

The workshop will focus on PET and intends to
create a precedent for other plastics

24 February 2016
VLEVA Conference Centre - Brussels



Petcore Europe Conference 2017: PET 2020 – The future of the PET industry

A background image showing several clear PET bottles, some with caps, arranged in a way that creates a sense of depth and focus on the industry.

Petcore Europe Conference 2017
PET 2020
The future of the PET industry

 **1 February 2017 in Brussels**
Diamant Conference & Business Centre
Auguste Reyerslaan 80 - 1030 BXL

www.petcore-europe.org
#AllaboutPET

ODR Workshop: 2 February 2017 in Brussels – industry only





Petcore Europe Conference 2018: Strategy for PET in the Circular Economy



Petcore Europe Conference 2018

Strategy for PET in the Circular Economy

7 - 8 February 2018 in Brussels

BLUEPOINT Business Centre
Auguste Reyerslaan 80 - 1030 BRU

www.petcore-europe.org



Petcore Europe Conference 2019: Strategy for PET in the Circular Economy

Petcore Europe Conference 2019

EU Plastics Strategy 2.0
Taking the PET industry to the next step

6 - 7 February 2019

Renaissance Brussels Hotel
Rue du Parnasse 19, 1050 Brussels
in front of the European Parliament



www.petcore-europe.org





Petcore Europe Conference 2020: Circularity & Innovation - Shaping the future of PET

Petcore Europe Conference 2020 Circularity & Innovation Shaping the future of PET



5 - 6 February 2020

Crowne Plaza Brussels - Le Palace
Rue Gineste 3, 1210 Brussels

www.petcore-europe.org





PET Monomer Recycling Forum 2020

2020 PET Monomer Recycling Forum Enhancing the circularity of PET

16 April 2020 - BluePoint Brussels



PET Monomer Recycling
Special Industry Group





Petcore Europe Conference 2021

Post Covid-19 – Trends and Strategy for the Circular PET Economy

Petcore Europe Conference 2021

Post Covid-19 - Strategy and Trends for the Circular PET Economy



3 - 4 February 2021

Crowne Plaza Brussels - Le Palace
Rue Gineste 3, 1210 Brussels

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Petcore Europe

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1150 Brussels

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