hoiame hoiset!

DRS
Deposit return system

EESTI PANDIPAKEND

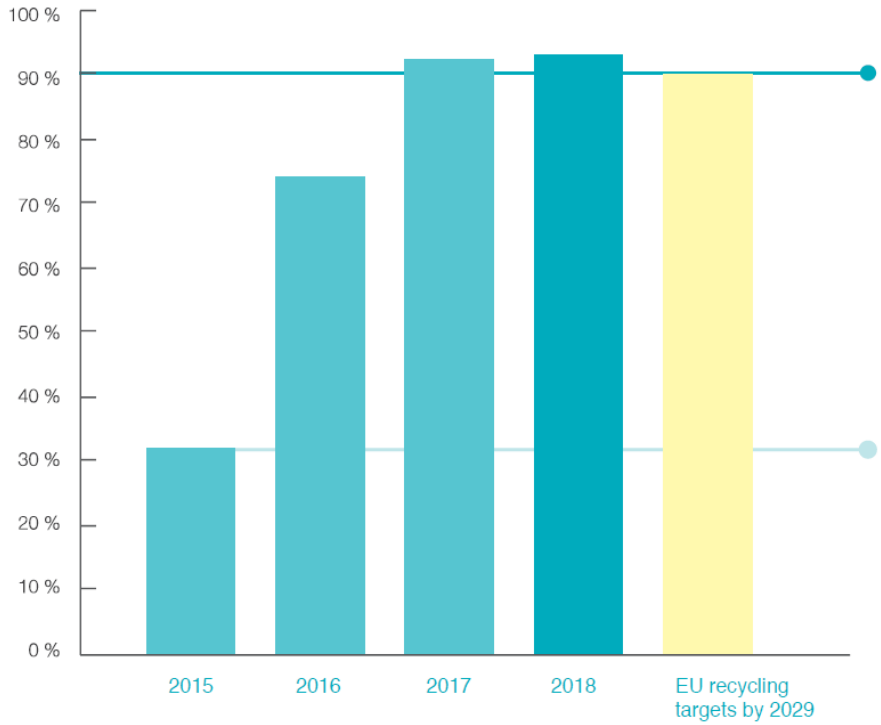
Kaupo Karba
CEO

DRS – why?

- EU target 90% of single-use beverage bottles placed on the market are collected
- DRS is the most effective and almost the only way to achieve 90% and beyond
- DRS enables a high level of closed-loop recycling
  - 2025 – beverage packaging (PET) must contain 25% recycled plastic
  - 2030 – beverage packaging (all plastics) must contain 30% recycled plastic
- 15 countries in Europe have implemented DRS and the following European countries expected to join in the coming years:
  - Hungary, Ireland, Portugal, Greece, Cyprus, etc.

DRS – why?

Collection & recycling results



Targets for **2029** are already **achieved and exceeded**

Deposit system allows higher recycling targets vs. container system

Before deposit system introduction PET bottles recycling **was below 33%**

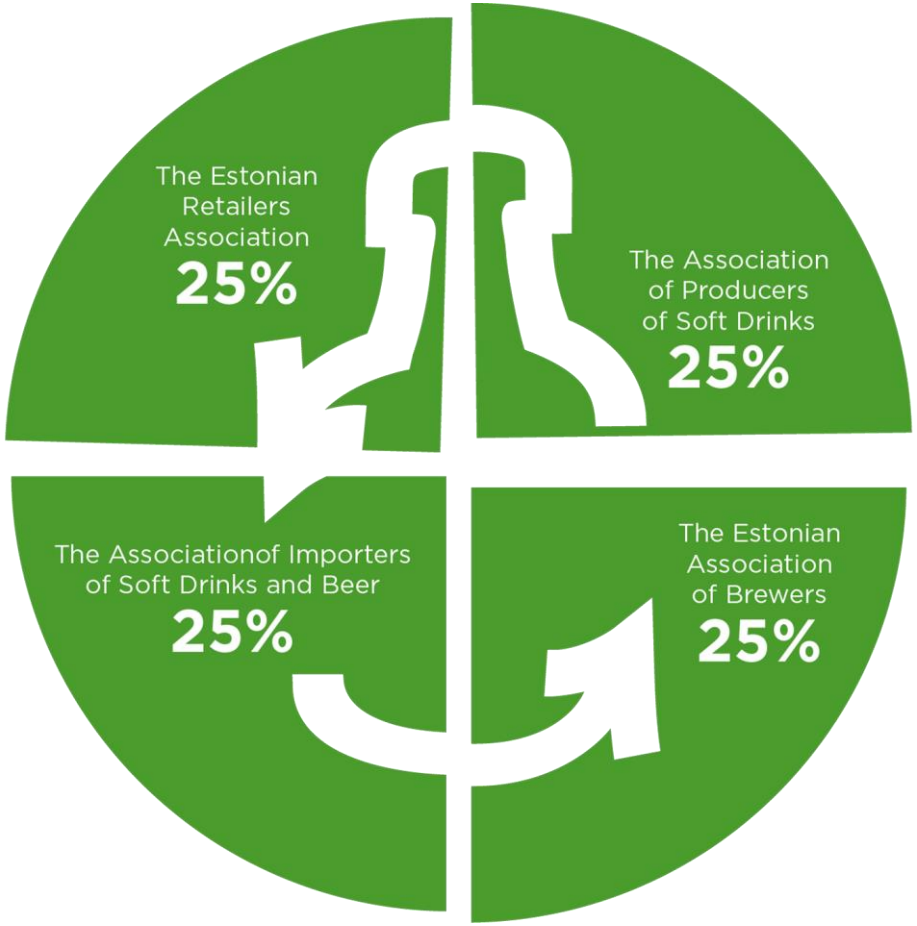
Lithuania started DRS beginning of 2016. *Source: USAD*

Eesti Pandipakend – Estonian DRS

- Eesti Pandipakend is a producer responsibility organization established in 2005, which organizes the recycling of beverage packaging by producers, importers and retailers. Our task is to manage and organize the collection, transport, sorting, counting and recycling of deposit packaging all over Estonia
- Packaging and Packaging Excise Tax Act sets minimum mandatory recycling rates for beverage packaging, non-compliance with which is subject to packaging excise tax (on the missing part):

Material	Excise tax in € per kg
Plastic	2,5
Metal	2,5
Glass	0,6

Eesti Pandipakend



- The Estonian Retailers Association
- The Association of Producers of Soft Drinks
- The Association of Importers of Soft Drinks and Beer
- The Estonian Association of Brewers

- Accredited by Ministry of Environment since 03/2005
- Operating from 05/2005
- Centralized system

Implementation

- Hygiene
- Investment
- Sorting/counting center(s)
- Collection infrastructure

- IT system/reporting
- Free riders
- Logistic
- Marketing campaign
- Scandinavian experience only

Product categories and materials

PRODUCT CATEGORIES UNDER DEPOSIT:

- Soft drink
- Water
- Beer
- Cider, perry
- Low-ethanol alcoholic beverages
- Juice, juice concentrate, nectar

Since July 2021 – alcoholic beverages of a alcohol content exceeding 6% and syrups can be added to the DRS on ***a voluntary basis***

Deposit value

- Deposit does not raise the price of the product, but it is a separate price component that the consumer returns when he returns the package
- The value of the deposit must be indicated separately in every transaction made with package, the value is always the same
- Deposit in Estonia is VAT free

DEPOSIT PACKAGING PRICE

0,10€/packaging

One-way plastic packaging
Up to 0,5 l

One-way plastic packaging
Over 0,5 l

One-way metal packaging
All sizes

One-way glass packaging
All sizes

Refillable glass packaging
All sizes

How the DRS works?

Movement of packaging
Movement of deposit
Movement of reusable packaging

PACKAGING COMPANIES

The retailer returns reusable packaging to the packaging company. The packaging company reimburses the deposit to the retailer.

The packaging company pays a deposit to EPP for every item of packaging sold.

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EPP counts one way packaging and returns the deposit to the retailer on the basis of the counted packaging.

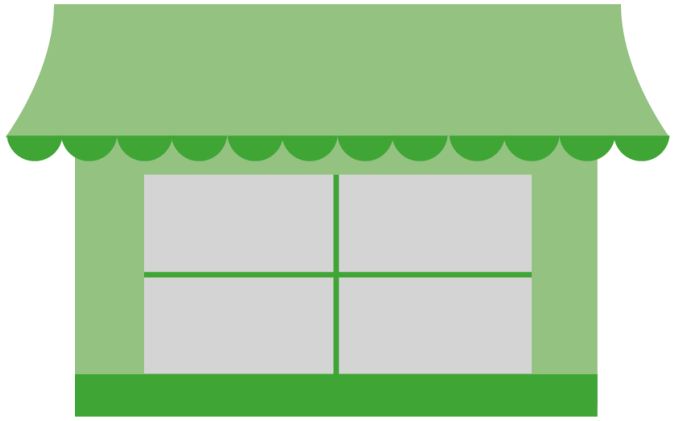
RETAILER

The consumer pays the retailler the price of the product plus the deposit for the packaging.

The consumer returns the packaging to the retailer. The retailer reimburses the deposit to the consumer.

CONSUMER

Involvement of the deposit return system



PRODUCERS/IMPORTERS

- ~350

Packages registered in the packaging register:

- 23 000 packages
- ~6000 active packages

RETAILERS

- 1260 collection points
  - 800 manual
  - 460 automated (600 RVM’s)

HORECA

- 450 pickup points

Retailers structure

Estonian legislation (take back obligation):

Sales area

- Up to 20 sqm – voluntary
- 20-199 sqm - it is possible to apply for an exemption from the local authority
- Over 200 sqm – an obligation to take back packaging at the point of sale or its service area

Collection structure in 2006

- 80% manual collection
- 20% RVM (reverse vending machine)

Collection structure since 2015

- 6-7% manual collection
- 93-94% RVM

Deposit packages collection&recycling in Estonia

Recyclable packages	2023 (2022)	Min requirement by excise law
Sales, million pieces	402 (389)	
Returns, million pieces	335 (320)	
PET return	89% (88%)	85%
CAN return	85% (83%)	50%
OWG return	90% (93%)	85%

A total of over **5.4 billion deposit packages collected** and recycled/reused (as of Dec 2023)

Keys to a successful deposit return system

- **Non-profit principle**
- **Correct initial setup** – law, handling/baling centres, logistics, etc
- **Stakeholders involvement** – producers, retailers
- **Controlling**
- **Constant awareness building -** towards public and stakeholders

Keys to a successful deposit return system

Refillable glass bottle is sent from the store to the factory of the beverage maker, where it will be carefully washed, refilled and resold.

One-way glass bottles shall be sorted according to their colour.

An old glass bottle is used for making **a new glass bottle, a soup or a marmalade jar.**

The melted glass drops are used to form new glass things, which after forming will go to annealing oven, where they are heated up and gradually cooled down again. This reinforces the glass and removes the accumulated tensions.

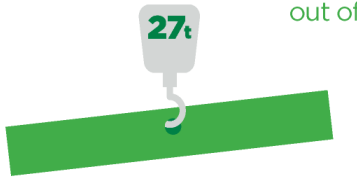
Then, they are crushed and melted.

Plastic bottles are sorted into two groups: transparent and coloured bottles, and then they are flaked and granulated.

The granules are used for making a new plastic bottle form.
The form will become a plastic bottle, if it is heated up and blown up like a balloon with the help of machines.

New cans are lacquered, sprayed with a protective layer from the inside, which prevents the corrosion of the can, and covered with a lid after the can has been filled with the beverage.

Metal cans are crushed and **melted at high temperatures.**



Aluminium bar is used for making aluminium sheets, which again **are used for making new cans.**

It usually takes
60 days
to make a new can out of an old one.

Out of 1.5 million melted metal cans, **10 meters long and 27 tons heavy metal bars are formed.**