ČAOOH
ČESKÁ ASOCIACE OBĚHOVÉHO HOSPODÁŘSTVÍ

FEAD
European Waste Management Association

CE Delft
Committed to the Environment

prognos
providing orientation.

Presentation of key results

CO_2 reduction potential in European waste management

Conference
GREATER ENERGY AND MATERIAL SECURITY IN EU COUNTRIES

Dr. Bärbel Birnstengel / Richard Simpson (Prognos AG)

Prague | 22/09/2022

Key facts

amounting to **505** **Mt**

(~ 19 % of the total waste generated in 2018)

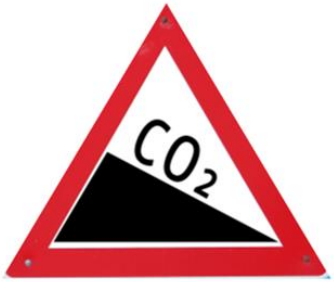
27+1

regional focus EU member states plus UK

10

waste streams with high resource potential,

considering separately collected amounts **and** the potential within mixed waste streams



2 projections until **2035**

compared to a baseline plus **several sensitivities**

CE Delft prognos

Committed to the Environment

13 Mt CO_{2eq} / 2018
by adopting a 20-year GWP perspective

-150 Mt CO_{2eq}/ 2035 by applying current waste legislation and adopting it to C&I waste (P1)

-296 Mt CO_{2eq}/ 2035 by increasing efforts and reducing landfilling to a minimum (P2)

Source: © Fotolia - Jan Will

CE Delft prognos
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I. The waste management industry has cross-industrial interlinkages by making valuable waste-derived content available to the whole economy as secondary resources for material and energy uses.

II. For more ambitious projections, the municipal waste targets need to be extended to commercial and industrial wastes, and waste suitable for recycling and energy recovery should be diverted from landfills.

III. To achieve max. CO_2 avoidance, waste management needs the support of policy makers/legislation, of the industry (development of recyclable products) , and every consumer - in short, it needs to become part of a truly Circular Economy.

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We provide orientation.

Prognos AG – European Centre
for Economic Research and Strategy Advise

Expra
Extended Producer Responsibility Alliance

Economy & Climate Session
The role of EPR

Joachim QUODEN
Managing Director of EXPRA

Expra
Extended Producer Responsibility Alliance

Founded in 2013

30 MEMBERS & Partners
all industry-owned, non-profit

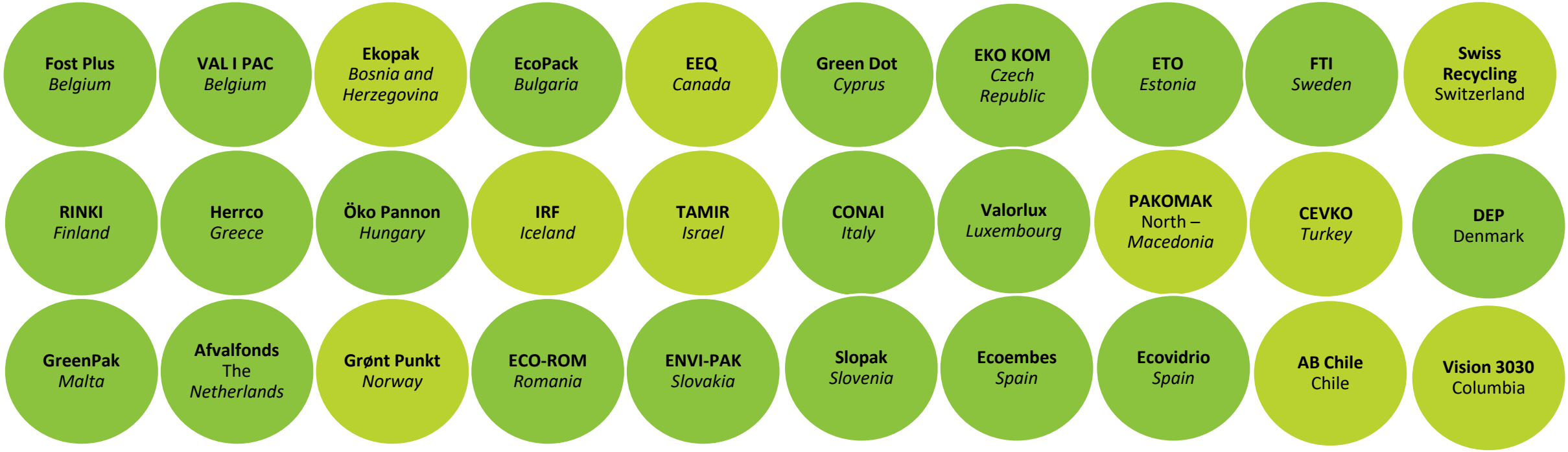
HAVE over **30** YEARS
of experience and expertise in the waste management field

PROVIDE over **200** MILLION PEOPLE
with packaging collection, sorting and recycling infrastructure

ENSURE RECYCLING AND RECOVERY of over **21** MILLION TONNES
of packaging every year at the moment

Expra
in a nutshell

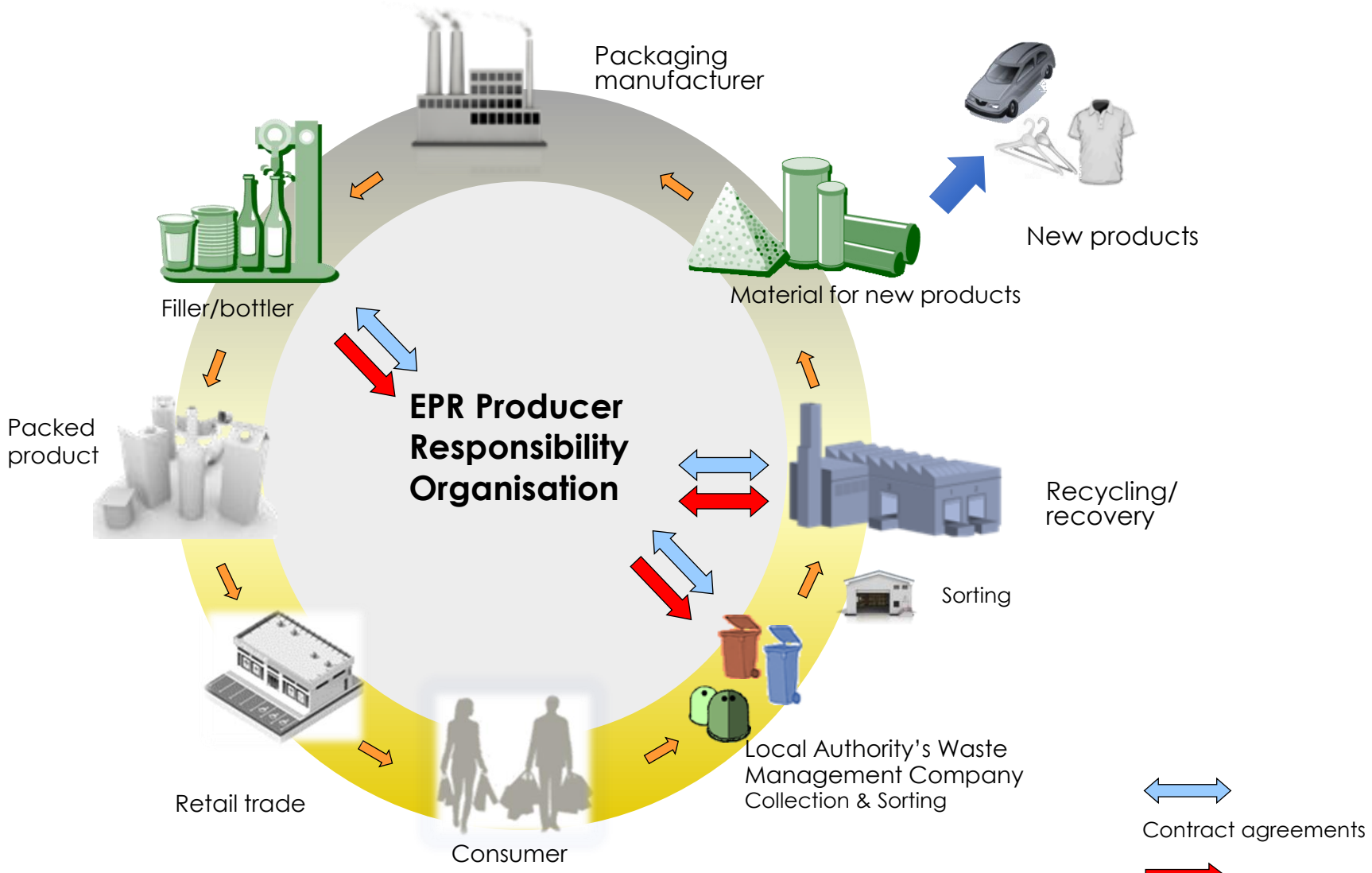
Our Members – 30 non-profit PROs owned by industry in close cooperation with industry via a Strategic Committee



Detailed info about each member of EXPRA:
https://www.expra.eu/uploads/Brochure%20EXPRA%202020%20last.pdf

EPR's role in a circular & carbon neutral economy

Operational **AND** financial responsibility



EPR as a solution – Golden Rules

5th Anniversary Expra Extended Producer Responsibility Alliance

Key principles that EPR should follow:

a) **A clear separation of roles and responsibilities** of all relevant actors involved;
b) **Ownership of the EPR** limited to the **obliged Producers and value chain**;
c) **Not-for-profit set-up;**
d) **Measurable waste management targets;**
e) **Reporting transparency**;
f) **Equal treatment of producers** of products regardless of their origin or size;
g) **Information to consumers;**
h) **EPR transparency**;
i) **Cost coverage**, to reflect the end-of-life costs of its products;
j) **Cost efficiency,** means that an EPR scheme has a clearly defined geographical, product and material coverage;
k) **Fee modulation,** taking into consideration the packaging' **recyclability**;
l) **Monitoring and enforcement.**

5th Anniversary Expra Extended Producer Responsibility Alliance

Waste Framework Directive (2018) – Learnings from 25 years EPR

Article 8a

Sets out general, minimum requirements for EPR with regards to:

- Roles and responsibilities
- Target compliance
- Reporting
- Equal treatment of producers
- Information to waste holders targeted by EPR schemes & Member States
- Transparency
- Cost coverage
- Eco-modulation
- Efficient & necessary costs
- Monitoring and enforcement
- Independent Oversight in case of competition
- EU & National Dialogue platforms

How to meet the CEAP goals in line with EU's climate neutrality objective by 2050

PROs already contribute if well designed

Having a **public mission** while using their commercial expertise **and working with all stakeholders** in the life cycle of packaging

Identifying (financial and operational) **gaps and suggest** working **solutions** and providing expertise and enabling the necessary investment;

Bridging upstream and downstream to ensure what enters the market can be uptaken after the use phase (design for recycling / sustainability

Collecting all necessary data to prove compliance and demonstrate performance for one way but potentially also for re-usable packaging

Using/developing reliable data collection on **carbon emissions and carbon performance**

How to meet the CEAP goals in line with EU's climate neutrality objective by 2050

How can EC, EP and National authorities support PROs:

Approve **targeted Design for Recycling Guidelines developed by the whole respective value chain**that take into account product, material- and packaging-oriented specificities;

Ensure that all new targets (w**aste prevention and reduction targets, recycled content targets) should not** affect the reusability and recyclability of packaging and **contribute to CO2 emission prevention** and reduction;

Reuse could be integrated in the reporting systems of EPR/PROs and eventually in the fee modulation system as well

Fee modulation should be based on facts / costs and should not be counterproductive versus climate neutrality;

Further **strengthen min EPR requirements in WFD** regarding governance, increased transparency/visibility among all actors, including LA, avoid vertical integration, clear roles matching responsibilities, etc.

THANK YOU!

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Expra

Extended
Producer
Responsibility
Alliance

centrum
ekonomických a tržních
analýz

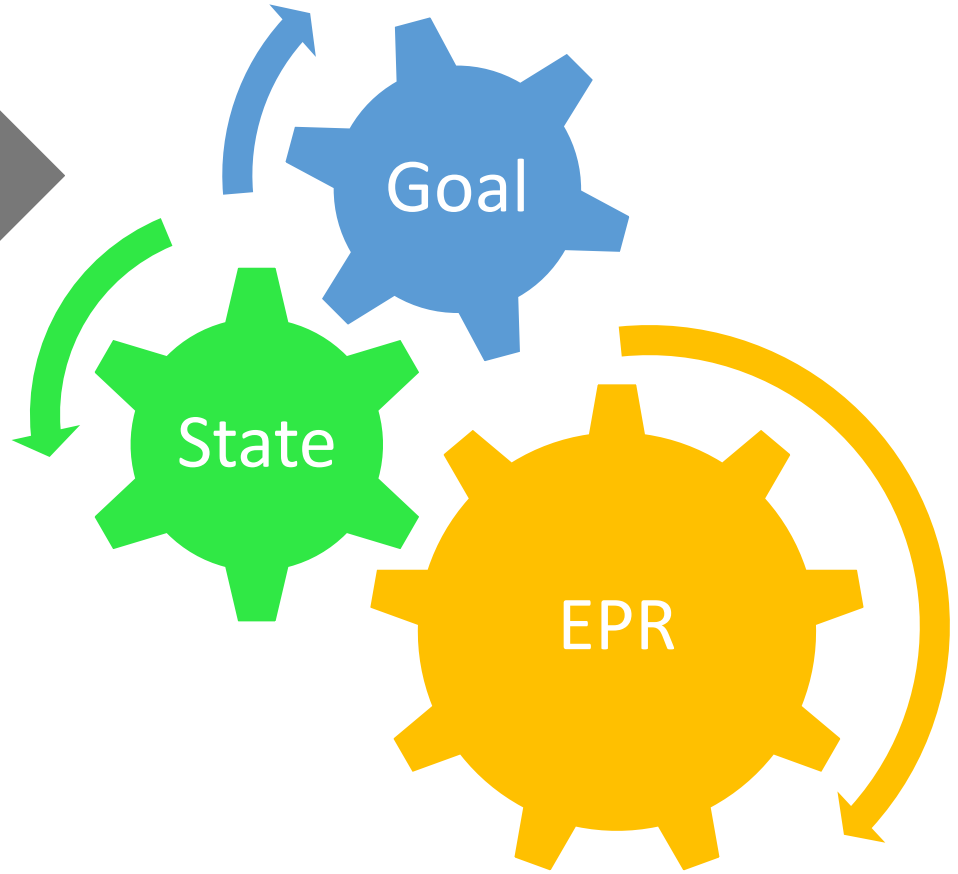
Comparison of regulations and EPR systems across the EU

Aleš Rod, Ph.D

Prague, 22th September 2022

EPR as a regulatory tool

Negative externality



1. Externality occurs
2. A goal is set
3. EPR implementation
4. Meeting the goal via EPR
5. Reporting, audit, control

EPR ORGANISATION

- EPR can be organized in two ways:
  - Single-operator: There is one collective operator in the system, who is a key partner in achieving goals.
  - Multi-operator: In the system, there are several collective operators who compete with each other but achieve the goal together.
- The government is responsible for the organization of the system and the fulfillment of waste targets.
- The government is thus the de facto "customer" of collective operator services in the system
- An example from the area of packaging waste:
  - Recycling is a PAID SERVICE for the manufacturer, whose provision (offer) is de facto ordered by the government from AOS.

EPR ORGANISATION

- Economic theory considers monopoly to be a market failure
  - (Perfect) competition delivers significant benefits for allocation of sources (=> Q , P)
- This concept is universally valid on the MARKET (supply x demand)
- An environment suitable for the EPR application is not market, because:
  1. There is no clearly identifiable demand here (utility => willingness to pay)
  2. There is no clearly identifiable supply here (costs => profit-seeking)
  3. There is no efficient pricing mechanism to achieve enable DxS interaction
- This leads to empirical conclusions (CETA 2016, CETA 2018, CETA 2020) that the competition between collective operators (PROs) does not automatically bring better results

MORE ACTORS ≠ MORE EFFICIENT FULFILLMENT OF ENVIRONMENTAL GOALS

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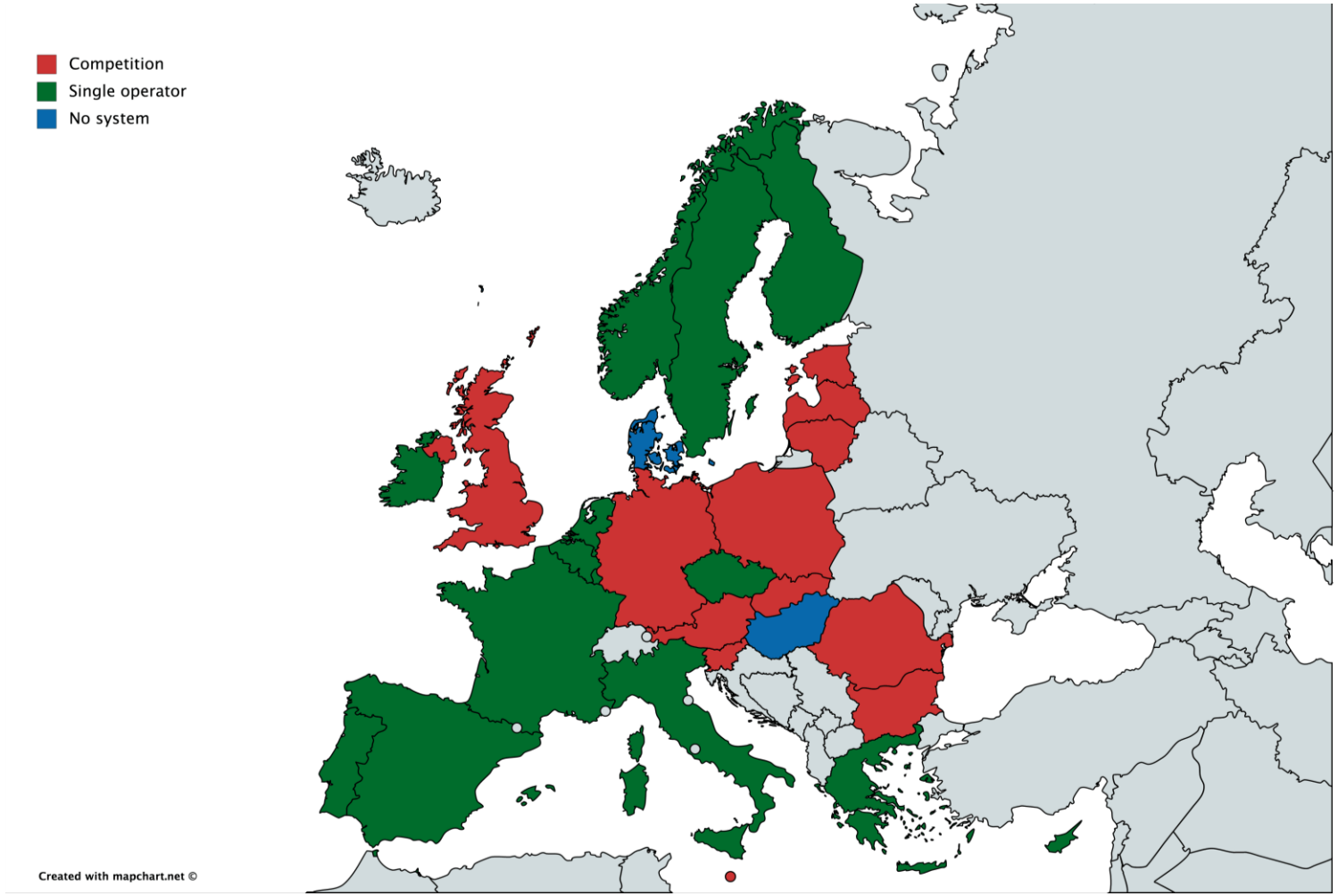


- One operator (10): Czechia, Belgium, France, Netherlands, Ireland, Finland, Spain, Cyprus, Italy, Luxembourg.

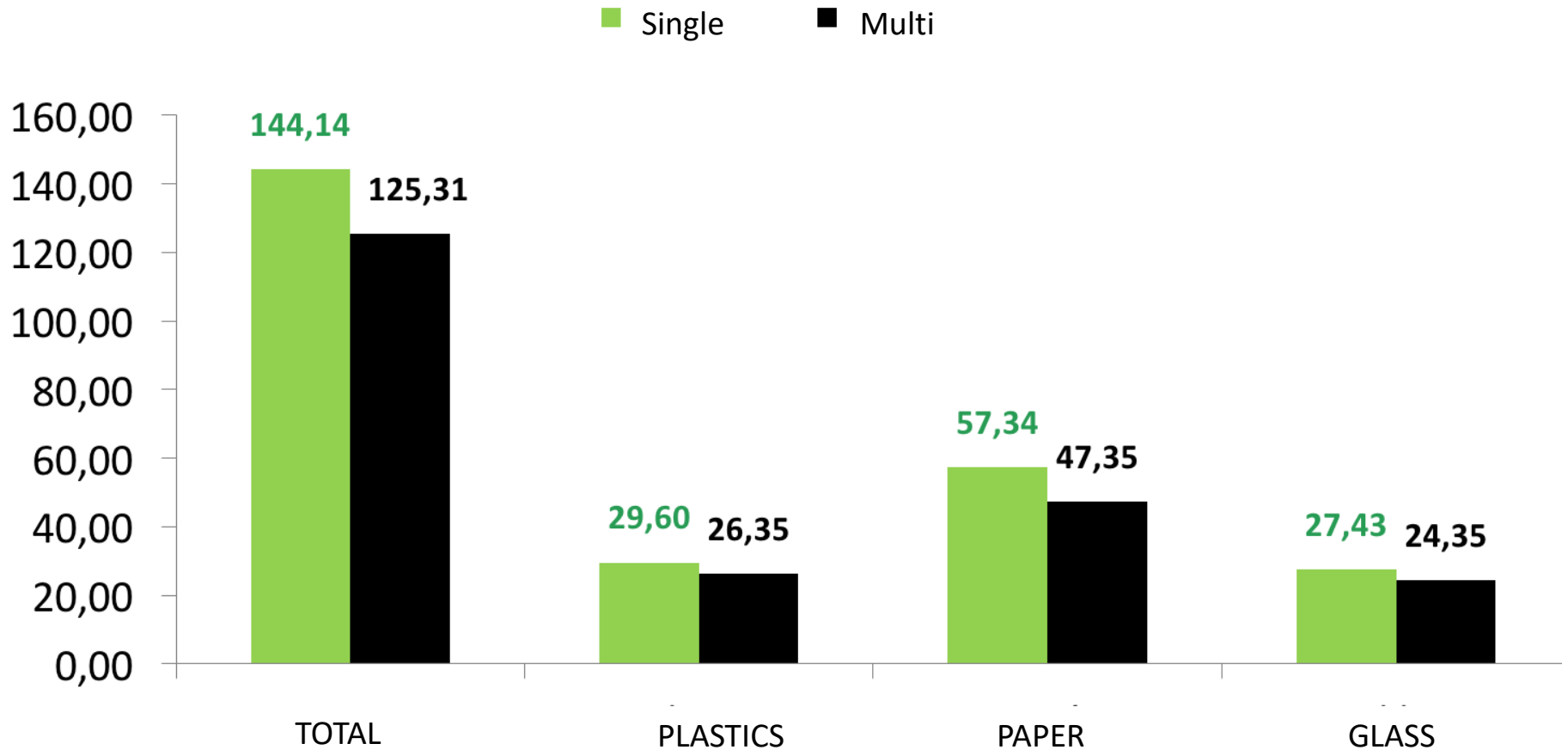
  (47.8% area, 50.27% population)

- Multi-operator (15): Austria, Germany, Norway, Poland, Estonia, Sweden, Romania, Lithuania, Latvia, Slovakia, Greece, Slovenia, Portugal, Bulgaria, Malta.

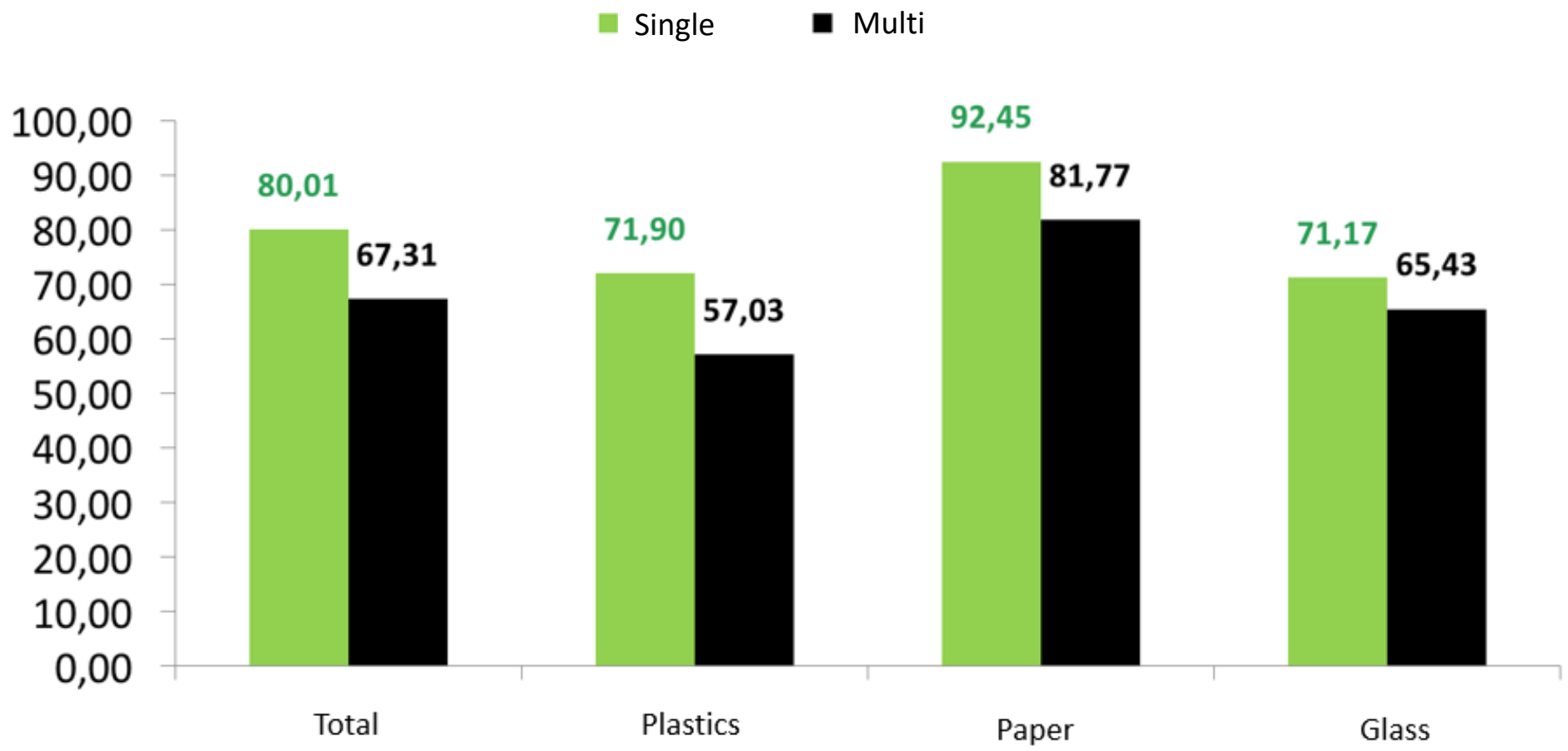
  (49.04% area, 46.26% population)

- Countries without EPR (2): Denmark, Hungary

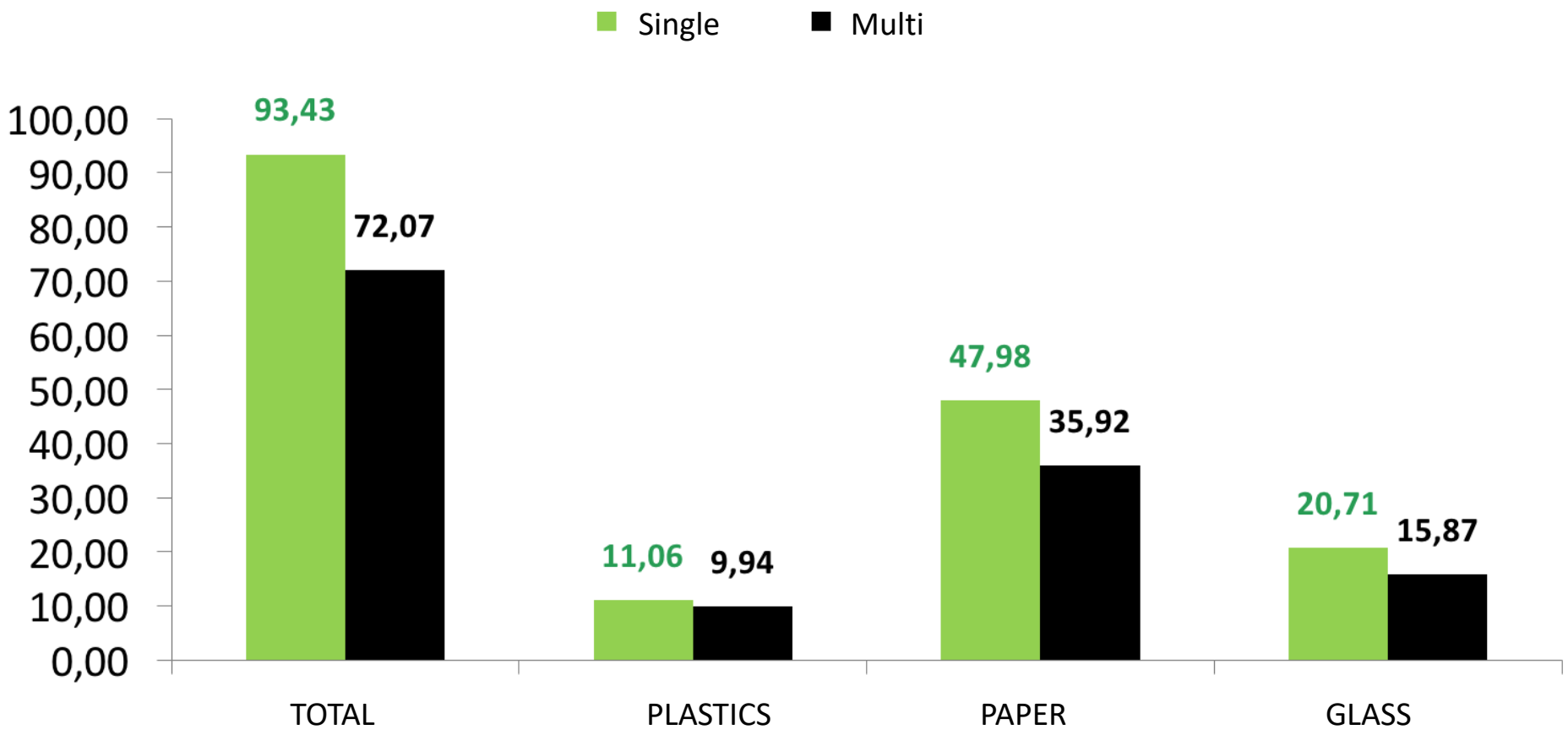
Volume of waste produced (kg per citizen)

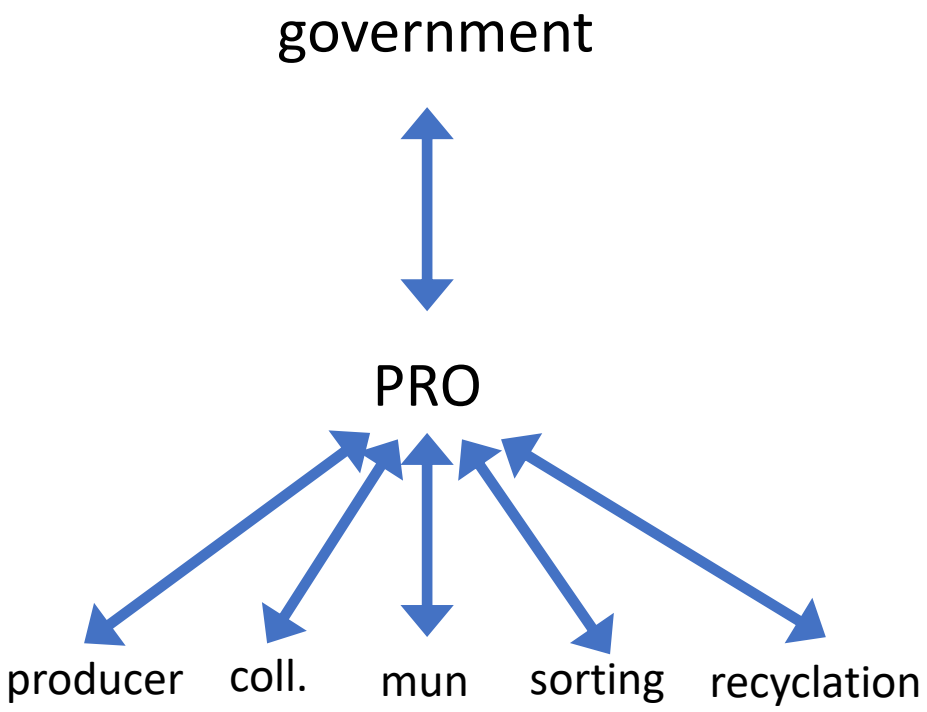


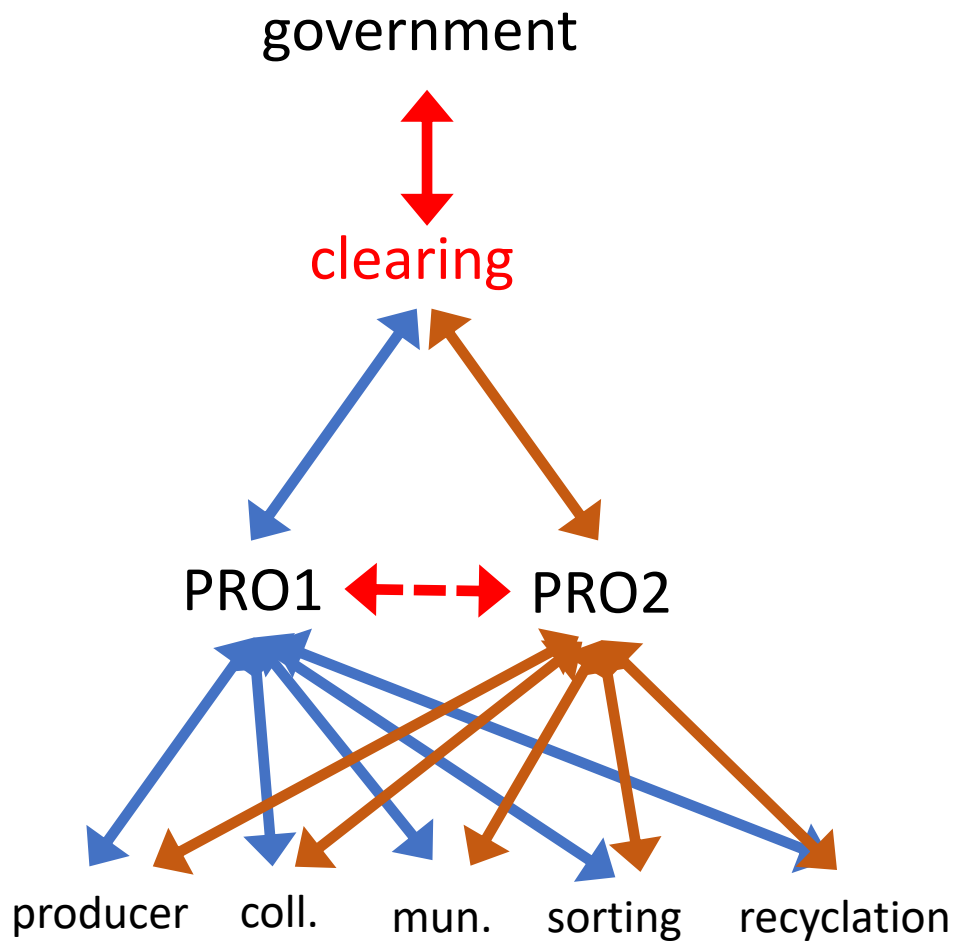
Sorted packaging waste – average collection rates (%)



Volume of recycled packaging waste (kg per citizen)




government
PRO
producer
coll.
mun
sorting
recyclation


government
clearing
PRO1
PRO2
producer
coll.
mun.
sorting
recyclation

Why the Czech EPR regulation is perceived as best-practice?

- Meets the requirements for an efficient system that:
  - Does not distort competition
  - It does not price-discriminate against small (weak) players
  - It transmits information without information noise
  - It is stable and resistant to fluctuations
- This is also confirmed by:
  - Development of regulation (packaging law => experiment with electrical devices => bringing the system closer to PRO)
  - Development of the EU regulation (writes Article 8a)
  - German system (which implements elements from the Czech Republic)
  - The Slovenian system (abolished “competition” and produced the law following to the Czech regulation)
- Multi-operator systems implement a clearinghouse that compensates for the disadvantages of a “competitive” system to behave like a single operator system

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