DEPOSIT-REFUND SYSTEMS FOR ONE-WAY BEVERAGE PACKAGING IN EUROPE

THE CASE OF LITHUANIA

JANUARY 2019
DESCRIPTION OF THE SYSTEM

BACKGROUND FOR INTRODUCING THE SYSTEM

The DRS for one-way beverage containers of glass, metal and plastic materials was introduced on 1 February 2016. Until then, a deposit was applied only to refillable glass containers used for beer, alcoholic beverages, soft drinks, mineral water, and juice. As of 2016, both systems for refillable and non-refillable beverage containers exist in parallel.

The incentive to introduce the system was grounded in the increasing environmental pollution by one-way containers, especially those of beverages. Additionally, it has been noted that separate waste collection as well as separation of recyclable waste from the municipal waste stream was not efficient enough. In 2013, only 53.8% of packaging waste was collected for recycling which meant the recycling target of 60% was not reached.

Having analysed the successful implementation of a DRS in other EU countries and having noticed its benefits – notably reduced littering, as well as facilitation of the collection of high-quality recyclable material – the Lithuanian government decided to introduce it in Lithuania as well.

The beverage industry welcomed the initial decision of the government. For instance, the Association of the Beer Industry noted that they perceive a DRS as the cheapest option for their industry and that this system has the potential to be more effective than a container-based collection. The DRS is seen as complementary to a container-based system and as beneficial in terms of speeding up the recycling process, as only less than 25-30% of beverage containers were collected through the container-based system. One of the biggest beer producers in the country also expressed their support for the introduction of the system as they saw it as an investment into ecology, an aspect which was in line with the company’s identification as being socially responsible.

General opinion polls were conducted and showed that the majority of the public was in favour of DRS. 67% of citizens noted their support for the extension of the existing DRS for glass bottles to also include

---

1 Government of the Republic of Lithuania – Lietuvoje siūloma įdiegti vienkartinių pakuočių užstato sistemą (In Lithuania, it is proposed to install a one-time packaging collateral system). 2014 [website]
2 Lrt.lt – Užstatas už bet kokią tarą taps įprastas (The security for any container will become routine). 2014 [website]
4 UTEÑOS - R. Viršilas: Užstato sistema išvalys miškus nuo butelių (The deposit system will clear forests from bottles). 2015 [website]
other one-way beverage containers into the system\textsuperscript{5}.

However, “Žaliasis taškas” (Green dot) – the biggest organisation responsible for recycling the packaging materials of consumer goods expressed their opposition to the introduction of the DRS. The organisation noted that the DRS would only concern 15% of all the packaging (whose collection would improve significantly) but the remaining packaging collection would be negatively impacted. Additionally, the organisation noted that with the introduction of the DRS the cost of the management of packaging waste would increase. Therefore, it advocated for further expansion of the separate collection system based on bring-points instead of the introduction of a DRS\textsuperscript{6}.

In 2017, the Lithuanian Parliament considered a suggestion to expand the DRS to include all kinds of alcoholic beverages\textsuperscript{7}. This suggestion was met with a strong opposition from the producers, noting that such expansion would mean that around 84% of glass containers currently covered by separate collection would be transferred to the DRS. As a result, collective glass containers would become nearly redundant because of inefficiency and high cost\textsuperscript{8}.

**LEGAL BASIS, SCOPE, AND TARGETS. LINKS TO OTHER POLICIES OR INSTRUMENTS**

The main piece of legislation related to the DRS in Lithuania is the Law on Packaging and Packaging Waste\textsuperscript{9}. Following necessary amendments, on 1 February 2016 a DRS for disposable packaging has been introduced, requiring producers and importers to charge a fixed deposit if:

- a. They put on the Lithuanian market alcoholic (beer, fruit wine, beer or wine cocktails) and non-alcoholic beverages (soft drinks, water, kvass, juices, and nectar);

- b. These drinks are filled in primary one-way glass, plastic or metal containers;

- c. These packages are in volume of more than 0.10 l but less than 3 l.

An exception is made and deposit is not charged if the products comprise wine-based drinks contained in one-way glass packaging – these have to be thrown away in the regular glass containers (if packaged in plastic or metal containers then the deposit applies to them). Further exception is made to products which are transported or exported from Lithuania by companies or through third persons and which are subject to the deposit system, since in this case packaging waste will accumulate in another country and producers and importers will not have possibilities to return the charged deposit fee. An exception also applies to products sold to operators or users of air, water, road, and railway transport vehicles under the Lithuanian jurisdiction, which transport passengers by international routes, if such drinks are meant to be sold to and/or consumed by passengers of transport vehicles.

The deposit value for packaging (both one-way and refillable) is approved by the Ministry of Environment, upon consultation with the deposit system operator. The deposit value is established on a yearly basis. As of October 2015, the approved value for all packaging subject to deposit is 0.10 EUR.

The targets were set for the period from 2016-2020 by the Lithuanian Government. For the first year of

---

\textsuperscript{5} Lt.Lt. – Tyrimas: dauguma gyventojų – už vientarinį pakuotę užstatą (Survey: most residents - for a one-time pledge deposit). 2013 [website]

\textsuperscript{6} Lt.Lt. – Tyrimas: dauguma gyventojų – už vientarinį pakuotę užstatą (Survey: most residents - for a one-time pledge deposit). 2013 [website]

\textsuperscript{7} Law IX-517 – PAKUOČIŲ IR PAKUOČIŲ ATLEIKŲ TVARKYMO ĮSTATYMO NR. IX-517 11 STRAIPSNIO PAKEITIMO (Packaging and packaging waste management law no. IX-517 amendment to article 11) [website]

\textsuperscript{8} Prime Minister, Minister of the Environment, Minister of Economy, and Minister of Finance – Kreipimasis del vientarinį pakuotę užstatą sistemos plėtros pagrįstumo (Applying for the reasonableness of the development of a one-time security deposit system). 2017 [report]

\textsuperscript{9} Law IX-517 – PAKUOČIŲ IR PAKUOČIŲ ATLEIKŲ TVARKYMO ĮSTATYMO NR. IX-517 11 STRAIPSNIO PAKEITIMO (Packaging and packaging waste management law no. IX-517 amendment to article 11) [website]
introduction (2016), the goal was to collect 55% of all the one-way containers that were released in the internal market. For the following years the targets were increased: 2017 - 70%; 2018 – 80%; 2019 – 85%; 2020 – 90%. The same targets are set for all types of containers (glass, plastic, and metal)\(^{10}\).

The Law on Packaging and Packaging Waste establishes that producers and importers are responsible for the packaging waste resulting from the goods placed on the market. They shall organise separate collection of all packaging waste resulting from the goods placed on the Lithuanian market and/or participate in such packaging management in the waste management systems established by the municipalities. In case producers and importers place goods packaged in one-way packaging subject to a deposit, they shall participate in the DRS.

The general packaging waste is managed by three EPR companies: “Žaliasis taškas” (Green dot), “Pakuočių tvarkymo organizacija” (Package management organization) and “Gamtos ateitis” (The future of the nature)\(^{11}\)\(^{12}\). There is a separate DRS for refillable containers which are collected by fillers themselves (although RVMs accept refillable bottles but no deposit is refunded for them).

Additionally, Law on the Tax on Environmental Pollution foresees that producers and importers shall pay a pollution tax for polluting the environment with goods and/or packaging. An exception is granted on the basis of the proportion of fulfilled recovery and/or recycling target\(^{13}\). Additionally, producers and importers releasing less than 0.5 tonnes of packaging to Lithuanian market are also exempt from paying the tax. This exemption is not applied to one-way beverage containers subject to deposit and all reusable containers\(^{14}\).

Table 1: Environmental Pollution Tax, 2017\(^{15}\)

<table>
<thead>
<tr>
<th>Packaging type</th>
<th>Environmental Pollution Tax (EUR per tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>57</td>
</tr>
<tr>
<td>Plastic</td>
<td>521</td>
</tr>
<tr>
<td>PET</td>
<td>579</td>
</tr>
<tr>
<td>Composite</td>
<td>579</td>
</tr>
<tr>
<td>Metal</td>
<td>753</td>
</tr>
<tr>
<td>Paper and cardboard</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>57</td>
</tr>
<tr>
<td>Wood</td>
<td>57</td>
</tr>
</tbody>
</table>

---

\(^{10}\) Government of the Republic of Lithuania – Specialistai aškina: užstatu už vienkartinės pakuotes sistema (Experts explain: a system of security for disposable packaging). 2016 [website]

\(^{11}\) Aplinkos apsaugos agentūra - Gamintojų ir importuotojų organizacijų užimamos pakuočių rinkos dalys (Package market shares held by producer and importer organisation) [website]

\(^{12}\) Annex 1 lists more information with regards to changes in volumes of packaging released and collected by two of the PROs as well as the set fees for producers

\(^{13}\) Law No VIII-1183 – Law on pollution tax. 1999 [website]

\(^{14}\) Law lx-517 – PAKUOČIŲ IR PAKUOČIŲ ATLIJEKŲ TVARKYMO ĖSTATYMO NR. IX-517 11 STRAIPSNIO PAKEITIMO (Packaging and packaging waste management law no. lx-517 amendment to article 11) [website]

\(^{15}\) Government of the Republic of Lithuania – Apmokestinamosios pakuotės rūšys ir mokestlio tarifai 2017 m. (Taxable packaging types and tax rates in 2017) [website]
SYSTEM FUNCTIONING, ROLES AND RESPONSIBILITIES OF MAIN STAKEHOLDERS

Deposit operator

Since February 2016, officially there are two DRS operators: “Užstato sistemos administratorius” (USAD) and “Užstatas”. However, the later one has not yet initiated its activities and USAD is de facto the only DRS operator in the country.

USAD is a non-for-profit organisation whose objective is to manage the deposit system, starting with collection of the packaging waste and ending with it being recycled, as indicated in the Law on Packaging and Packaging Waste. Its founding members are large beverage producers: the Lithuanian Association of Breweries; the Association of Lithuanian Trade Enterprises; and the Lithuanian Natural Mineral Water Manufacturers’ Association. Combined, the founding organisations are responsible for more than 80% of total beverage containers released on the Lithuanian market.

Upon the establishment of the operator, each founding partner contributed with the amount equal to 14,481 EUR. These companies also guaranteed USAD loans to banks. Initial investment to the DRS system reached 29 million EUR: 22 million EUR were allocated to developing a network of RVMs and 7 million EUR were invested in the counting and storing centre near Vilnius. The counting centre, rented by USAD, is used for gathering all collected beverage packaging and preparing it for recycling. Out of the 7 million EUR, 4 million EUR were invested into real estate and infrastructure and 3 million EUR in sorting equipment as well as computer software used in the counting centre.

Main responsibilities and tasks of USAD are:

- Supplying the means of collection to retailers;
- Reimburse collection costs to retailers;
- Taking care of transporting the collected packaging to the counting centre;
- Taking care of the inspection and preparation of the packaging for processing at the counting centre;
- Selecting processors for recycling the collected packaging;
- Managing accounting and the flow of the deposit, obtaining this from producers and paying it to the retailers that collect the packaging;
- Supervising implementation of the tasks prescribed to producers for the management of packaging waste;
- Conducting educational activities with regards to the DRS and management of packaging waste.

USAD concludes contracts with producers subject to deposit obligations. Contracts include procedures for the administration of deposits, the submission of reports and information, the registration of products, and the obligations of USAD for carrying out tasks related to the management of packaging waste.

16 USAD – Home [website]
17 USAD – Užstato UI vienkartinės pakuotes sistemos FINANSAVIMO SCHEMA 2016 - 2018 metams [Funding scheme for the security system for loading packages for 2016-2018]. 2015 [report]
18 USAD – Lietuvoje įrengs taromatų tinklą už 22 mln. EUR [Lithuania will install a network of customers for 22 million EUR]. 2015 [report]
Fulfilling its obligation to supply the means of collection to retailers, USAD coordinated the instalment of 1,000 RVM before the introduction of the DRS (750 in 2015, 250 until 1 February 2016)\(^{19}\). The installed RVMs are owned by their manufacturer, who is also responsible for their maintenance and repair. USAD compensates the manufacturer of the RVMs based on the total number of returned one-way packaging via RVMs. For the initial period 2016-2018, the compensation was set at 0.01632 EUR per each packaging irrespective of the packaging type and actual expenses of the manufacturer\(^{20}\). Additionally, USAD is responsible for supplying other collection means for retailers (special collection bags, stickers, and bag sealers).

Table 2: Collection costs (in EUR)

<table>
<thead>
<tr>
<th></th>
<th>2016(^{21})</th>
<th>2017(^{22})</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVM related costs</td>
<td>5,994,019</td>
<td>7,646,614</td>
</tr>
<tr>
<td>Other collection means</td>
<td>776,685</td>
<td>637,053</td>
</tr>
</tbody>
</table>

The transportation from the retailer to the counting centre and from the counting centre to the recycler is organised by USAD who hires necessary vehicles to perform this task.

Table 3: Transportation costs

<table>
<thead>
<tr>
<th></th>
<th>2016(^{23})</th>
<th>2017(^{24})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation from retailers to counting centre</td>
<td>1,867,926</td>
<td>2,307,243</td>
</tr>
<tr>
<td>Transportation from counting centre to recycler</td>
<td>141,051</td>
<td>no data</td>
</tr>
</tbody>
</table>

Costs related to the system are financed by unredeemed deposits, producers’ fee and the income from selling the materials.

Table 4: Total income 2016-2018 (in million EUR)

<table>
<thead>
<tr>
<th></th>
<th>Total 2016(^{25})</th>
<th>Total 2017(^{26})</th>
<th>Total 2018(^{27})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unredeemed deposits</td>
<td>14.38</td>
<td>4.73</td>
<td>4.05</td>
</tr>
<tr>
<td>Administrative fees collected from producers</td>
<td>1.43(^{28})</td>
<td>14.40</td>
<td>13.23</td>
</tr>
<tr>
<td>Sold material</td>
<td>4.72</td>
<td>7.33</td>
<td>6.58</td>
</tr>
<tr>
<td>Total</td>
<td>20.53</td>
<td>26.46</td>
<td>23.86</td>
</tr>
</tbody>
</table>

\(^{19}\) USAD – Užsūtija už vienkartines pakuoses sistemos FINANSAVIMO SCHEMA 2016 - 2018 metams METINĖ ATASKAITA UŽ 2016 METUS (Funding scheme for the security system for loading packages for 2016-2018 ANNUAL REPORT FOR 2016). 2017 [report]

\(^{20}\) USAD – Užsūtija už vienkartines pakuoses sistemos FINANSAVIMO SCHEMA 2017 - 2019 metams (Funding scheme for the security system for loading packages for 2017-2019). 2017 [report]

\(^{21}\) USAD – Užsūtija už vienkartines pakuoses sistemos FINANSAVIMO SCHEMA 2016 - 2018 metams METINĖ ATASKAITA UŽ 2016 METUS (Funding scheme for the security system for loading packages for 2016-2018 ANNUAL REPORT FOR 2016). 2017 [report]

\(^{22}\) USAD – Užsūtija už vienkartines pakuoses sistemos FINANSAVIMO SCHEMA 2017 - 2018 metams METINĖ ATASKAITA UŽ 2017 METUS (Funding scheme for the security system for loading packages for 2017-2018 ANNUAL REPORT FOR 2017). 2018 [report]

\(^{23}\) USAD – Užsūtija už vienkartines pakuoses sistemos FINANSAVIMO SCHEMA 2016 - 2018 metams METINĖ ATASKAITA UŽ 2016 METUS (Funding scheme for the security system for loading packages for 2016-2018 ANNUAL REPORT FOR 2016). 2017 [report]

\(^{24}\) USAD – Užsūtija už vienkartines pakuoses sistemos FINANSAVIMO SCHEMA 2017 - 2018 metams METINĖ ATASKAITA UŽ 2017 METUS (Funding scheme for the security system for loading packages for 2017-2018 ANNUAL REPORT FOR 2017). 2018 [report]


\(^{26}\) USAD – Užsūtija už vienkartines pakuoses sistemos FINANSAVIMO SCHEMA 2017 - 2018 metams METINĖ ATASKAITA UŽ 2017 METUS (Funding scheme for the security system for loading packages for 2017-2018 ANNUAL REPORT FOR 2017). 2018 [report]

\(^{27}\) USAD – Finansinis skaidrumas (Financial Transparency) [website]

\(^{28}\) From 1 February 2016 until 31 October 2016, producer fees were set at 0.00 for each packaging material type. Between November 1 and December 31 2016, producer fees are set accordingly: PET – 0.025; Metal (steel) – 0.025. Packaging from PET and glass were except from producer fees during that period. Zero tariffs were set before the introduction of the system. At that time, USAD had contracts signed with 8 companies. As the nearly 300 additional contracts were signed until the end of 2016, tariffs were recalculated.
The DRS operator also has to carry out public information and awareness raising campaigns. To fulfil this obligation, it has to spend no less than 1% of total yearly revenue\textsuperscript{29}. The campaign of USAD focuses on three pillars\textsuperscript{30}:

- Continuously inform the public about the waste management system in the country, including the DRS. Inform them about the changes and modification in the waste management sector that are influenced by the DRS.
- Encourage the public to participate in the DRS as actively as possible. Explain their role in the system and system set-up; highlight not only the practical (monetary) benefits for the citizens, but also the benefits for the environment (cleaner environment, amount recycled, etc.)
- Educate the public about the necessity to recycle waste, by informing them about the waste recycling in general and the DRS in particular as well as emphasise the role of the public in the functioning of system.

To achieve the communication aims, visual materials adapted for different age groups, as well as other informational materials, are developed and disseminated through various channels (TV, radio, press, etc.).

Producers

Apart from being obliged to charge a deposit and refund it to the retailers, producers and importers are responsible for labelling their goods in accordance with the requirements foreseen in the Law on Packaging and Packaging Waste. Each marketed packaging has to be labelled with a barcode that identifies the producer as well as the appropriate deposit mark\textsuperscript{31}.

Other obligations include:

- Indicating the product price and value of the packaging deposit in the relevant accounting documents.
- Delegating organisation of the deposit system for one-way packaging to its administrator.
- Covering the costs of participating in the deposit system that relate to management of one-way packaging waste collected under the system and its administration.

Producers shall pay administrative fees to the DRS which can be recalculated on a yearly basis. In addition, they shall pay: 1) one-time registration fee (50 EUR); 2) one-time packaging registration fee (35 EUR) to the DRS.

\textsuperscript{29} Law Ix-517 – PAKUOČIŲ IR PAKUOČIŲ ATLIEKŲ TvARKYMO ĖStatymo Nr. Ix-517 11 Straipsnio Pakeitimo [Packaging and packaging waste management law no. Ix-517 amendment to article 11] [website]

\textsuperscript{30} USAD – Home [website]

\textsuperscript{31} USAD – Gamintojams ir importuotojams (Manufacturers and importers) [website]
Table 5: Producers fees (as of 1 January 2018)

<table>
<thead>
<tr>
<th>Per year per Packaging type</th>
<th>PET</th>
<th>Aluminium</th>
<th>Steel</th>
<th>Glass</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016(^{34})</td>
<td>0.025</td>
<td>-</td>
<td>0.025</td>
<td>-</td>
</tr>
<tr>
<td>2017</td>
<td>0.03</td>
<td>0.015</td>
<td>0.03</td>
<td>0.025</td>
</tr>
<tr>
<td>2018</td>
<td>0.03</td>
<td>0.011</td>
<td>0.03</td>
<td>0.04</td>
</tr>
</tbody>
</table>

As reusable packaging is also accepted in the reverse vending machines, producers of reusable containers shall pay 0.0175 EUR per each packaging collected via a RVM to the DRS.

Retailers

Retailers of one-way packaging are obliged to accept packaging waste subject to a deposit and return the deposit, irrespective of whether they sell products in identical packaging. Initially, this obligation was not applied to retailers when their retail area does not exceed 300m\(^2\) with the exception of merchants who trade from village and town shops with a retail area not exceeding 90m\(^2\), a department store, a kiosk, a gas station or a public catering establishment. However, on 12 October 2017, the Lithuanian Parliament adopted changes related to the DRS and decided to expand it by obliging more food stores to take part in it. Notably, the change has been made with regards to the size of the stores located in the small cities and countryside regions. With the adopted change, it is now shops with a retail area not exceeding 60m\(^2\) which will be exempted. The new legislation will come into force in May 2019. All other sellers of packaging are allowed to participate in the system on a voluntary basis.

Other obligations include:

- The collection shall be organised at the trading venues, or nearby sites that are no further than 150m away. The collection is organised during the same opening hours as those of the retailer.
- Retailers shall indicate the value of the deposit on the price tag of the product.
- Written information on how consumers can return refillable and one-way packaging shall be provided on a poster (at least A3 dimensions).

One-way packaging shall be accepted but the deposit shall not be refunded if:

- The container is not labelled with the deposit mark or the mark is not clearly visible;
- The container is not marked with a barcode or the barcode is damaged;
- The container is not completely empty;
- The shape of the container is damaged to the extent that it is not possible to identify it.

Retailers can collect empty packaging manually or with RVMs. The packaging legislation foresees that the DRS administrator is obliged to provide RVM to retailers. Each store can submit an application to receive an RVM at any time.

Large stores that collect a monthly average of 40,000 or more units of one-way packaging can be

---

32 Additional fees apply in case higher number of beverage packaging is collected over the last 12 months than that indicated by the producer.
33 USAD – Gamintojams ir importuotojams (Manufacturers and importers) [website]
34 Fees applied from 1 November 2016 until 31 December 2016
provided with the RVM model (T-9 model) that requires a special facility (with an area of at least 30 m²) where the collected packaging is automatically sorted, compressed, and stored. Medium-sized and smaller stores that collect a monthly average of 10,000-40,000 pieces of packaging under the deposit system can be provided with the RVM (T-63 model) that does not require any special facilities. It can be set up on or near a shop floor, requiring an area of at least 4 m². Packaging collected by the RVM is automatically sorted and compressed, and then moved from the shop to a place designated for storage.

In the beginning of 2018, there were a total of 2,713 collection points (RVMs and manual)\(^{35}\), of which 1,006 RVMs: 900 RVMs were owned by the RVMs manufacturer (compensated by USAD), 106 were owned by the retailers themselves\(^{36}\). Those retailers that purchased RVMs are compensated by USAD in the same manner as the RVMs manufacturer and thus receive 0.014 EUR for each packaging unit collected.

Additionally, the DRS operator pays handling remuneration to retailers based on the collection method.

**Table 6:** Handling remuneration fees as of 1 January 2018 (EUR/unit)

<table>
<thead>
<tr>
<th>Collection method</th>
<th>PET</th>
<th>Aluminium/Metal</th>
<th>Glass</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVM with compressor</td>
<td>0.0175</td>
<td>0.0137</td>
<td>0.0284</td>
</tr>
<tr>
<td>Manual collection/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RVM without compressor</td>
<td>0.0138</td>
<td>0.0118</td>
<td>0.0148</td>
</tr>
</tbody>
</table>

**Consumer**

Upon returning empty beverage container subject to deposit, the consumer can:

- Receive the deposit in cash or,
- Upon request, have a rebate to his purchase of goods or services equal to the amount of the deposit or,
- Upon request, make a donation to the beneficiaries cited in the Law of the Republic of Lithuania on Charity and Sponsorship, of an amount equal to the value of the deposit.

**Supervision**

The Ministry of Environment is the responsible institution regulating the DRS system in Lithuania. USAD is accountable to the Ministry of Environment and thus has to submit organisational, financial and public information plans as well as reports showing how those plans were executed.

---

35 USAD – Per 2 metus Lietuvos gyventojai pridėvė 1 mld. vienkartinių pakuočių (In 2 years, Lithuanians have given 1 billion disposable packaging). 2018 [website]
RESULTS

In the first year (2016) after the DRS has been introduced in the country, 455 million one-way beverage containers have been returned by the citizens, which represented more than 75% of quantities put on the market: 8,331 tonnes of plastic, 2,610 tonnes of metal and 5,422 tonnes of glass. As the collected material is pure, there is no contamination with other residues and all packaging collected under the DRS has been sent to recycling. The DRS operator sells the collected materials through an open-tender procedure to waste recyclers.

Over the second year (2017), 92% of all packages released into the market were collected through the DRS. It is estimated that, until the end of 2017, 538.5 million beverage containers were collected. According to containers’ categories, 51% of those collected are beer bottles and cans, 21% are of soft drinks, mineral and table water, and the remaining 8% consist of light alcohol drinks, juices, energy drinks, etc.

The results achieved far exceed the target that Lithuanian Government has set for the system. The target for 2017 was to collect 65% of containers released to the market. It has been foreseen that the system will exceed 90% only after 2020. However, seeing the success of 2017, USAD expects that, in 2018, 93% of beverage containers participating in the scheme will be collected.

The introduction of the DRS resulted in nearly 8% increase in recycling of three materials: glass, plastic (PET), and metal. The recycling rates of plastic increased the most of the three materials, from 54.8% to 74.4%.

Table 7: Released and collected packaging waste by PROs and deposit-return operator (2017)

<table>
<thead>
<tr>
<th></th>
<th>PET</th>
<th></th>
<th></th>
<th>Metal</th>
<th></th>
<th></th>
<th>Glass</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Released</td>
<td>Collected</td>
<td>%</td>
<td>Release</td>
<td>Collected</td>
<td>%</td>
<td>Released</td>
<td>Collected</td>
</tr>
<tr>
<td>Žaliasis taškas</td>
<td>2243</td>
<td>122</td>
<td>50.02</td>
<td>7017</td>
<td>3922</td>
<td>55.89</td>
<td>35791</td>
<td>23449</td>
</tr>
<tr>
<td>PTO</td>
<td>1141.6</td>
<td>563.8</td>
<td>49.39</td>
<td>4077.5</td>
<td>2417.7</td>
<td>59.29</td>
<td>21455.8</td>
<td>11526.6</td>
</tr>
<tr>
<td>Gamtos ateitis</td>
<td>1.81</td>
<td>14.33</td>
<td></td>
<td>37.11</td>
<td>20.48</td>
<td></td>
<td>54.18</td>
<td>296.98</td>
</tr>
<tr>
<td>USAD</td>
<td></td>
<td></td>
<td>9246</td>
<td></td>
<td>9347</td>
<td></td>
<td></td>
<td>8348</td>
</tr>
</tbody>
</table>

37 USAD – Vienu metu su užsaito sistema: grąžinta 455 milijonai pakuotų (One year with deposit system: 455 million packs returned). 2017 [website]
38 USAD – Informacija Savivaldybėms (information for Municipalities). 2017 [report]
39 USAD – For Waste Processors [website]
40 USAD – Per 2 metus Lietuvos gyventojai pridavė 1 mlrd. vienkartinių pakuotų (In 2 years, Lithuanians have given 1 billion disposable packaging). 2018 [website]
41 Verslo žinios – Lietuviai butelius grąžina taip uolai, kad jau pavijome Skandinaviją (Lithuanians are returning the bottles so zealously that we’ve already converted Scandinavia) [website]
42 Verslo žinios – Lietuviai butelius grąžina taip uolai, kad jau pavijome Skandinaviją (Lithuanians are returning the bottles so zealously that we’ve already converted Scandinavia) [website]
43 ŽALIASIS TAŠKAS - VEIKLOS ORGANIZAVIMO PLANAS FINANSAVIMO SCHEMA ŠVIETIMO PROGRAMA 2017 METŲ ATASKAITA (ACTIVITY ORGANIZATION PLAN FUNDING SCHEME EDUCATION PROGRAM 2017 ANNUAL REPORT). 2017 [report]
46 15Min - Atliekų statistika: po 2017-ųjų pagalbos iš Lietuvos prašo net Francūzija (Waste statistics: after 2017, even France is asking for help from Lithuania) [website]
47 15Min - Atliekų statistika: po 2017-ųjų pagalbos iš Lietuvos prašo net Francūzija (Waste statistics: after 2017, even France is asking for help from Lithuania) [website]
48 Open Access Government – Recycling: Lithuania deposit system exceeds all expectations [website]
Table 8: Income of 2018 (in million EUR)\(^49\)

<table>
<thead>
<tr>
<th></th>
<th>PET</th>
<th>Aluminium</th>
<th>Steal</th>
<th>Glass</th>
<th>Total</th>
<th>In %(^50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unredeemed deposits</td>
<td>2.23</td>
<td>1.35</td>
<td>0.006</td>
<td>0.47</td>
<td>4.05</td>
<td>17</td>
</tr>
<tr>
<td>Producers fees</td>
<td>9.63</td>
<td>2.17</td>
<td>0.025</td>
<td>1.40</td>
<td>13.23</td>
<td>55</td>
</tr>
<tr>
<td>Sold material</td>
<td>2.39</td>
<td>3.88</td>
<td>0.002</td>
<td>0.30</td>
<td>6.58</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>14.26</td>
<td>7.39</td>
<td>0.032</td>
<td>2.18</td>
<td>23.86</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Expenses of 2018 (in million EUR)\(^51\)

<table>
<thead>
<tr>
<th></th>
<th>PET</th>
<th>Aluminium</th>
<th>Steal</th>
<th>Glass</th>
<th>Total</th>
<th>In %(^52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling remuneration for retailers</td>
<td>9.39</td>
<td>5.42</td>
<td>0.024</td>
<td>1.41</td>
<td>16.24</td>
<td>70</td>
</tr>
<tr>
<td>Transportation</td>
<td>2.10</td>
<td>0.485</td>
<td>0.002</td>
<td>0.548</td>
<td>3.14</td>
<td>14</td>
</tr>
<tr>
<td>Counting centre operation</td>
<td>2.12</td>
<td>1.30</td>
<td>0.006</td>
<td>0.215</td>
<td>3.64</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>13.61</td>
<td>7.20</td>
<td>0.032</td>
<td>2.17</td>
<td>23.02</td>
<td></td>
</tr>
</tbody>
</table>

An opinion survey conducted 6 months after the introduction of the DRS revealed that 78.2% of consumers describe the system as being “good” or “very good”. After the second year of operation, an opinion survey revealed that 97% of respondents think that the system is “necessary” or “very necessary”. An equal proportion of respondents noted that the system is “good” or “very good”\(^53\). When asked to describe the reasons for returning the empty beverage containers, the majority (73%) noted “less litter” as the main reason. 95% of respondents also noted that after the introduction of the DRS they see less litter. Additionally, 93% of participants pointed out that participating in the DRS system also contributes to the separation of other waste.

\(49\) USAD – Finansinis skaidrumas (Financial Transparency) [website]

\(50\) USAD – Finansinis skaidrumas (Financial Transparency) [website]

\(51\) USAD – Finansinis skaidrumas (Financial Transparency) [website]

\(52\) USAD – Finansinis skaidrumas (Financial Transparency) [website]

\(53\) Diena.it - Apklausa: lietuviui patenkinti užstato sistema (Poll: Lithuanians are happy with the deposit system). [website]
REFERENCES

Aplinkos apsaugos agentūra - Gamintojų ir importuotojų organizacijų užimamos pakuočių rinkos dalys (Package market shares held by producer and importer organisation) [http://atliekos.gamta.lt/cms/index?rubricId=cd1334bd-e9bf-4d8f-9432-cdf6fd35f29c] Accessed in December 2018


Law IX-517 – PAKUOČIŲ IR PAKUOČIŲ ATLIEKŲ TVARKYMO ĮSTATYMO NR. IX-517 11 STRAIPSNIO PAKEITIMO (Packaging and waste management law no. IX-517 amendment to article 11) [https://e-seimas.lrs.lt/portal/legalAct/It/TAK/59849920d35211e69c5d8175b5879c31?jfid=wny8ri1dr] Accessed in December 2018


Prime Minister, Minister of the Environment, Minister of Economy, and Minister of Finance – Kreipimasis dėl vienkartinių pakuočių užstato sistemos plėtros pagrįstumo (Applying for the reasonableness of the development of a one-time security deposit system). 2017 [http://www.lp.k.lt/wp-content/uploads/2017/03/LPK_D%4597-vienkartinių%5B3-pakuo%4D%5B3-\%5B3-u\%5B3Estatos sistemos-pl\%5B3pagr%4597tros-pagr%45AFstumo.pdf]


USAD – Finansinis skaidrumas (Financial Transparency) [http://grazintiverta.lt/verslui/finansinis-skaidrumas/] Accessed in December 2018

USAD – Home [http://grazintiverta.lt/verslui/] Accessed in December 2018

USAD – Gamintojams ir importuotojams (Manufacturers and importers) [http://grazintiverta.lt/verslui/gamintojams-ir-importuotojams/] Accessed in December 2018

USAD – Per 2 metus Lietuvos gyventojai pridavė 1 mldr. vienkartinių pakuočių (In 2 years, Lithuanians have given 1 billion disposable packaging). 2018 [http://grazintiverta.lt/2018/02/27/2018-02-22/] Accessed in December 2018

USAD – Vieneri metai su užstato sistema: grąžinta 455 milijonai pakuočių (One year with deposit system: 455 million packs returned). 2017 [http://grazintiverta.lt/2017/02/21/2017-02-21/] Accessed in December 2018


Verslo žinios – Lietuviai butelius grąžina taip uolai, kad jau pavijome Skandinaviją (Lithuanians are returning the bottles so zealously that we’ve already converted Scandinavia) [https://www.vz lt/paslaugos/2017/12/07/lietuviai-butelius-grazina-taip-uolai-kad-jau-pavijome-skandinavija] Accessed in December 2018

ŽALIASIS TAŠKAS – VEIKLOS ORGANIZAVIMO PLANAS FINANSAVIMO SCHEMA ŠVIETIMO PROGRAMA 2017 METŲ ATASKAITA (ACTIVITY ORGANIZATION PLAN FUNDING SCHEME EDUCATION PROGRAM 2017 ANNUAL REPORT). 2017 [http://www.zaliasistaskas lt/files/2017-metine-ataskaita/1_V%C5%A0%C4%AE_%C5%BDALIASIS_TA%C5%A0KAS_2017_met%C5%B3_veiklos_ataskaita. pdf]


Disclaimer
This country report is based on publicly available information gathered by ACR+ team and validated by Užstato sistemos administratorius (USAD).
Deposit-refund systems for one-way beverage packaging in Europe

This country report is part of a wider study of ten deposit-refund systems in Europe covering the following countries: Croatia; Denmark; Estonia; Finland; Germany; Iceland; Lithuania; the Netherlands; Norway and Sweden.

The full report is available for ACR+ members on www.acrplus.org.