

International Conference and Study Tour

Reuse and Recycling through Deposit Systems

September 25-26, 2023

Riga, Latvia

Organised by

**Depozīta
punkts**



reloop resources
remain
resources

Under the auspices of



State Environmental
Service
Republic of Latvia

International Conference and Study Tour

Reuse and Recycling through Deposit Systems

September 25-26, 2023 Riga, Latvia

Mircea Fechet

Minister of Environment, Republic of Romania



MINISTERUL MEDIULUI,
APELOR ȘI PĂDURILOR

DEPOSIT RETURN SYSTEM

Ministry of Environment, Waters and Forests Romania

September 2023

Mircea Fechet

ROMANIA

BUCHAREST



POPULATION

19 MILLION PEOPLE

Urban - 54.5% Rural - 45.5 %



AREA

238,397 km²



BEVERAGE CONTAINERS POM

Over 6 billion / year



ROMANIA

European
Objectives

Romanian
pollution
data

Infringement
procedures



republicahd.ro

TIMELINES

Professional Presentation

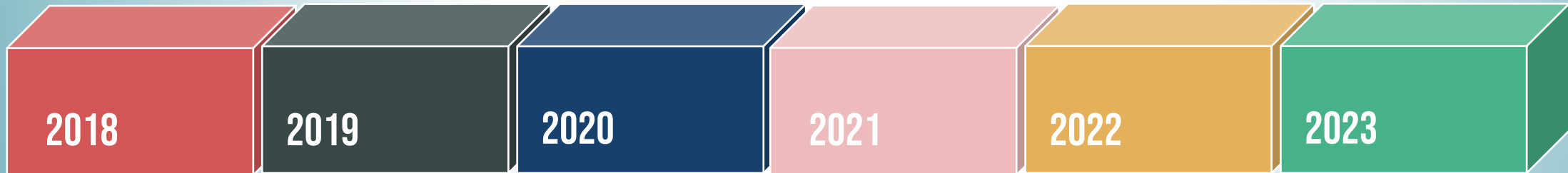
INITIAL TIMELINES by LAW



Law 249/2015 amended through EO 74/2018

By 1st of January 2021, based on economical, social and environment efficiency evaluation, as well as of impact upon small and medium enterprises, through Government Decision is established a deposit return syste applicable to ***primary single use beverage containers of glass, plastic and metal with volumes between 0.1 and 3L inclusive, used for putting on the national market of bere, beer mixes, alcoholic beverage mixes, cider, other fermented beverages, juices, nectars, soft drinks, mineral waters and waters of any kind, wines and spirits.***

ULTERIOR TIMELINES by LAW



Primary legislation
stipulation

DRS start - 1st of Jan

1st delay to Oct 2022

DRS start - 1st of Oct

2nd delay to Nov 2023

30th of Novermber –
official launch of DRS

ADMINISTRATING THE DRS

Non for profit – centralized, national organization and administration



RETURO SISTEM GARANTIE RETURNARE

appointed through Gov Decision



Brewers of Romania for
Environment Association



Association of
Soft Drinks
Producers for
Sustainability



Retailers for Environment
Association



Romanian State through Env
Ministry

60%

20%

20%

APPLICABILITY

Single use primary beverage containers

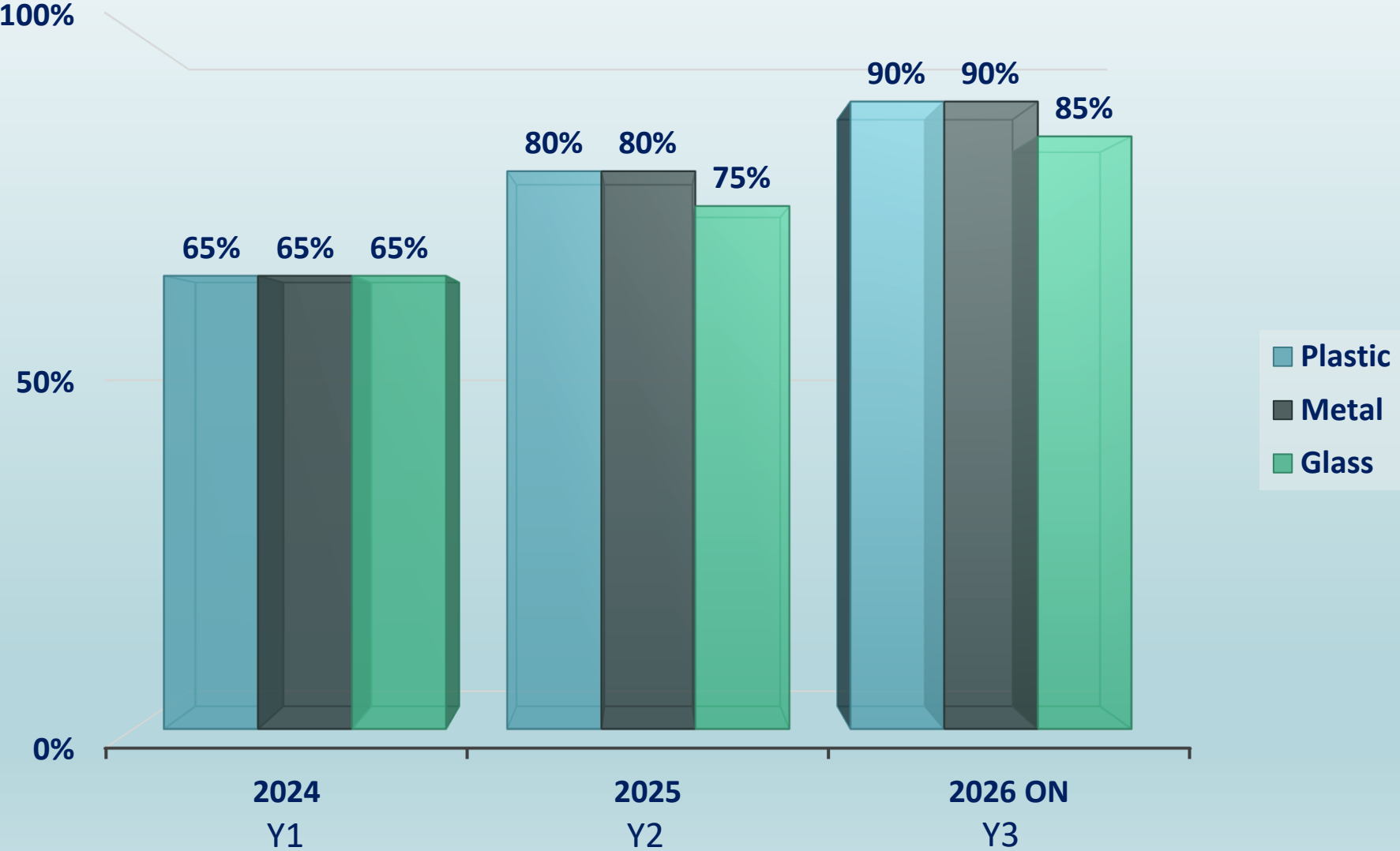
PLASTIC METAL GLASS



Volumes from 0.1 to 3 L

- beer
- beer mixes
- alcoholic beverage mixes
- cider
- other fermented beverages
- Juices
- nectars
- soft drinks
- mineral water
- drinking water of all kinds
- wines
- spirits

RETURN FOR RECYCLING TARGETS




RESPONSABILITIES AND OBLIGATIONS

SYSTEM ADMINISTRATOR:

- Issue the organization plan and operate accordingly
- Fulfill return for recycling targets
- Report to state bodies
- Fund the DRS scheme
- Pick up returned material
- Organize sale of returned material
- Close the contract with producers and retailers
- Issue automated technology standards
- Pay handling fees to return points operators
- Organize public awareness and information

RESPONSABILITIES AND OBLIGATIONS

PRODUCERS AND IMPORTERS

- mark the packaging with national barcode and deposit mark
- pay the  deposit (0,10EUR) and administration fee
- close the contract with system administrator and register in the DRS
- separate reporting



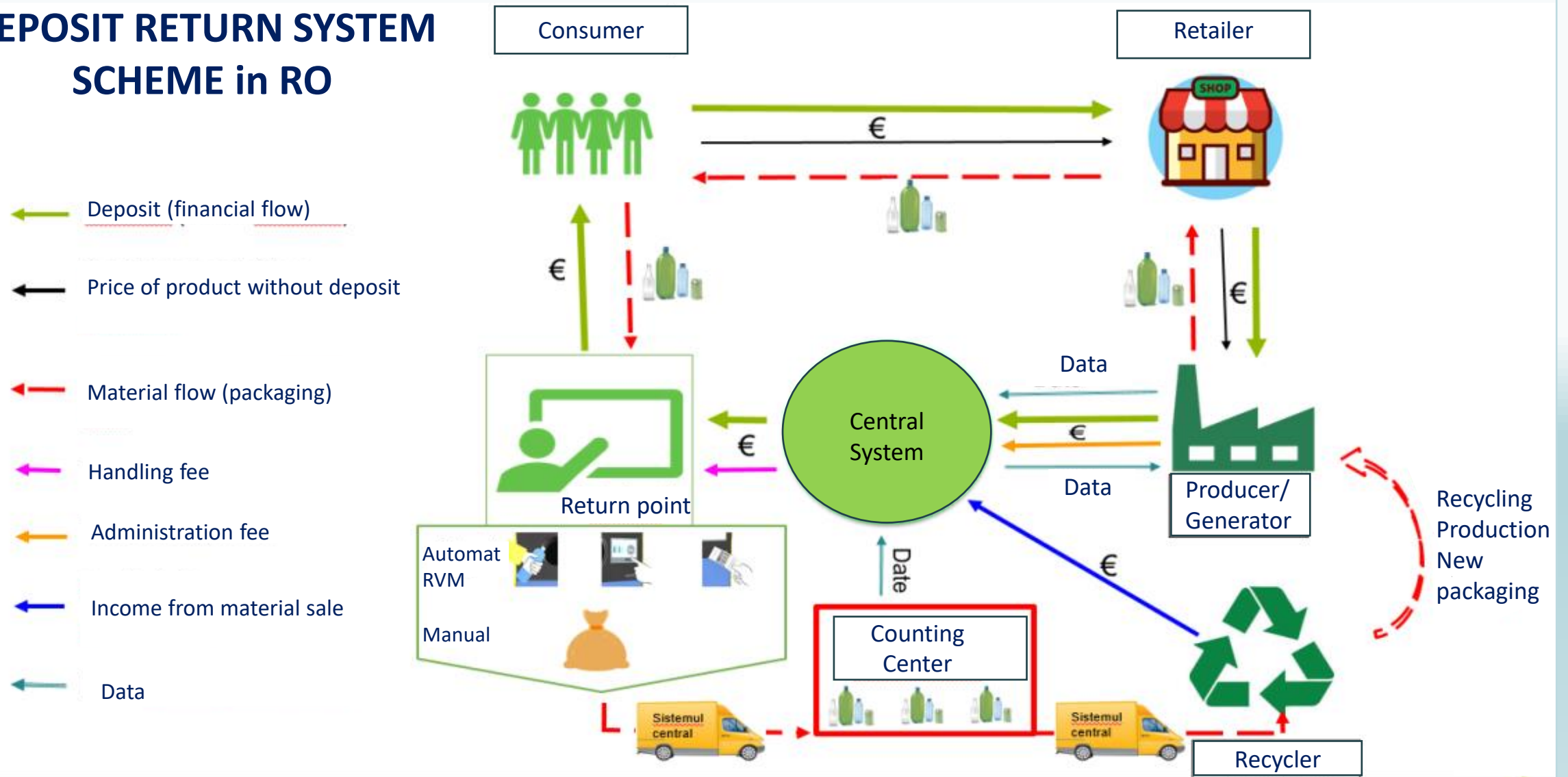
RETAILERS

- organize the return points under legal requirements
- Pay, withhold and reimburse the deposit
- To communicate the deposit value separately from the product price on the shelf and in documents
- To record and report DRS products according to legal requirements
- To protect and hand over the collected DRS packaging
- Prohibit the sale of unregistered products
- Inform consumers

RETURN POINTS



DEPOSIT RETURN SYSTEM SCHEME in RO



BENEFITS

Of DRS in Romania

PREVENTING POLLUTION

Eliminating pollution factors affecting citizens quality life. Aprox 30%(by weight) of the littered items are beverage packaging

REDUCE CO2 EMISSIONS

Estimated 260 000 tons CO2/year
(Equivalent of 120 000 cars emissions/year)

CIRCULAR ECONOMY

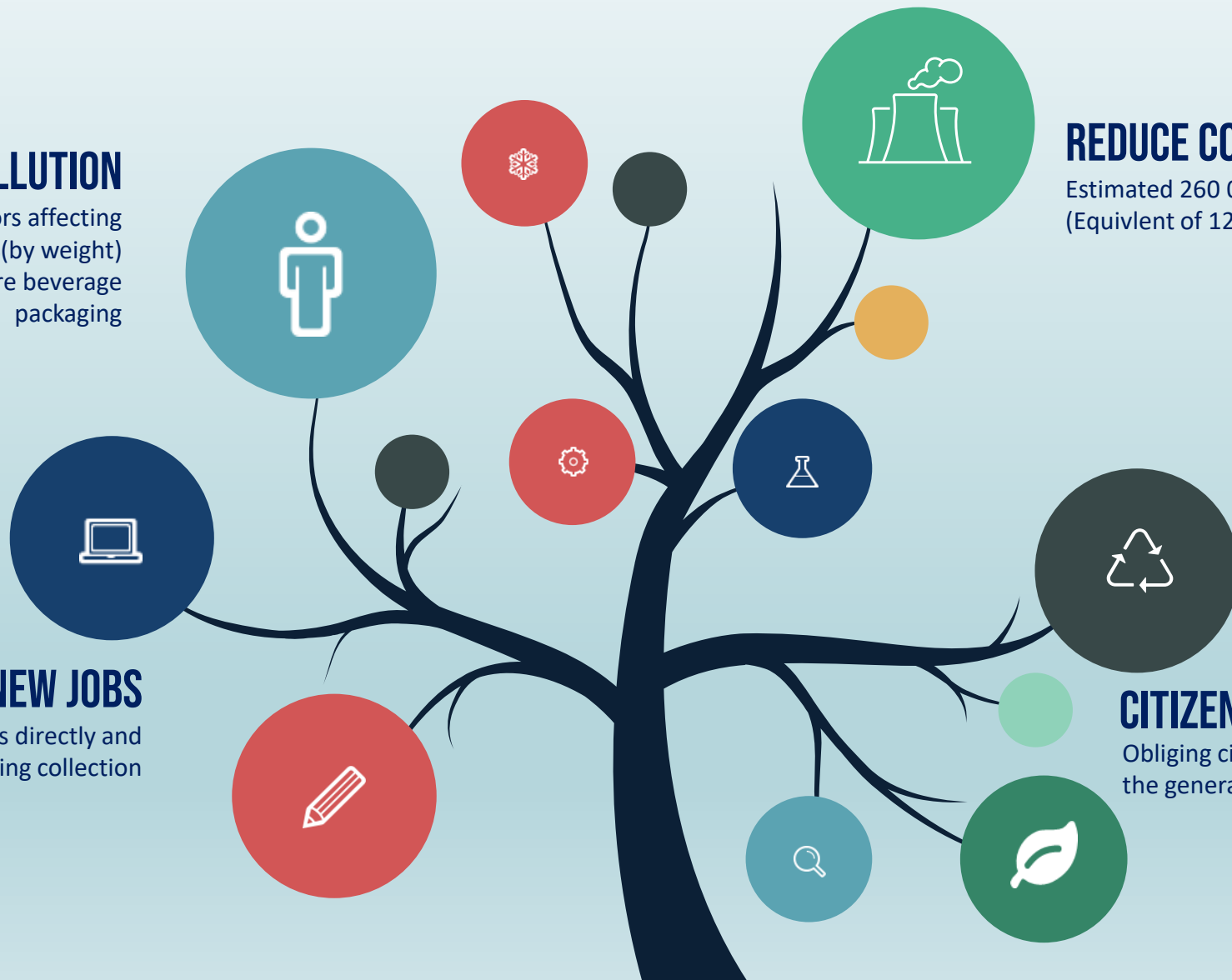
Approx 100 000 tons of plastic, 11 700 tons of metal, 460 000 tons of glass could return to economy through closed loop recycling

CITIZENS RESPONSABLE BEHAVIOUR

Obliging citizens to return separately will impact the general environmental behaviour

NEW JOBS

Aprox 3600 new jobs directly and indirectly excluding collection





MULTUMESC!
THANK YOU!

International Conference and Study Tour

Reuse and Recycling through Deposit Systems

September 25-26, 2023 Riga, Latvia

Martin Udengaard Olesen

Head of Business Development, Dansk Retursystem

Dansk Retursystem

Collection and clearing of single-use
and refillable containers in Denmark

26th of September 2023

Agenda

- The history of Dansk Retursystem – how we got to here
- Figures for Dansk Retursystem – where we are
- Refillable vs. single use bottles and cans – our considerations
- Recap

Background and history

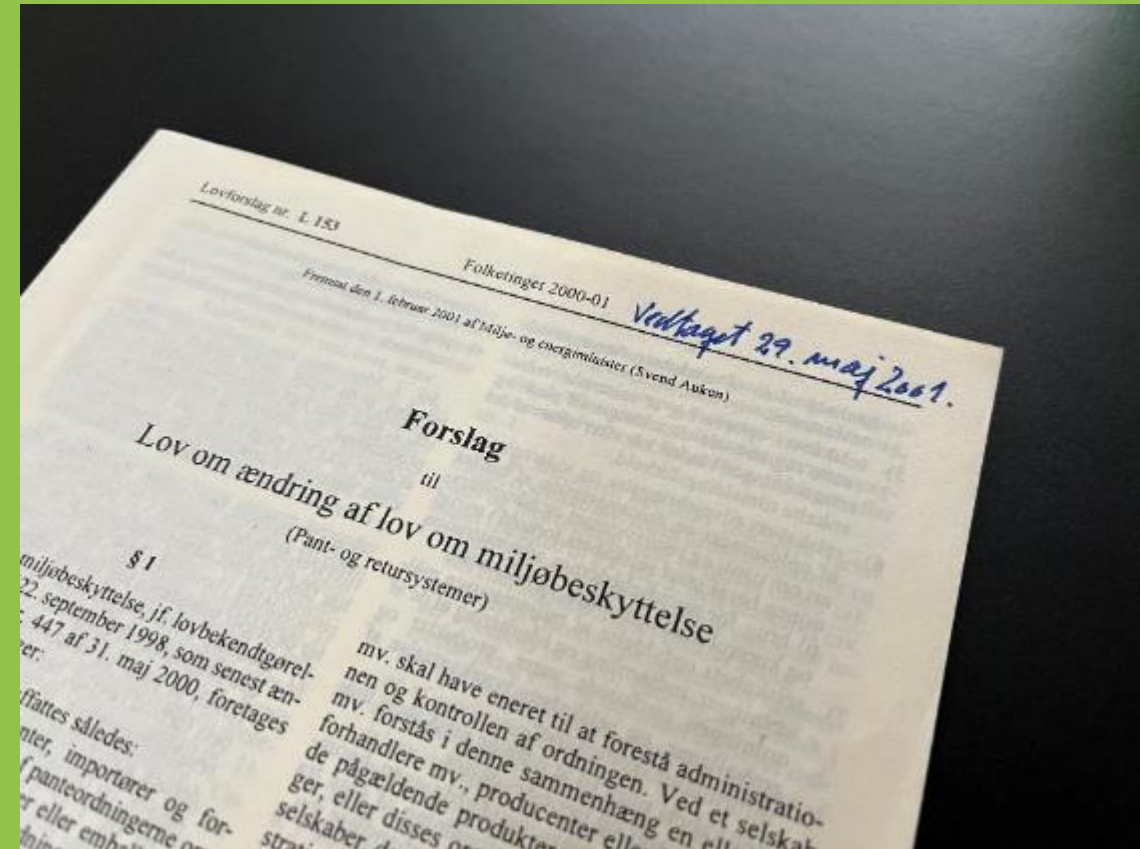


Denmark has a long tradition of collecting used bottles

Denmark has one deposit and return system, and it is easy to use

Dansk Retursystem is one of a kind

- Established 30 June 2000
- A non-profit company
- Owned by Denmark's breweries and regulated by Denmark's Ministry of Environment and Food
- Dansk Retursystem has exclusive rights to operate the deposit and return system governed by a Statutory Order on Deposits
- The Board of Directors comprise representatives from retail, breweries and importers
- Dansk Retursystem strives to maximize the return rate



In collaboration with all actors

PRODUCERS

Producers and importers register their products with the deposit and return system. We advise them on the correct labelling of bottles and cans



RETAILERS, RESTAURANTS, COMPANIES, ETC.

Sales outlets must take back empty bottles and cans. We help by providing the equipment that makes it easy to refund the deposits and to collect and separate the returned packaging



CONSUMERS

We make it easy to return used bottles and cans. The deposit label guarantees that the packaging will be recycled to benefit both climate and environment



PROCESSORS

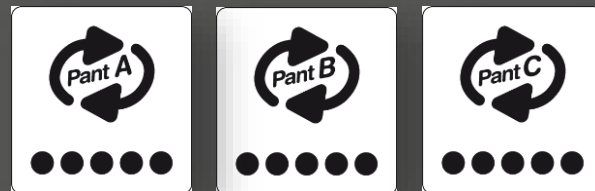
We collaborate with major European recycling plants on ensuring high quality in recycling



Deposit markings



Primary markings



Secondary markings



Active SKUs in the deposit system




Materials:

- Plastic bottles
- Metal cans
- Glass bottles

The producer decides material, fee based on recyclability





Facts about Dansk Retursystem

About us



2 bn bottles and cans returned i 2022

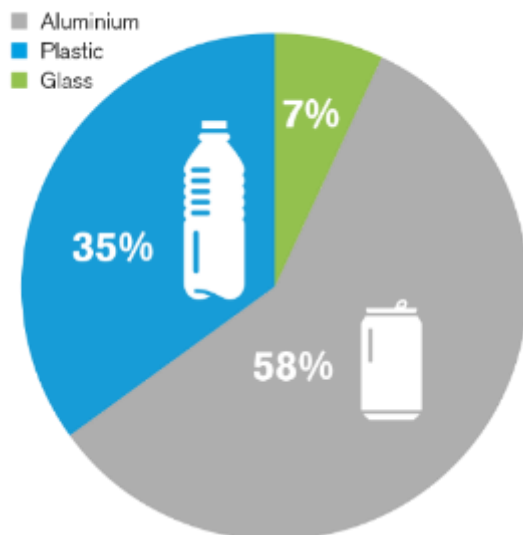


Market

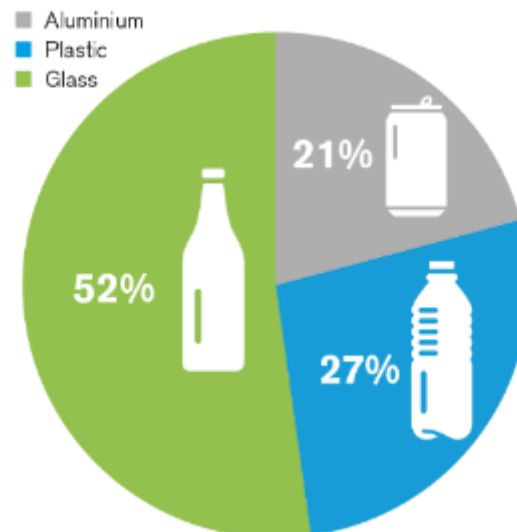


Single use packaging 2022 – material

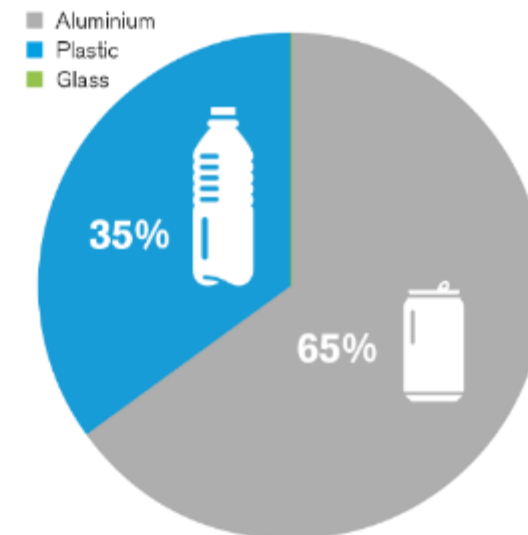
Collected single use packaging
Pieces



Collected single use packaging
Tonnes



Revenue from single use
packaging sold to recycling
DKK



Where are bottles and cans returned?



Compacter containers

83%

Pantstations and reverse
vending machines



Collected in bags

17%

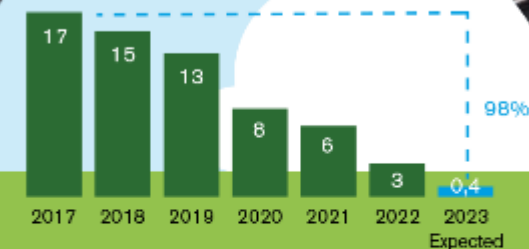
Convenience stores,
restaurants and businesses

18%
less CO₂



emitted per packaging
in 2022 compared
to 2019

Øre/packaging



Average fee per
packaging have been
reduced by 98%

Sorting and counting center Høje Taastrup - 2020





Deposit stations

Bulk setup for larger
amounts



Refillable vs. single use bottles and cans



Refillable vs. single use

Behind the scene

Refillable

- Registration and reporting, **DRS**
- Handling fees, **DRS**
- Validation of deposit, **DRS**
- Logistic to shops, **Brewery**
- Logistic from shops empty, **Brewery**
- Deposit collection and payment, **Brewery**
- Washing, **Brewery**

Single use

- Registration and reporting, **DRS**
- Handling fees, **DRS**
- Validation of deposit, **DRS**
- Logistic to shops, **Brewery**
- Logistic from shops empty, **DRS**
- Deposit collection and payment, **DRS**
- Recycling, **DRS**

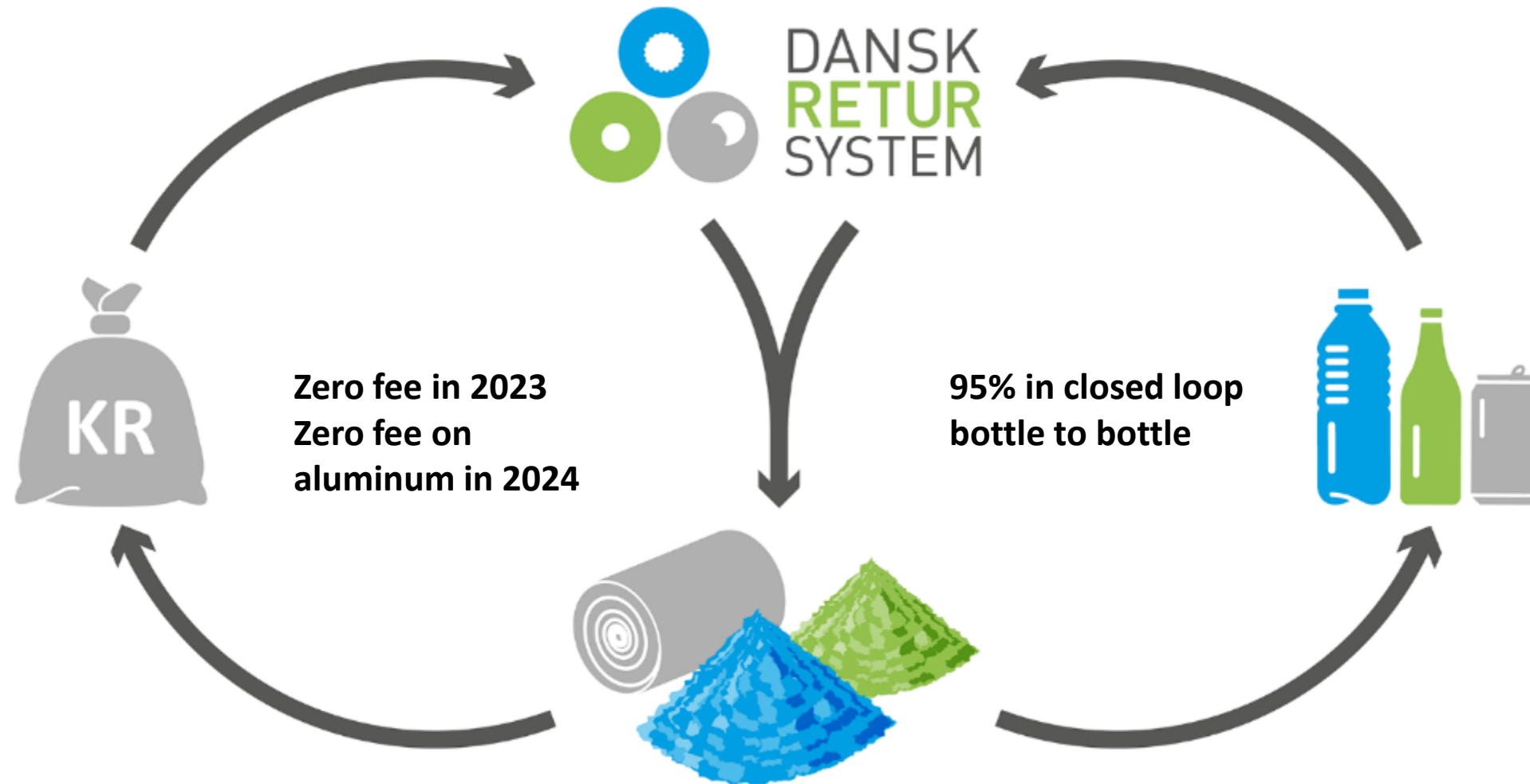
Consumers perspective

Refillable vs. single use



One system

Circular Economy in Dansk Retursystem



CO₂ saved by recycling instead of producing a new container



95%

Aluminium cans



81%

Plastic bottles



58%

Glass bottles

Recap:

- Two string system in Denmark
- Consumer perspective (one string system)
- Producer perspective
- Packaging perspective



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Anna Larsson

Director, Circular Economy Development, Reloop Platform

Deposit systems

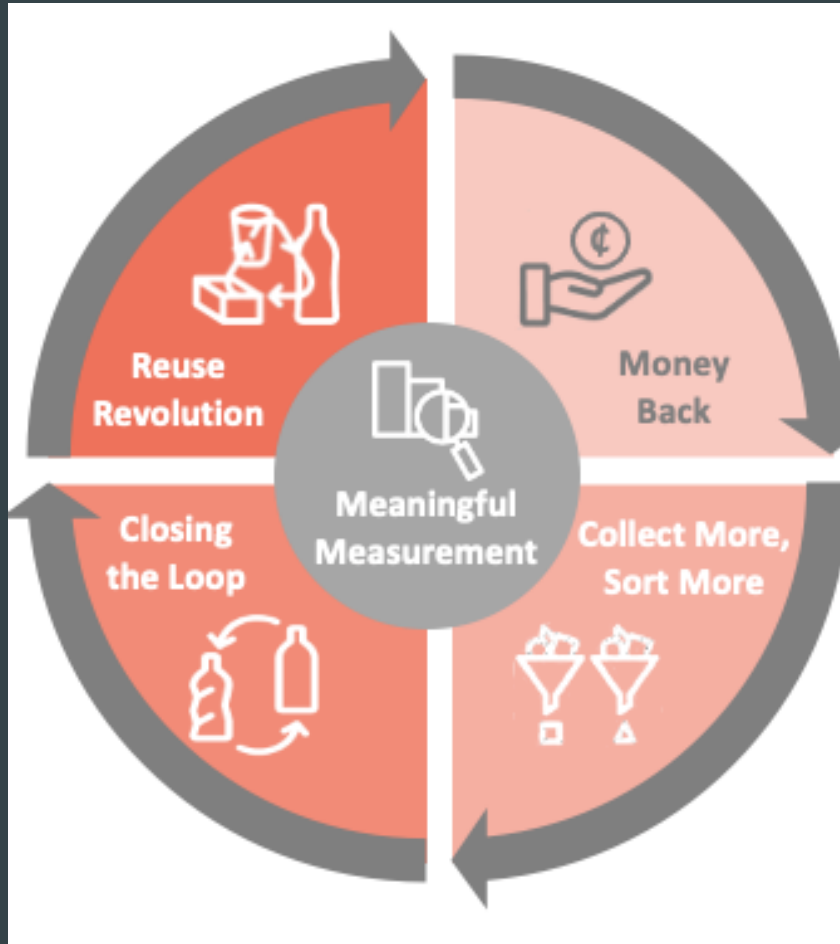
for beverage containers
in Europe

Deposit for single use

Deposit for refillable

Anna Larsson

Director, Circular Economy Development
Reloop Platform



Vision

World without waste pollution

Mission

Implementation of Circular Economy



= cash

Deposit systems - history

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Swedish refillable bottle



Slovak single use bottle

→ DRS has been used as a **method of the collection** of beverage containers for decades. Producers have used the deposit, id est, a monetary incentive, in order to guarantee **returns of refillable** containers.

→ Collection method based on deposit has been **adopted for single use** beverage containers.





Sweden

First country to introduce DRS for single use containers

1984 – DRS for cans

1994 – DRS for plastic

Shifting from refillable containers into single use packaging created risk for littering.

In order to prevent it, producers and government entered a dialog the result of which for first deposit system for beverage containers in Europe.



DRS in Europe

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Fact Sheet: Deposit Return Systems Reduce Litter

- Attaching a monetary value to beverage containers, in the form of refundable deposits, decreases the likelihood that the containers will be littered or remain as litter in the environment.
- The impact of a DRS on litter reduction depends on a number of factors, including the level of the deposit/refund and the program scope.
- There are different ways to measure beverage containers as a proportion of litter, each of which has its own advantages and pitfalls.

In addition to increasing recycling rates, one of the main benefits of deposit return schemes (DRS)—and one that cannot be accomplished without it—is litter reduction. Quite simply, this is because attaching a monetary value to a beverage container, in the form of a refundable deposit, decreases the likelihood that the containers will be littered or remain as litter in the environment, as consumers and other citizens will be motivated to return them for recycling so that they can claim the refund.

It probably does not come as a surprise then that litter concerns were a primary reason why legislated DRSs were invented and passed in the first place. The first legislated system, established in British Columbia in 1970, began as “The Litter Act” and was aimed at encouraging consumers to recycle beverage cans and bottles instead of tossing them to the side of the road. Many other DRSs introduced in the 1970s and 1980s were also mainly passed as anti-litter laws, including those in South Australia, Oregon, Vermont, and California.

In New South Wales (NSW), Australia, the state government identified DRS as one of the key actions it’s taking to achieve the objectives in the 2019-2022 NSW Litter Prevention Strategy. Moreover, the state’s decision to implement DRS in 2017 was principally based on the results of a cost-benefit analysis where benefits to communities from litter reduction were estimated using their willingness to pay for decreased litter. The discussion document for the DRS decision stated that “by providing a reward, [DRSs] create a disincentive to litter and an incentive to pick up littered items.” Similarly, Queensland’s DRS legislation includes in its objectives to “reduce the number of empty beverage containers that are littered or disposed to landfill.” The Tennessee government’s recent decision to implement a DRS (planned for 2022) was also influenced by its effectiveness at reducing littering behaviour. Environment Minister Elise Archer has stated that “the scheme will encourage positive, incentivised recycling and re-use behaviours that will help reach our target of becoming the cleanest state by 2023.”

The effectiveness of DRS at reducing litter has also been recognized by the European Union. In 2019, the European Parliament and Council passed the Single-Use Plastic Directive, which introduced a wide range of measures to tackle commonly littered plastic that includes a requirement for member states to collect at least 90% of plastic bottles by 2025. The Directive specifically references DRS as one way to achieve this.

We wanted to see what evidence there was for the impact of DRS on litter reduction, so we set off on a task to compile all of the research we could find on the subject. What we found was compelling and offers substantial proof that deposit systems are effective at decreasing litter. The following table summarizes the evidence we found. Despite the methodological issues associated

Material fractions – single use

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**Denmark, Finland, Germany,
Croatia, Latvia, Lithuania,
Estonia, Malta, Iceland**
(Romania, Hungary)



**Sweden, Netherlands, Norway,
Slovakia**
(Ireland, Austria)

| | Croatia | Denmark | Estonia | Finland | Germany | Island | Lithuania | Netherlands | Norway | Sweden |
|--------------------------|---------|---------|---------|---------|---------|--------|-----------|-------------|--------|-------------|
| water (still, sparkling) | • | • | • | • | • | • | • | • | • | • |
| Soft drinks | • | • | • | • | • | • | • | • | • | • |
| Juices and nectars | • | | • | • | | • | • | | • | |
| beer | • | • | • | • | • | • | • | | • | • |
| cider | • | • | • | • | • | • | • | | • | • |
| Alcohol beverages | • | <10% | <6% | • | • | • | • | | • | • |
| wines | • | | | • | | • | in PET | | • | In PET, can |
| liquers | • | | | • | | • | | | • | |
| Spirits | | | | • | | | | | | In PET, can |
| milk | <0,2l | | | | | | | | | |

Deposit systems in Europe



| | | | | | | | | | | | |
|---------------------------------------|---------|---------|--------|---------|---------|-----------|---------|----------------------|--------------------------|---------|--------------------------|
| Centralized clearing | Island | Croatia | Sweden | Norway | Finland | Lithuania | Estonia | Denmark | Netherlands | Germany | Decentralized |
| System management by producers | Island | Holland | Sweden | Norway | Finland | Lithuania | Estonia | Denmark ¹ | Croatia | | State operator |
| Return to retail | Germany | Croatia | Sweden | Norway | Finland | Lithuania | Estonia | Denmark | Holland | Island | Redemption center |
| Bar code² | Island | Germany | Sweden | Norway | Finland | Lithuania | Estonia | Denmark | Netherlands ³ | Croatia | Tonnage |
| Obligatory by law | Island | Germany | Sweden | Croatia | Holland | Lithuania | Estonia | Denmark | Finland | Norway | Fee⁴ |

1 upon public procurement

2 reporting on put to market and information on collected packages are based on EAN code identification

3 in border areas

4 fee for uncollected packaging (Norway) or fee applied if the producer has not joined the deposit system (Finland)

| | | | | |
|--------------------------------|----------|--------|-------|-----------------------|
| Centralized clearing | Slovakia | Latvia | Malta | Romania |
| System management by producers | Slovakia | Latvia | Malta | Romania and the State |
| Return to retail | Slovakia | Latvia | Malta | Romania |
| Bar code ² | Slovakia | Latvia | Malta | Romania |
| Obligatory by law | Slovakia | Latvia | Malta | Romania |



Governance and role of retail

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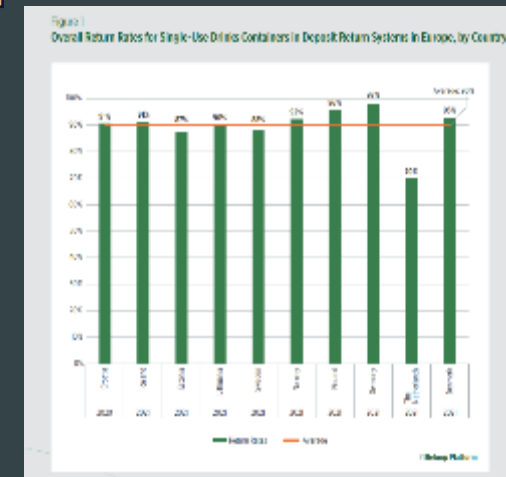
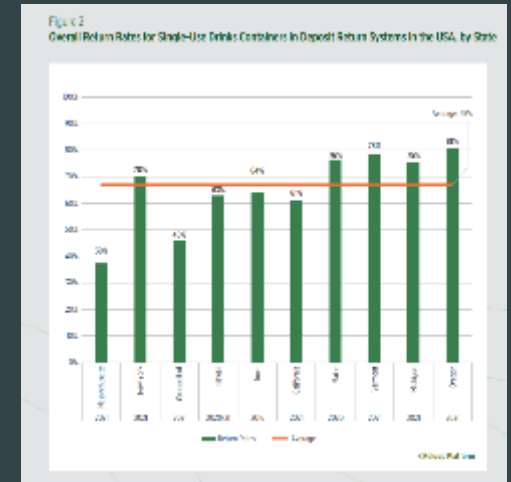
Producers and retailers have played an important role in the collection activities and as co-founders of the system operator's entity.

BEVERAGE
INDUSTRY

TRADE

Participation of the retailers has important positive impact on collection rates as well as climate footprint of a deposit system.

Europe*
90%



65%
USA*

How many resources are recirculated?

9,1%

2018

8,6%

2020

7,2%

2023

DRS based circularity

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80-90%



DRS – Circular Economy Best Practice:



Figure 1
Overall Return Rates for Single-Use Drinks Containers in Deposit Return Systems in Europe, by Country



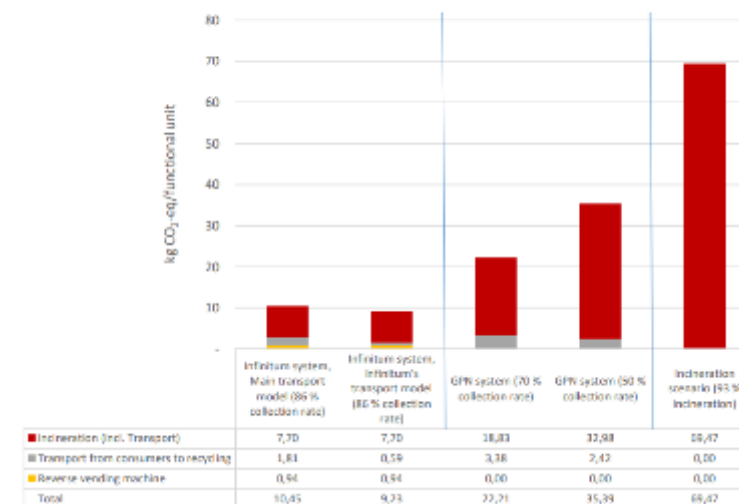
Deposit systems result with
high collection rates
exceeding 85%



*"Return me to the
DRS collection
point. I am made
out of recycled
plastic. Produced
in Sweden."*

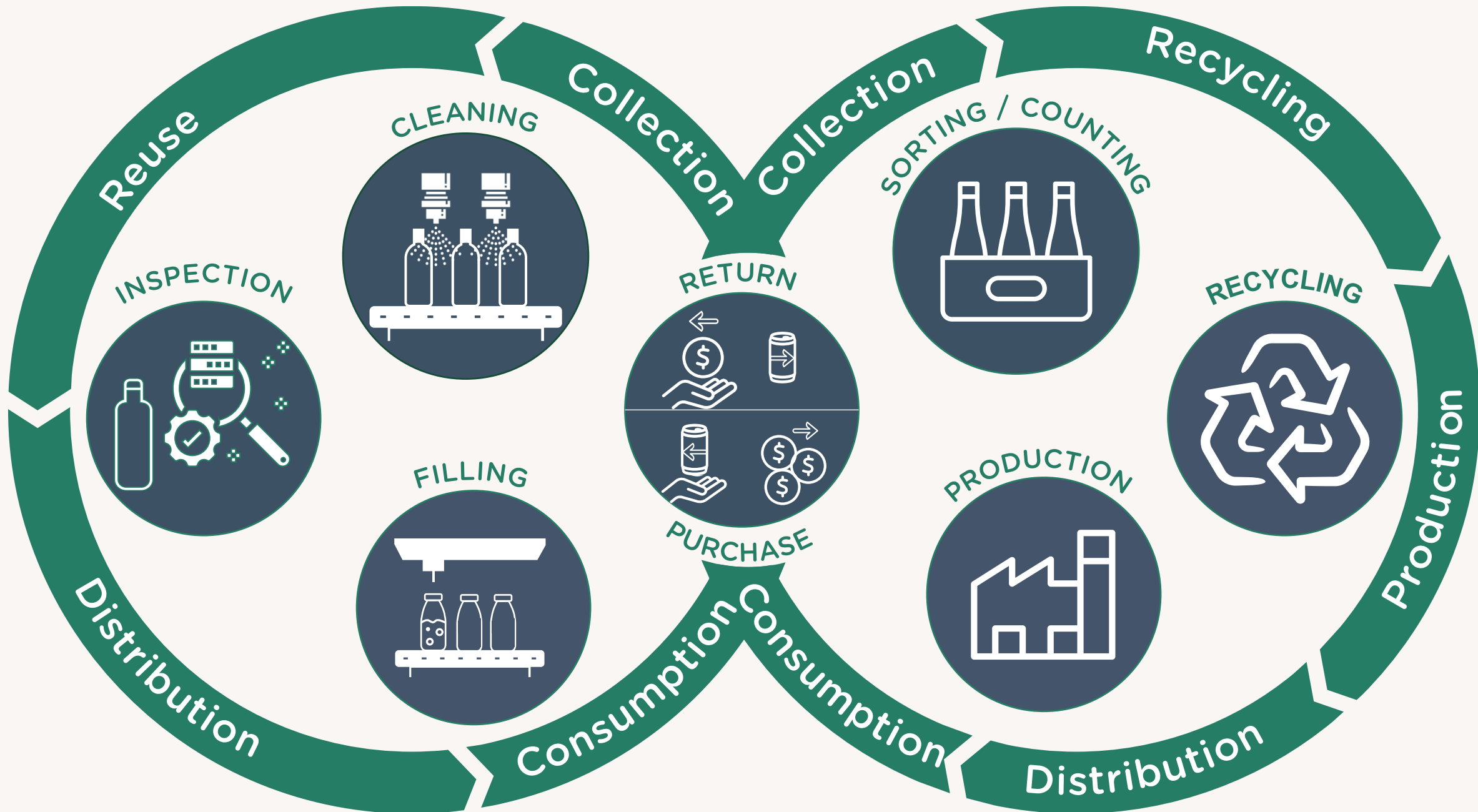
**CIRCULAR ECONOMY
AT SCALE**

LCA of beverage container production, collection and treatment systems

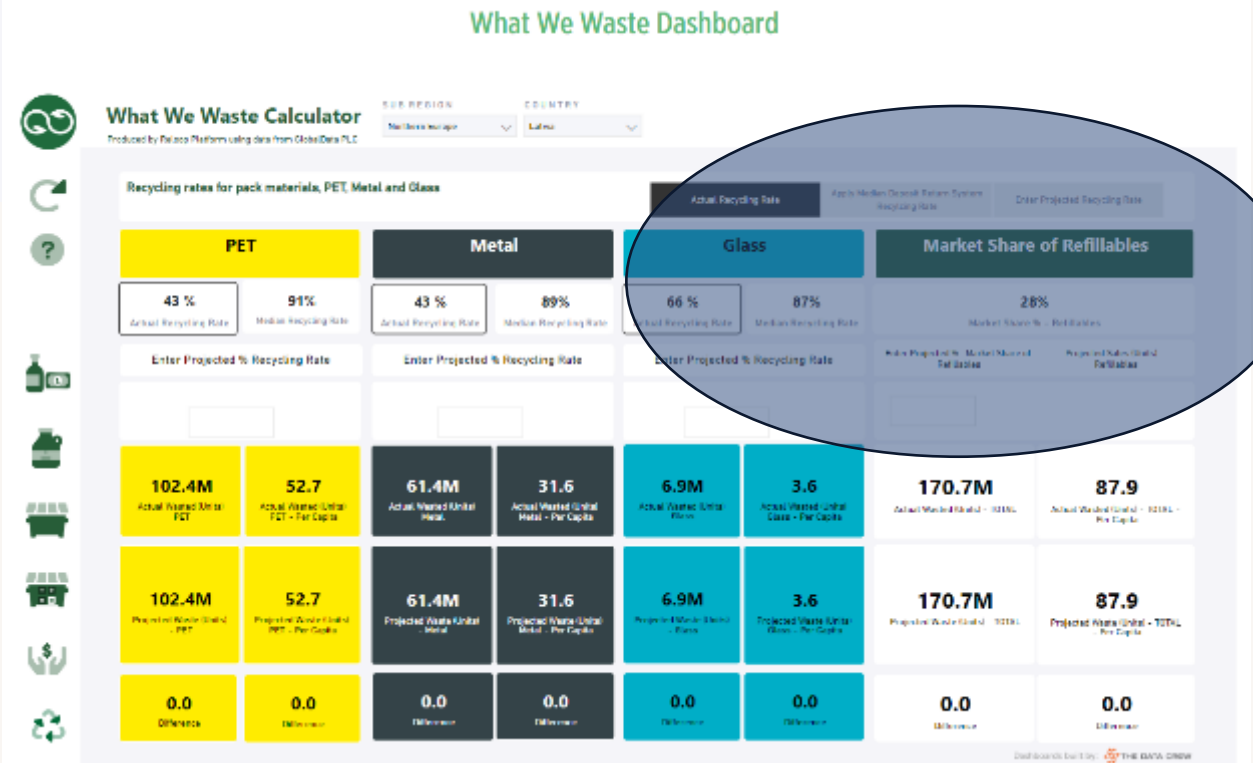
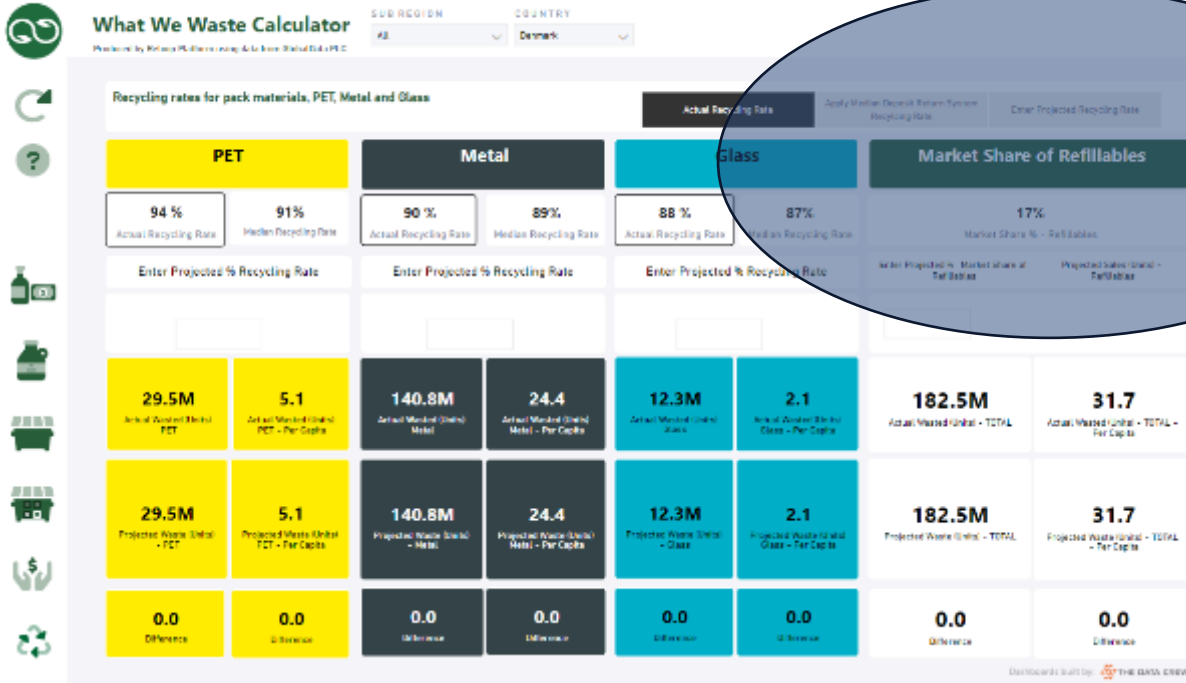


Collection of beverage containers through deposit system results with **ca 30% lower carbon footprint** than traditional curbside system.

Source: LCA for existing deposit system in Norway and LCA calculated for Czech Republic



What We Waste Dashboard





Single use and refillable
container - units

Crates



DRS for refillables



| Country | Reporting p o m/collected | Deposit clearing/ handling fee | Collection |
|----------------------------|--|--|---------------------|
| Estonia | System operator (joint with SO for single use) | Filler individually | Filler individually |
| Lithuania, Finland | System operator (A separate entity) | Filler individually | Filler individually |
| Latvia – individual shapes | System operator (joint with SO for single use) | Filler individually | Filler individually |
| Latvia – standard shapes | System operator (joint with SO for single use) | System operator | System operator |
| Denmark | System operator (joint with SO for single use) | System operator (joint with SO for single use) | Filler individually |
| Germany* | Filler individually | Filler individually | Filler individually |

Additional pooling systems

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resources
remain
resources

www.reloopplatform.org

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Q&A

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reloop resources
remain
resources

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Laura Anteina

**Deputy Director General, the State
Environmental Service, Republic of Latvia**



Establishment and monitoring of the deposit system in Latvia

Laura Anteina

Deputy Director General
State Environmental Service
The Republic of Latvia

26.09.2023



Why do we need a deposit system?

National Waste Management Plan 2021 - 2028

Achievable goals:

- 🔄 By 2035 – only 10% of household waste is buried in landfills
- 🔄 By December 31, 2025 – recycled 65% of annual used packaging
- 🔄 By December 31, 2030 – progress towards the target of recycling 70% of annual used packaging
- 🔄 By 2025 - 77% collection rate of used single-use plastic beverage packaging based on the respective year's mass of beverages sold in the market
- 🔄 By 2029 - 90% collection rate of used single-use plastic beverage packaging based on the respective year's mass of beverages sold in the market



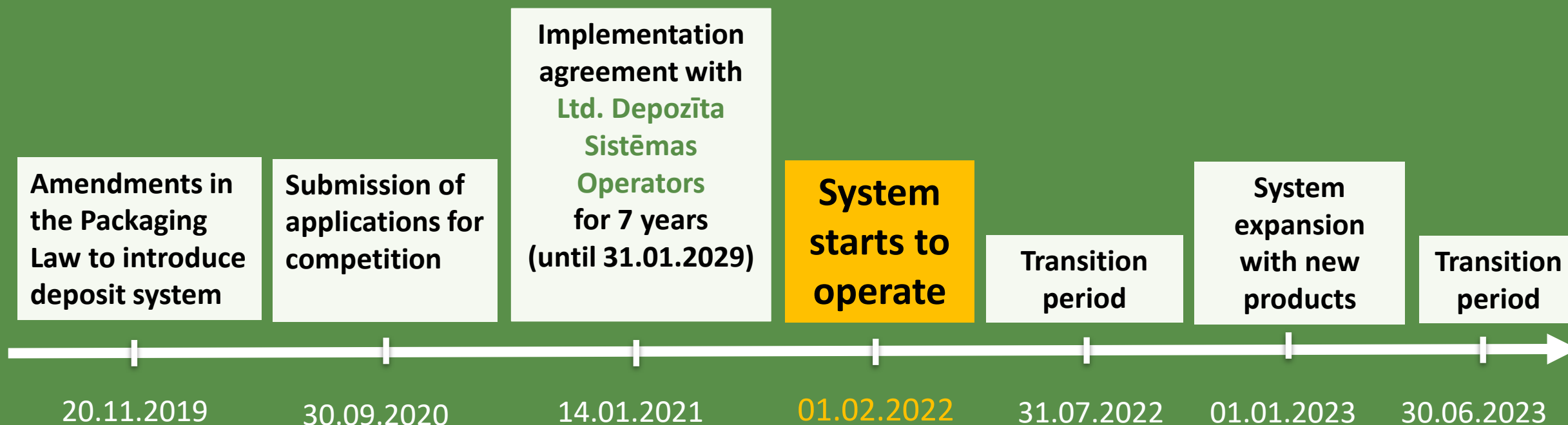
Why do we need a deposit system?

Application of the deposit system to beverage packaging

- ✓ contributes to the reduction of the amount of used packaging that is buried in a landfill
- ✓ makes Latvia cleaner, reducing environmental littering
- ✓ ensures the efficient use of natural resources by diverting plastic, glass and metal beverage packages for recycling
- ✓ encourages public involvement in packaging management



Mandatory, unified beverage packaging deposit system from 01.02.2022





Framework for deposit system operation



Amendments in the Packaging Law

<https://likumi.lv/ta/en/en/id/57207>

Regulations of the Cabinet of Ministers Regarding the Operation of the Deposit System

<https://likumi.lv/ta/en/en/id/316731>

Waste Management Law

A waste transport permit is not required for the transport of used beverage deposit packaging to the deposit packaging sorting center

<https://likumi.lv/ta/en/en/id/221378-waste-management-law>

Scope of the deposit system

| Non-alcoholic drinks and syrups | All types of beer | Alcoholic cocktails (alcohol content up to 15%) | All types of alcoholic drinks |
|---------------------------------|---------------------|---|--|
| Except dairy products | | Except wine, sparkling wine and fruit wine | For example, wine and strong alcoholic spirits |
| Cans | Cans | Cans | Cans |
| Glass bottles | Glass bottles | Glass bottles | |
| Plastic PET bottles | Plastic PET bottles | Plastic PET bottles | Plastic PET bottles |

Volume of 0.1 to 3 l
(not included)

2023 expanded to:

- **Syrups**
- **All types of alcoholic drinks in plastic (PET) bottles or cans**
- **Alcoholic cocktails** - fermented drinks or **spirits**, increasing their alcohol content from 6% **to 15%**



Funding sources of the deposit system

The deposit system operates based on the zero-profit principle and all revenue earned needs to be reinvested into operation and development of the system

The deposit system is financed by three main sources of revenue:

1. **Income from materials** collected and handed over for recycling
2. **Deposit fee** for any packaging **not returned to the system** by consumers
3. **Payments of beverage producers** for participation in the deposit system



Controlled areas by the State Environmental Service during deposit system introduction process



Deposit acceptance network establishment – involvement of retailers



Deposit collection infrastructure – reverse vending machine (RVM) network



Implementation of IT solutions



Involvement of deposit packaging (beverage) producers



Construction of deposit sorting and counting centre



Recycling of collected materials



Creation of logistics system



Implementation of public communication plan





And during deposit system implementation from 01.02.2022



Supervision of DS implementation –
monthly operator reports,
supervision meetings until the end
of transition period



DS operation supervision
according to the signed
agreement, deposit
collection, reuse and
recycling rates



Involvement of deposit
packaging producers and
their data credibility



Application of natural
resource tax exemption for
deposit packaging



Mandatory involvement of
retailers



Obligation to participate in the system for producers

Mandatory requirement for **producers and importers** to sign a contract with the deposit packaging operator for participation in the system



313
contracts

The amount
of beverage
deposit
packaging
produced

150 kg
or more in
a calendar
year

~ 500 pcs.
0.5 l glass bottles
or
~ 5,000 pcs.
PET bottles
or
~ 10,000 pcs.
metal cans

Benefit for producers?

Producers and importers that join the deposit system receive **an exemption from the natural resources tax** for the containers that are managed within the deposit system

| Type of material | Natural resources tax, EUR per kg | Deposit system participation fee, EUR per unit | Type of packaging | Natural resources tax, EUR | Deposit system participation fee, EUR |
|--|-----------------------------------|--|---|----------------------------|---------------------------------------|
| Plastic/PET bottles: colourless, transparent | 1,22 | 0,0068 | 500 pcs. PET bottles: colourless, transparent | 183 | 3,4 |
| Plastic/PET bottles: other colours | 1,22 | 0,0252 | 500 pcs. PET bottles: other colours | 183 | 12,6 |

Natural resources tax exemption granted for 2022
EUR 16 million

Obligation to participate in the system for retailers

For retailers depending on their store size

in state cities

if the area of the store
is equal to **300m^2**
or larger

in other
administrative
territories

if the area of the store is
equal to **60m^2** or
larger

1409 collection points established

- ✓ 1014 - automated
- ✓ 395 - manual



210 common collection points

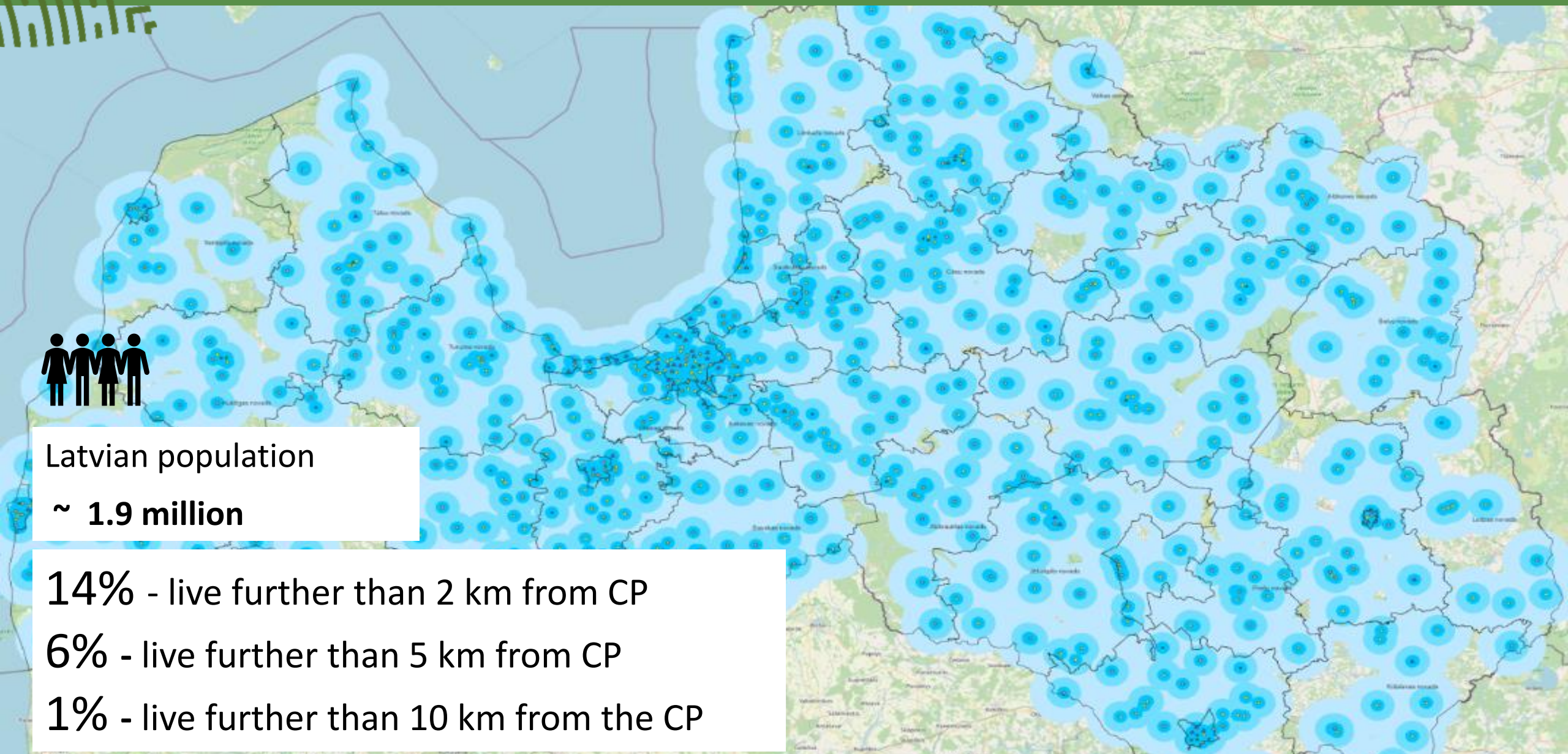


Deposit system availability



Latvian population
~ 1.9 million

14% - live further than 2 km from CP
6% - live further than 5 km from CP
1% - live further than 10 km from the CP

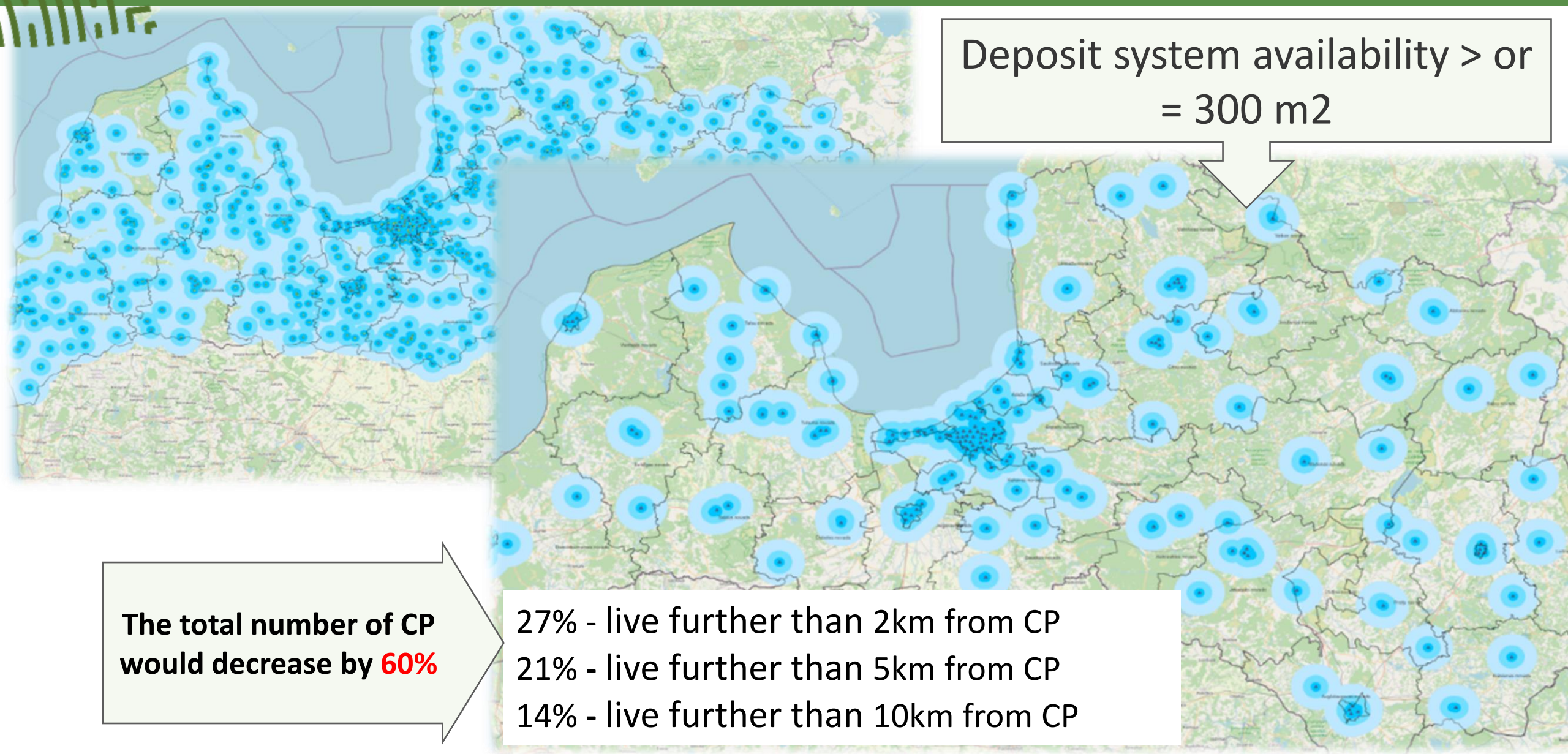


Deposit system availability

Deposit system availability $>$ or
 $= 300 \text{ m}^2$

The total number of CP
would decrease by **60%**

27% - live further than 2km from CP
21% - live further than 5km from CP
14% - live further than 10km from CP



Challenges with participation of retailers

| 1.02.2022 | 1.02.2023 | 1.09.2023 |
|--------------------------------------|-------------------------------------|-----------------------------------|
| 80 retailers 144 stores | 12 retailers 47 stores | 3 retailers 4 stores |



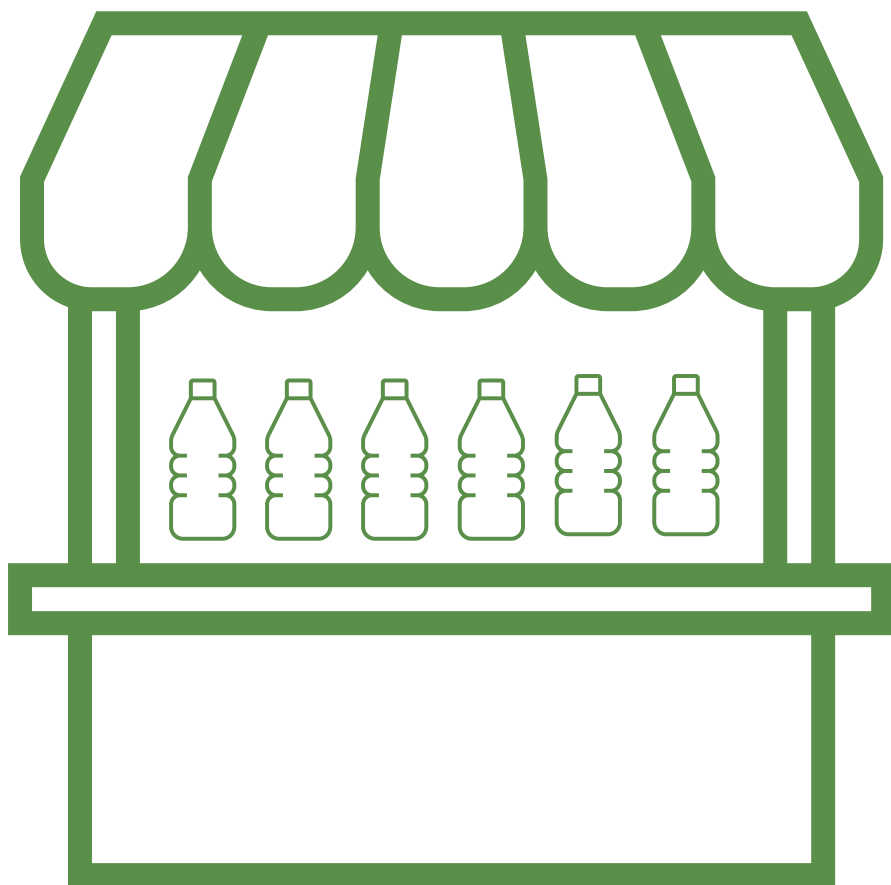
«**Consult first**» principle - SES has sent informative letters to 80 retailers



SES issued 53 decisions on actions to be taken to prevent inconsistencies



SES issued 31 executive orders on fines applying a total of **29 thousand EUR**



Challenges for retailers

- Ensuring hygiene requirements
 - Lack of storage facilities to store accepted packaging until collection by operator
 - Additional workload for employees
-
- Employee resistance to the new duties
 - Low priority of environmental sustainability in the value scale of business owners

Management fee (or benefit?) for retailers

The approved **deposit packaging management fee** for the first operating year of the deposit system (2022):

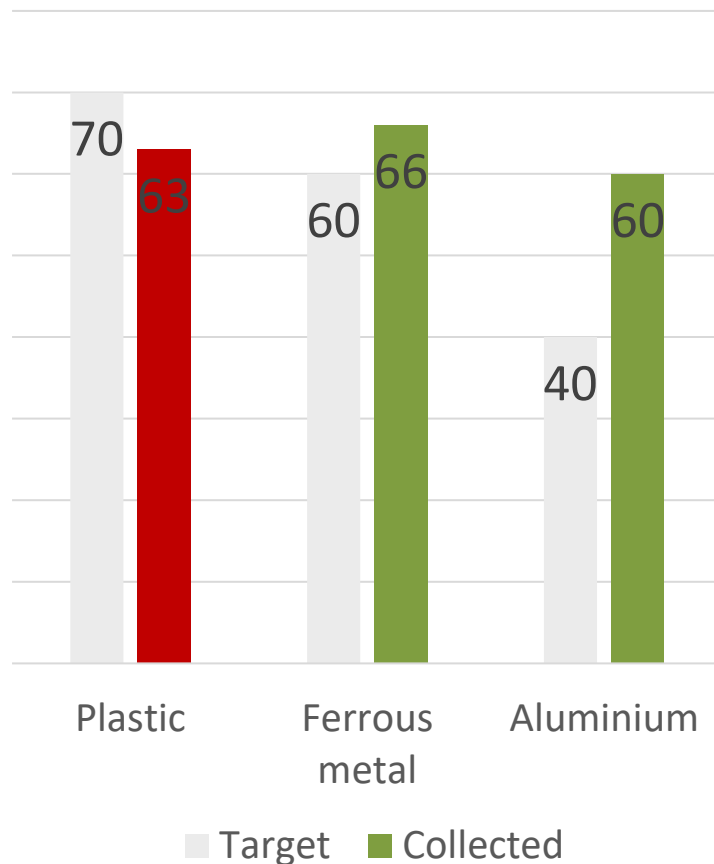
- Manual, per item: EUR 0.0203
- RVM with compaction, per item: EUR 0.0223
- RVM without compaction, per item: EUR 0.0195

Management fee,
paid in 2022
EUR 4,8 million

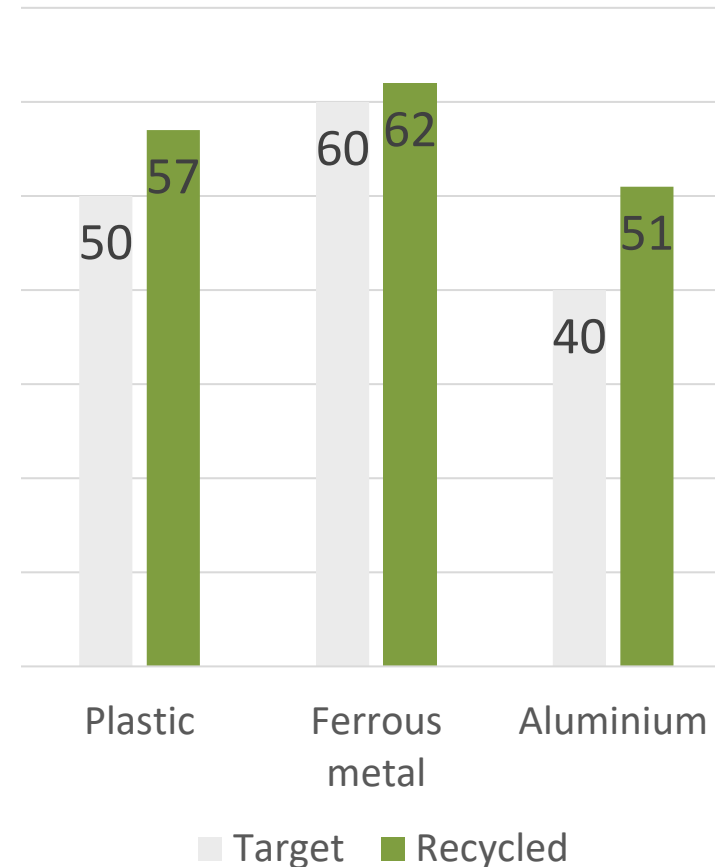
After assessing the results of the first year of operation, the management fee for 2023 has been set by type of packaging material

Results of the first operational year

Collection rates
(%)

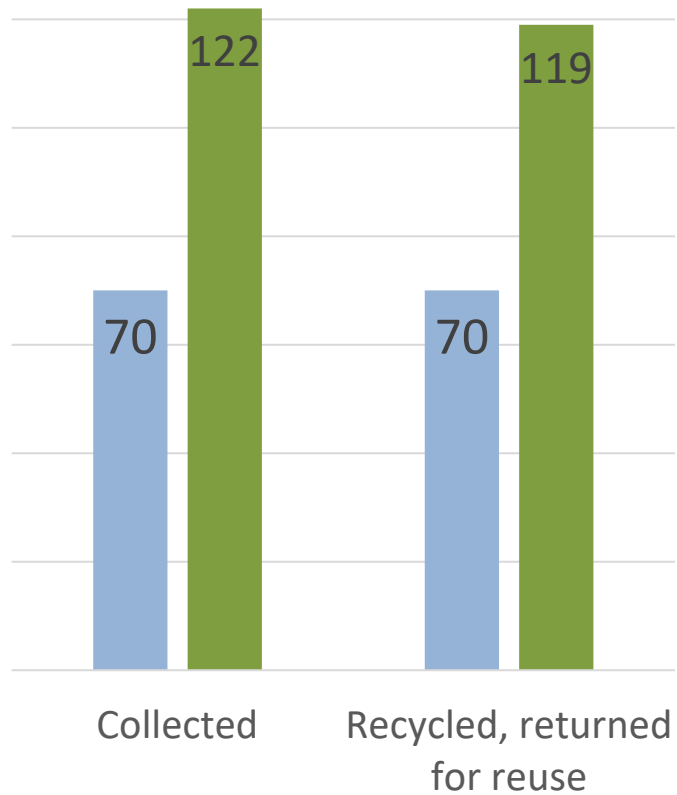


Recycling rates
(%)



Results of the first operational year

Glass collection and recycling rates (%)



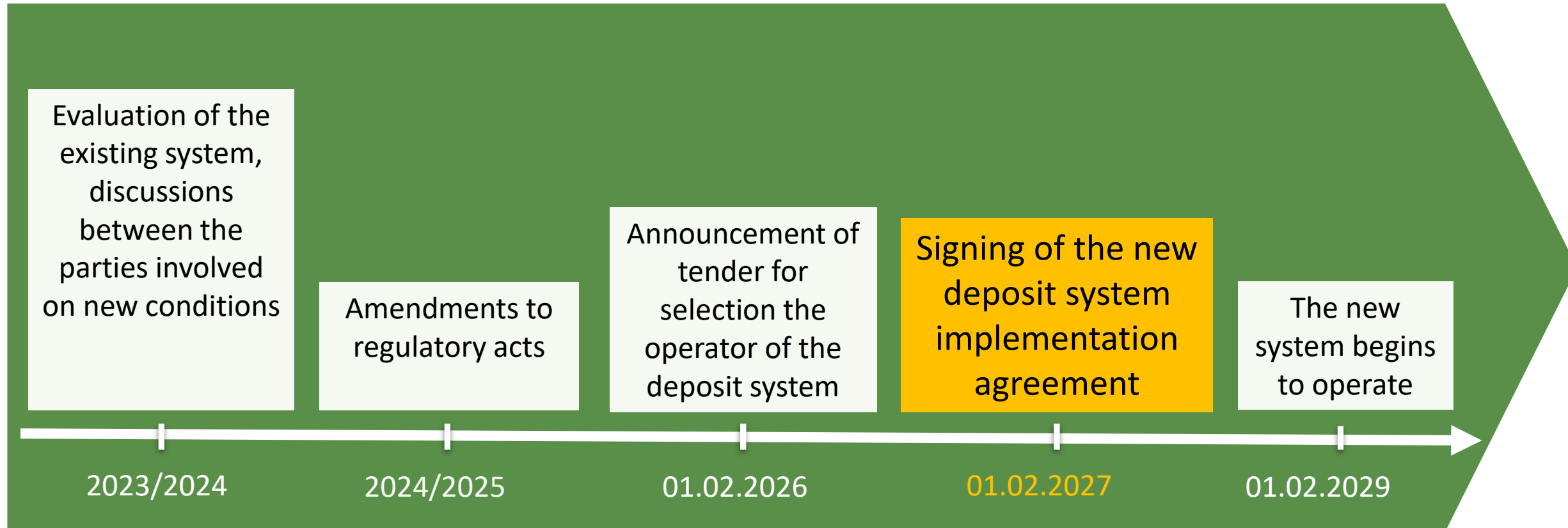
■ Target

■ Collected, recycled, refilled

| Material | Packaging placed on the market for the first time | | Rotations per year |
|----------|---|-------------------------|-------------------------------|
| | All packaging (kg) | Reusable packaging (kg) | Reusable sales packaging (kg) |
| Glass | 15 666 720,43 | 8 447 100,59 | 21 935 373,20 |

New period of the deposit system starting from 01.02.2029

Timescale for the implementation of the measures to be taken



Thank you!

International Conference and Study Tour

Reuse and Recycling through Deposit Systems

September 25-26, 2023 Riga, Latvia

Miks Stūrītis

CEO, DIO

Deposit system and refillables in Latvia

Reuse and Recycling through Deposit Systems

conference in Riga, 26.09.2023

Depozīta
punkts



Miks Stūrītis,
SIA Depozīta Iepakojuma Operators
Chairman of the Board

Facts about Latvia

Population:

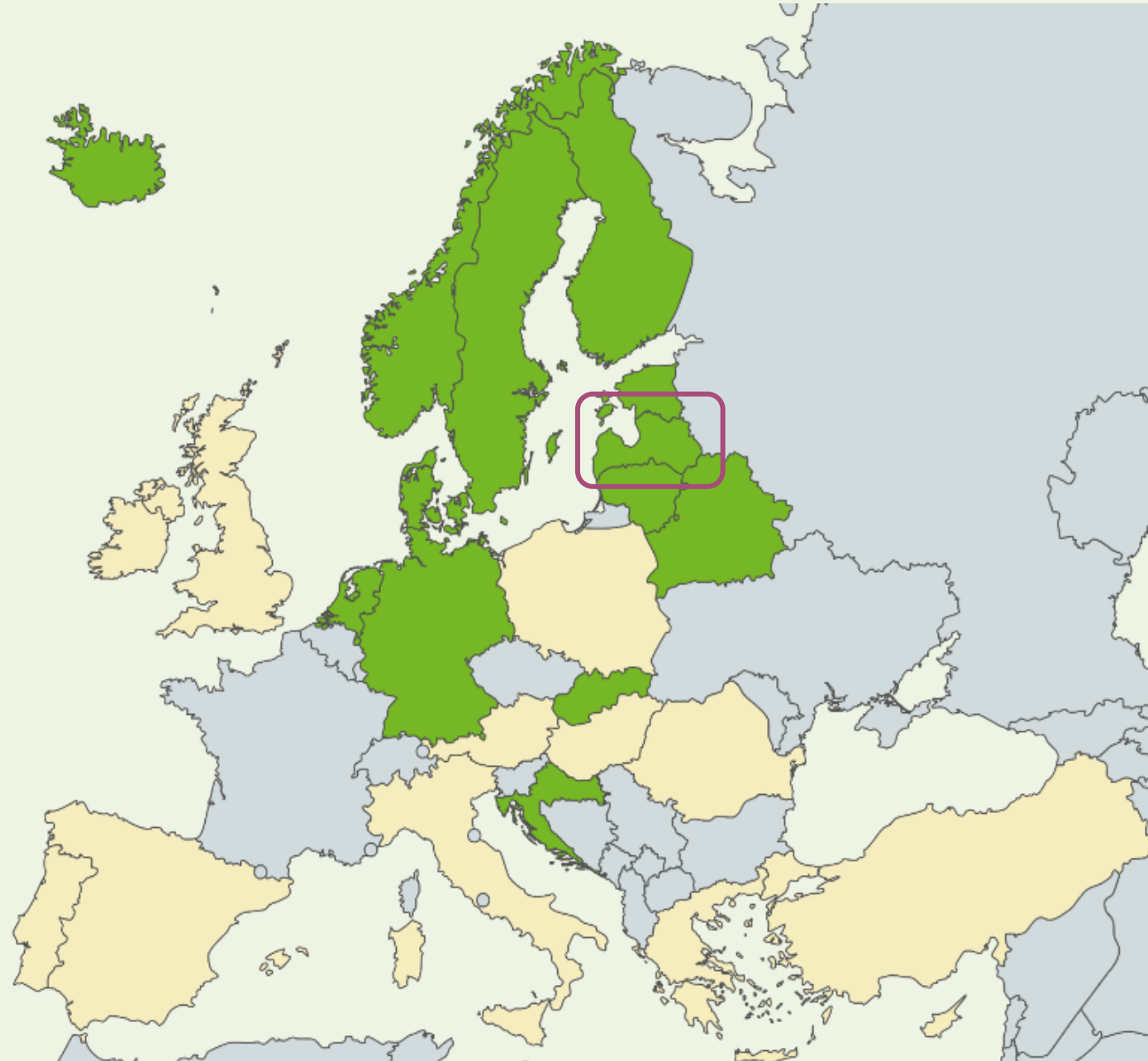
~1 884 000

Area:

64 594 km²

**Annual deposit
packaging volume:**

500 million



Latvian deposit system

Infrastructure

- **1118** RVM's installed
- **174** outdoor kiosks installed
- **395** manual deposit points
- **590** HoReCa collection points

Partners

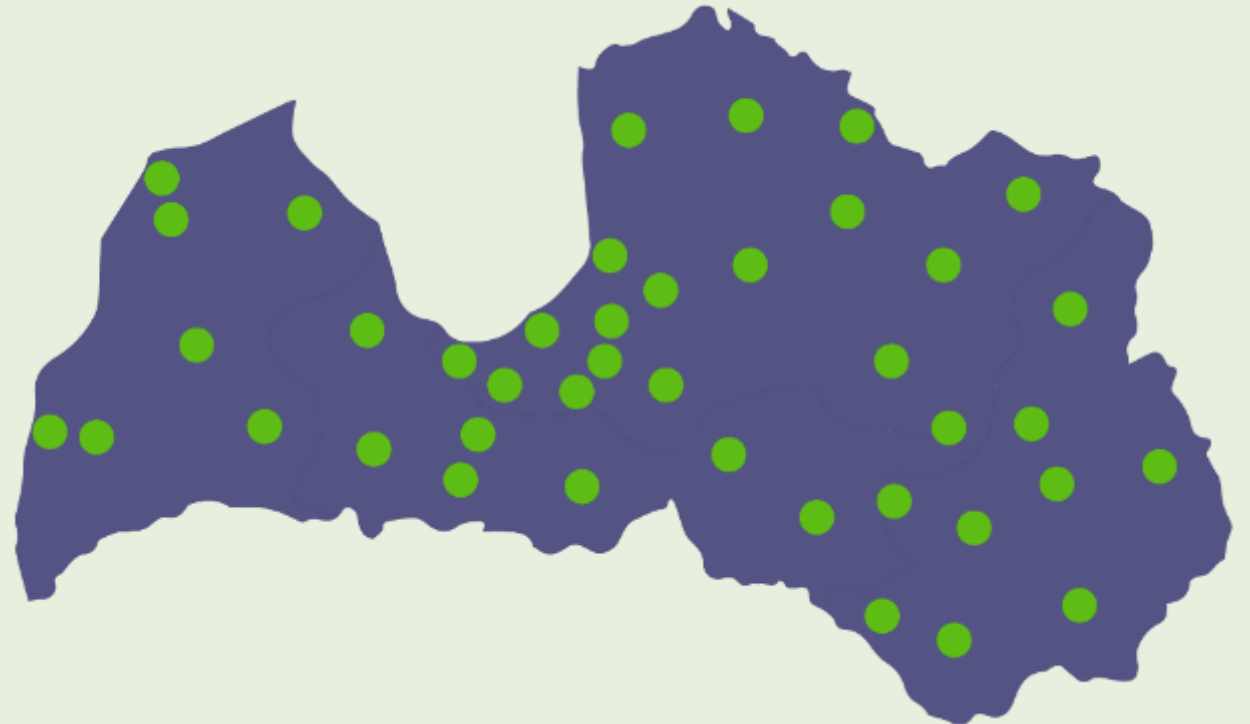
- Contracts with **>400** retailers
- Contracts with **>300** producers and importers

DIO team

- **20** employees

Packaging register

- **> 8500** deposit products packagings registered



Latvian deposit system

Supervising authorities:

- The State Environmental Service of the Republic of Latvia
- Ministry of Environmental Protection and Regional Development of the Republic of Latvia
- The Public Utilities Commission

DIO keeps the system running
for 7 years



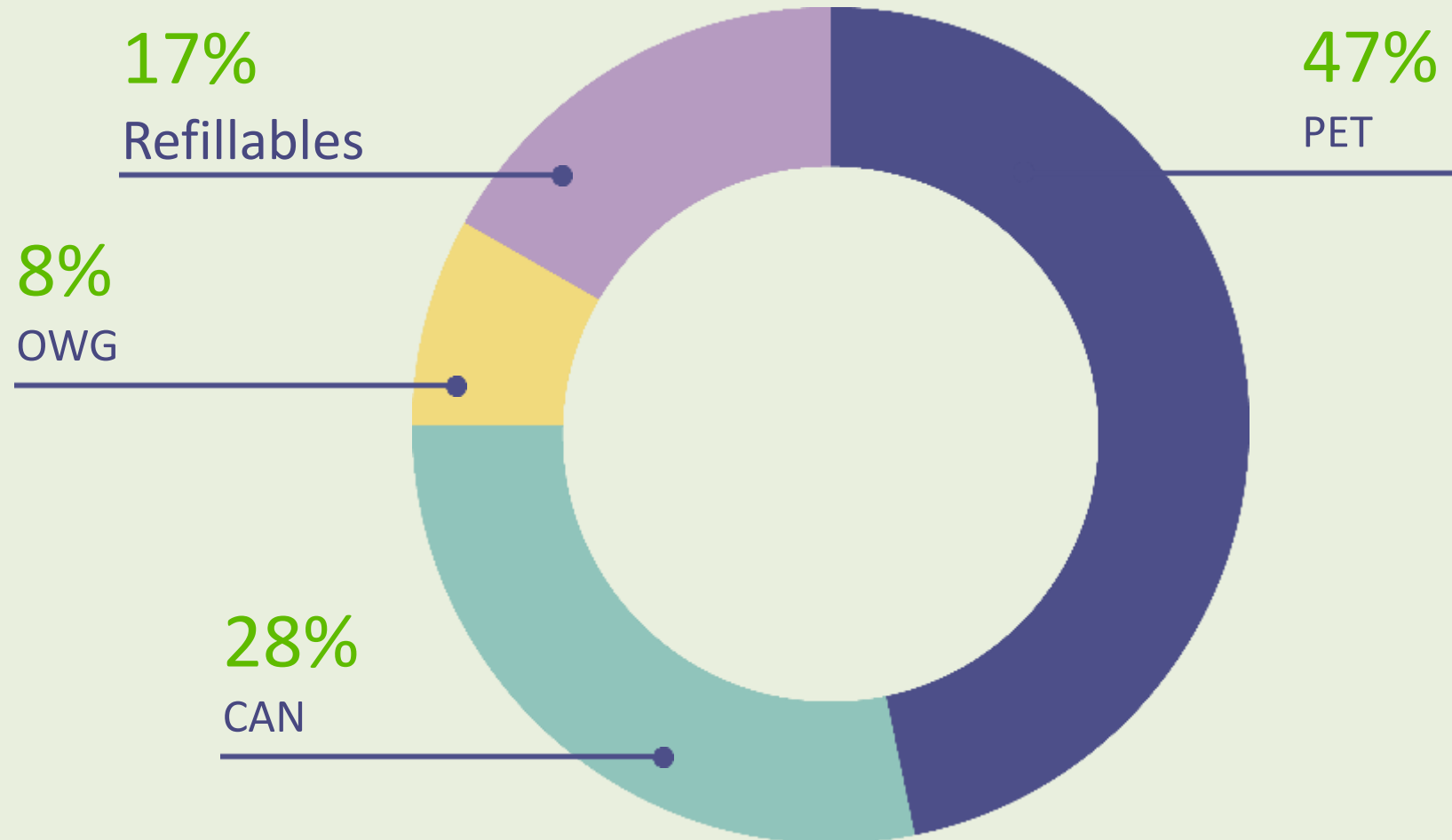
Deposit fee set for 0,10 €

What kind of packaging is included in DRS?

| Non-alcoholic drinks and syrups | Beer | All types of alcoholic drinks | Alcoholic cocktails and premixed spirits with alcohol content up to 15% |
|---|---|---|---|
|  Cans |  Cans |  Cans |  Cans |
|  Glass bottles |  Glass bottles |  Glass bottles |  Glass bottles |
|  Plastic PET bottles |  Plastic PET bottles |  Plastic PET bottles |  Plastic PET bottles |
| Volume: 0,1–3 liters (excluding) | | | |

Deposit packages put on the market

01.02.2022.-31.08.2023.



The results





Since 01.02.2022. more than

515 million

beverage packages have been returned through deposit system



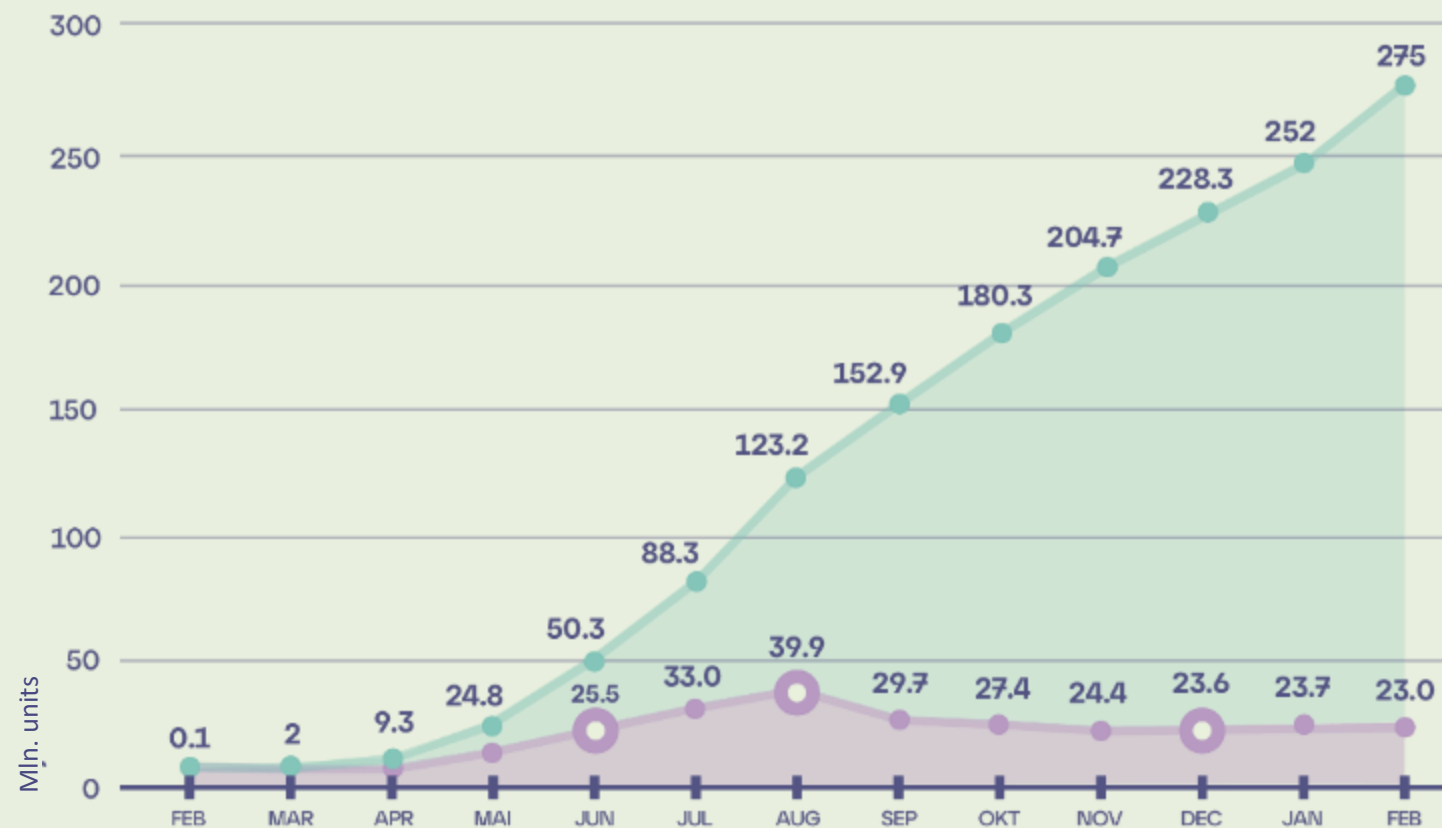
That is an average of

280

beverage packages per one Latvian resident

First year of operation

01.02.2022.-31.01.2023.



Return rate

63%

Returned per month

Returned in total

In 2023 so far

352 million

deposit packages were put on the market,
but

272 million

were returned back through deposit
system.

Current return rate:

77%



Collected packaging volumes

01.02.2022.-01.08.2023.



2200

tons of aluminium



30 000

tons of refillable bottles



10

tons of steel



10 100

tons of glass (disposable)



8 500

tons of PET packaging

50 810 = **1200** =
tons of packaging hectares

~**1**
city of Saldus

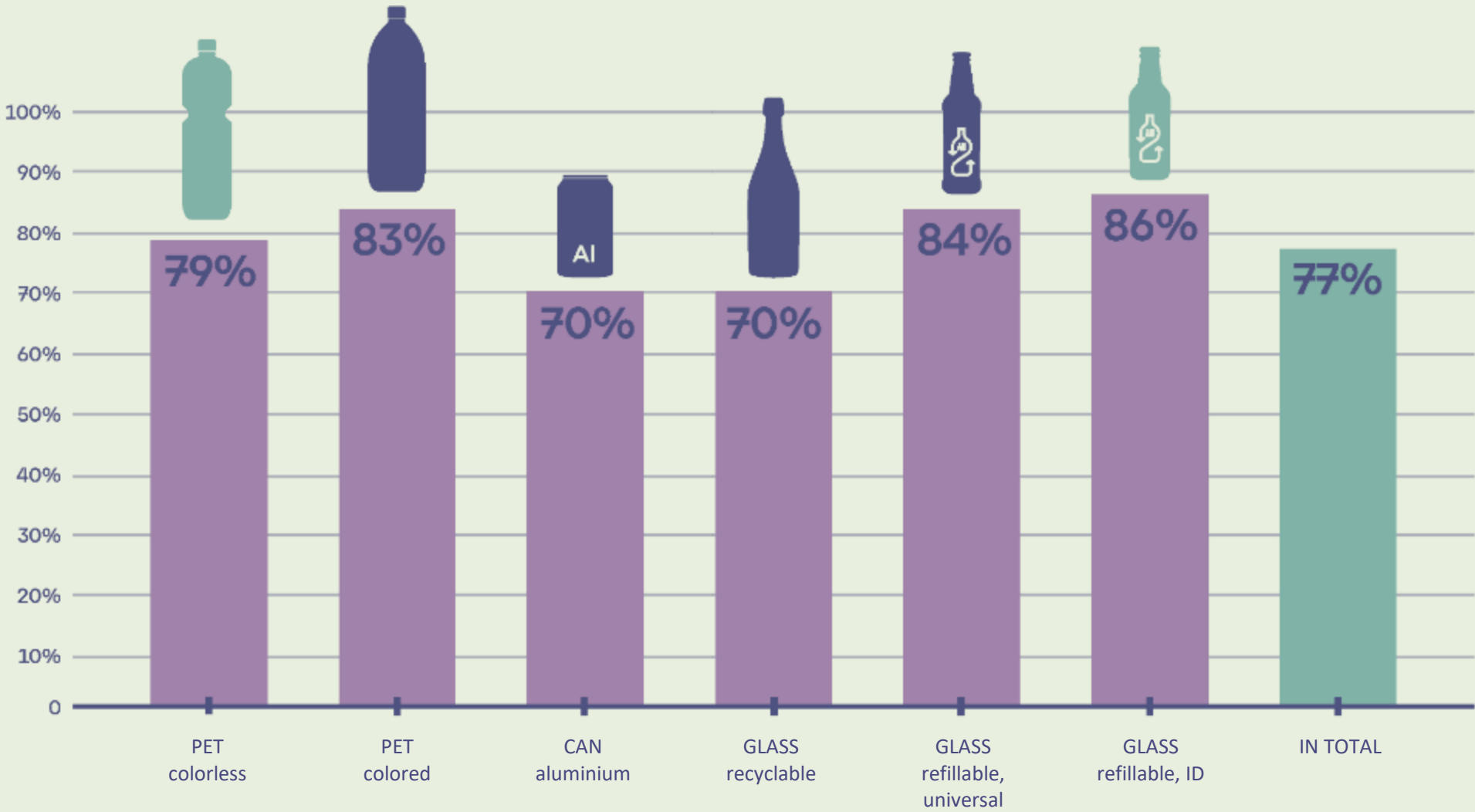
or

3 NY Central parks

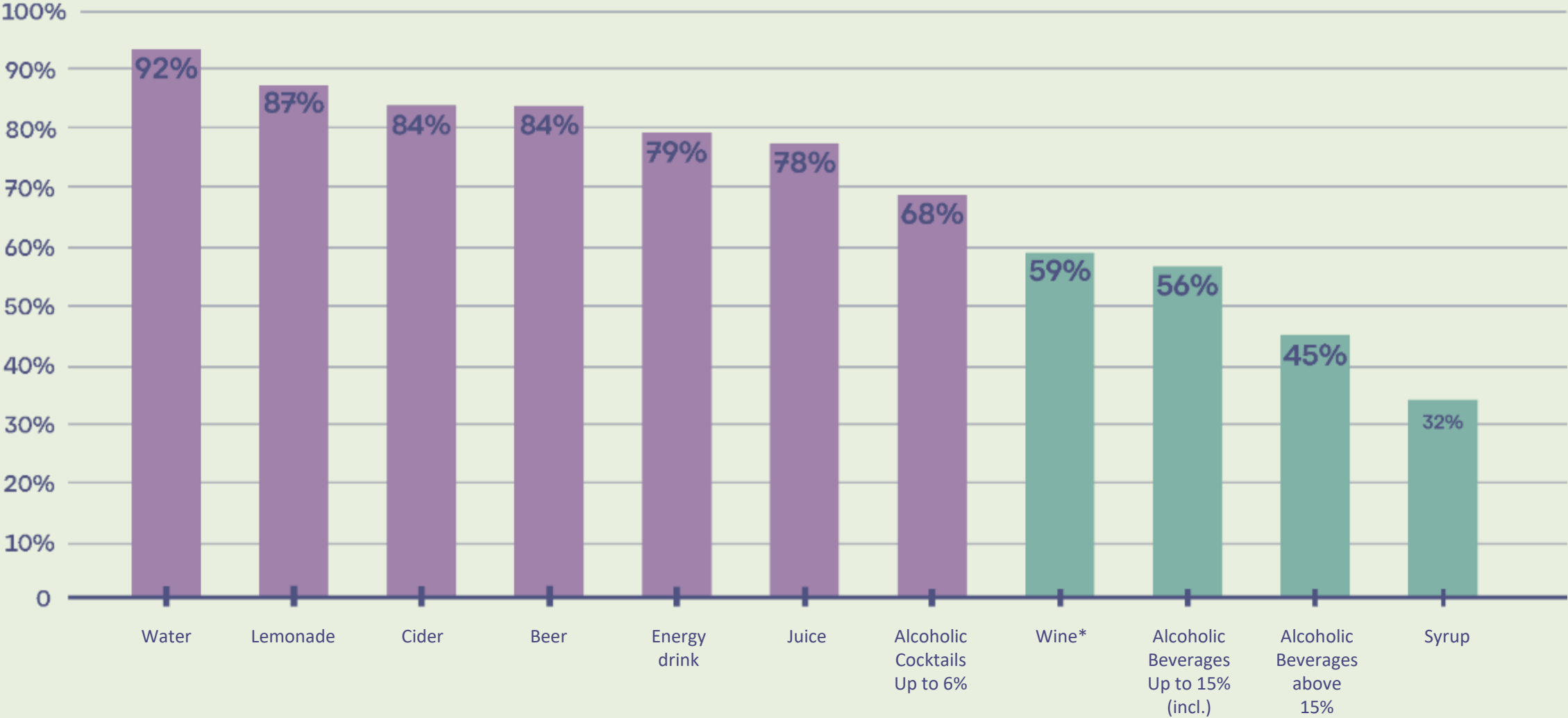



Return of packages by materials % of units

01.01.2023. - 01.09.2023.



Packaging return rates by product group
01.01.2023.-10.09.2023.



 New scope of the deposit system

*incl. sparkling, wine cocktails, fortified, flavored

Glass packaging & refillables

184,15 million glass bottles put to the market so far

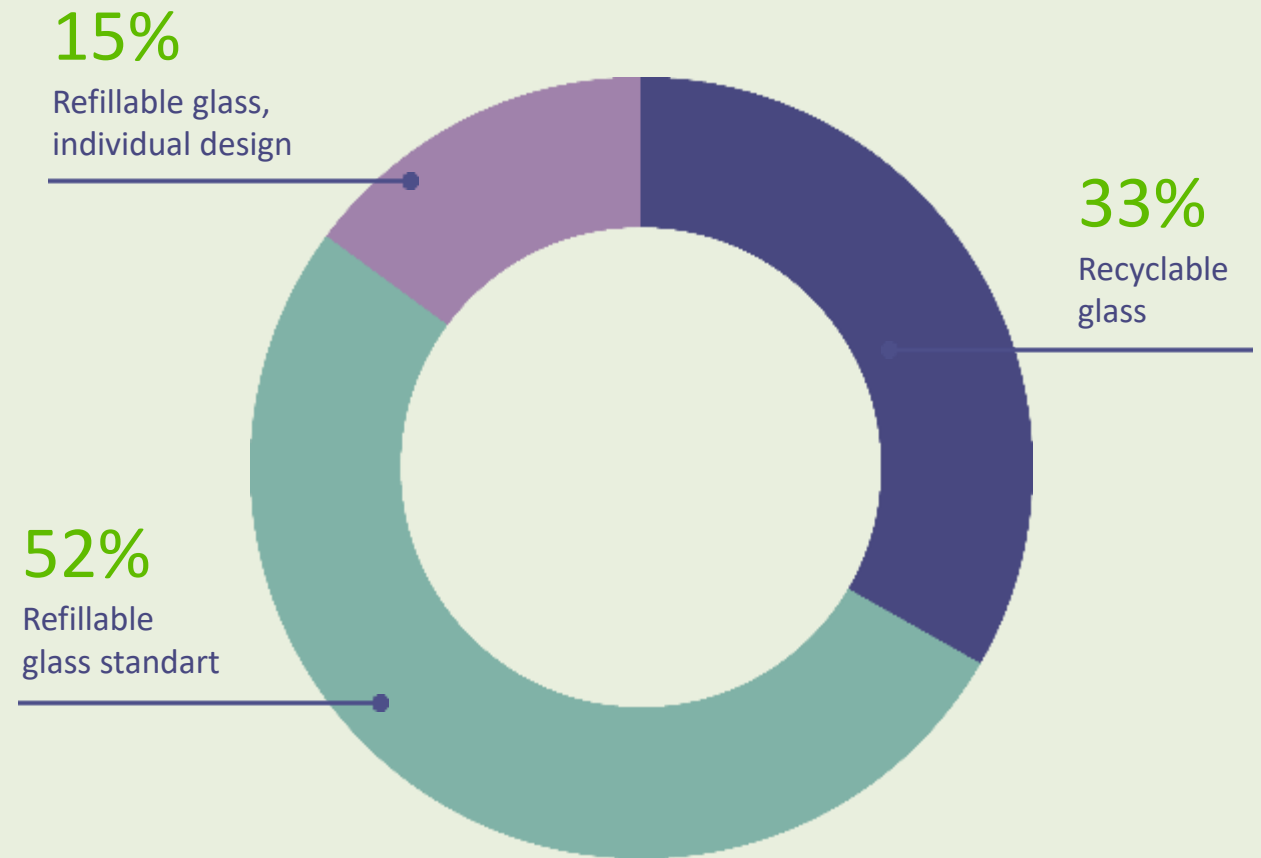
27% of all deposit packaging



Standard
refillable bottle



Individual design
refillable bottle
13 shapes



Refillable results so far

Returned to breweries

95 mln.

of refillables

Reused

30 000 t

of glass



Standard refillable bottle

Used by 28 breweries



Responsibilities in refillable return

Producers pay to operator for quantities put to the market:

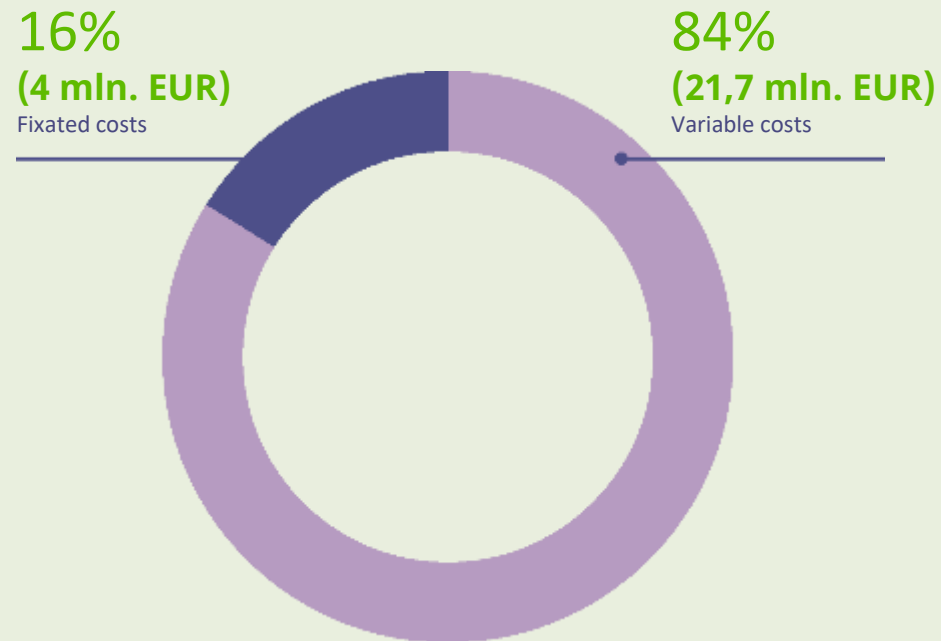
For Universal RGB the industry fee + deposit fee

For ID RGB - only industry fee

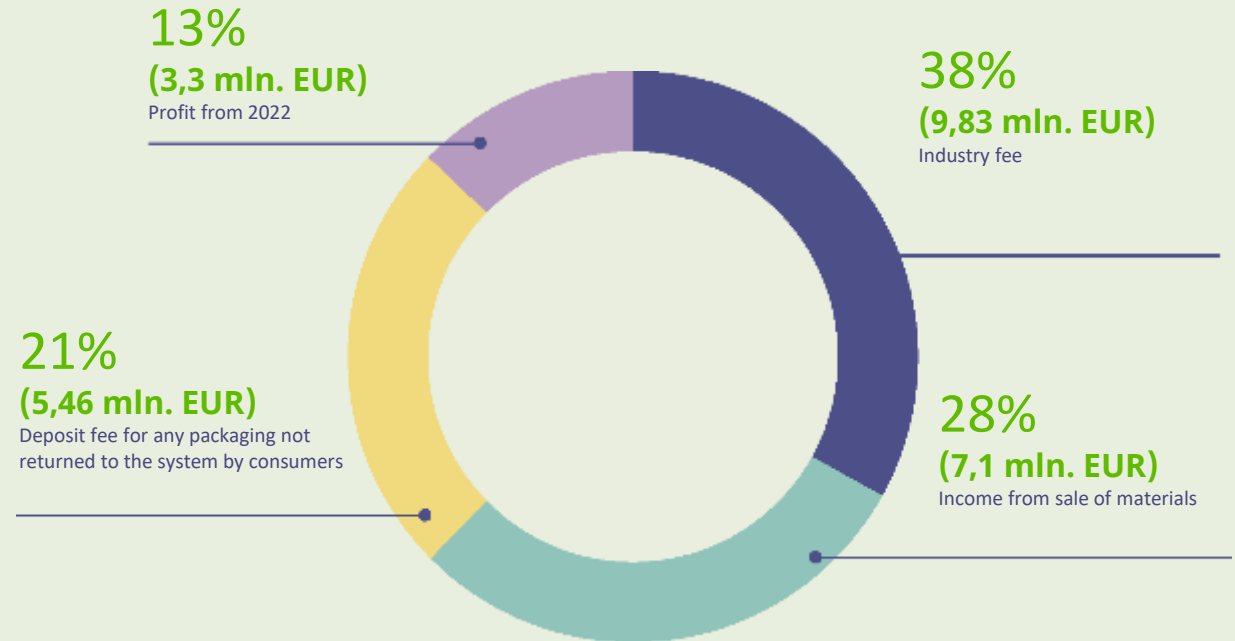


The deposit system operates based on the **zero-profit principle**.

Projected costs of deposit system operation in 2023
25,7 mln. EUR



Deposit system financing sources in 2023



Where did the previous year's profit go?

In system development & financing of operations



202 new RVM's installed
(by 22% more)



It is planned to install 3 bulk collection points in Riga



An additional glass counting device was installed



Investments in the improvement of packaging processing processes



Investments in the improvement of IT packaging accounting

Lessons learned – retailers

The participation of retailers in the deposit system is a key:

1. Taking responsibility for the collection;
2. Every day caring for the RVMs;
3. Deposit system is not an extra duty, but also a competitive advantage.



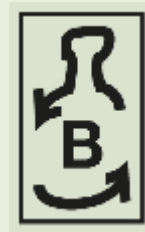
24%

Latvian residents' choice of stores is influenced by how well organized the acceptance of deposit packaging is



Lessons learned

- Support from government and authorities
- The transition period should be realistic, but as short as possible
 - Suggestion: 1 month from DS start for producers, 4 months for retailers to sell out stocks
- Antifraud measures on RVMs is a must
- Deposit sign must be significantly different from the neighboring countries



Lessons learned – work with producers and importers

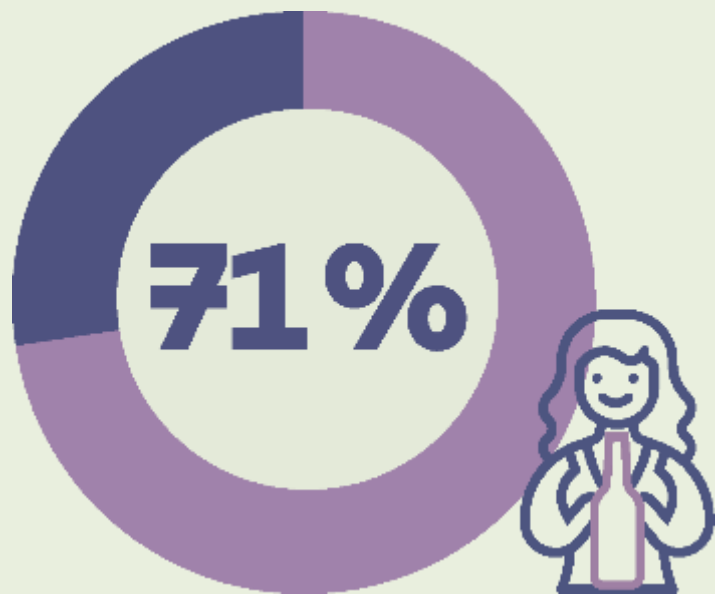


Faulty labels



Shape variations

Society's habits after first 8 months of DRS operation



of Latvian residents use the deposit system regularly – at least once a month or more often

The most active users of the deposit system are:

- 40-49 years old
- Living in 8 biggest cities
- 5+ people in the household
- Managers, office workers, unqualified workers

Donations option in RVMs

Deposit fee donated since Dec 2022

EUR 255 083,9

- **40,58%** — for children of Ukraine refugees in Latvia
- **40,24%** — for pet shelters
- **19,18%** — for seniors in need



Depozīta
punkts



Thank you!



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Riga, Latvia

Maija Krastiņa

Zero Waste Latvia

Environmental impact of the introduction of the deposit system in Latvia

Maija Krastiņa

2023



The impact on the environment

DRS are one of the most efficient instruments to tackle plastic leakage into the oceans and the environment.

DRS can reduce drink containers in the ocean by up to 40%.



Keep the Pressure On with #BrandAudit2020



#breakfreefromplastic

THE 10 WORST PLASTIC POLLUTERS

Numbers of countries in which waste was found and pieces of waste recorded

- | | | |
|--|--|---|
| 1  51 countries 13,834 plastics | 2  PEPSICO 43 countries 5,155 plastics | 3  Nestlé 37 countries 8,633 plastics |
| 4  Unilever 37 countries 5,558 plastics | 5  Mondelēz International 34 countries 1,171 plastics | 6  Mars 32 countries 678 plastics |
| 7  P&G 29 countries 3,535 plastics | 8  PHILIP MORRIS INTERNATIONAL 28 countries 2,593 plastics | 9  COLGATE-PALMOLIVE 24 countries 5,991 plastics |
| | | 10  PERFETTI van Melle 24 countries 465 plastics |



+ Annual clean up
“Lielā talka”
+
“Mana jurā” sea
monitoring

#BrandAudit2020





#BrandAudit2023



2023



2023: Latvia
still cleaning
up



2023: France
hasn't yet
closed the tap

1dechetsparjour_1pieceofrubbish

https://www.instagram.com/p/ClgM40RIfWC/?img_index=1

Impact on the environment: long lasting



Public support rates for DRS are above 80%.



Saving resources: refill



When properly implemented, DRS for refillables generate 50% less CO₂ emissions than DRS for single-use items.

Facebook:
Zero Waste Latvija

Instagram:
@zerowastelatvija

Twitter:
@ZWLatvija

info@zerowastelatvija.lv

Thank you!



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Q&A

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reloop resources
remain
resources

Under the auspices of



State Environmental
Service
Republic of Latvia