



# EPR & DRS SYSTEMS

Implementation & Lessons  
learned - Ecopack

Alexander Urmanov, CEO of Ecopack Bulgaria



**ECOPACK**

# OUTLINE

1

EPR SET UP AND RESULTS

2

CURRENT ADVANTAGES AND CHALLENGES

3

DIFFERENT EPR SET UP MODELS

4

DRS SET UP – PRINCIPLES AND MODELS



# THE FRAMEWORK

European Parliament and Council Directive Waste Framework (WFD) and Packaging and Packaging Waste Directives (PPWD) - transposed in 2004, updated in 2021 – “The Circular Economy Package” (CEP), SUP (transposed 2021)

Material	2014-2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Circular Economy Package										
Paper & carton	60%	64%	68%	70%	72%	75%	77%	79%	81%	83%	85%
Glass	60%	62%	64%	66%	68%	70%	71%	72%	73%	74%	75%
Plastic	23%	30%	35%	40%	45%	50%	51%	52%	53%	54%	55%
Steel	50%	52%	55%	60%	65%	70%	72%	74%	76%	78%	80%
Aluminium		10%	20%	30%	40%	50%	52%	54%	56%	58%	60%
Wood	15%	17%	19%	21%	23%	25%	26%	27%	28%	29%	30%
<b>Total target</b>	<b>60%</b>	<b>61%</b>	<b>62%</b>	<b>63%</b>	<b>64%</b>	<b>65%</b>	<b>66%</b>	<b>67%</b>	<b>68%</b>	<b>69%</b>	<b>70%</b>
Single Plastic Strategy											
PET bottles < 3 l.			30%	40%	50%	77%	80%	83%	86%	90%	

# SET UP OF EPR SYSTEM IN BULGARIA

Multiple operator model, no distribution of profit



Ecopack - the first and biggest packaging recovery organisation

Leader on the market

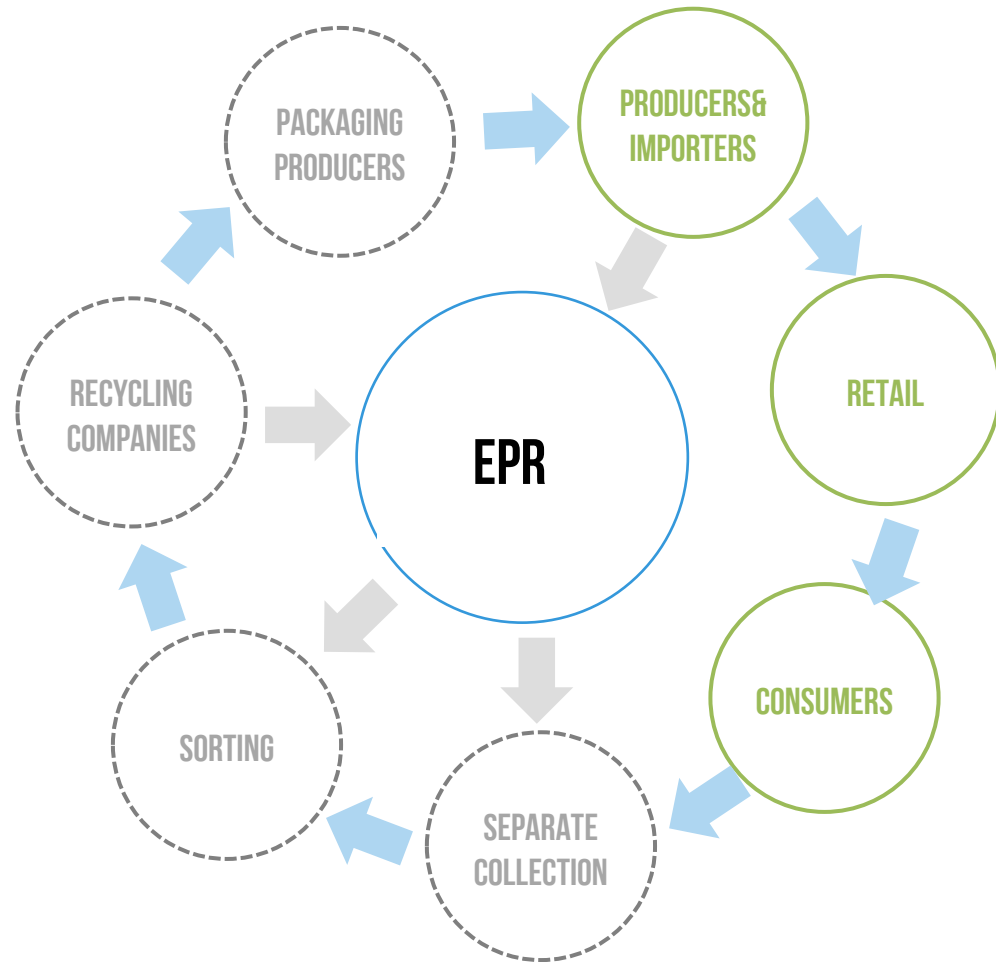
Launch in 2004

Set up by the biggest international & local FMCG companies: 17 shareholders

Over 1100 clients



# THE OPERATING MODEL



Obligatory for all stakeholders

The covered population is based on market share, but coverage is only for residential areas

PRO finances **100% of the CAPEX & OPEX** of the SCS

**PRO owns the material** and it is sold to recyclers

The Municipalities only determine the places for the bins and their number is defined in the legislation



# THE POPULATION

2,429 million people



Up to 3300 l. containers

- Over 100 000 pop. – per every 750 people
- Between 50 and 100 000 pop.– per every 550 people
- Below 50 000 pop. – per every 350 people

Every municipality over 5 000 people should have separate collection



# THE ECOSYSTEM

We supply 50% of recycled material used by Bulgarian packaging producers

We are the main contractor to 25 recycling companies in Bulgaria

We work with 42 subcontractors for servicing containers, sorting and transport of packaging waste

We partner with the biggest retail chains in Bulgaria for collecting their packaging waste

# THE INFRASTRUCTURE



45 trucks



17000  
containers



17 sorting  
installations



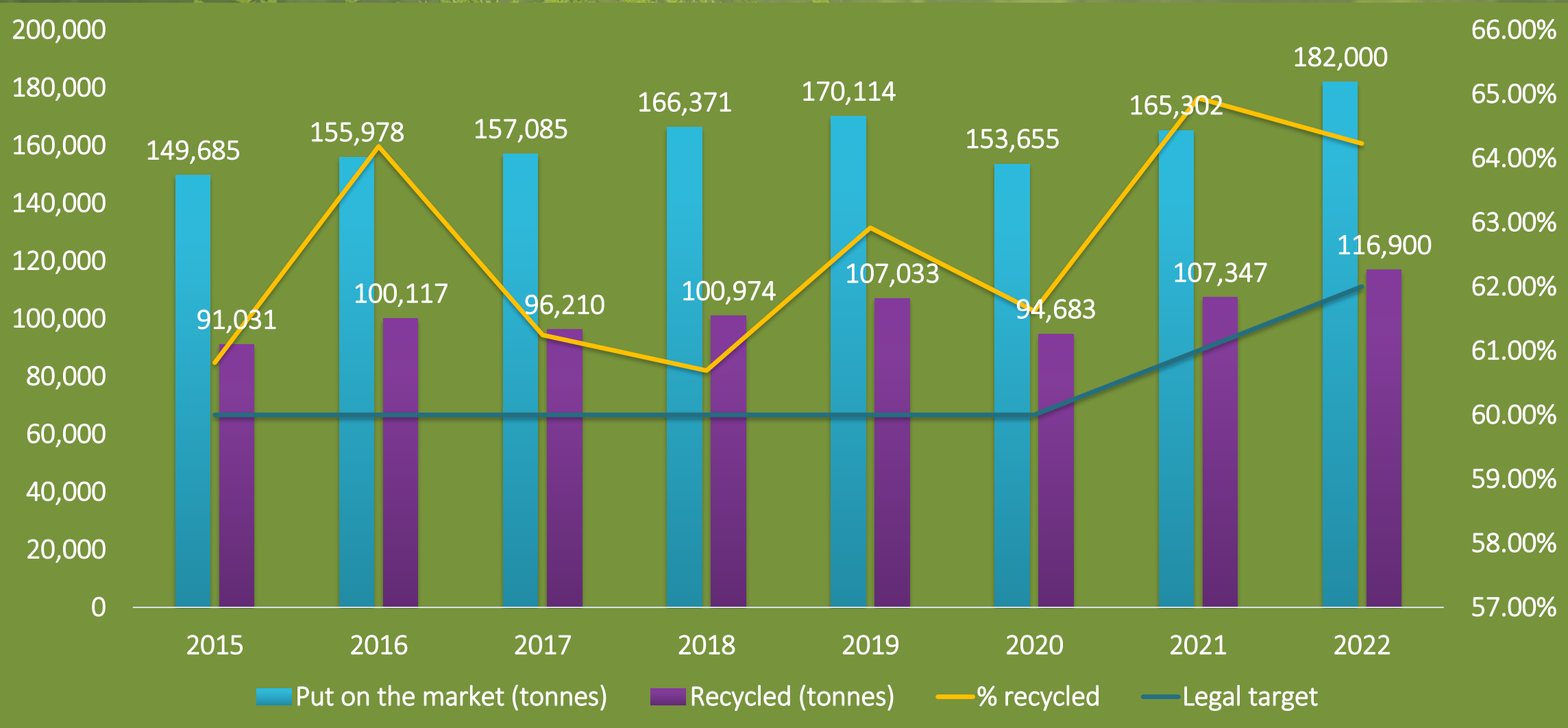
Over 24  
million EUR  
investments



# Delivering on our clients obligations



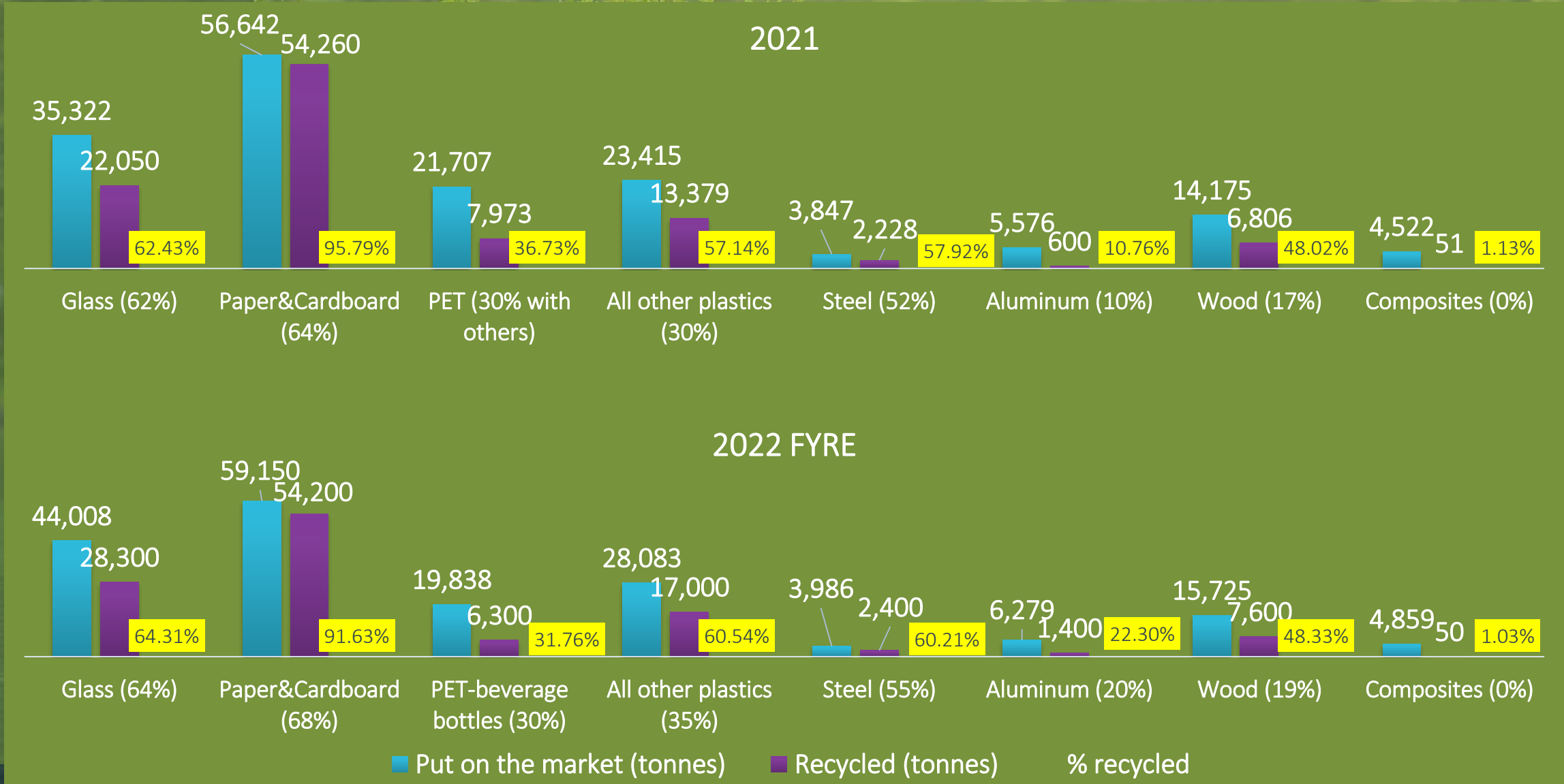
Tonnes put on the market and recycled by Ecopack by years



# Delivering on our clients obligations



Tonnes put on the market and recycled by Ecopack in 2021 vs 2022 (FYRE)



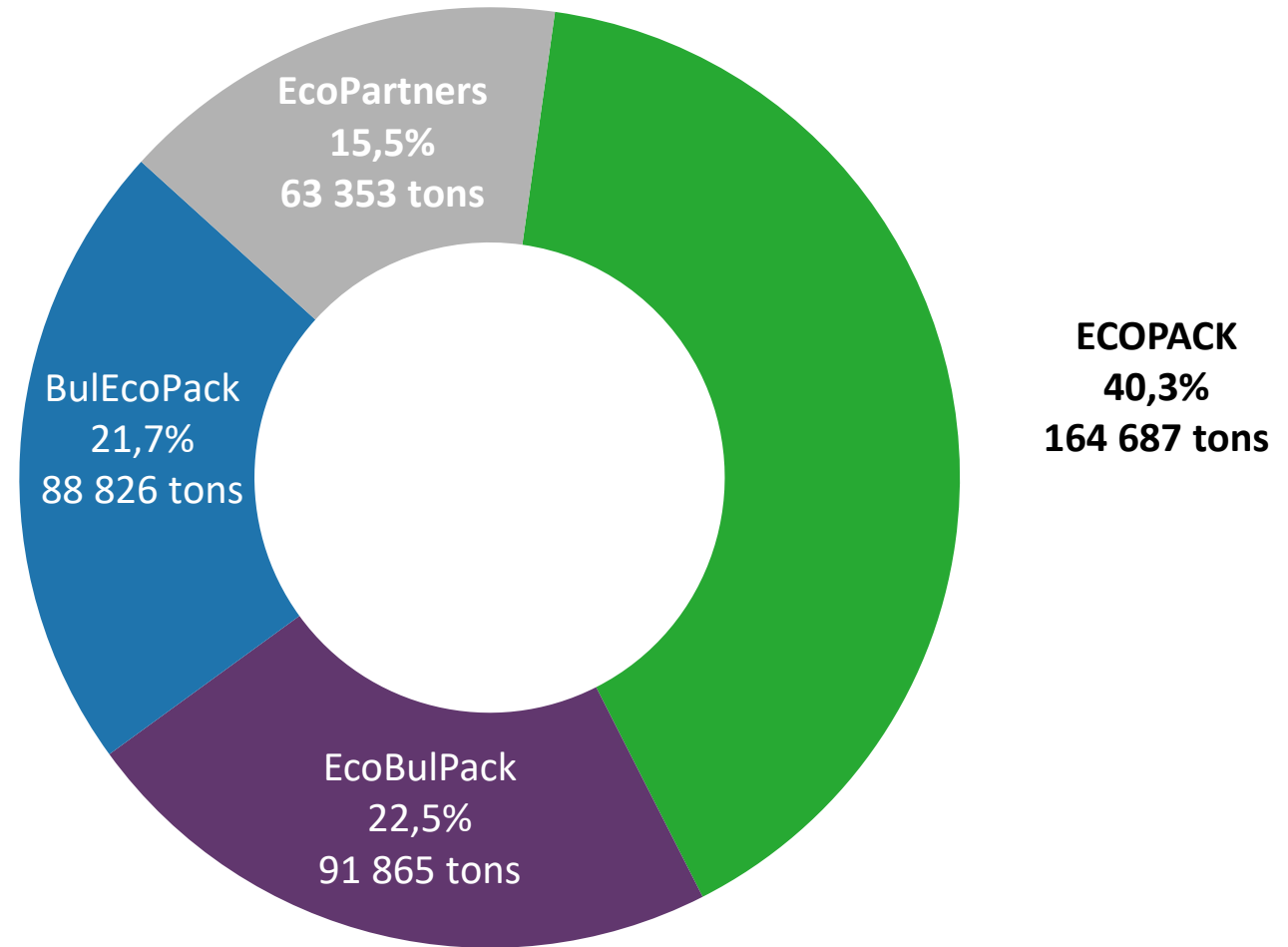
# THE MARKET 2021: CHALLENGES & RESULTS

Competition: vertically integrated waste management

Risks of “wars” with no winner

Reputation of the industry is built as a whole

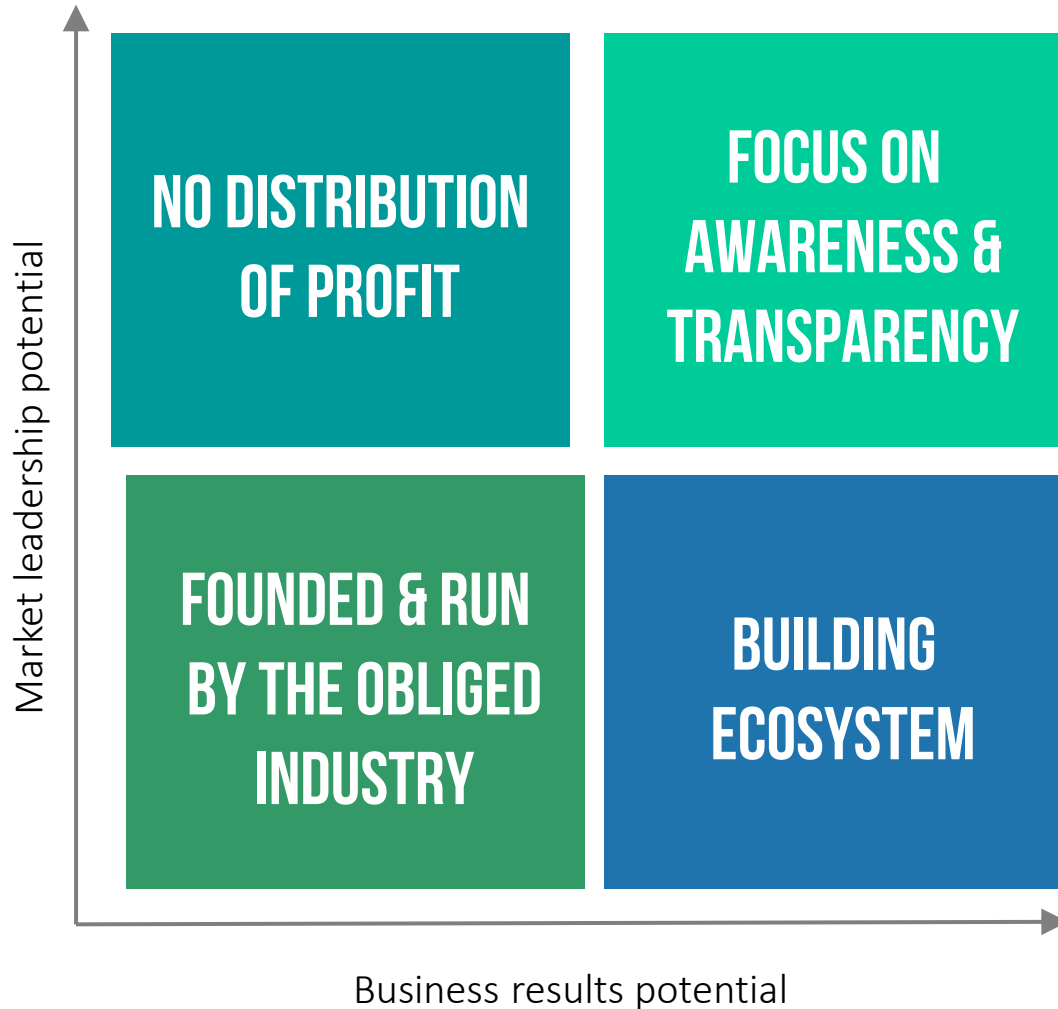
Minimize costs strategy does not work to meet high 2030 targets



# DIFFERENT DRIVERS OF ECOPACK & COMPETITION

ECOPACK – run by multinational business

COMPETITIVE EPR organisations



Vertically integrated Organizations

Founded and run by waste management companies

Minimum focus on awareness

Main interest in profit

# COMMUNICATION ISSUES IN MULTIPLE OPERATOR



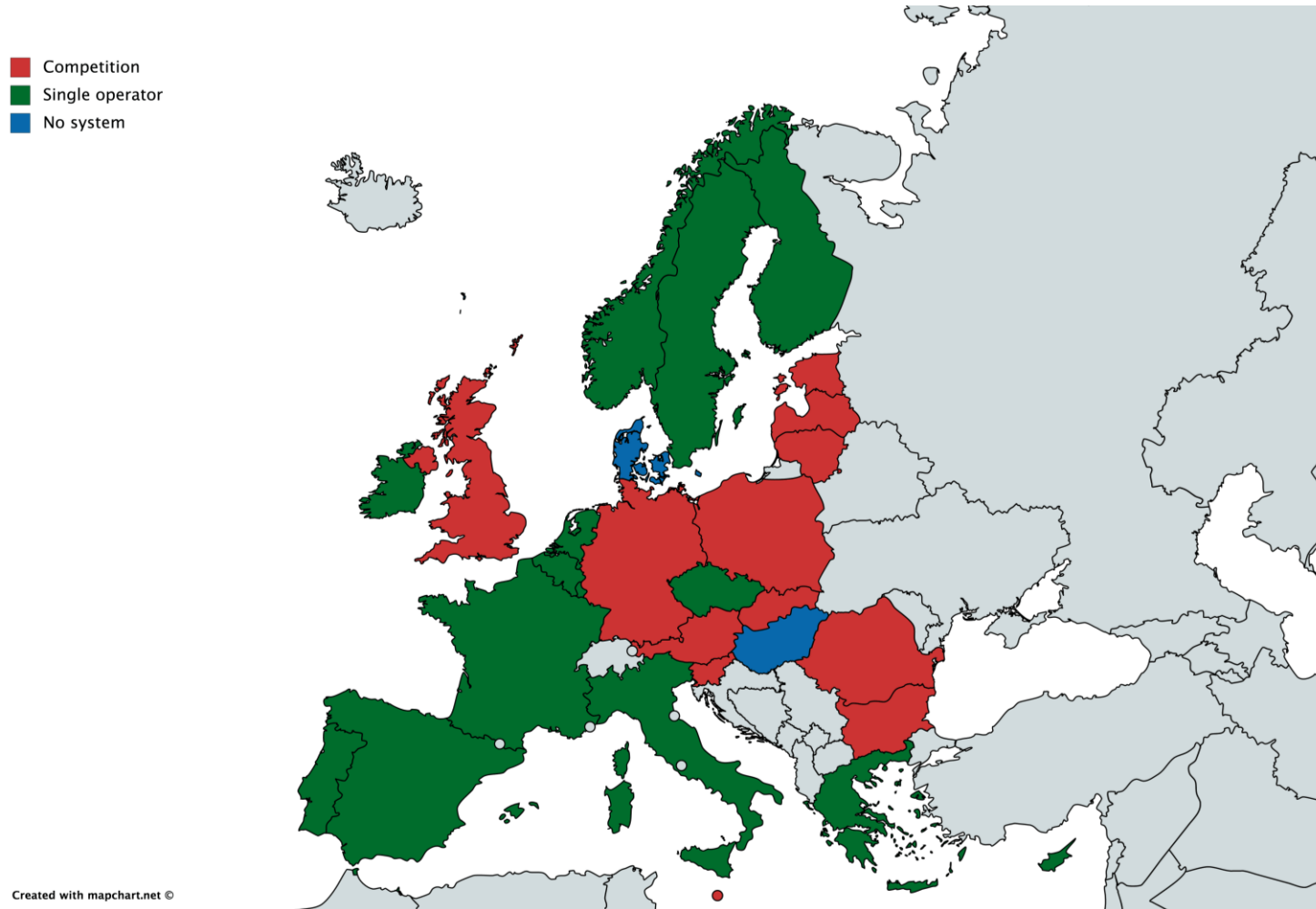
Myth that separate collection is collected together in 1 truck

- Two different container system confusing the public
- Change of public communication when organization enters new market
- Harder to a common national education program



# EPR MODELS IN EU

EU COUNTRIES as of 2021



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

**(47.8% area, 50.27% population)**

- Multi-operator (15): Austria, Germany, Norway (1 dominant operator), Poland, Estonia, Sweden, Romania, Lithuania, Latvia, Slovakia, Greece, Slovenia, Portugal, Bulgaria, Malta.

**(49.04% area, 46.26% population)**

- Countries without EPR (2): Denmark, Hungary

# EPR ORGANISATION



## MORE ACTORS ≠ MORE EFFICIENT FULFILLMENT OF ENVIRONMENTAL GOALS

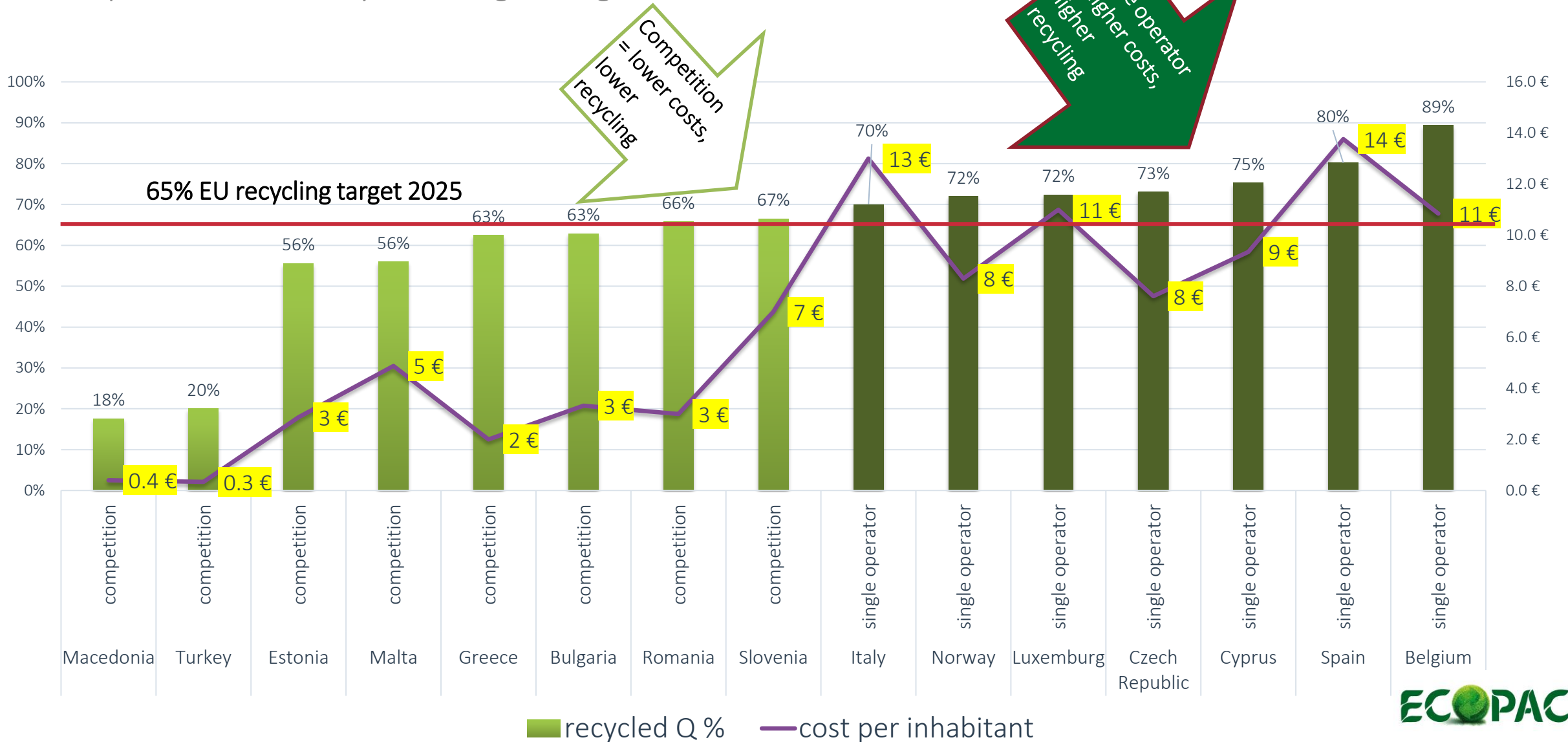
- Economic theory considers monopoly to be a market failure
  - (Perfect) competition delivers significant benefits for allocation of sources ( $\Rightarrow Q, P$ )
- This concept is universally valid on the MARKET (supply x demand)
- An environment suitable for the EPR application is not market, because:
  1. There is no clearly identifiable demand here (utility  $\Rightarrow$  willingness to pay)
  2. There is no clearly identifiable supply here (costs  $\Rightarrow$  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



\* CETA – Central ekonomických a tržních analýz, z. ú.

# DIFFERENT STARTING POINTS SAME FINISHING LINE

Competitive efficiency challenges targets

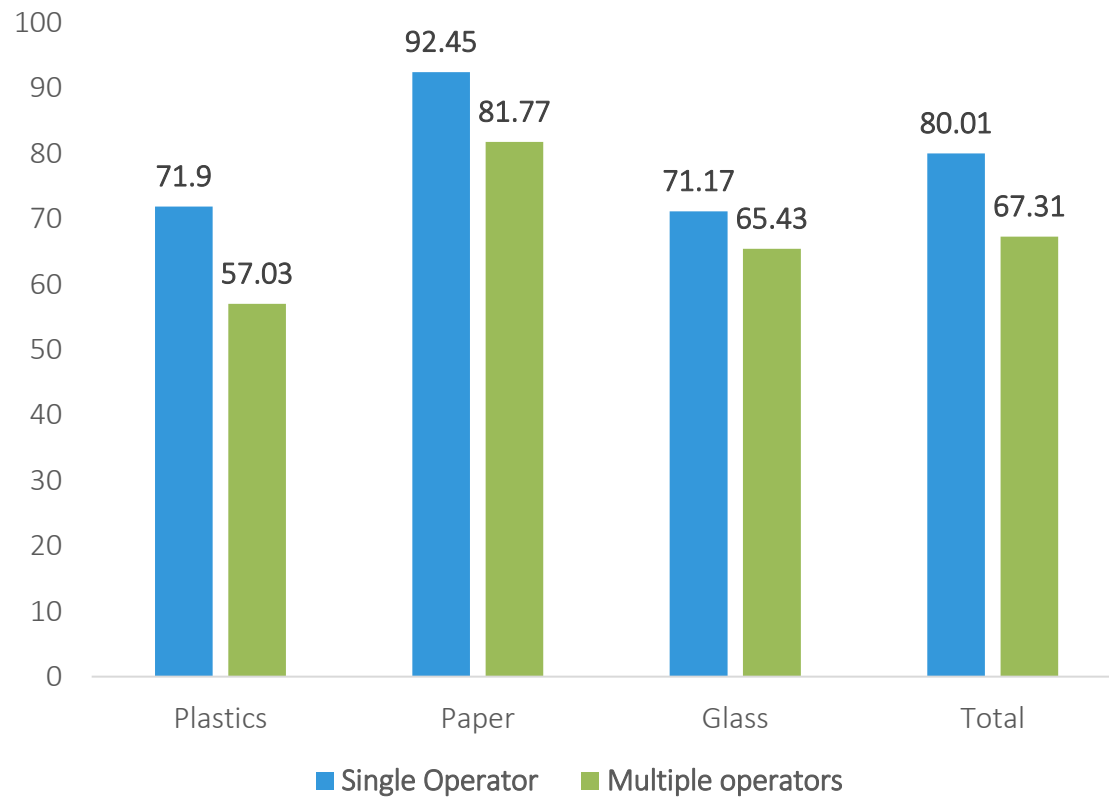




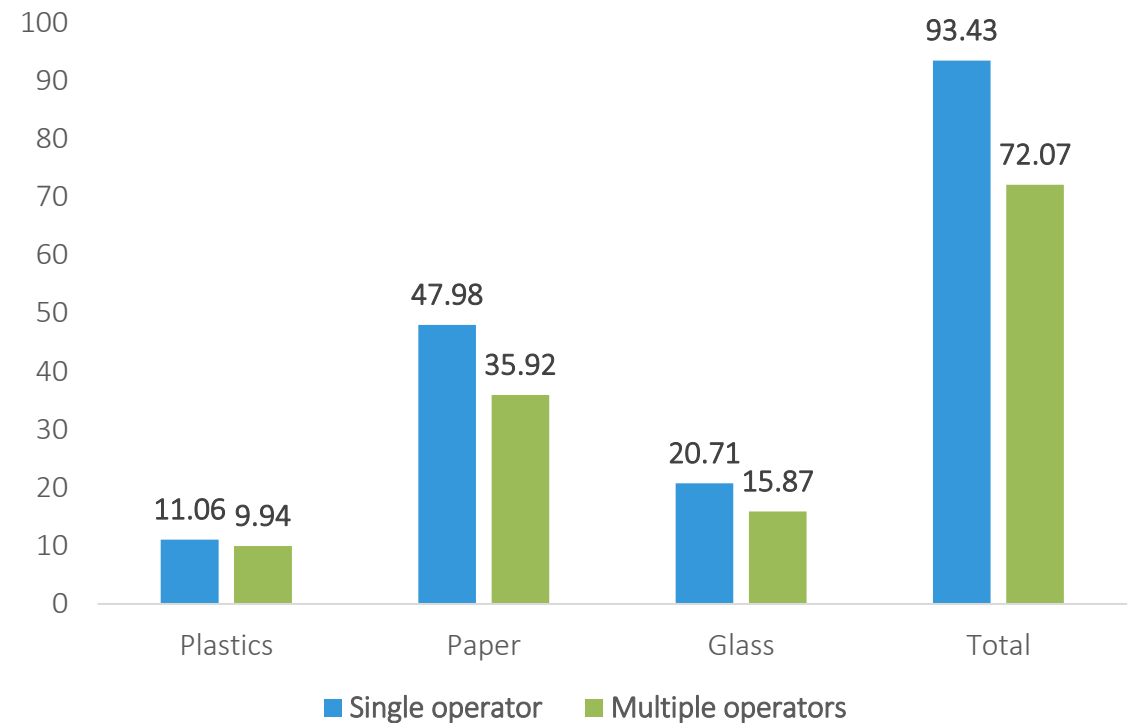
# COLLECTION/ RECYCLING RATES

Higher in single operator markets than in competitively operated markets

Average collection rates %

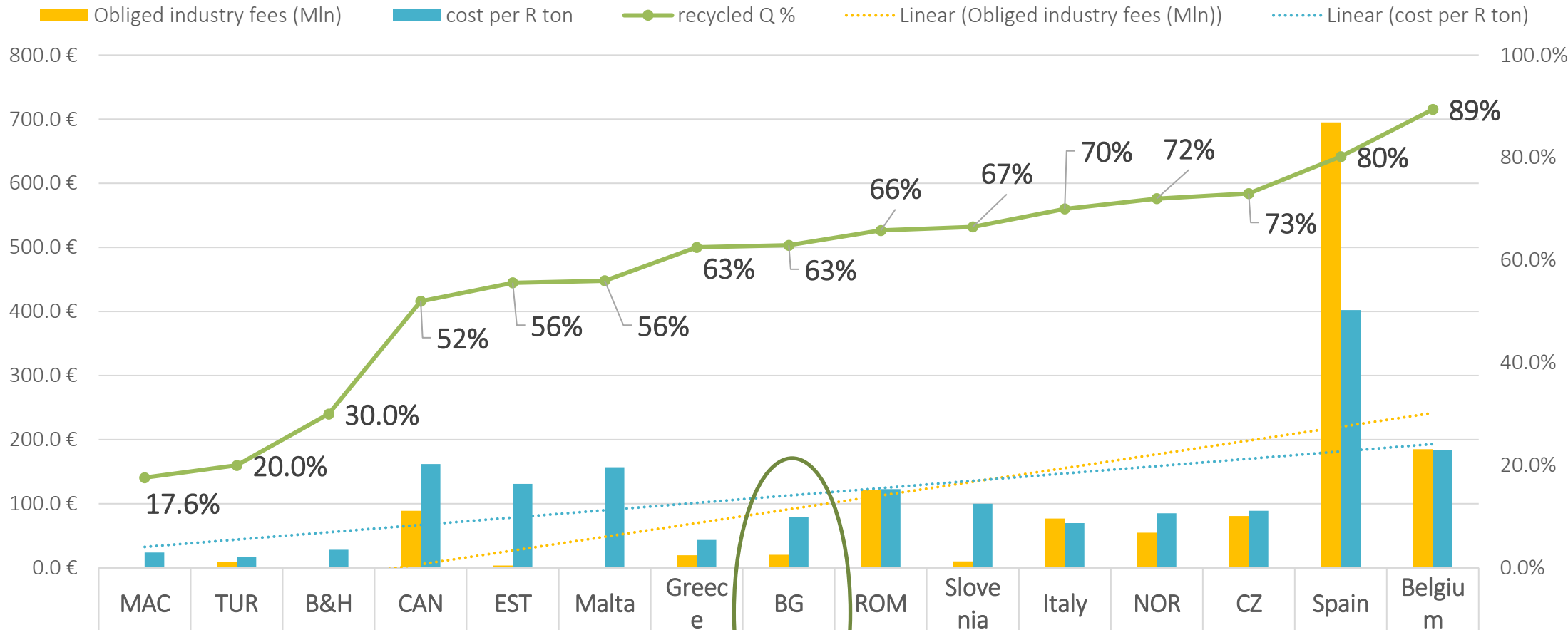


Volume of recycled packaging waste (kg per citizen)



# HIGHER RECYCLED QS = HIGHER COSTS

New guidelines on MP, recyclability, littering, recycled content targets for different plastic packaging



Obligated industry fees (Mln)	1.2 €	9 €	1.4 €	89 €	3.8 €	1.8 €	20 €	21 €	121 €	10 €	77 €	55 €	81 €	695 €	185 €
cost per R ton	24 €	17 €	28 €	162 €	131 €	157 €	43 €	79 €	123 €	100 €	70 €	85 €	89 €	402 €	184 €
recycled Q %	17.6%	20.0%	30.0%	52%	56%	56%	63%	63%	66%	67%	70%	72%	73%	80%	89%

# AWARENESS CAMPAIGNS

- Free online eco classes 1st to 12th grade
- School competitions for collecting PET and Al
- Educational visiting center
- 50-100 000 kids and families per year





**THANK YOU  
FOR YOUR  
ATTENTION!**



ECOPACK Bulgaria

[www.ecopack.bg](http://www.ecopack.bg)