



## **Real Price of Deposit**

*Analysis of the introduction of the deposit-refund system for single-use beverage packaging in the Slovak Republic*

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# | Why did we start?

- Request from the Minister of Environment
- Demand from the public
- EC Directive on the reduction of certain plastic products



# Advantages and disadvantages of DRS



+ less littering



+ higher recycling rate of PET and cans



+ application of the polluter pays principle



+ energy, material and CO<sub>2</sub> emissions savings



+ increased employment



- expensiveness of the system



- reduced consumer comfort



- higher costs of separate collection



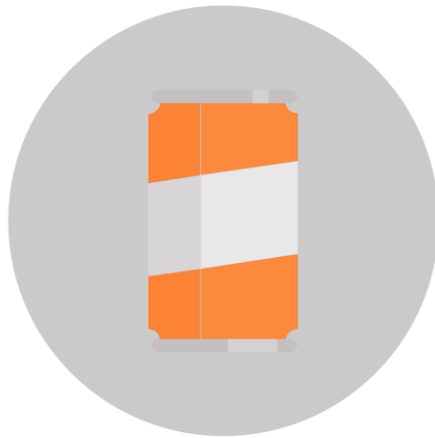
- limitation of the free international beverage market



- solution for only 2 % of the municipal waste

# | One-way beverage containers only

- Learning from best practices in Europe (Scandinavian countries, Lithuania,...)
- Existing deposit refund system for refillable glass bottles
- Aiming at PET bottles and aluminium cans



## | Main issues – data availability and quality

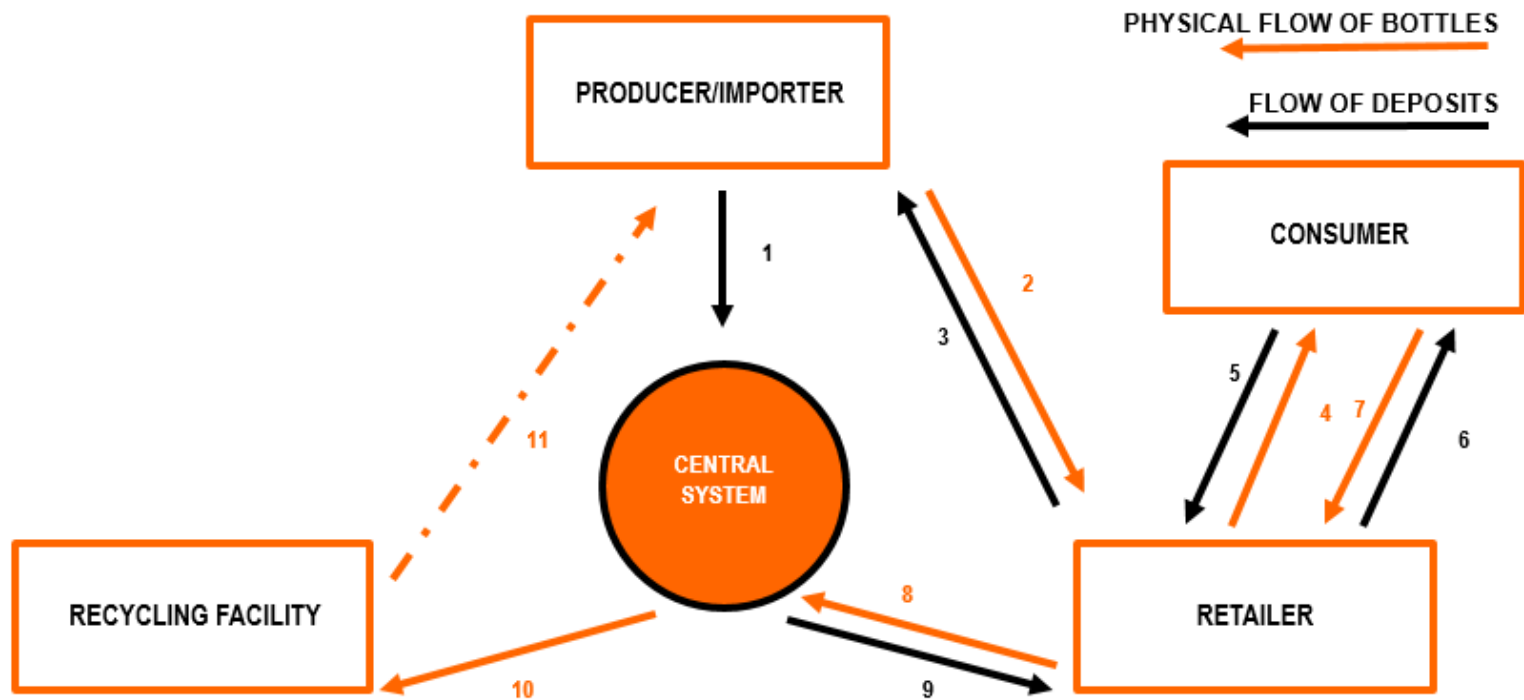
- Poor evidence on quantity of PET and cans placed on the market
- Various numbers of selling units in different statistics
- Separation and recycling rates
- No comprehensive estimate of nationwide littering



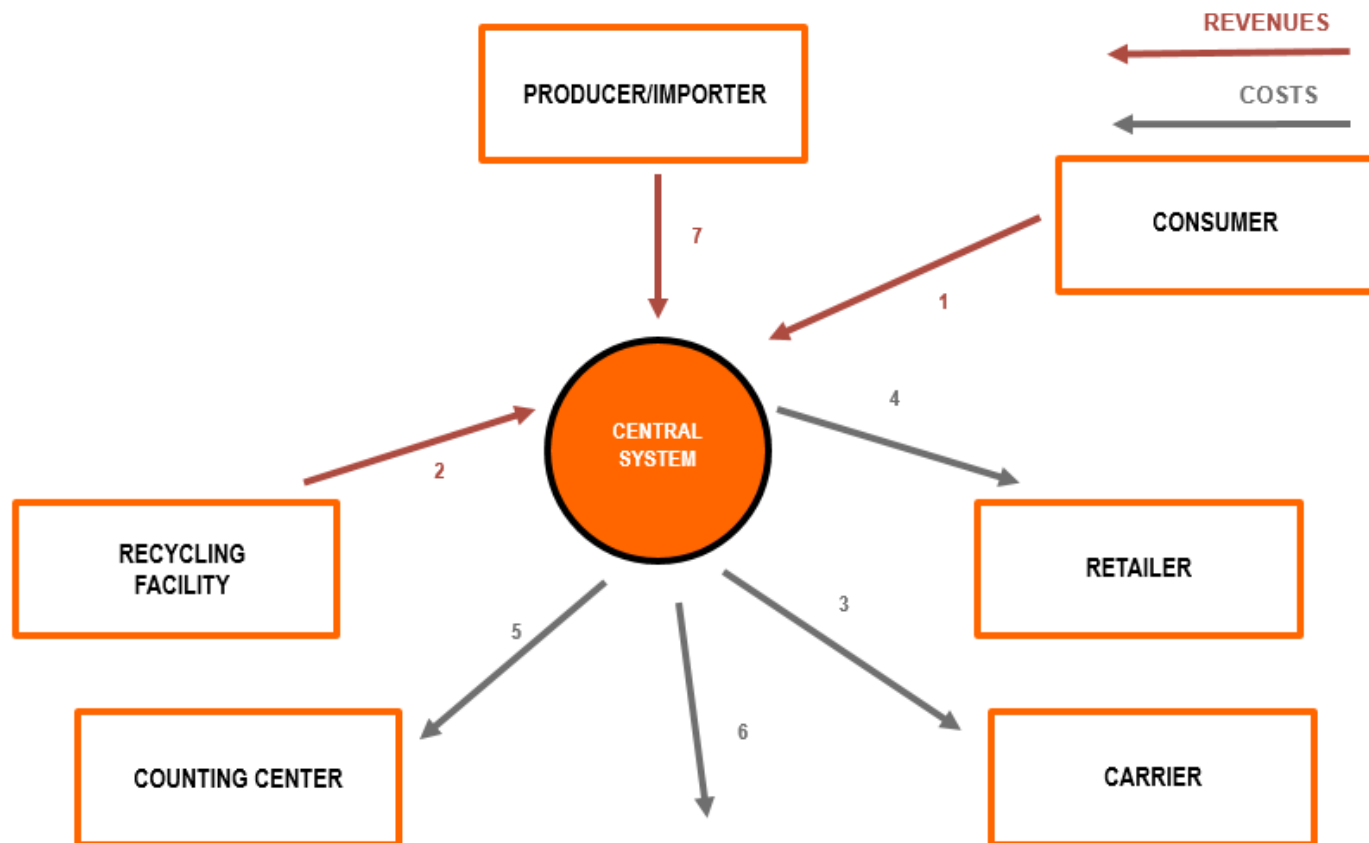
## Key settings – inspired by “Scandinavian” model

- Single use PET bottles and cans only
- Voluntary for producers but with environmental tax
- Mandatory for retail with the sales area exceeding 400 m<sup>2</sup>
- Financed by producers through the administrative fee per one bottle/can (**polluter pays principle**)
- Compensation of retail through handling fee
- **Central system as a clearing centre and coordination**
- The amount of deposit will be determined by the Central System

# The story of a bottle – physical flow and deposits



# The story of a bottle – physical flow and deposits





## Key settings – input numbers

- Target min 90 % return rate
- Deposit amount: 12 cents per PET, 10 cents per can
- 2 150 reverse vending machines (2 530 persons per machine)
- 989mil PET bottles, 345mil cans
- 73 % of all shops will collect empty containers
- 90 % rate of automatization
- The amount of deposit will be determined by the Central System
- Environmental tax 24 cents per bottle/ can
- 34 interim storage facilities
- 1 counting centre and sorting plant

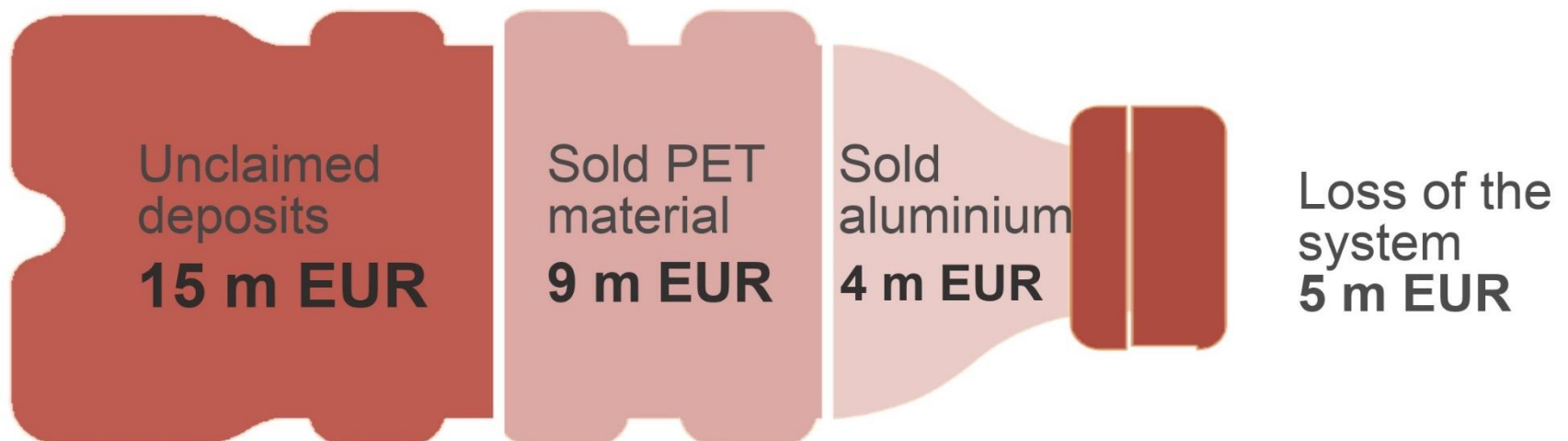
## Direct financial costs of DRS

- 80 mil. EUR on investments, including reverse vending machines



# | Direct financial revenues of DRS

**Annual incomes**  
28 m EUR



## Indirect benefits of DRS



The saved costs of **littering** removal from 0.6mil to 2.7mil EUR



The saved costs of landfilling from 53k to 690k EUR



Benefit of increased employment from 3.3mil to 4.8mil EUR



Energy, material and emission savings from 3mil to 11.6mil EUR



**Aesthetic value**, lower load on ecosystems, health benefits ? EUR



# | Indirect costs of DRS



Net influence on separate collection from 4.1mil to 10.7mil EUR



Reduced comfort of consumers from to 13.8mil to 21.4mil EUR

## | Status quo

- Analysis published in November
- Preparation of legislation (participation in the working group)
- Meetings between stakeholders and government
- Public discussion

# I Public discussion raised also other arguments against DRS...

- Separation of other plastics will decrease
- EPR costs will increase
- Use of PET and cans will decrease
- Promotion of glass or refillable bottles would be better solution
- Frauds with empty PET bottles
- DRS is for rich countries

# | Thank you for your attention

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