



Arbeitsgemeinschaft
Verpackung + Umwelt

ARBEITSGEMEINSCHAFT VERPACKUNG + UMWELT

**Extended Producer Responsibility -
Experiences in Germany**

TECHNICAL VISIT OF THE JORDANIAN MINISTERIAL DELEGATION TO BERLIN

The AGVU promotes the sustainable recycling of packaging for resource and climate protection

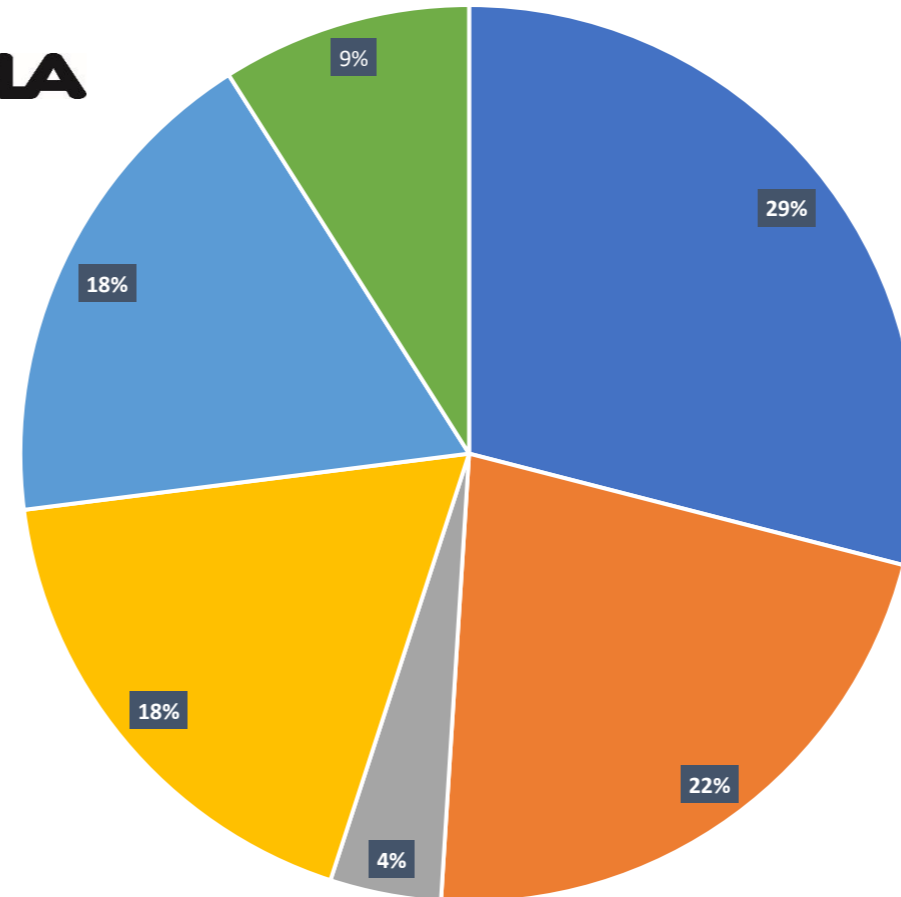
Management of resources

Environmental legislation



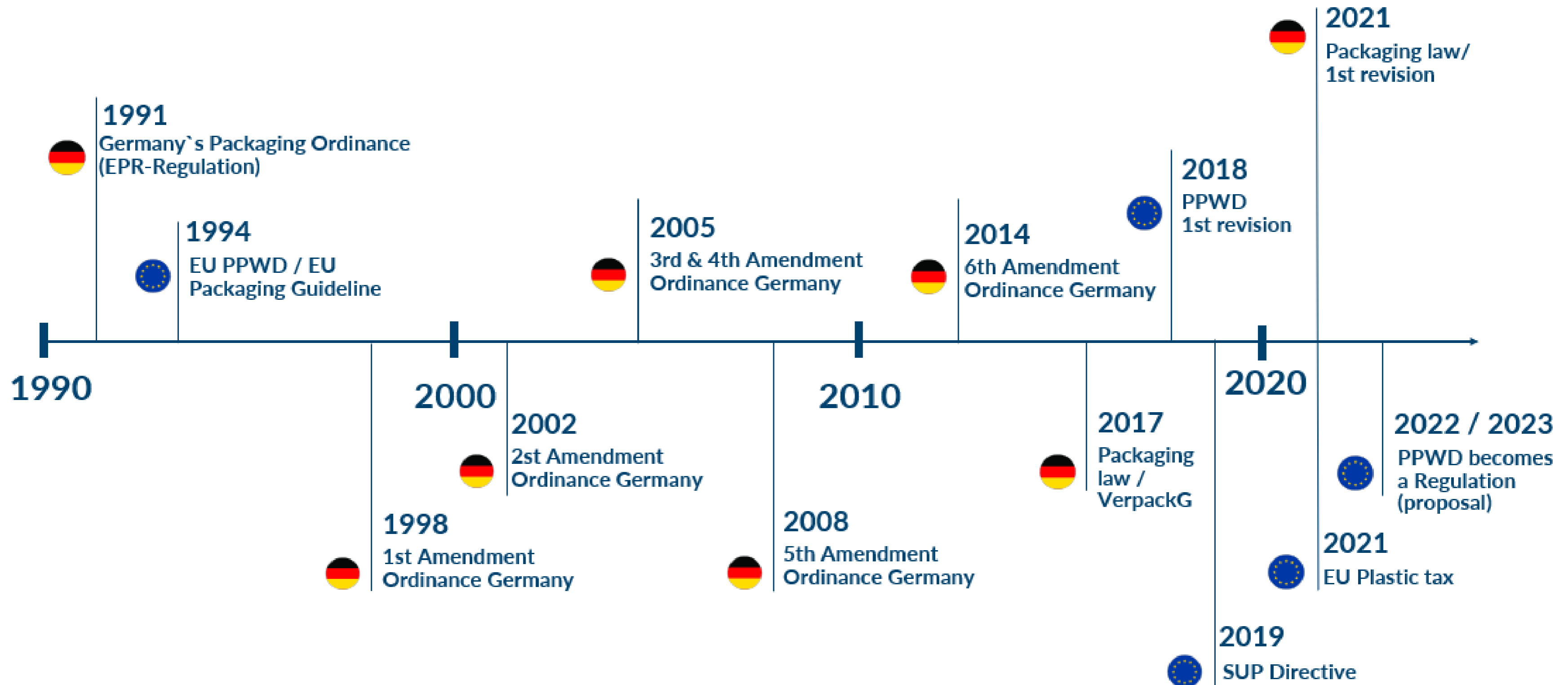
Press, politics and professional audiences

AGVU represents the entire value chain and all packaging materials



- Producers of packaging and packaging materials
- Producers / Bottler
- Retail
- Waste Management Systems
- Associations
- Recycling & Waste Management

30+ Years of EPR





EPR and PRO models

EPR in Germany

- 84 mio. inhabitants
- 357.588 km²
- 16 federated states
- Packaging consumption in 2020: 18.78 M t.
 - 8.2 M t packaging in EPR scope
 - 0,5 M t packaging in DRS
 - 10.1 M t packaging NOT in EPR scope
- 18.20 M t were recovered, thereof
 - 13.96 M t materially and
 - 4.2 M t energetically.



Statutory Recycling Targets

Germany
2023

- Plastic: 63%
- Paper & board: 90%
- Aluminium: 90%
- Ferrous metals: 90%
- Glass: 90%
- Beverage cartons: 80%

EU 2025

- Plastic: 50%
- Paper and cardboard: 75%
- Aluminium: 50%
- Ferrous metals: 70%
- Glass: 70%
- Wood: 25%

Central Agency Germany

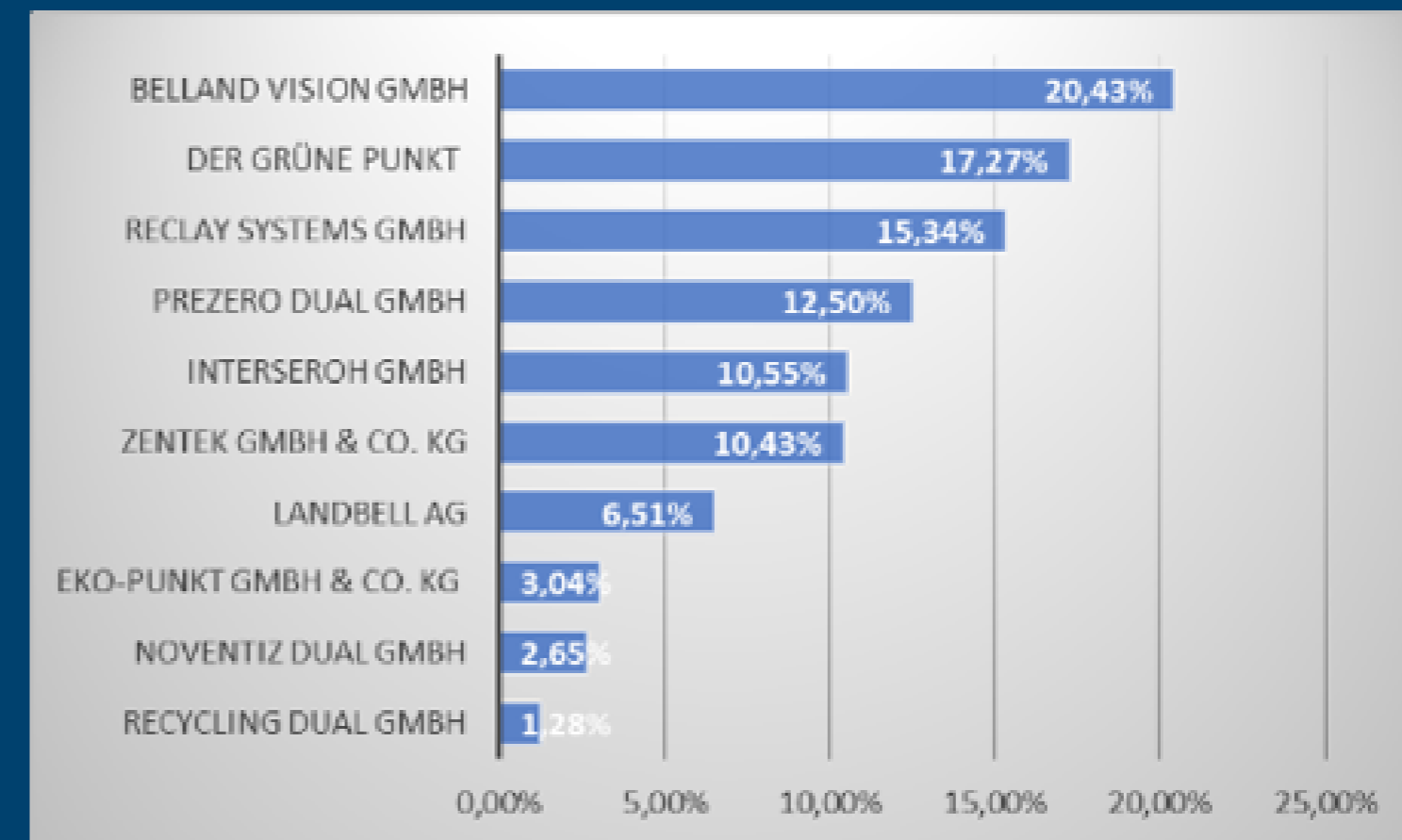
The supervisory agency in Germany - Zentrale Stelle Verpackungsregister

- Founded in 2019 as a non-profit foundation
- Supervisory agency for packaging
- Provides a public register of obligated parties
- Financed by the PROs based on their respective market shares
- Aims to reduce free-riding of parties that do not fulfill their EPR obligations

Operators of dual systems in Germany

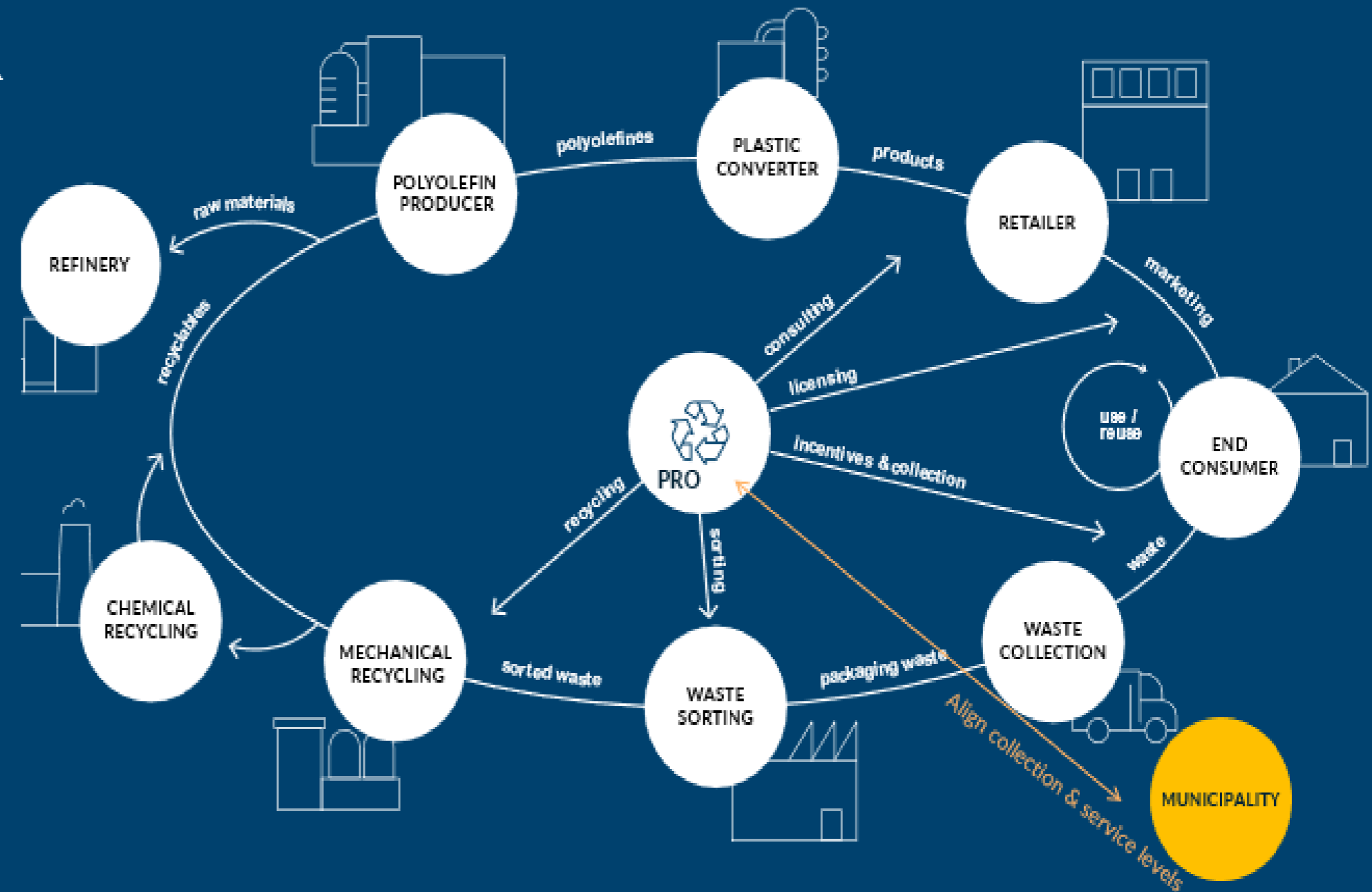
Market shares Q1 2023

- In Germany there are several PROs in a competitive market
- The PROs can be privately owned and need to be admitted by the central office
- Collection is collectively done by all PROs together
- A clearing house is needed to allocate costs according to market share
- Sorting and recycling contracts are done individually



The role of PRO in EPR

- Service provider meet producers' EPR obligations collectively
- Connecting the dots: thousands of municipalities, brand owners, retailers, recycling operators
- Data management & transparency
- Promotion & Education
- Material Supplier



Actors involved in the system and their role

PRO



Collection by local waste management companies, in coordination with the municipalities



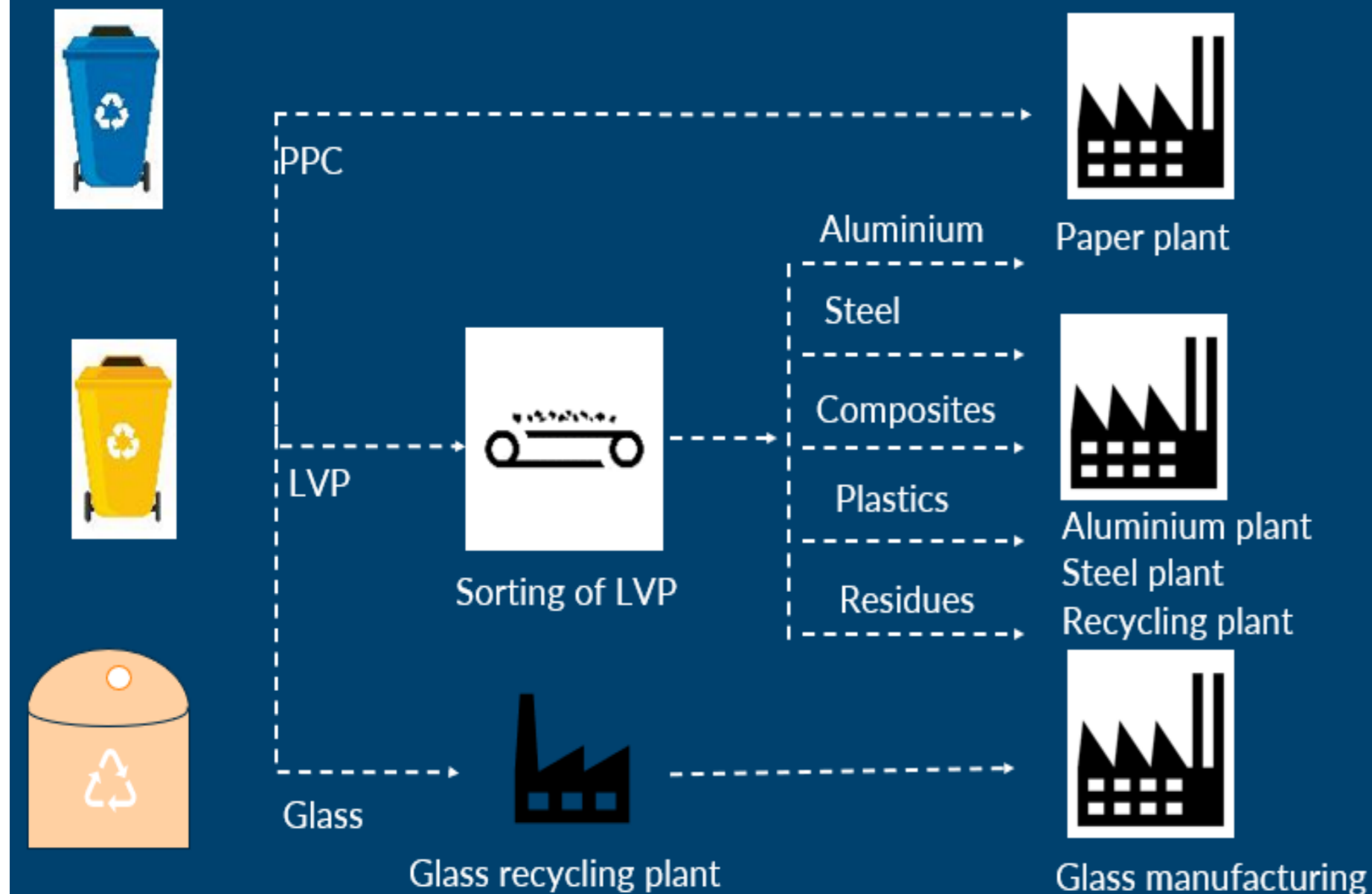
Municipalities

Agreement between PROs and the 400 municipalities on:

- Collection frequency
→ weekly/ biweekly/ fortnightly
- Type of collection
→ yellow bin/ yellow sack



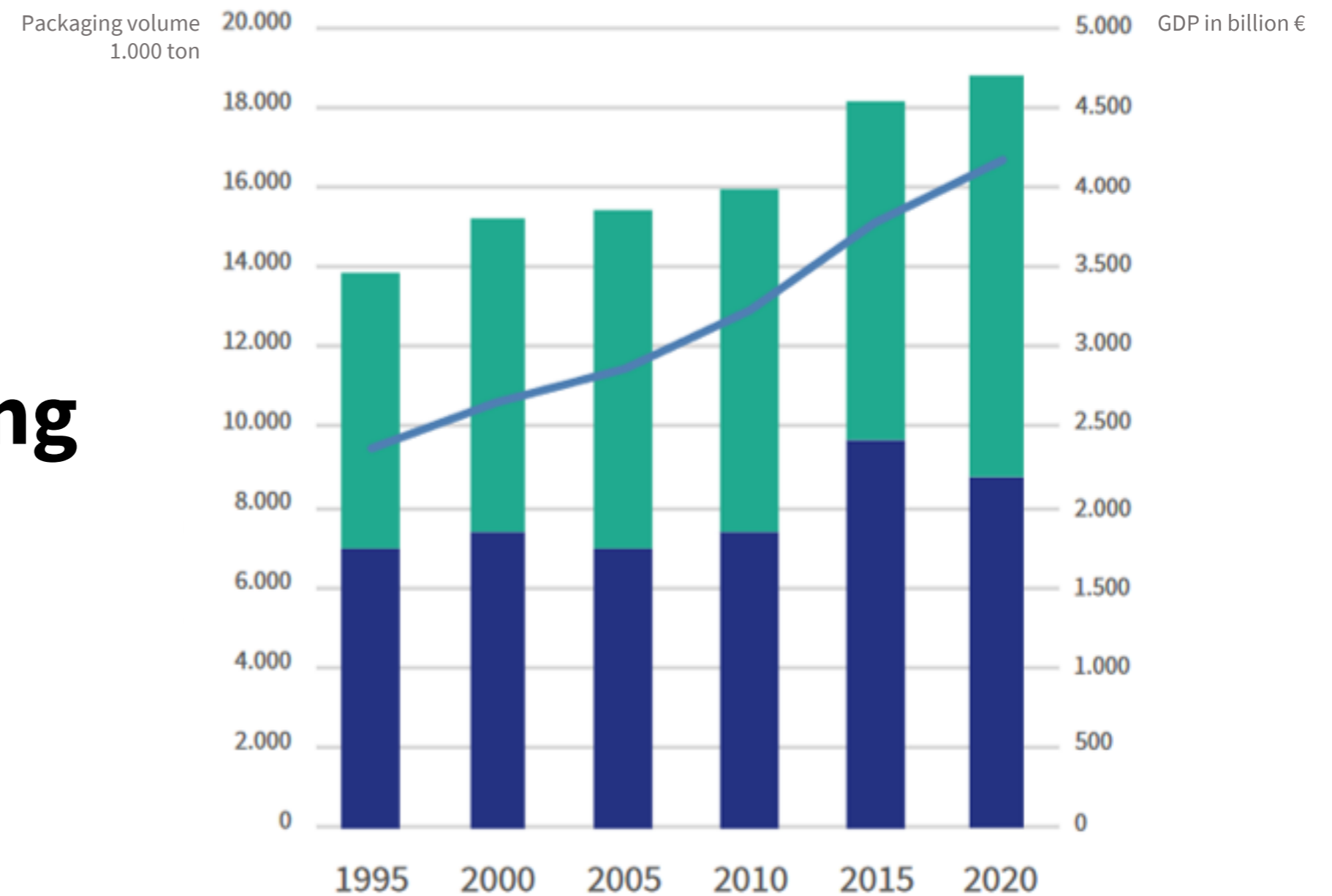
Sorting and Recycling



Sorting and Recycling

- 39 sorting plants with 2,9 mio t sorting capacity
- Sorted Plastics:
 - HDPE
 - LDPE
 - PET
 - PP
 - PS
 - Mixed Plastics

**As the economy grows,
the amount of packaging
increases**



- Packaging: Industry, wholesale, retail
- Packaging: Households, waste facilities, small businesses
- Gross domestic product in billion €

EPR with a steering effect on packaging mass



- Weight: 7,2 g plastics
- Recycling: 3 %

— 1991



- Weight: 4,7 g
- Recycling: 58 %

today

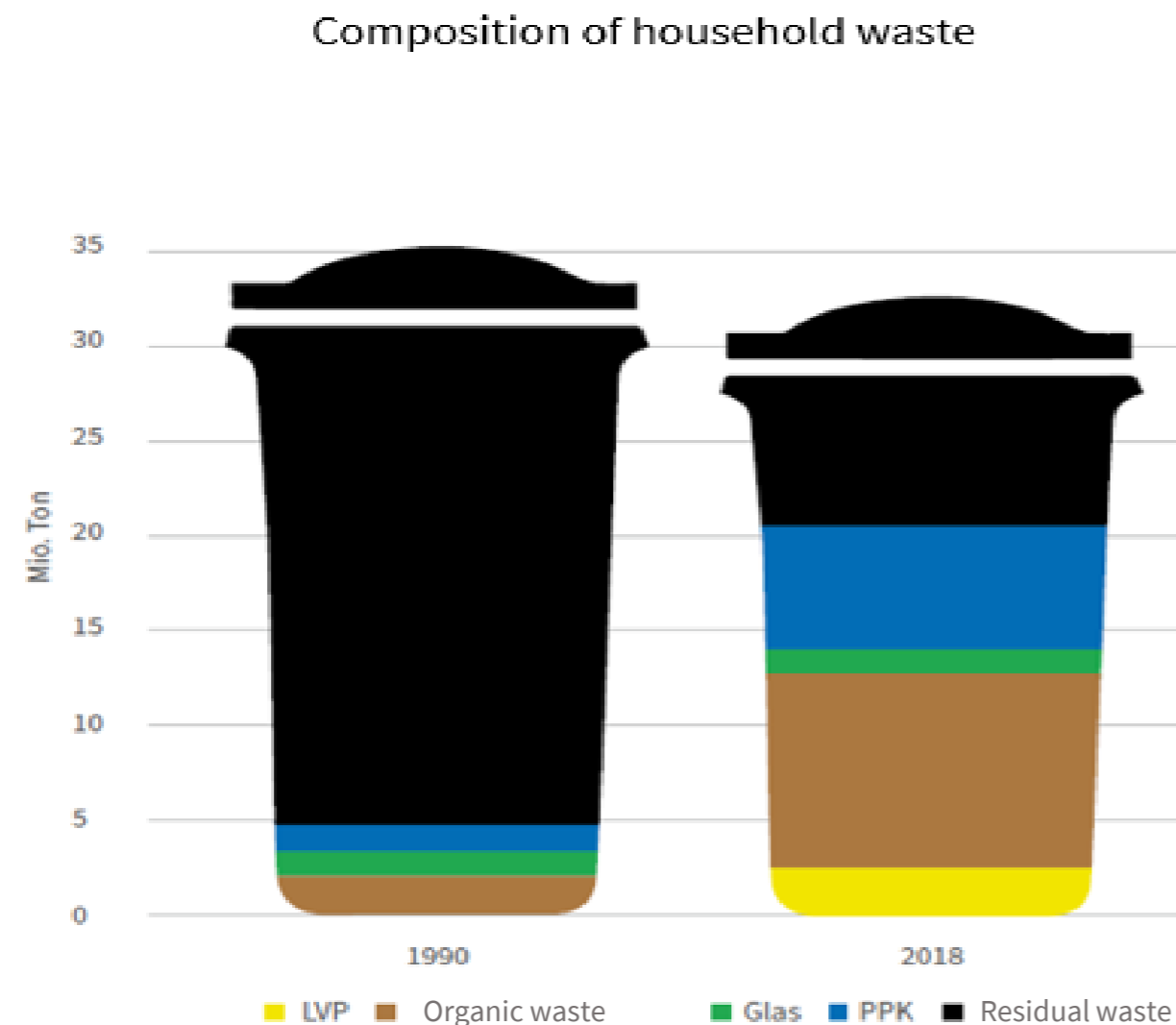


- Weight: 441,5 g Glas
- Recycling: 58 %



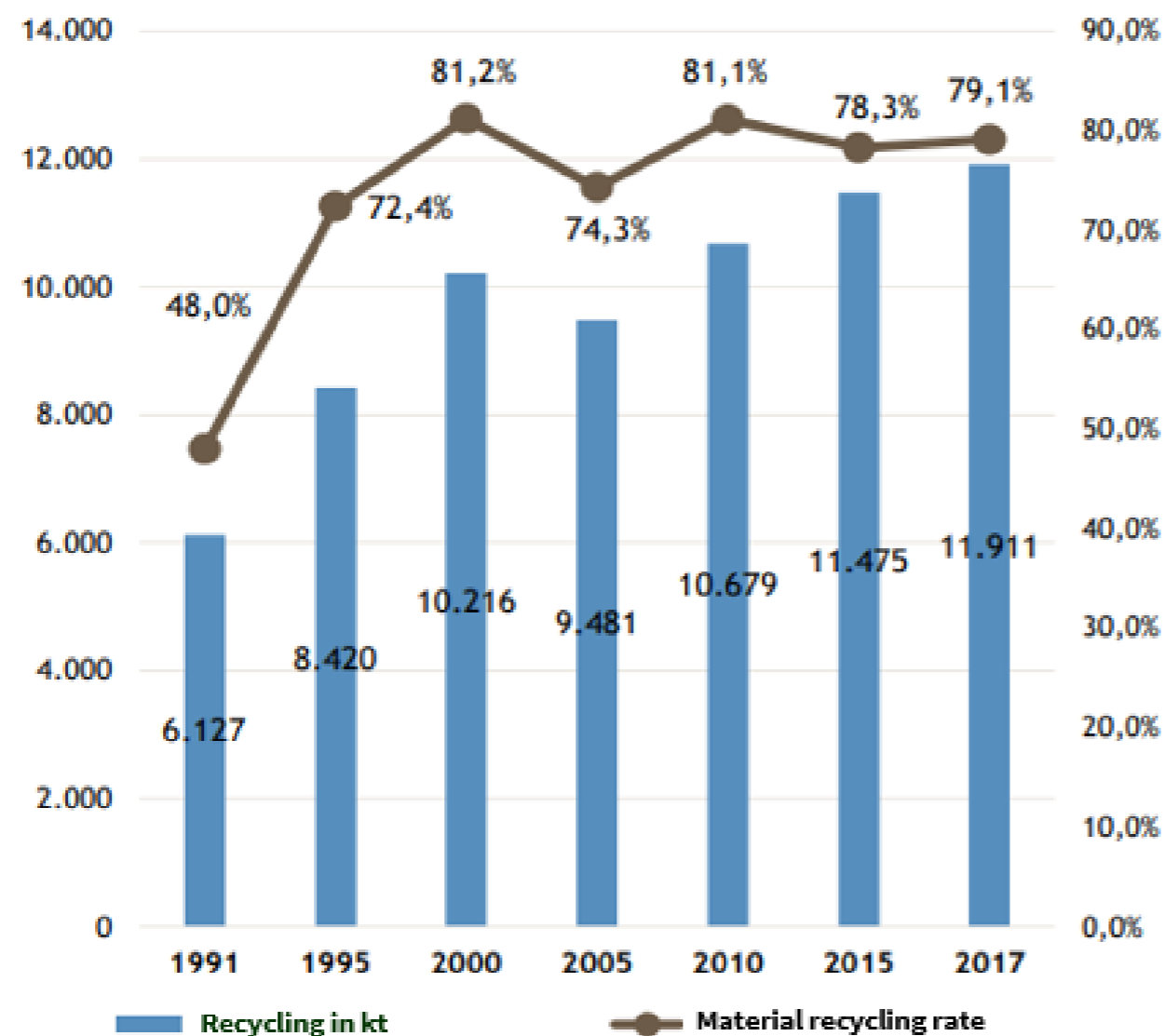
- Weight: 337,1 g
- Recycling: 84 %

Better sorting and recycling reduces the amount of residual waste



- Reduction in residual waste volume by more than 50 % since 1990
- In 1990, 70 % of the total amount of waste was still landfilled without pre-treatment
- Statement on the participation of citizens over the years

Progress of the recycling target (packaging)



- In 2017, 11.9 million tons of packaging were recycled in Germany
- This corresponds to a recycling rate of 79.1 %
- The remaining packaging is mainly used to generate energy

Quelle: gvm und denkstatt, 2019

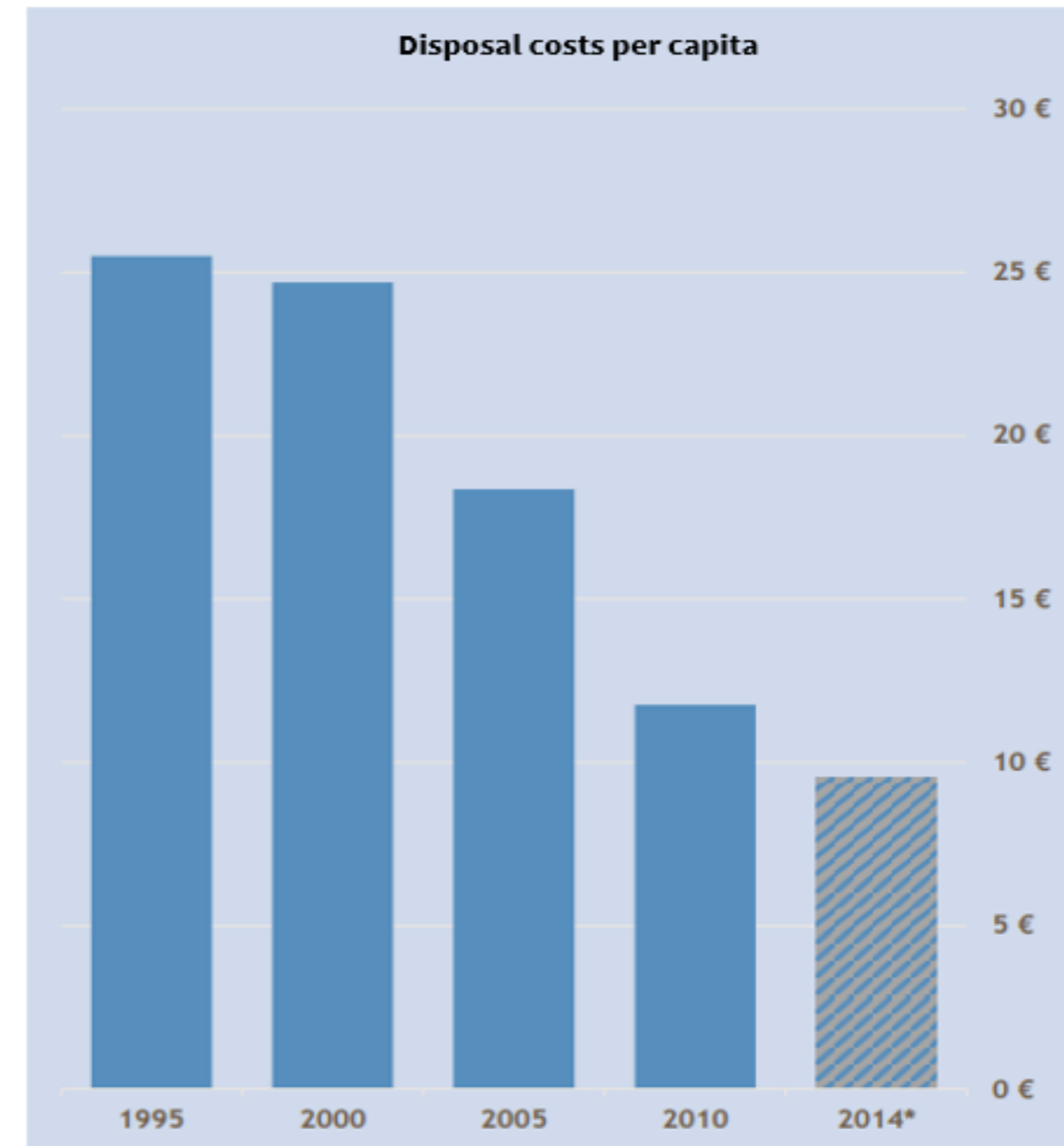
Packaging, climate and jobs



- 8.1 million tons of CO2 equivalents per year were saved by recycling packaging in Germany in 2018. This corresponds to the annual fuel consumption of 3 million passenger cars (denkstatt, 2020).
- The circular economy (waste management, waste disposal technology and secondary raw material production) generates an annual turnover of around €85 billion in almost 11,000 companies with around 310,000 employees (2020)

Disposal costs

- The costs of collecting, sorting and recycling packaging waste are carried by the consumer through product prices
- In 2014, every citizen paid an average of 9.50 € for the disposal of packaging waste.



Quelle: gvm und denkstatt, 2019

Modulation of EPR fees according to ecological criteria

Criteria for an eco-bonus in the German Packaging Act:

- Can be emptied without residue
- Recognizability through automatic sorting
- Monomaterial
- No substances that interfere with recycling, such as:
 - Barriers, additives, fillers
 - Labels with different materials
 - Water-soluble inks/adhesives

EPR in Germany: Conclusion and Learnings

Efficiency: Neither companies nor population are excessively burdened.

Added value: The circular economy is established as a successful industry.

Responsability: EPR is used by companies to communicate their responsibility

Environment: Collection and recycling of packaging is a useful instrument to minimize littering and pollution and to save CO₂-emissions.

Aspects for the acceptance by the companies

- Funds exclusively used for the collection and the recycling of packaging
- Prevention of free-riding – equal treatment of all companies and importers
- Services on design-for-recycling and access to secondary raw materials



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Thank you for your attention