



ALPLA



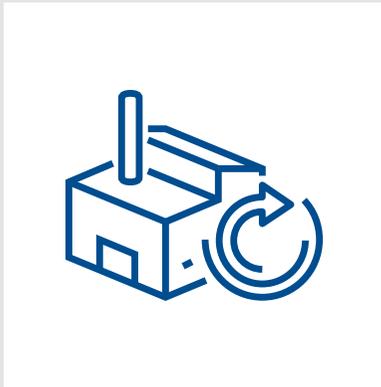
**Reuse – how can the PET industry
combine the concept with recycling?**

*3 June 2021 – Petcore Europe Conference
Strategy and Trends for the Circular PET Economy*

Agenda



Why reuse?



What role does reuse play at ALPLA?



The environmental footprint – what does the LCA say?



Petcore Europe Reuse WG



Why does reuse play an important role?



ALPLA is striving to become the world's leading sustainable rigid-plastic packaging producer.

Modernising reusable solutions is an important step.



Industrial refill solutions made of plastics have a smaller environmental footprint than their counterparts made of glass.

PET is an indispensable pillar in a world of sustainable packaging.



In several countries, there is a trend towards reusability. We are glad to offer our expertise to advance in these markets.

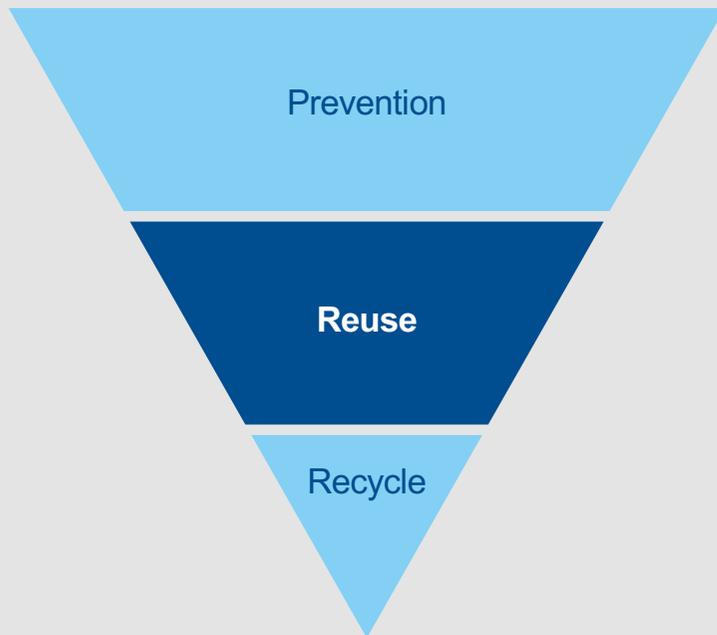
Together with our customers we are paving the way to a new plastics economy.



Policy prioritises reuse, at the same time the public and NGOs consider reuse models as future-proof.

Developing reusable packaging adds another layer to the circularity of PET besides recycling.

Direction of policy: prevention > reuse > recycle



The Waste Hierarchy –
Waste Framework Directive (2008/98/EC)

„By 2030, all plastics packaging on the EU market is either **reusable** or can be recycled in a cost-effective manner. “ - **Plastics Strategy (2018)**

In March 2020, the Commission adopted a **Circular Economy Action Plan to prioritise reducing and reusing materials before recycling them.**

Article 5. Reuse - the Packaging and Packaging Waste Directive (in force):

“Member States shall take measures to encourage the increase in the share of reusable packaging placed on the market and of systems to reuse packaging in an environmentally sound manner and in conformity with the Treaty, without compromising food hygiene or the safety of consumers.

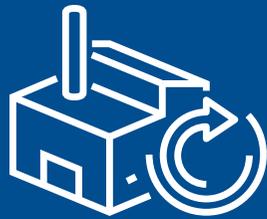
Such measures may include, inter alia:

- a) the use of deposit-return schemes;
- b) the setting of qualitative or quantitative targets;
- c) the use of economic incentives;
- d) the setting up of a minimum percentage of reusable packaging placed on the market every year for each packaging stream.”

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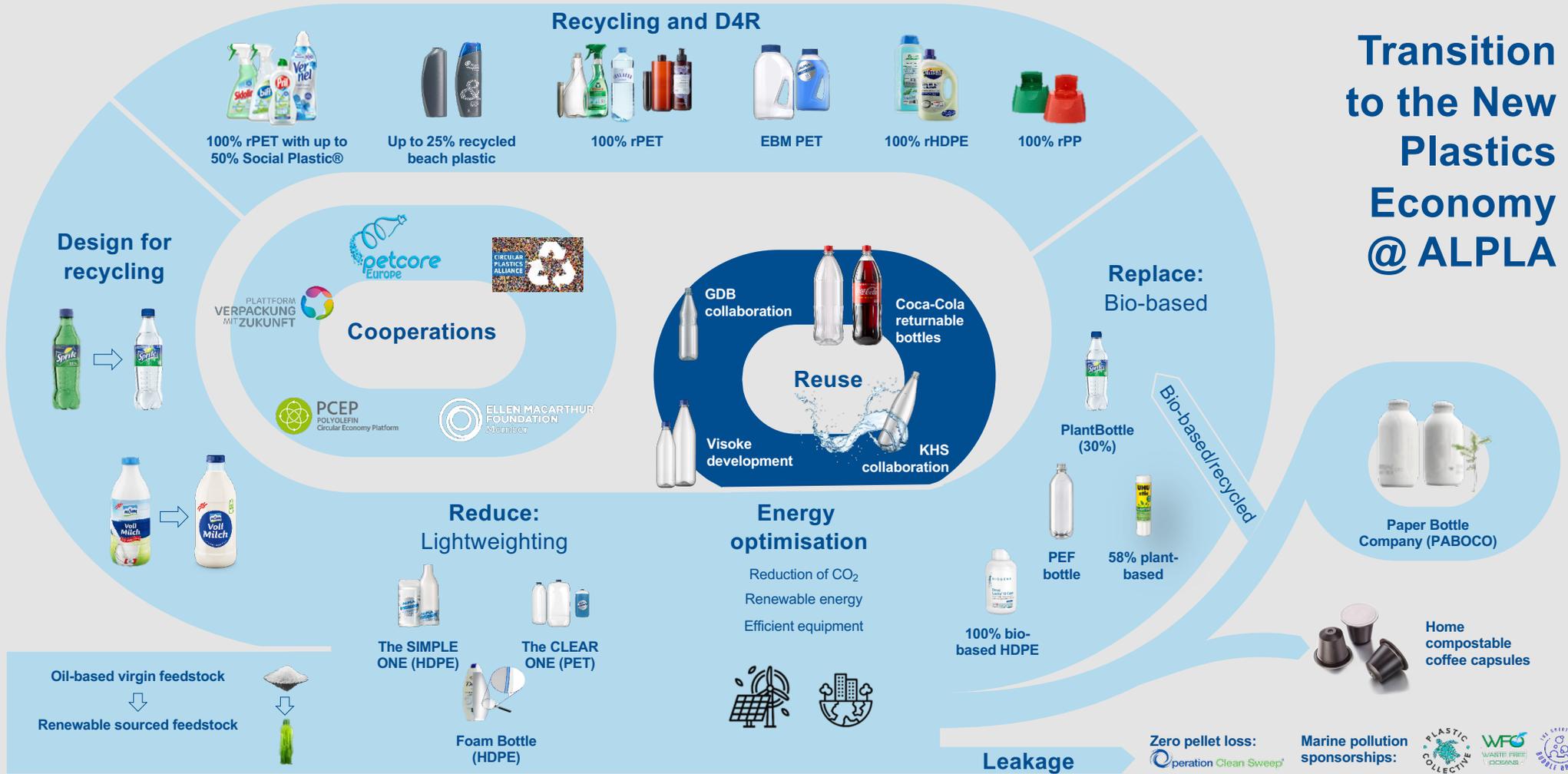
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Transition to the New Plastics Economy @ ALPLA



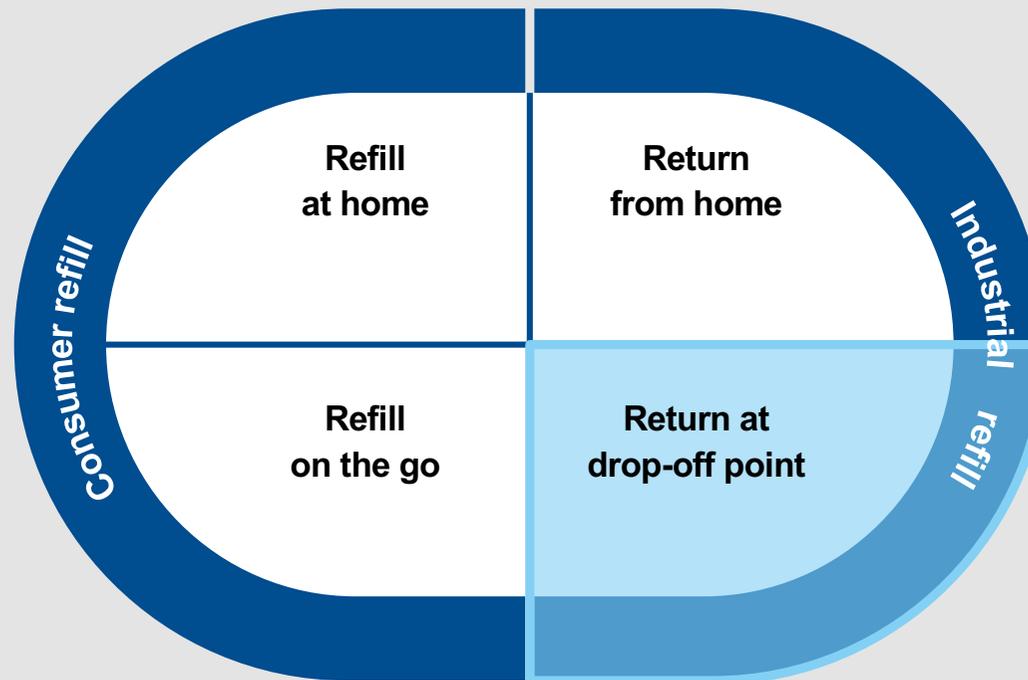
ALPLA reuse model

Refill at home

users refill their reusable container at home (e.g. with refills delivered through a subscription service)

Refill on the go

users refill their reusable container away from home (e.g. at an in-store dispensing system)



Return from home

packaging is picked up from home by a pickup service (e.g. by a logistics company)

Return at drop-off point

users return the packaging at a store or drop-off point (e.g. in a deposit return machine or mailbox)

Covered on next slides: reusable PET bottles (returnable bottles for industrial refill)

Requirements for reusable PET bottles

Customer examples:

GDB

- 1L reusable PET bottle
- Produced on ALPLA machine technology
- **Up to 30% rPET possible**
- Minimum lifetime: 15 cycles



Coca-Cola

- 0,5L, 2L, 2,5L reusable PET bottles in Costa Rica, Mexico and South Africa (pre-forms)
- Minimum lifetime: 25 cycles

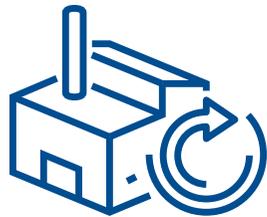


- Bottles for industrial refill more stable – stronger neck finishes support washing treatments and bottle handling
- ALPLA solutions withstand a minimum of 15 cycles
- Our reusable pool bottles: 1000ml bottle with 55g and 500ml bottle with 38g (up to 10g less than comparable PET solutions)
- Use of rPET material tested successfully

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What is more sustainable?

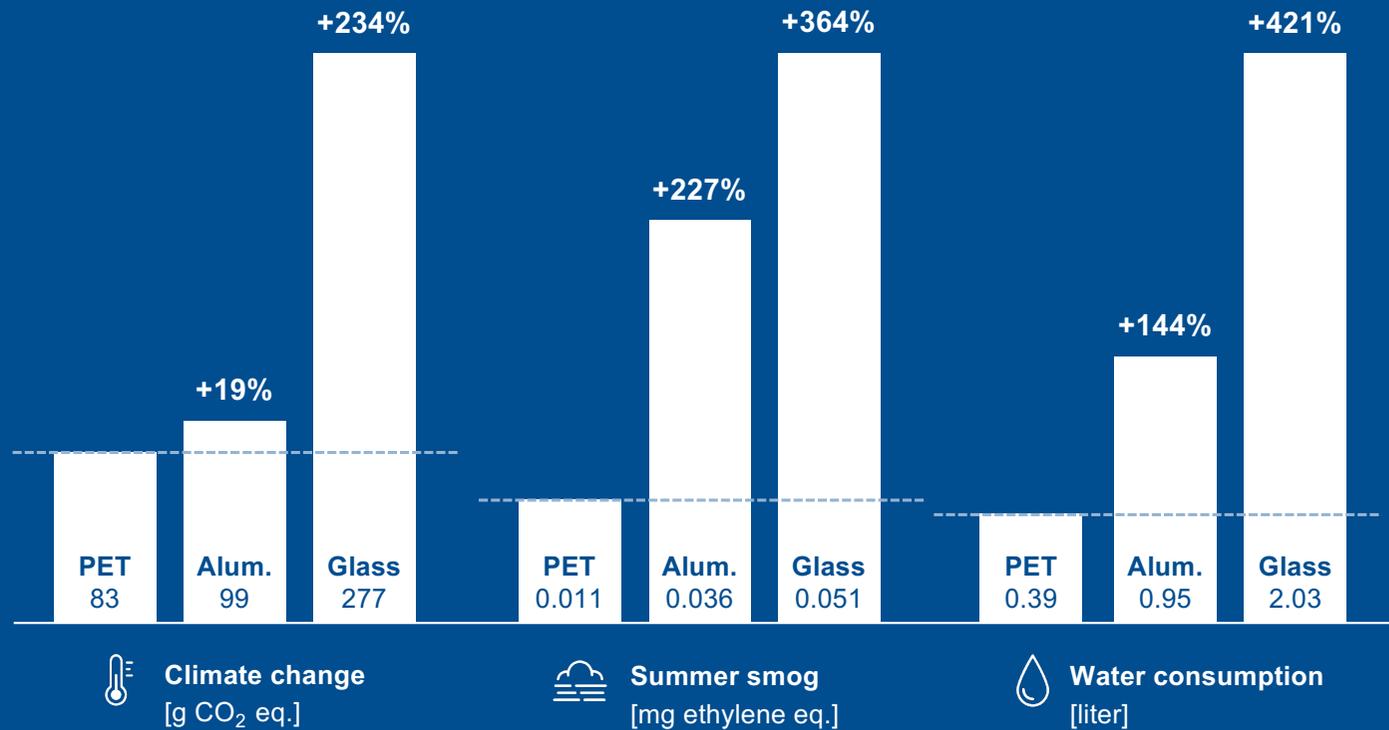
#ChallengingPlastics

Lemonade 0.5l

vs.



Aluminium Can PET Bottle Glass Bottle



What is more sustainable?

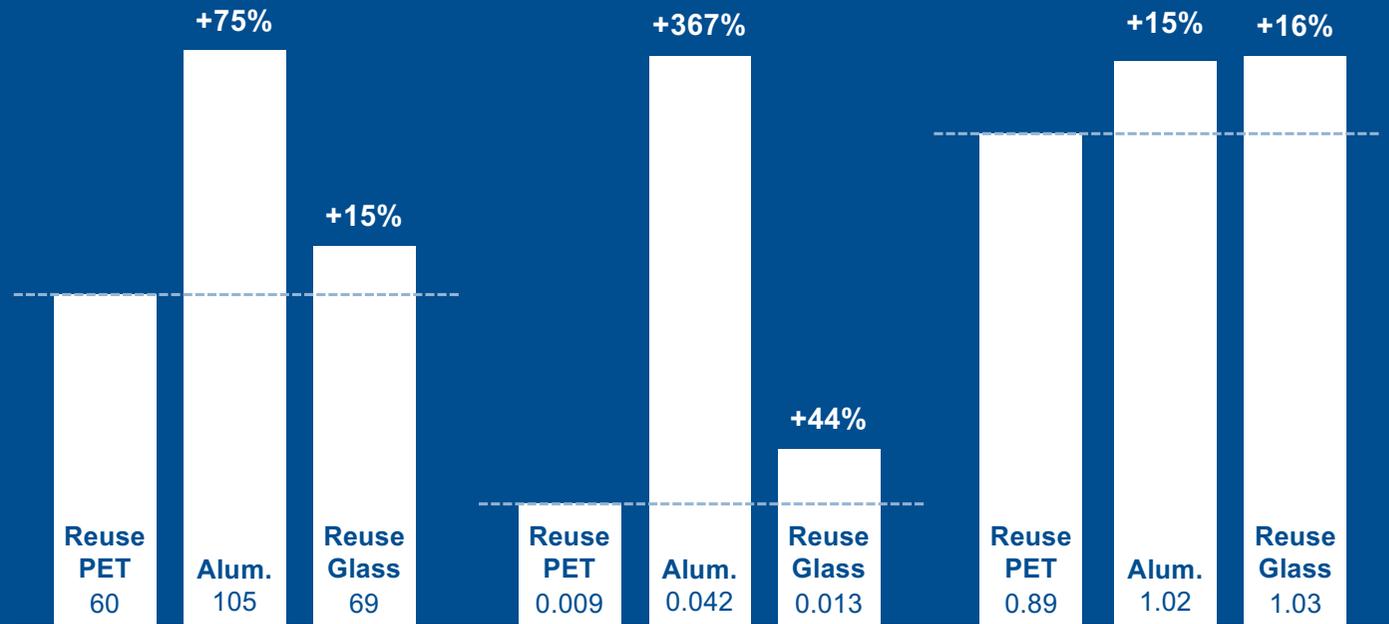
#ChallengingPlastics

Lemonade 0.5l

vs.



Aluminium Can Reusable* PET Bottle Reusable* Glass Bottle



Climate change [g CO₂ eq.]

Summer smog [mg ethylene eq.]

Water consumption [liter]

What is more sustainable?

#ChallengingPlastics

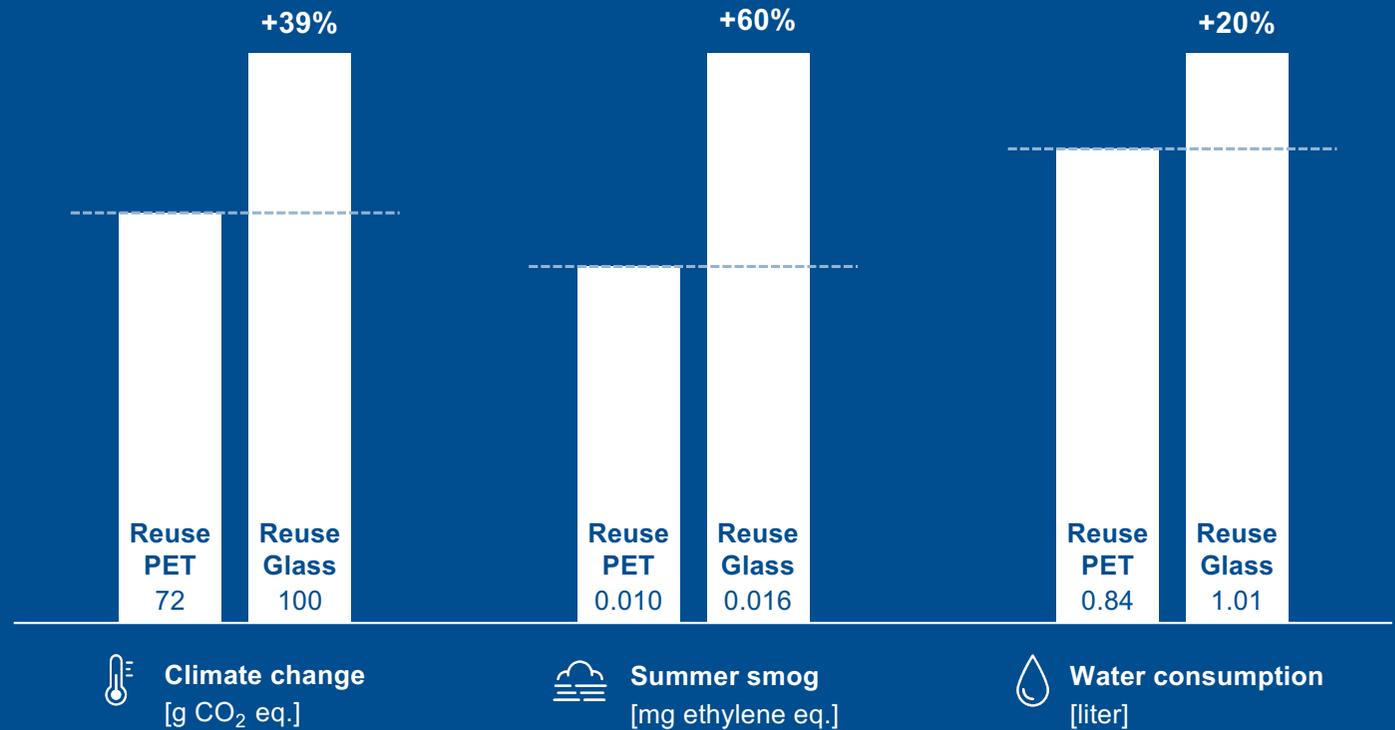
Mineral water 1l

vs.



Reusable*
PET Bottle

Reusable*
Glass Bottle



Climate change
[g CO₂ eq.]

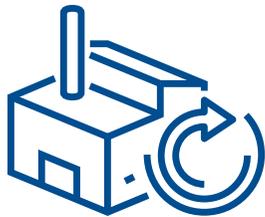
Summer smog
[mg ethylene eq.]

Water consumption
[liter]

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**Petcore Europe
Reuse WG**



The Petcore Europe Reuse WG

Objective and activities



‘Next to the well-established solution of recycling, the PET industry needs to focus on reuse, a key element for the circular economy of PET recognised by policy makers, NGOs and consumers alike due to its position in the waste hierarchy.’

- Finding right strategy to **navigate in the discussion with different stakeholders** – show proactivity and interact with policy makers and other key partners by collection and sharing data (LCAs, business models, best practice, etc.).
- Scanning **regulatory and policy developments**.
- Working on **harmonised definitions** and terminology of reuse.
- **Two meetings** and **one webinar** held this year – **best practice regarding deposit systems** for reuse and for recycling.
- New WG scope to reflect the reality: **„90 % Collection WG“** – **covering both for reuse and for recycling**.

Reuse will be a solution – with or without PET!

Need to show PET is THE solution for single-use recyclable and reuse packaging.

Get in touch with the Petcore Europe team to join the WG.

