



ENSURING THAT POLLUTERS PAY

Deposit Refund Schemes

This factsheet captures some examples of deposit refund schemes in place in the EU. See the EU polluter pays Member State factsheets for more examples of other polluter pays instruments in each Member State.

BULGARIA

PACKAGING EPR TAX

Extended Producer Responsibility (EPR) for packaging waste has been in existence in Bulgaria since 2004. The packaging tax should ensure the packaging waste treatment activities (separate collection and recovery of at least 60% of the material, incl. recycling of at least 55%¹) and is applied to **producers and importers of packaged goods based on the amount (kilogram) of material they place on the Bulgarian market.**

How it works

The producers/importers have the possibility to undertake their responsibilities² for the achievement of recycling and recovery targets individually (through the establishment of take back or deposit systems for used packaging) or by participating in collective schemes, operated by Packaging Recovery Organizations (PRO). **Otherwise, producers should pay EPR tax (i.e. product tax) directly to EMEPA which is on average 10 times higher than the PROs tariffs³** (Figure 3). However, when it comes to plastics, a producer owes a fee of 1.19 EUR/kg to EMEPA, whereas the tariff of a PRO could be 0,06 EUR/kg (approx. 20 times lower).

Thus, the obliged entities are stimulated to participate in the collective systems (i.e. to become members of a PRO) which turned out to be the only effective way for the recycling targets to be achieved. According to

the legislation, in order to maintain their legal license to operate, each PRO is required to collect, sort and recycle at least 60% of all packaging its clients placed on the market. With the collected EPR tax, PROs cover the full costs for the separate collection and transportation of packaging waste, as well as for organizing the recovery and recycling activities. No additional funding is provided by the municipalities, which practically hold the responsibility of establishing the separate collection mainly by providing collection points (municipal territory) and concluding contracts with PROs. Currently, there are 6 PROs operating in Bulgaria with coverage of 90% of the population⁴.

Taxes collected by EMEPA in 2019 account for approx. 290 000 EUR. The revenues are used for investments of environment-related projects and practically do not provide funding for operations within the packaging waste management system. In this sense, product tax collected by EMEPA could be considered as a penalty imposed on the obliged entities for non-achievement of recycling and recovery targets for packaging waste.

What is the impact

According to the [data published by the MoEW](#), the total amount of recycled packaging in 2019 is 406 227 tonnes which represents **66% recycling rate**, based on the quantities of packaging placed on the market (Figure 4). The reported results are based only on the collection and recycling activities implemented by the PROs.

Packaging tax EUR/kg, 2019

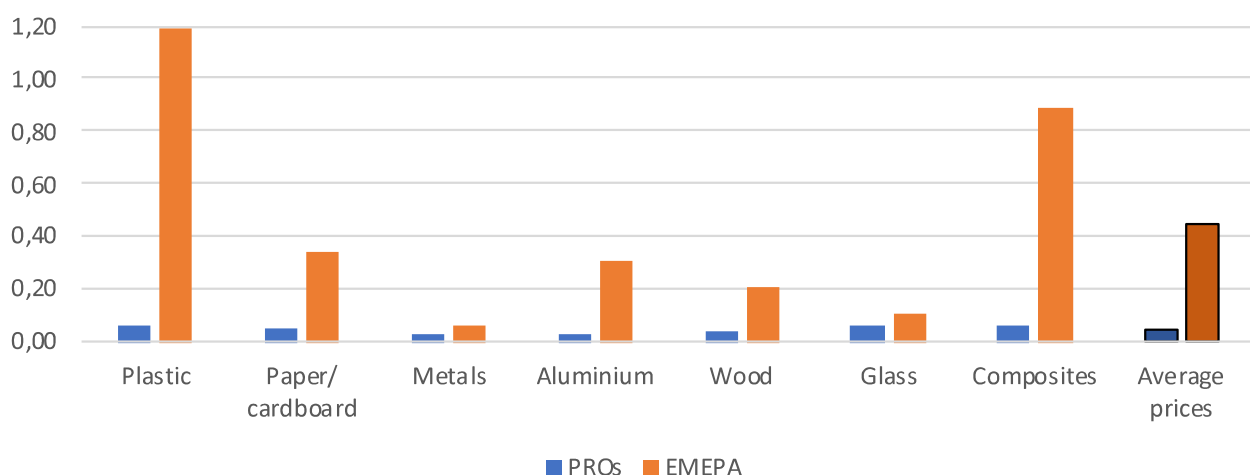


Figure 3 Differences in the PROs' and EMEPA's packaging tariffs (2019)

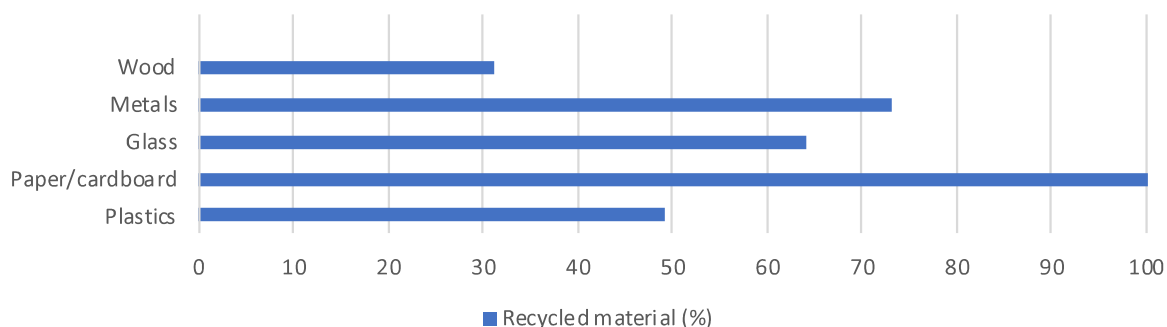


Figure 4 Packaging recycling rates (%), 2019, MeEW

Through the taxes collected by EMEPA for the period 2018 and 2019 were funded approx. 40 municipal projects related to the construction of integrated systems for waste treatments, as well as projects for recultivation of landfills.

Stakeholder involvement

The common agreement on the establishment of EPR system (related to the Packaging Directive 94/62/EC) was achieved in 2003 and 2004 during an intensive discussion with representatives of the industry. However, the business associations (e.g. Bulgarian Industrial Association, Bulgarian Chamber of Commerce, Branch Association Polymers) did not support the approach proposed by MoEW with arguments regarding the high recycling targets set, as well as the insignificant role of the municipalities for financing and organization of the packaging waste management system. Over the years, round tables and other discussion forums on the

EPR have been organized at the initiative of Bulgarian Industrial Association. Subsequently, in 2015 business representatives (incl. Recycling Industry Association) had once again expressed their view on the proposed new Regulation for determining product tax within the public consultation process (the documentation [was published](#) on the Council of Minister's Portal for public consultations). The main issue was related to the lack of economic justification on the proposed product taxes amounts.

Nevertheless, in the implementation of their duties, PROs interact with various stakeholders such as producers and importers of packed goods, state and local authorities, waste management companies, recycling facilities and citizens. Moreover, the enterprises (placing packaged products on the market) are directly involved in the PROs' management, as shareholders⁵.



FINLAND

THE DRS/PACKAGING TAX SYSTEM

Most beverage manufacturers and importers are members of return systems managed by Suomen Palautuspakkaus Oy, or Palpa. By becoming members of Palpa's return systems, beverage manufacturers and importers are exempted from the beverage packaging tax. There are 200 manufacturers funding the system through membership fees and packaging recycling fees. The producer of beverages can decide if they want to be part of Palpa's return system scheme or pay packaging tax. For small producers it is cheaper to pay beverage tax and not be a member of Palpa.

What it does

In 2016, the deposit system achieved a total return rate of 92%, with individual material return rates at 96% for cans, 92% for PET and 88% for glass. The DRS/packaging tax system has received a lot of praise but a potential improvement would be to expand the DRS to other products as well, but this has been currently deemed too expensive.

How did it come about

The deposit system for glass bottles started in 1952 as part of the arrival of Coca-Cola at the Helsinki Olympics and has then expanded over the years to other materials.



THE NETHERLANDS

DEPOSIT SYSTEM ON SMALL BOTTLES

In July 2021, a deposit on small plastic bottles will be introduced in the Netherlands. For large bottles (> 0,75 litre) and returnable beer bottles, a deposit system already exists, but smaller plastic bottles were exempt. Consumers will have to pay a fee of € 0.15, which is reimbursed when the bottle is returned through so called reverse vending machines or over the counter.

What it does

Introducing a deposit is expected to reduce the amount of plastic bottles in litter by 70% to 90% (CE Delft 2017)⁶. Consumers will have an incentive to bring back the bottles instead of littering. Furthermore, bottles still being littered may be picked up by scavengers and handed in. The reduction range emerges from physical counts in the USA in the 70s and 80s, estimates based on a 2001 questionnaire in the Netherlands, and recent analysis of the share of cans in litter in Denmark. In addition, introducing a deposit-refund scheme will lead to an expected increase in PET recycling of 6.6-7.6 Kton. In addition, the quality of the recyclate will increase, as the collected bottles will not be polluted with other plastics.

How it came about and stakeholder engagement

The debate on deposit-refund schemes for plastic bottles has a long history in the Netherlands with strong debates on expanding the system with small bottles and cans, and discussions/developments to abolish the system for large bottles.

A major driver for expanding the system was the petition in 2017 from the artist, environmentalist and 'Plastic Soup Surfer' Merijn Tinga, which was presented to the Dutch House of Representatives. The petition, signed by more than 55,000 people, requested the ministry to reduce litter from small plastic bottles by 90% in the next three years. The petition was endorsed by Parliament and as a result, the ministry announced it would develop measures.

In 2018, an agreement between the State Secretary of Infrastructure and Water Management, the business community and the Association of Netherlands Municipalities VNG was made which aimed to achieve a 70-90% reduction of littering and a recycling rate of minimal 90%. If these targets would not be met, a deposit system would be introduced.



ROMANIA

DEPOSIT-REFUND SYSTEM



Several requirements regarding the application of deposit-refund system for reusable packaging were integrated in the Romanian legislation starting with 2019. The deposit-refund system is 0.5 RON (~ 0.1 EUR) per reusable primary packaging with volumes between 0.1 l and 3 l, used for products intended for human consumption.

The definition and the establishment of the deposit-refund system for non-reusable packaging are in development, so that in December 2020 public consultations and debates took place on the Government Decision to be approved at the end of this year.

The project mentions that a guarantee of 0.5 RON (~0.1 euro) for each type of packaging made of glass, plastic or metal, with volumes between 0.1 l and 3 l (which are used for placing on the national market different beverages such as beer, alcoholic beverage mixes, cider, other fermented beverages, juices, nectars, soft drinks, mineral waters and drinking water of any kind, wines and other alcoholic drinks).

What it does

Through this deposit-refund system, the environmental authorities aim to **increase the level of waste collection to 90%**.

According to the system defined by the draft of Government Decision, the quantities of non-reusable packaging waste returned to stores will then be transported to regional sorting centres and then to recyclers.

The entire in-store waste collection infrastructure will be organized by a single system operator, as in the states where the system is already implemented. This operator will be a non-profit entity in which that will include producers or their representatives, but also retailers.

The Government Decision will enter into force on January 1, 2021 and stipulates that the entire infrastructure will be completed within one year from the date of selection of the national system operator.

Beverage packaging that will be subject to the deposit-refund system in Romania, recently put up for public debate, will no longer have to be declared to the Environmental Fund Administration (AFM) and will no longer be subject to recycling targets.

How did it come about

The national policy in the field of waste management in Romania must subscribe to the objectives of the European policies regarding the prevention of waste generation and should aim to reduce resource consumption and practical application of the waste hierarchy.

According to the “Study on the evaluation of the deposit-refund system, part of the waste management system in Romania”, elaborated by the Academy of Economic Studies in Bucharest in 2020, approximately 5.2 million tons of municipal waste are collected in Romania. More than 86% of the waste collected is disposed to landfill and only 13% of the total amount of waste is recycled. Due to the low recycling rate the deposit-refund system enhances the recycling and recovery waste in

Romania. The implementation of this system aims to substantially increase the recycling rate of packaging in Romania.

The decision to implement this system is based on studies, analyses and consultations with stakeholders in several relevant conferences.

Stakeholder involvement

Several consultations and conferences have taken place over time that integrated stakeholders and their needs in establishing the most feasible approach to a deposit-refund system for non-reusable primary

packaging. According to the national legal requirements, after publication, the draft of Government Decision was publicly debated, receiving comments and proposals for amendment from various stakeholders.

The comments and proposals are all accessible here: <http://www.mmediu.ro/articol/mmap-supune-dezbaterii-publice-proiectul-de-hg-pentru-stabilirea-sistemului-de-garantie-returnare-pentru-ambalaje-primare-nereutilizabile/3799>

The evaluation of the instrument will be done gradually, so that after one year from the implementation of the system, it will be adjusted if necessary.

¹ According to the recovery and recycling targets for packaging waste set in the Directive on packaging and packaging waste 94/62/EC, transposed into the Bulgarian legislation via the Waste Management Act and Regulation on packaging and packaging waste.

² Waste Management Act, art. 7.

³ Tariffs submitted to EMEPA are outlined in MOEW's Regulation for determining product taxes, whereas tariffs for participating in collective systems are defined by each respective PRO (example). PROs' prices may vary with a maximum of 20% difference.

⁴ According to "Market share and minimum current population of the recovery organizations", MoEW, 2020

⁵ Information on the shareholders of the leading PRO in Bulgaria Ekopak (ca. 40% market share) can be found [here](#).

⁶ CE Delft 2017: Kosten en effecten van statiegeld op kleine flesjes en blikjes. Geert Bergsma Ellen Schep Geert Warringa. Delft, augustus 2017



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