

# Plastic Pollution Lobby

**A coalition against the introduction of a deposit  
return system in Austria**



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HOLDING  
**GRAZ**  
SERVICES

# 1. Executive summary

Plastic pollution represents a major problem for the environment and has enormous negative impacts on the oceans, rivers and other ecosystems. Austria is no exception; 1.6 billion plastic bottles are placed on the market every year, which equals to 181 plastic bottles per Austrian.<sup>1</sup> In terms of volume, PET bottles are responsible for the largest proportion of littered items frequently found in Austria's natural environment.<sup>2</sup>

The Austrian Federal Ministry of Climate Action and Environment is currently considering introducing a deposit return system (DRS) to achieve the new targets set out in the European Union's (EU) Single-Use Plastics (SUP) Directive to tackle plastic. A government-commissioned study recently confirmed that a DRS not only achieves the highest collection rate for plastic bottles but is also the most cost-effective option, ensures the best material quality for subsequent recycling and has the strongest anti-littering effect.

Yet a powerful coalition of companies – including retail giants REWE Group (Billa, Merkur, Penny, Bipa, etc.), Spar, Hofer and Lidl, as well as beverage companies including Brau Union, Spitz and Pfanner – are working to influence the government's decision against a DRS. They are orchestrating their lobbying efforts through the highly reputed Altstoff Recycling Austria AG (ARA), Austria's largest extended producer responsibility (EPR) organisation. A closer look at the complex corporate structure of ARA reveals that companies under the ARA umbrella have a position almost like that of owners, with legal powers that allow them to use ARA for their own interests. In this case, to lobby against DRS legislation that would reduce litter and increase plastic recycling rates in Austria.

ARA is fighting to maintain its influence, market pool position and a large chunk of its income: it is currently the biggest EPR organisation in Austria, handling over 70% of waste. Losses from licensing fees for plastic bottles alone are estimated to be €24 million. If cans or single-use glass were added, the amount would increase significantly. In addition, taking into account market growth in plastic bottles, without measures to further reduce plastic packaging, just the value of recycled polyethylene terephthalate (r-PET) collected through a DRS in 2029 could be worth around €64 million annually.<sup>3</sup>

This briefing explains why a DRS is the only legally, economically and environmentally sound method to implement the SUP Directive. It rebuts false claims put forward by the anti-deposit campaign and shows why other options to incentivise separate collection will not succeed in achieving the EU's goals.

A recent public opinion poll showed that 83% of Austrians support the introduction of a DRS, and 86% believe more needs to be done to address plastic pollution.<sup>4</sup> For all the reasons outlined above, it is crucial that the Austrian government puts in place a deposit return system for all single-use plastic bottles and other beverage containers. In addition, it should introduce measures to promote reuse, such as a specific sub-target for refillables. Such measures are backed by science and the public. They will increase reuse and recycling rates, reduce virgin plastic production, protect the environment and free up over €120 million of resources that are currently being spent on clean-ups.

## 2. Background

In 2019, the European Union (EU) adopted the Single-Use Plastics (SUP) Directive to tackle plastic pollution. The Directive addresses single-use plastic items through a range of policy measures to transition away from single-use plastics, such as bans on plastic cutlery and straws, and improved design, collection and labelling requirements. Two important goals are also

that 90% of all plastic bottles will need to be collected separately by 2029, and that beverage bottles will need to contain at least 30% recycled plastic by 2030.<sup>5</sup> These targets have to be seen in the context of its overall target recycling rate for plastic packaging: 50% by 2025 and 55% by 2030.<sup>6</sup>



### 3. Study on how to achieve the new target to collect plastic bottles

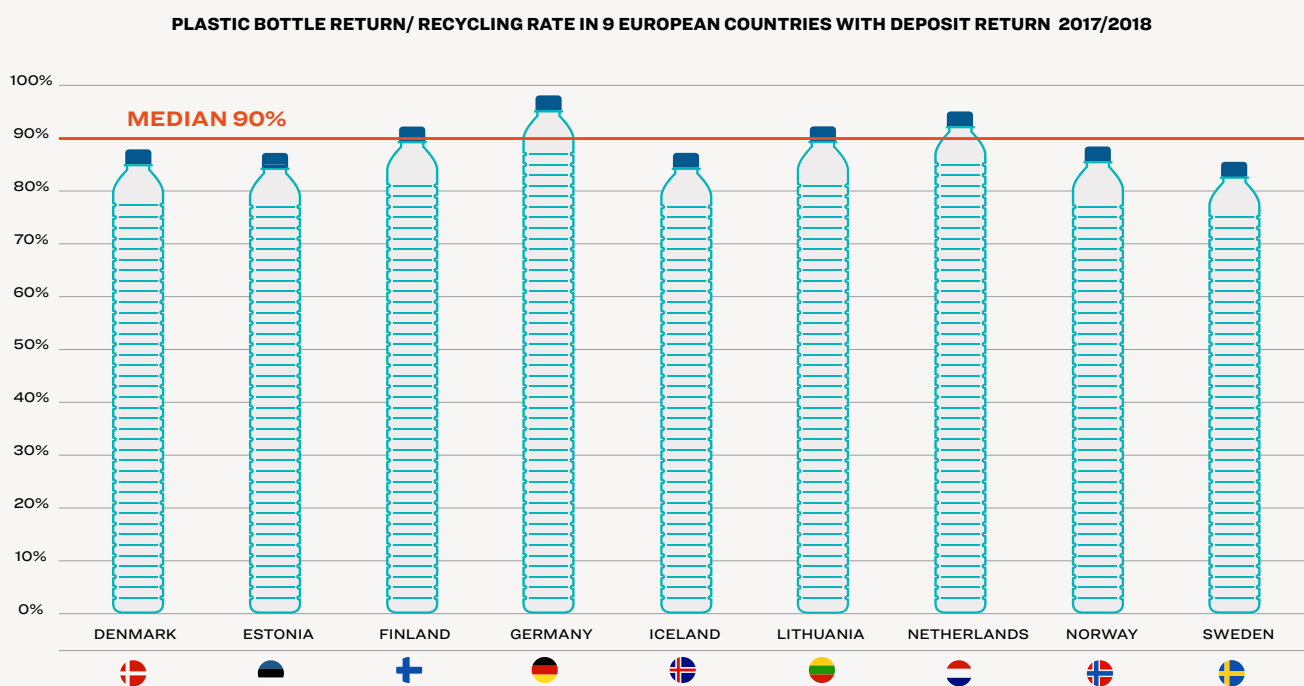
To identify the most effective method to implement this compulsory collection rate in Austria, the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) commissioned a study<sup>7</sup> comparing four different options:

1. better separate collection and additional collection from residual waste;
2. an improved method for separate collection and additional collection from residual waste;
3. deposit for <1 litre bottles, better separate collection and additional collection from residual waste; and
4. deposit on all plastic bottles.

#### 3.1. Ministry study identifies most effective method to achieve EU plastic targets

The wide-ranging study overwhelmingly concluded that option 4 was the best and most economical solution. It found that, compared to the current situation (which achieves a rate of 70% of separate collection)<sup>8</sup> and the other three options (projected to achieve, on average, 80% separate collection), a deposit method for all plastic bottles is expected to achieve a collection rate of 95%. The study not only summarises that a DRS results in high collection rates but also in high material quality for effective recycling. It also has the strongest anti-littering effect.

These findings confirm the experiences of European countries that already have a deposit system in place. Figure 1 shows that the collection rate is 90% on average, while in Germany, the return rate of bottle deposits is as high as 98%.



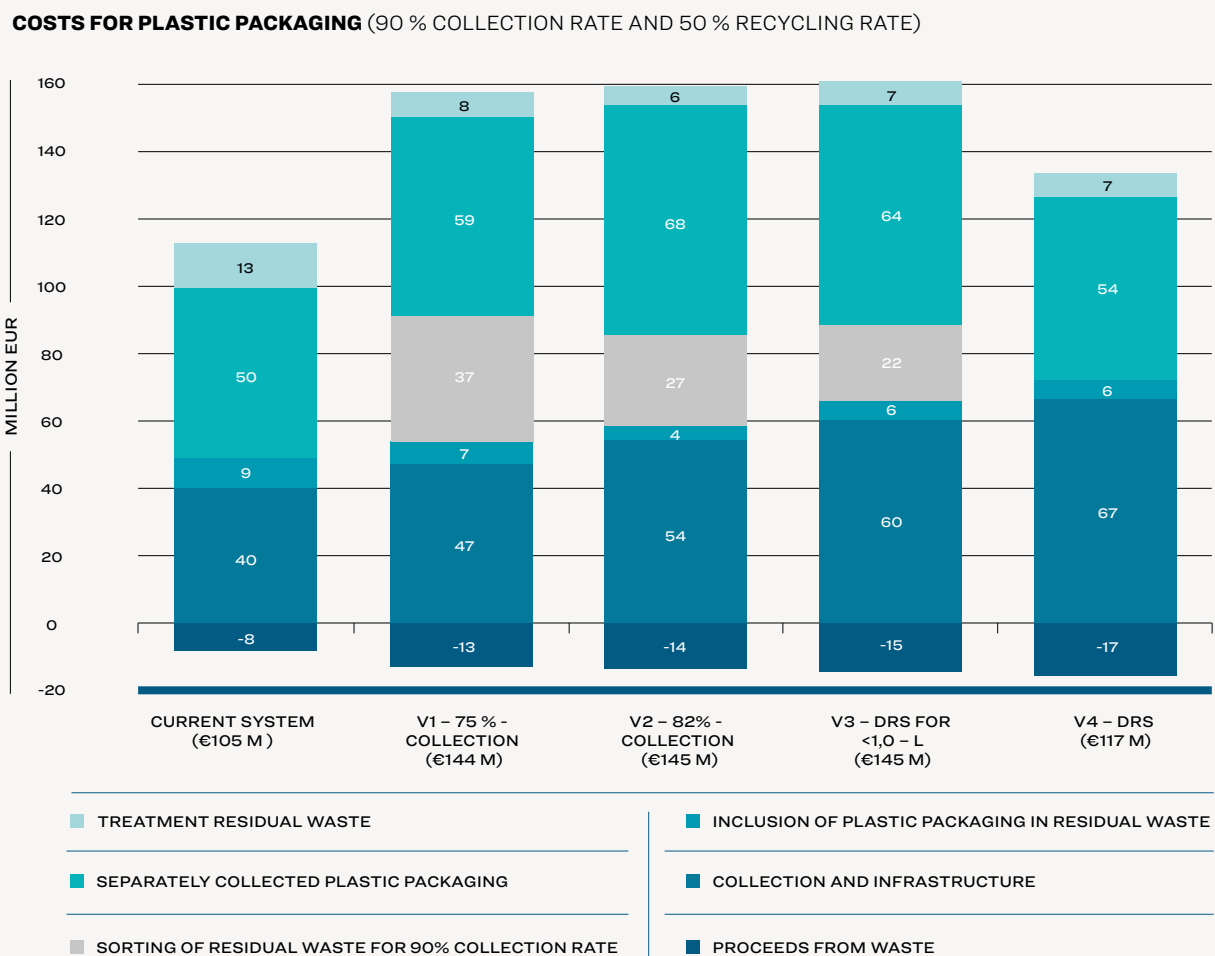
**Figure 1:** Average return rates of plastic bottles in countries with deposit return systems in place.

Source: Reloop (2019).<sup>9</sup>

### 3.2. Deposit return system is the cheapest method to collect most plastic bottles

Options 1, 2 and 3, examined by the study, not only achieve a lower collection rate but also result in far lower quality of collected plastic bottles because they rely on recovering the bottles from residual waste. However, as Figure 2 shows, the costs for sorting through residual waste are high; options 1 to 3 would cost around €145 million. Even though plastic bottles only represent 1% of residual waste, 100% of the costs of sorting through the waste would have to be attributed.

Option 4, which includes a DRS, costs €27 million less than the other three options. The higher quality of the collected bottles also results in higher revenues because of the easier recycling process, fewer losses and the higher quality granulate, which is required to create new beverage plastic bottles.



**Figure 2:** Projected costs for each of the examined options.

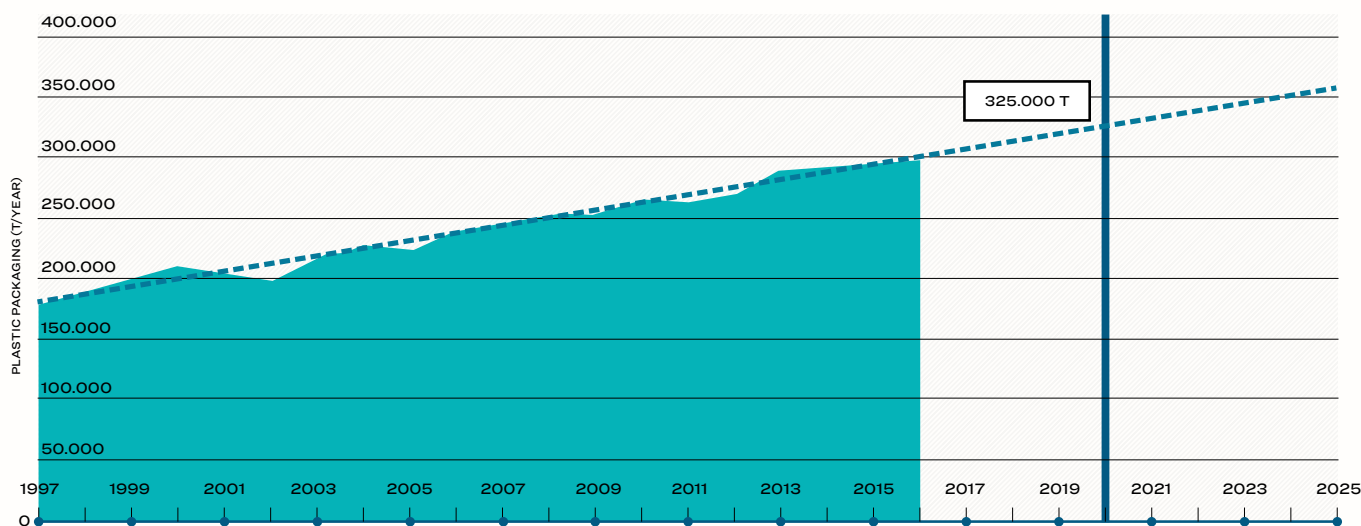
Source: Hauer, W. et al. (2020).<sup>10</sup>

## 4. Annual amount of packaging waste in Austria

Most significant recent studies in the field of packaging waste – including the recent government commissioned study<sup>11</sup> and Van Eygen et al. (2019)<sup>12</sup> – assume that about 300,000t of plastic waste were produced in Austria in 2016. Van Eygen goes further to assume that the annual growth in plastic consumption is about 2%. Therefore, annual plastic waste is projected to increase to about 325,000t for 2020, 360,000t for 2025 and 385,000t for 2029.

### 4.1. Annual number of plastic bottles in Austria

Plastic bottles are responsible for 15% of total plastic consumption in Austria.<sup>13</sup> According to the new BMK study, 300,000t of plastic – including 49,000t of plastic bottles – were put on the market in 2018. In total, 1.6 billion plastic bottles are placed on the market every year, which equals 181 plastic bottles per Austrian.<sup>14</sup> Taking into account projected growth without measures to reduce plastic packaging (as shown in Figure 3), a collection target of 90% by 2029 would therefore translate to roughly 52,000t of bottles.



**Figure 3:** Development of plastic packaging waste, 1997–2016, and projections until 2025.

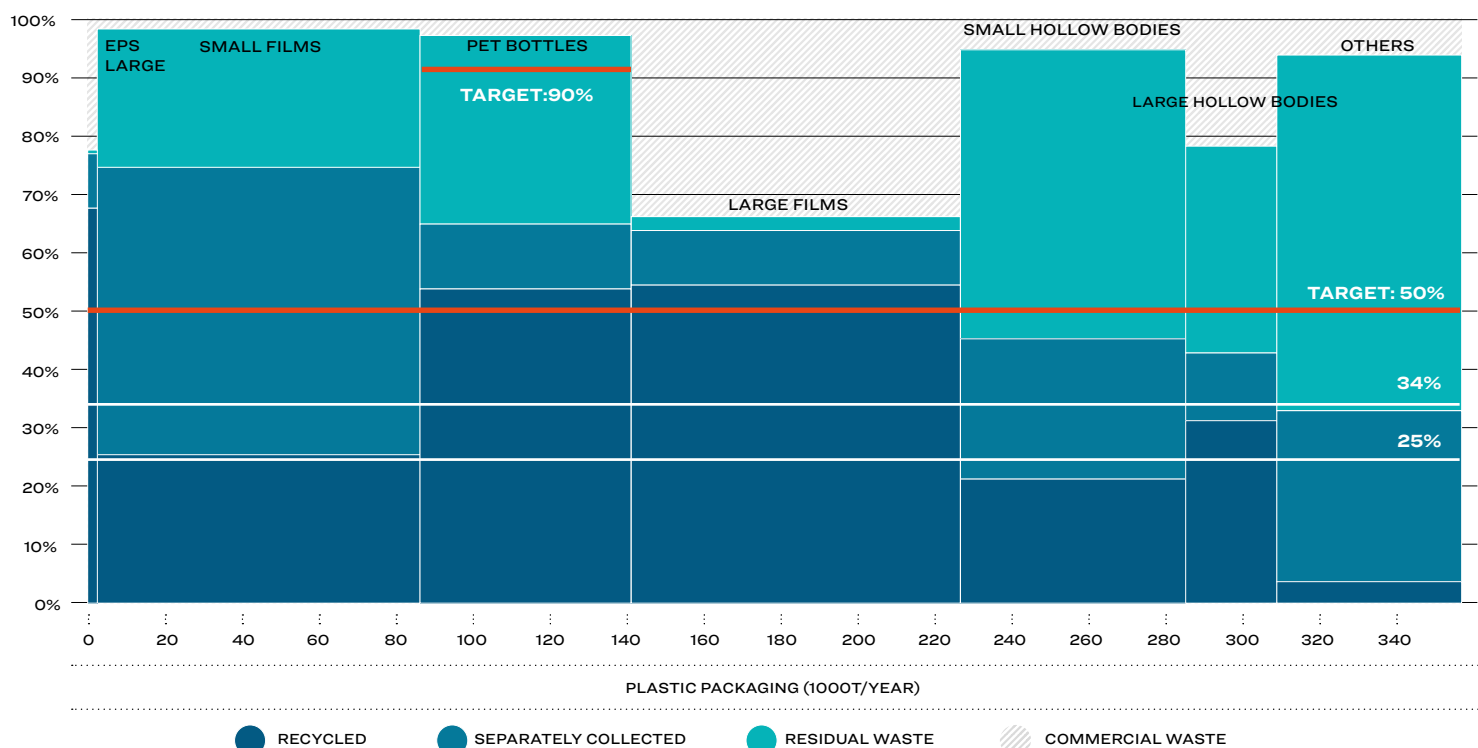
Source: Van Eygen et al. (2019).<sup>15</sup>

## 4.2. Rate of collection and recycling

In 2016, 34% of all packaging waste was sent to mechanical recycling, after which 26% was recovered as granulate,<sup>16</sup> 40% was treated in waste-to-energy plants and 33% was used for incineration in the cement industry.<sup>17</sup>

Figure 4 shows that 70% of PET bottles are already collected separately. However, a recent study shows that only 40% of PET bottles are actually recycled.<sup>18</sup>

While the overall input of separately collected plastic packaging to the sorting centres is calculated at 34%, only 25% of plastic packaging is currently recycled.<sup>19,20</sup> This will need to double to reach EU targets of 50% by 2025 and 55% by 2030. Such an increase can only be achieved with a maximum collection rate for PET of 95%, combined with related additional measures to reduce packaging waste.<sup>21</sup>



**Figure 4:** Rates of separate collection and recycling, divided by product groups.

Source: Van Eygen, E. et al. (2018).<sup>22</sup>

### Box 1: Reuse is the way out of the plastic crisis

The current government program for 2020-2024, includes the dedicated measure “binding legal framework conditions including concrete goals for the expansion of reuse systems, especially for beverage packaging”. In the early 1990s, the reuse share was around 80%, but has since rapidly dropped to a low of 18.4%.<sup>23</sup>

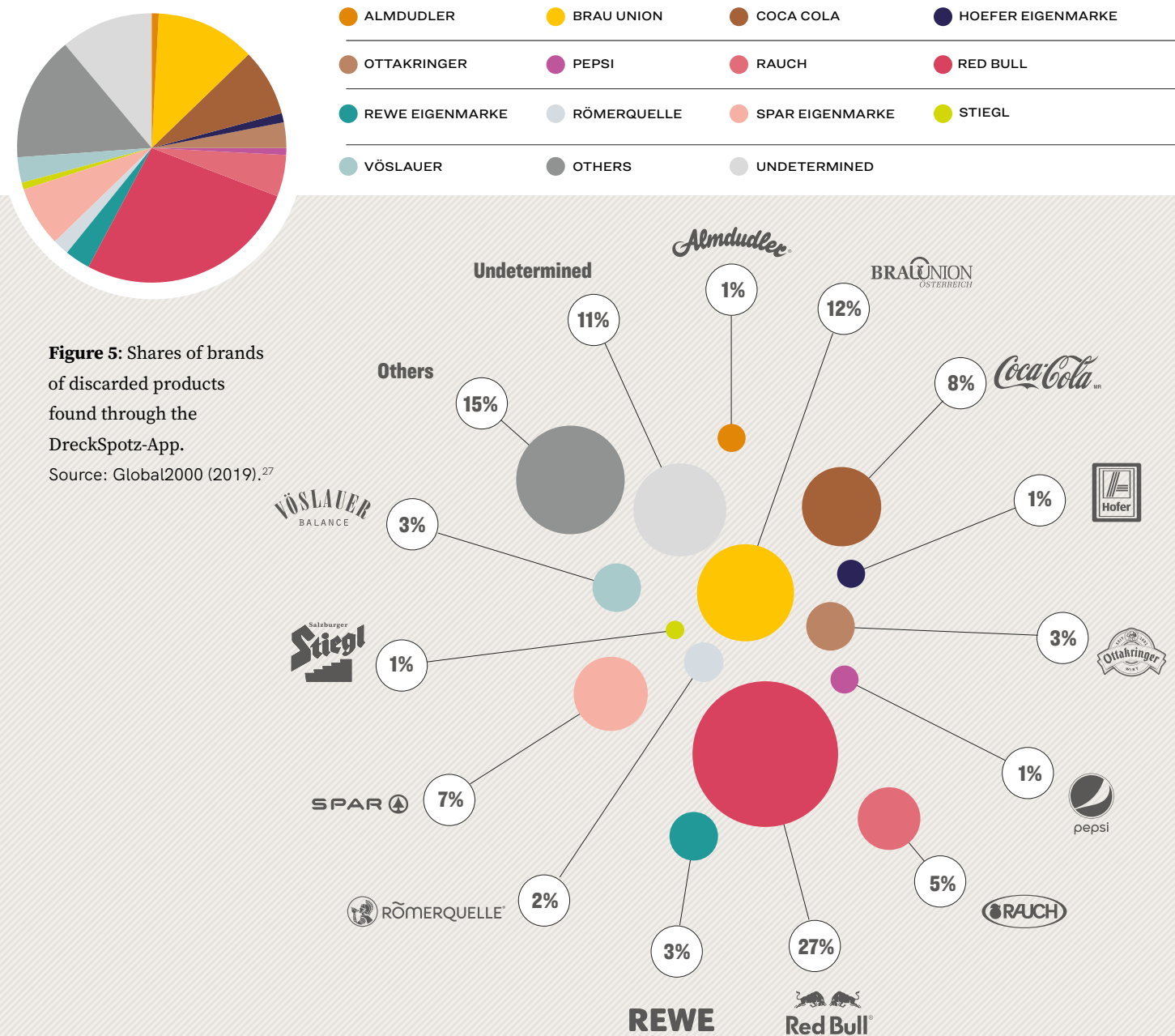
Reuse plays an important role in a circular economy. In the waste hierarchy, “reduce” and “reuse” are above recycling, which requires greater energy use and also creates higher emissions. Reuse offers the opportunity to move towards a true zero waste economy.

### 4.3. Role of Austrian consumers in littering – and cleaning it up

Every year, each Austrian consumes a massive 34kg of plastic – more than many other European countries.<sup>24</sup> While Austria is known for its high-quality collection system, not all packaging waste is collected separately in the designated yellow bags or recycling centres. Current targeted measures to reduce resource consumption and packaging waste are just not sufficient.

In particular, takeaway products consumed on the road are often discarded in nature. DreckSpotz-App, a mobile

app developed by GLOBAL 2000, has analysed the type of discarded items and found that plastic packaging accounts for 53% of it.<sup>25</sup> Another analysis, commissioned by the Salzburg government, found that 76% of litter along the Salzach in Salzburg city consisted of plastic bottles.<sup>26</sup> These littered waste products have multiple adverse impacts on not only the environment but also public budgets, because of the high personnel costs involved in cleaning up packaging.



#### 4.4. Public clean-up initiatives

Numerous projects across Austrian municipalities aim to mobilise the public, including school classes and not-for-profit associations, to clean up litter. The most popular is Reinwerfen statt Rauswerfen (Throw in instead of throw away), which aims to both support clean-up initiatives and raise awareness about separate collection and recycling. It was founded in 2012 as a joint initiative between the Austrian Recycling Agency, Altstoff Recycling Austria (ARA), the Austrian Chamber of Trade and the discount retailers Hofer, Lidl and PennyMarkt.<sup>28</sup> Other supporting organisations are the very same companies that produce much of the littered waste (see Figure 5), including Coca-Cola, McDonald's, Red Bull and retail giant REWE. In 2019, approx. 170,000 volunteers in 2,700 spring cleaning initiatives collected and properly disposed of 1,000 tons of waste.<sup>29</sup>

While initiatives such as Reinwerfen statt Rauswerfen provide €700,000 – €1 million of private funding for clean-ups,<sup>30</sup> it is estimated that public institutions such as municipalities, but also the Austrian rail and road associations ÖBB and ASFINAG, bear the majority of the clean-up costs. According to ArgeAWV well over €120

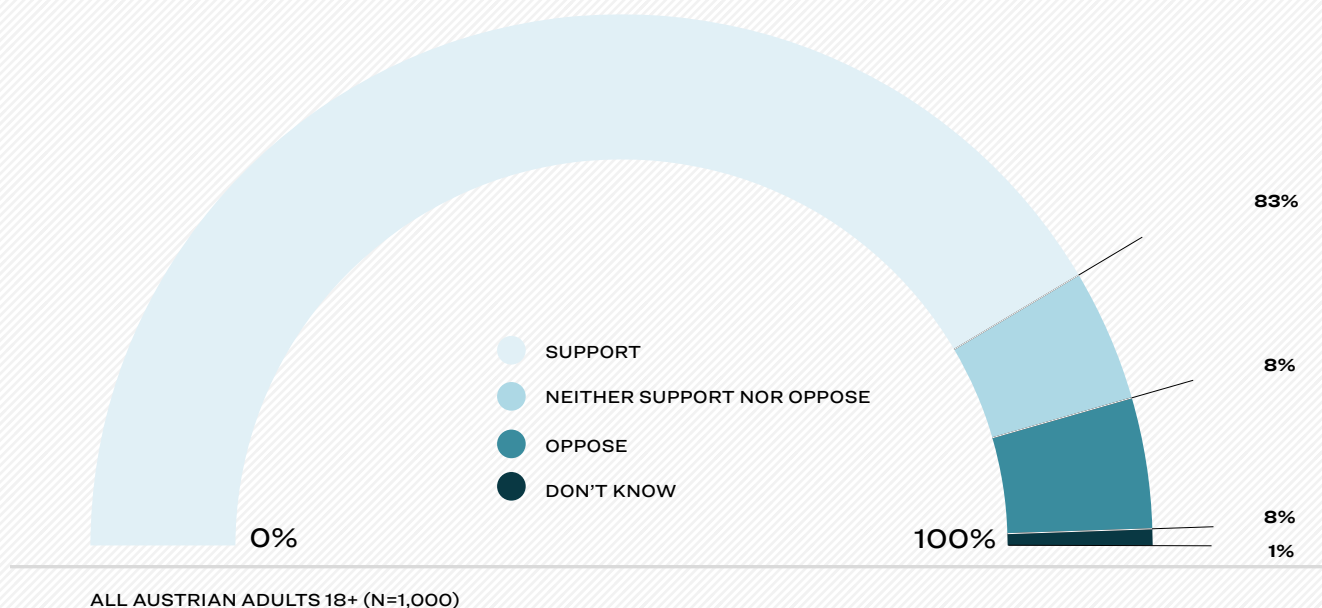
million in personnel and machine costs are spent annually on daily street cleaning and cleaning campaigns.<sup>31</sup>

As this briefing shows, the companies and associations that support and promote these clean-ups simultaneously lobby against the adoption of DRS – one of the most effective mechanisms to reduce litter – in Austria. Through these symbolic monetary contributions to avoid littering, the anti-DRS lobby continues pushing for voluntary initiatives, while working against the introduction of effective legislative solutions for litter reduction.



**Image 1:** Clean up initiative with primary school children in St. Jakob. Source: Gemeinde St. Jakob (2019).<sup>32</sup>

TO WHAT EXTENT DO YOU SUPPORT OR OPPOSE THE INTRODUCTION OF A DEPOSIT RETURN SYSTEM IN AUSTRIA?



**Figure 6:** Public survey question on support for a DRS.

Source: Survey GLOBAL 2000 and Changing Markets Foundation (2020).<sup>33</sup>

### Box 2: Survey shows 83% of Austrians want deposit return system

While Austrians are keen to participate in clean-up initiatives, there is a growing desire for greater action and accountability regarding plastic pollution. According to the results of an opinion poll, conducted by YouGov for the Changing Markets Foundation and GLOBAL 2000 in February 2020, 86% of Austrian adults believe more needs to be done to reduce plastic pollution, and a full 93% agreed that the producers of plastics, such as manufacturers and businesses, should contribute to managing plastic waste. When asked about the introduction of a DRS in Austria, 83% of adults expressed support for the system.<sup>34</sup>



## 5. Plastic bottles: a considerable source of income

Polyethylene terephthalate (PET), which plastic bottles are made from, is relatively easy to recycle in a mechanical recycling process. The cleaner the waste stream, the more valuable PET is for recycling back into products. PET derived from residual waste does not meet the hygiene regulations for food packaging; to be able to recycle PET into containers for food beverages, it is crucial that the recycled material is at the food-grade PET level. This is why separate collection is necessary to achieve the EU obligation that beverage bottles contain at least 25% and 30% recycled content by 2025 and 2030, respectively.

### 5.1. Proceeds from PET granulate from recycling

The prices of food-grade recycled PET (r-PET) have been steadily increasing in response to regulations, obliging industry to integrate certain percentages of recycled content into its products, and companies' voluntary commitments to tackle plastic pollution. The price of food-grade r-PET has been 130% of virgin PET, and the growth in demand for r-PET outstripped the growth in supply in 2019. Food-grade r-PET is used in not only plastic bottles and packaging but also textiles, carpets and so on.<sup>35</sup>

Of the potentially 52,000t plastic bottles expected to be on the market in 2029, it is estimated that around 90% (46,800t) will be collected separately. The recycling rates of PET beverage bottles in countries with a DRS are high because the collected bottles are comparatively cleaner. According to the recent government commissioned study, the recycling rate in Austria can be assumed to be 98%.<sup>36</sup> Applying this to the 46,800t figure, a 98% recycling rate would amount to 45,864t being recycled as r-PET pellets for new plastic bottles. With a current market value of €1,400 per ton, this corresponds to around €64 million.<sup>37</sup>

### 5.2. Proceeds from waste-licensing fees for PET bottles

In the Austrian system, manufacturers, importers or packaging companies are principally obliged to organise disposal of the packaging they introduce to the market through so-called extended producer responsibility (EPR). To facilitate this process, a company must pay a license fee to a waste collection and recycling company, which discharges the company from the obligation to collect and treat the packaging waste. The license fee is set according to a tariff list for each packaging category. Once a company has reported the estimated amount of a given packaging category, and is paying a license fee, it can no longer be held liable for the packaging waste introduced to the market. According to a tariff list by ARA<sup>38</sup> (Austria's largest packaging waste collector), the value of 49,000t of plastic bottles, at €0.695/kg plastic packaging waste, is around €34 million in licencing fees. Thus, the licensing fee of ARA's market share (70.98%) means that ARA would lose €24 million from the loss of plastic bottles from the waste stream alone. DRS would likely also include single-use glass and aluminium, meaning income losses due to reduced licensing fees would be even higher.

Due to a lack of transparency of waste data, we have not managed to establish how much money ARA currently makes from the recyclates it sells back to the market; however, combining this with its income from licensing fees, the money ARA stands to lose is significant. As Figure 7 shows, ARA has a near-monopoly on Austria's waste-management market, but this could change significantly with the introduction of a DRS – if ARA does not manage the DRS. The total value of collecting and recycling Austria's plastic bottles through a DRS in 2029 is estimated to be around €100 million.<sup>39</sup> This is our back-of-the-envelope calculation, based on current licensing fees and current r-PET prices; it might increase further in the future, as countries start pricing the value of materials and waste more in line with their environmental impacts.



### Box 3: Collection and recycling systems in Austria

Since 2016 there are six waste and collection systems officially licensed in Austria. Figure 7 shows the market shares of the companies for plastic packaging (LVP=Leichtverpackung), notably Altstoff Recycling Austria AG with 70,98%, followed by Interseroh Austria GmbH with 11,86% and Reclay UFH GmbH with 8,60%.<sup>40</sup>

**Figure 7:** Market shares of collection and recycling systems for packaging in 2018.

Source: Hauer, W. et al. (2020).<sup>41</sup>

COLLECTION AND RECYCLING SYSTEMS	PAPER	GLASS	METAL	LIGHTWEIGHT PACKAGING
Altstoff Recycling Austria AD	73,99%	N/A	78,93%	70,98%
AUSTRIA GLASS RECYCLING GmbH	N/A	79,86%	N/A	N/A
Bonus Holsystem Für Verpackungen GmbH & Co. KG	3,11%	5,74%	0,89%	4,93%
Good Waste Austria GmbH	0,63%	1,20%	0,57%	0,81%
European Recycling Platform Austria GmbH	3,08%	1,47%	2,61%	2,82%
INTERSEROH Austria GmbH	7,44%	6,28%	9,98%	11,86%
Reclay UFH GmbH	11,75%	5,72%	7,02%	8,60%

## 6. Coalition against a deposit return system for single-use plastic

The previous section showed that the majority of Austrians support more action to tackle plastic waste, and specifically favour DRS to do this. It also showed that DRS is supported by both the scientific study commissioned by the Austrian government and the experiences of other EU Member States, which have all reached separate collection levels above 90%, as obliged by the SUP Directive.

Regardless of this evidence, our investigation revealed that a powerful coalition of companies is lobbying against DRS. This section shows who they are, and why their arguments are misleading.



### 6.1. Altstoff Recycling Austria (ARA)

Altstoff Recycling Austria (ARA) is Austria's largest collection and recycling system for packaging. It was founded in 1993 by the Austrian Chamber of Commerce to support companies in fulfilling their obligations under the Packaging Law in order to manage their waste responsibility. According to the latest annual report 2019,<sup>42</sup> ARA received €147.22 million from license fees. Based on the volume of plastic bottles in Austria and ARA's market share, it is estimated that plastic bottles account for around 16% of the total license fees at around €24 million.

#### 6.1.1. DRS results in considerable loss of license fees for ARA

With the introduction of a DRS, which would replace the need for companies to pay licensing fees, ARA would lose more than €24 million in licensing fees for plastic bottles alone. As it is likely that other waste streams would also be covered by a future DRS, such as metal beverage packaging and single-use glass, the loss in licensing fees would be even higher.

Not surprisingly, ARA is a loud opponent of a DRS. ARA also intended to influence the development of the government-commissioned study that examined four options for implementing the 90% collection target. It has advocated for an improved method for separate collection, as well as additional collection from residual waste. In essence, this option was examined as option 2, and explicitly recited as a suggestion by ARA. The findings unequivocally show that a DRS would achieve at least 95% separate collection, while option 2 would only achieve a collection rate of 80% and would require sorting through 60% (840,000t) of Austria's residual waste. ARA also fails to explain how it intends to achieve an increase, from 70% to 80%, in areas that already have a very high collection rate.

### Box 4. EU rejects ARA proposal to sort plastic bottles from residual waste

**In a recent meeting<sup>43</sup> of the EU Expert Working Group on Waste with regards to SUP Directive guidelines it was clarified that sorting waste out of residual waste does not constitute separate collection.** It was also noted that the aim of the Directive is to ensure the quality of the plastic waste collected, which, in turn, works best when the plastic bottles are collected separately. This would be important to ensure new plastic bottles contain at least 25% and 30% recycled plastic by 2025 and 2030 respectively.

**This clarification effectively excludes options 1, 2 and 3 examined by the Ministry study, because they are all based on the need to separate plastic bottles from residual waste.** Although this clarification is not official yet, it sets out the Commission's thinking on the matter and it means that three of the four options examined in the Ministry study, which are based on the need to sort residual waste, do not meet the definition of "separately collected". Similar statement was set out by an earlier legal opinion by the law firm Geulen & Klinger, which explained that sorting plastic from residual waste does not meet the goal of a "separate collection".<sup>44</sup> In addition, the SUP Directive aims to influence consumer behaviour to avoid waste; knowing that companies collect plastic bottles from residual waste would contradict this purpose.

#### 6.1.2. DRS threatens ARA's market pool position

ARA's opposition to the introduction of a deposit system is not only due to the substantial loss of licence fees. Since it is still unclear how and by whom a deposit system will be implemented, there is also resistance from ARA's main players against an effective market opening of the Austrian waste system.

Formally, ARA is a private company. Its main shareholder with 80.03% is the non-profit association Altstoff Recycling Austria. Any company that produces, imports or sells packaged goods can become a member of this association. The remaining 19.97% of the share is spread over seven companies or associations that are either owned by the recycling packaging industries or represent them or their packaging materials: paper, glass, plastic, beverage packaging, wood, metal and aluminium. As figure 8 shows, the eight companies that hold shares in ARA also have - partly together with other companies - the majority of other specific ARA subsidiaries that deal with glass recycling, commercial waste, electrical waste and waste data.

A closer look at ARA's particular corporate structure makes it clear that its own customers, who themselves hold shares, can create favourable rules to their advantage. On the one hand, they occupy the relevant decision-making bodies (the ARA supervisory board) and, on the other hand, act in various forms as service providers in ARA's main business area. This leads to a number of questionable business constellations, such as those relating to large-scale supply point contracts for retail chains, contracts for recycling such as the incineration of plastic waste or recycling waste paper and glass.<sup>45</sup> This structure, combined with a lack of transparency about waste data, enables the main players to flow savings back to customers or owners through their own tariff structure, and thus encourages an interest in maintaining ARA's market position.

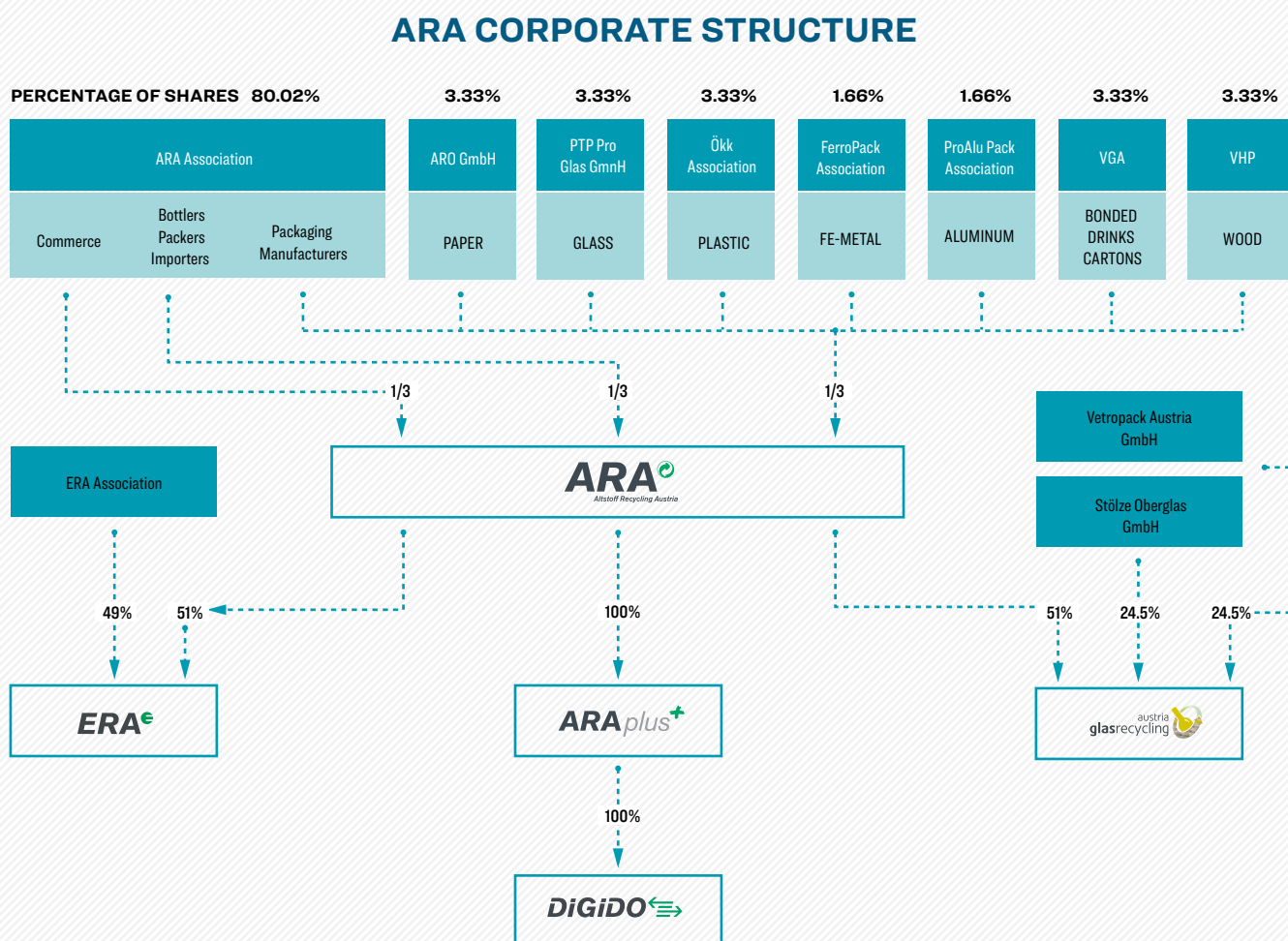
In 2003 the European Commission decided that the Austrian waste market must be open for other collection and recycling systems. ARA entertained several initiatives in resistance against this decision and maintained its monopoly-like position as a collection and recycling system in Austria with the restriction of competitors to narrow niches until 2016. Only a decision by the European Court of Justice (ECJ) and the Austrian Waste

Management Act 2013 sealed the opening of the market and the end of ARA's monopoly. After the decision of the ECJ came into force, ARA was also fined €6 million for violating EU antitrust law.<sup>46</sup>

However, the decisions sought by the European Commission have not affected the cartel-like ownership structure of ARA. The situation is different in Germany, where the German Federal Competition Authority, following the Commission's decisions, has issued a prohibition order against the similarly structured "Duales System Deutschland (DSD)", which has led to the exclusion of retail, paper and glass industries from the management structure of the DSD.<sup>47</sup>

The ARA supervisory board is made up of its main customers, such as the retail giants Spar and Rewe, including Billa, Merkur, ADEG and Sutterlüty, and the milk product giant Nöm.

These were also responsible for the original design of the system as part of the so-called "round table of large retail chains" and still have control over the system's operation. Although the conflict of interest provisions of ARA's statutes exclude current or potential service providers of ARA from association membership (and from a supervisory board position), the Federal Competition Authority has so far not taken any further measures in Austria.<sup>48</sup>



**Figure 8:** Ownership structure of ARA.

Source: ARA (2020).<sup>49</sup>

### 6.1.3. ARA coordinates lobby-letters against a DRS

Led by its powerful board of directors, ARA launched a campaign against DRS to influence the development of the government programme. Letters sent in December 2019 to the Federal Chancellor Sebastian Kurz,<sup>50</sup> the Environment Minister Leonore Gewessler<sup>51</sup> and the MPs Werner Kogler and (now Federal Minister for Agriculture, Regions and Tourism) Elisabeth Köstinger provide a detailed insight into the powerful coalition against the introduction of a DRS. Next to ARA, the signatories include retail giants REWE Group, Spar, Lidl and Hofer as well as multinational plastic packaging manufacturer ALPLA (see Figure 9). The letters highlight that the undersigned companies vehemently reject the introduction of a DRS for single-use plastic, and refer to two discussion papers about deposit return systems<sup>52</sup> and the circular economy.<sup>53</sup>

The arguments put forward in these papers are of such a nature that they prompted Arge AWV to publish a rebuttal in defence of the positive impacts of a DRS.<sup>54</sup>

Although the SUP Directive lists a DRS as the preferred option to implement the collection target, the government programme launched in January 2020 – after the letters were received – no longer mentioned the implementation nor benefits of a DRS. Instead, it includes wording suggested in the letters, notably the introduction of “targeted measures to reduce single-use-plastic, including cooperation with retail, restaurants and producers”.<sup>55</sup>



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**Figure 9:** Signatories of lobby letters sent to the ruling political parties ahead of the development of the government programme.<sup>56</sup>

## BOX 5: FALSE CLAIMS PUT FORWARD IN THE ARA DISCUSSION PAPER AGAINST A DEPOSIT RETURN SYSTEM<sup>57</sup>

CLAIMS BY ARA		REALITY
1	Austria's recycling rates are among the best in the EU. Yet, there is a discussion about the introduction of a DRS.	Austria ranks sixth for the recycling of municipal waste, with a rate of 53%. The recycling rate for plastic packaging is, however, very low (25%) and must be more than doubled by 2030 to achieve the 55% EU recycling target for all plastic packaging.
2	Current collection rate for PET bottles in Austria is 76%, and sometimes above 80%.	The EU introduced a new calculation method for recycling, which reduced Austria's previous rate from 33% to 25%, and its collection rate for PET bottles from 76% to 70%. The latter rate will need to increase to over 90%. According to another study, the collection rate is 65%, <sup>58</sup> and in cities it is as low as 15%.
3	To achieve the 90% collection rate, an additional 10,000t of PET bottles need to be collected, resulting in 8,000t net for recycling.	The 8,000t figure is based on consumption data from 2013. Currently, 34,125t of PET bottles are being collected separately (70% collected from 48,750t); the increase to 46,800t (90% of 52,000t) is actually 12,675t.
4	Deposit refund only makes sense for refillable bottles and has even had negative impacts on the refillables quota in Germany.	In general, the reuse quota has dropped worldwide - with and without a deposit system. In Germany, the reusable share is significantly higher than in Austria. It is currently 42% and in Austria only 18.4%, which shows that the one-way deposit in Germany had a supportive effect for reusable packaging.
5	A DRS has no impact on littering, because only 13% are packaging, 4% PET and 3% cans, which means deposit return only addresses less than 10% of littering.	The provided numbers are misleading because they are based on weight. According to individual pieces (which matters when picking up litter), beverage packaging is responsible for the majority of littering – estimates range from 53–76%. <sup>59</sup> The costs of littering are estimated to be around €120 million annually in Austria.
6	Without PET bottles, one-third of containers would need to be reduced, which would diminish appetite for the population to separate.	A pilot project introducing a DRS in Spain proves the opposite: During the introduction of the DRS, separate collection grew from 12% to 66.58% because consumer awareness increased. <sup>60</sup> Even without the PET bottles, around 80% of the 250,000t of remaining plastic packaging waste will need to be collected separately to be able to achieve the new recycling targets. This will require an enormous information campaign, regardless of the DRS system.
7	The population would be confused about rules to return bottles to shops and other plastic packaging to recycling centres.	The general public is in favour of a DRS. According to the results of a recent opinion poll, conducted by YouGov for the Changing Markets Foundation and GLOBAL 2000 in February 2020, 83% of Austrians showed support. <sup>61</sup>
8	Many inner-city outlets do not have enough space for return machines and empty containers.	All modern deposit systems provide an exception for small shops that have no space for return machines and empties. The appropriate size for Austria must be determined, in discussions with small companies. Should it be financially beneficial for a small company – due to the handling fee or increased customer frequency by returning empties – to accept beverage packaging, it has the option to do so. It is also possible to handle the withdrawal manually, without an automatic machine.
9	Achieving the 90% target with DRS is 20% more expensive than with separate collection.	The findings of the Austrian ministry study <sup>62</sup> show that introducing a DRS is cheaper than increasing separate collection. A DRS implements the “producer pays principle” by shifting collection net costs from municipalities and taxpayers to industry, including a significant saving for municipalities' public budgets, as shown by 32 studies that have examined the costs and benefits of implementing a DRS. <sup>63</sup>
10	There are high costs for installing and running the systems – the German examples cost €1.1– €1.8 billion for installation and €500–€800 million to operate.	Translated to the Austrian market, this would mean introducing the system would cost €150–€200 million, which can be written off over 8 years with €18.75 million annually. This means the annual operating costs for the system would be about €68.75–€105 million annually. Art. 8 of the new SUP Directive requires producers (including retail companies with their own brands, such as Spar, Hofer, Lidl etc.), as part of the EPR provisions, to inter alia cover costs related to collection and littering. In that context, the costs of introducing and operating a DRS are actually lower than the current costs of littering (around €120 million).

## 6.2. Major retailers



Austria's retail association is an outspoken opponent of the introduction of DRS for single-use plastic. Its main concerns are high investment costs arising from a need for additional space, personnel and machinery, and adverse impacts on the quota for reuse containers.<sup>64</sup>

### 6.2.1. Retailers receive handling fee to cover costs

While the above are legitimate concerns, provisions are foreseen to facilitate the transition to DRS and experience in other countries shows that DRS is cost neutral for retailers. Retailers will receive a handling fee of about 2 cents for every empty beverage container they receive to cover the additional costs of adapting current structures.

### 6.2.2. Retailers pay according to "producer pays principle" for own brands

Moreover, most supermarkets (including Spar, Billa, Hofer and Lidl) often produce their own beverage containers for their in-house brands. They are therefore obliged, as part of the EPR provisions of the new SUP Directive, to cover costs related to collection (including the infrastructure and its operation), transport, treatment and littering costs, of beverage containers.<sup>65</sup>

### 6.2.3. Hypocrisy of supporting and opposing DRS



Lidl Germany has published a position paper in support of the introduction of a DRS for single-use plastic.<sup>66</sup> This explains why Lidl's signature is missing from

the declaration of the Austrian trade association against the DRS,<sup>67</sup> even though they are members of the trade association.

Yet, Lidl has signed the lobby letter against the introduction of a DRS in Austria, contradicting all of its international efforts towards resource efficiency, a circular economy, higher recycling rates, better use of valuable materials, reducing the amount of litter, creating new jobs and raising awareness among their customers. To safeguard consumers' trust and credibility, a clarification by Lidl regarding these conflicting statements between supporting and opposing a DRS is urgently required.

### 6.2.4. Level playing field for re-use containers

The voluntary commitment by the beverage industry representatives in 2011 has led to specific targets and measures



to stabilize the multi-way rates. However, experience has shown that it is also up to the retailers to ensure a level playing field for reuse packaging or to promote an increase in the quota by offering drinks in reusable packaging at the same price or not more expensive than in disposable packaging. In Germany, 8 cents are levied on returnable beer bottles and one-way is legally fixed at 25 cents - this creates a level playing field between single use and reuse packaging, since the total price of single use containers is slightly higher. Although some retailers are already adopting this trend, these measures are voluntary and it is unclear, what percent of their sales will be covered. Rewe and Spar recently introduced the reusable bottle for milk. Spar is also expanding the range of drinks in reusable bottles. Soda water, apple juice, orange juice, cola and herbal soda have recently been returned to the glass reuse bottle and the customer is given the opportunity to opt for plastic-free packaging. Unfortunately, these same retailers are still lobbying against the introduction of a DRS, which would introduce a level-playing field with reusable and single-use containers. A clear trend reversal away from single-use towards re-use solutions is required to significantly reduce the mountains of waste.

### **Box 6: Experience of re-use in Germany: How Aldi and Lidl influenced the market**

In the 1990s, big German discounters like Aldi and Lidl started selling high quantities of beverages in single-use bottles and cans at very low prices, thereby harming beverage wholesalers, cash-and-carry stores and retailers. The discounters have since refinanced the low beverage prices through other products and have made it impossible for small and regional fillers – which traditionally mostly sell beverages in refillable beverage packaging – to compete. This intentional market-displacement strategy led to Aldi and Lidl having a 52% market share in the mineral water segment – the most important beverage segment. Today, Aldi and Lidl are still exclusively selling water in single-use containers, and refuse to change their environmentally harmful sales strategy.

This explains why, since the 1990s, overall sales of single-use PET bottles have been increasing in Germany. It also explains why the market share of refillables in the water segment has declined, both before and after the introduction of the single-use DRS. As such, the DRS is not to blame for, and does not correlate with, an increase in the overall market share of single-use PET bottles. On the contrary: The DRS significantly contributed to the fact that, today, the market share of refillables (glass and PET) in the water sector (38.4%) is still considerably higher than in other countries (in Austria, the reusable share is only 15.8%).

Several factors are contributing to this steering effect. First, consumers have to return both single-use and refillable bottles to the retailers, which makes it easier to choose the more environmentally friendly option. On top of that, returning both single-use and refillable bottles was tremendously simplified through a predominantly automated take-back – whereas, before 2003, refillable bottles had mainly been taken back manually. Second, the deposit amount on single-use bottles is higher (25 cents) than on refillable bottles (8 or 15 cents). A large number of consumers choose bottles with lower deposit amounts.

The DRS on single-use bottles had a protective effect on the German refillables system. However, the decline of refillables could only be decelerated – not reversed. Very low discount prices on beverages filled in single-use bottles are too tempting for consumers and have been sabotaging the desired steering effect.<sup>68</sup>

## **6.3. Beverage companies**

The Austrian Beverage Manufacturers Association (Verband der Getränkehersteller Österreichs) also opposes the deposit system, arguing that single use is just as good as re-use. The marketing strategy builds on complementary initiatives – such as the aforementioned anti-littering campaign, Reinwerfen statt Rauswerfen – that pass the responsibility to consumers and makes the sweeping statement that eight out of ten PET bottles are already collected separately.<sup>69</sup>

Claims that single use is as good as reuse are simply false. Over their lifetime (about 20 usages of one bottle), reuse PET bottles generate only 5% of the waste generated by the production of 20 single-use bottles.<sup>70</sup> Moreover, at the end of life the re-use bottle can also be recycled. Even from this basic perspective of resource conservation, re-use bottles are considerably more ecological than single-use systems.

### 6.3.1. New recycled content target for beverage containers

The SUP Directive requires beverage bottles to contain at least 30% recycled plastic by 2030, and 25% by 2025. This puts beverage producers in the spotlight, because they will be required to add recycled material to the plastic mix for new bottles. As seen earlier in the briefing, virgin plastic is less expensive than r-PET,<sup>71</sup> which adds a strong argument in favour of DRS as the straightforward solution for more high-quality food-grade recycled material, because the returned bottles do not get mixed with other types of waste.

### 6.3.2. Coca-Cola supports deposit return system for single-use plastic



Coca-Cola recently published a U-turn position regarding DRS. In a press statement from January 2020 it said, for the first

time, that it is supporting the introduction of DRS for single-use plastic in Austria.<sup>72</sup> The drinks company has a long history of lobbying against plastic pollution solutions. Their website shows that Coca Cola focuses primarily on the expansion of r-Pet packaging but does not describe the extent to which reuse packaging should be expanded.

Therefore, the introduction of a deposit return system in Austria must go hand in hand with a target for reuse packaging. This is the only way to ensure that large corporations do not shirk their responsibility to effectively reduce plastic pollution.

Coca-Cola had a long history of lobbying against DRS as a solution to single use plastics and has previously only changed its tune after realising that DRS had become inevitable in certain countries.<sup>73</sup> It is noteworthy that Coca-Cola did not sign the lobby letter against the introduction of a DRS in Austria. However, other beverage producers oppose the introduction of a DRS, including Höllinger, Pfanner, Alpquell, Starzinger, Brau Union and Spitz.

### 6.3.3. Pet2Pet initiative needs r-PET

The position of Spitz – opposing the introduction of a DRS – is motivated by its co-ownership of the Pet2Pet recycling facility in Müllendorf, Austria. The facility is believed to have an exclusive agreement with ARA for raw material supply. Competition through a DRS would put the compensation between ARA and the facility under pressure and would reduce business success. This facility is operated together with Coca-Cola, Egger, Rauch and Vöslauer – all of which support the introduction of a DRS.<sup>74</sup>

While the Pet2Pet project is hailed as an international best-practice case, it thus far only occupies a small niche in the Austrian recycling market. It also grossly over-estimates its recycling success. As not enough quality material is available in Austria, the recycling plant has to import thousands of tonnes of r-PET from abroad to meet demand for recycled material. Bottle-to-bottle recycling is still not happening at scale; therefore, Coca-Cola's claims about a closed-loop material cycle of PET bottles leading a "Buddhist lifestyle", with their PET bottles turned back into PET bottles over and over again, should be viewed with scepticism.<sup>75</sup>

However, while Vöslauer (in particular) aims to produce 100% recycled bottles for mineral water by 2025, a new study<sup>76</sup> by Ökologie Institut shows that the success rate of recycling PET bottles is, on average, much smaller. The study calculated that, after six recycling processes, only 0.55g of the original PET bottle is left in the plastic mix for the sixth bottle. In 2018, only 28% of all collected PET bottles were used to produce new bottles.





## 6.4. Austrian Chamber of Commerce

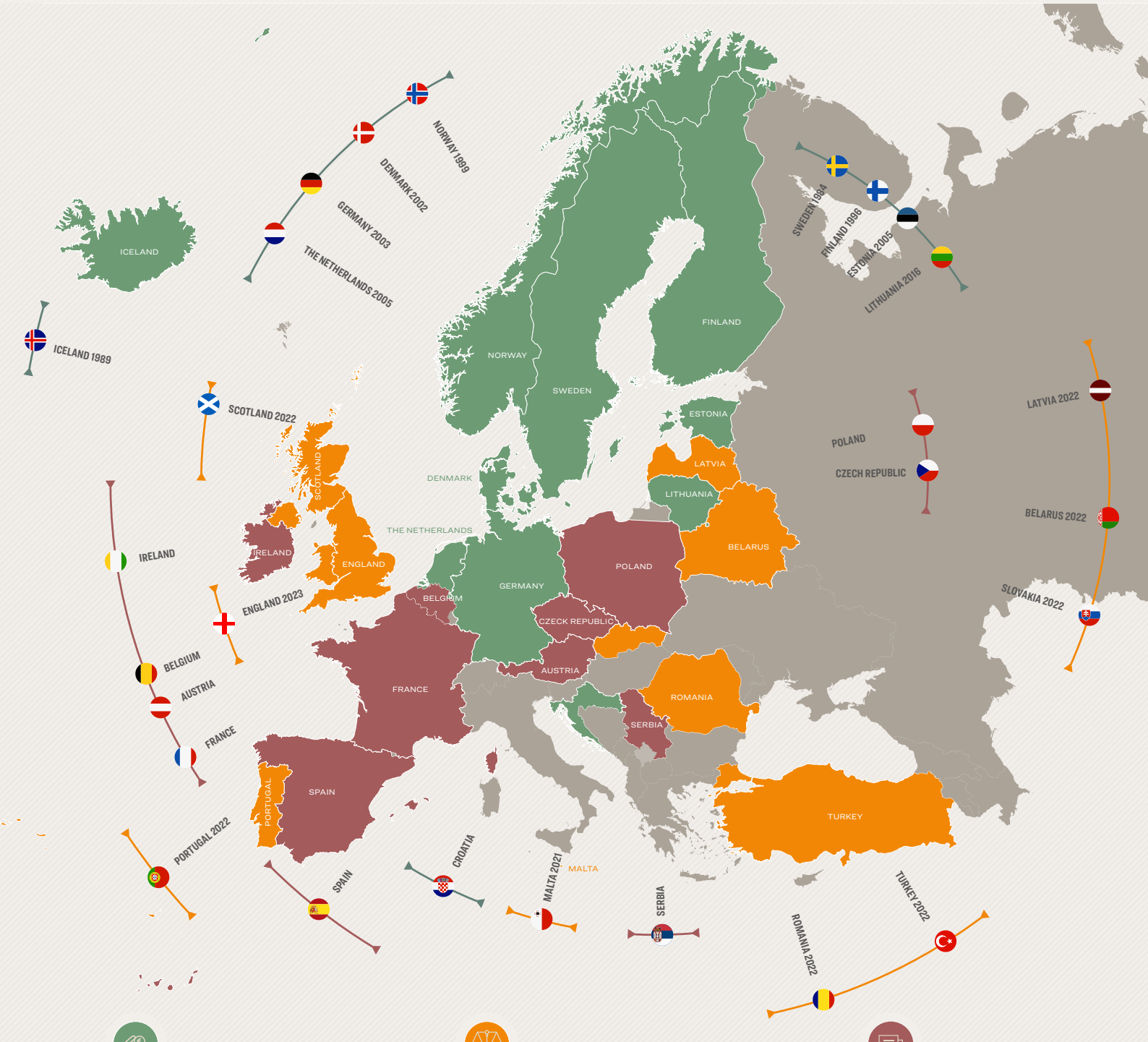
Another powerful organisation vocally opposed to DRS, and lobbying against it, is the Austrian Chamber of Commerce (WKÖ). The WKÖ is a powerful body; it represents the interests of retail and industry, and is in a unique position to influence and persuade.<sup>77</sup> Opponents of a deposit system repeatedly refer to the Arge Sustainability Agenda for Drinks Packaging (Arge Nachhaltigkeitsagenda für Getränkeverpackungen) – a consortium, headed by the WKÖ, that aims to promote the sustainable use of plastic bottles. The central instrument of this “voluntary commitment by the drinks industry” is the anti-littering campaign *Reinwerfen statt Wegwerfen*.<sup>78</sup>

While public clean-up initiatives are commendable, such campaigns only combat the consequences of littering, not its causes – such as the lack of a deposit system. Moreover, such initiatives provide a convenient smokescreen for industry, allowing it to blame consumers for not knowing how to dispose of waste correctly. However, the operation of DRS is good for business, because it increases regional employment and supports local industry in rural areas.

## 6.5. Recycling companies

Several recycling companies have signed the letters opposing the introduction of a DRS in Austria. Understandably, these companies fear a reduction in the volume of waste they are contracted to separate for ARA. However, a DRS will work alongside, and complement, the current system. Even without PET bottles, around 80% of the 250,000t of remaining plastic packaging waste will need to be collected separately to achieve the 50% recycling target.

DEPOSIT RETURN SYSTEMS IN EUROPE



IMPLEMENTED DRS

- SWEDEN (1984)
- ICELAND (1989)
- FINLAND (1996)
- NORWAY (1999)
- DENMARK (2002)
- GERMANY (2003)
- THE NETHERLANDS (2005)
- ESTONIA (2005)
- CROATIA (2006)
- LITHUANIA (2016)

LEGISLATIVE ACTIONS  
TAKEN FOR IMPLEMENTATION

- SCOTLAND (2022)
- MALTA (2021)
- PORTUGAL (2022)
- LATVIA (2022)
- SLOVAKIA (2023)
- BELARUS (2022)
- ROMANIA (2022)
- TURKEY (2022)
- ENGLAND (2023)

UNDER DISCUSSION

- AUSTRIA
- SPAIN
- IRELAND
- FRANCE
- POLAND
- SERBIA
- CZECH REPUBLIC
- BELGIUM

## 7. Conclusion

The introduction of a DRS is the only way to achieve the EU targets set out in the SUP Directive – notably, to separately collect 90% of PET bottles by 2029, and to ensure beverage bottles contain at least 30% of recycled plastic by 2030. The high collection rates will also help to avoid littering and to achieve a 55% recycling rate for plastic packaging by 2030.

Eight of the 27 EU Member States, plus Norway and Iceland, already have a DRS in place.<sup>79</sup> Another nine jurisdictions have decided to implement a deposit system over the next three years, and a further eight countries are currently discussing its introduction, including Spain, Poland, and Austria.

Austria already has a voluntary deposit system for refillable bottles for drinks such as beer, mineral water and milk.

What is now needed is a political decision, by the government, to introduce a deposit system to all single-use plastic bottles and other beverage containers. In addition, it should introduce measures to promote reuse, such as a specific sub-target for refillables. Such a decision is backed by science and supported by the

public opinion. It will increase reuse and recycling rates, reduce virgin plastic production, protect the environment and free up over €120 million of resources that are currently being spent on clean-ups.

This decision will need to go hand in hand with a strong signal to the companies that are still lobbying against the introduction of a DRS. The coordinated lobby-efforts via the ARA network must give an impetus to take a closer look at the cartel-like structure of ARA. When designing the future deposit system, particular attention must be paid to ensuring an open market with clear competitive conditions and provisions that reduce conflict of interest.

Reusable packaging should not be considered a luxury product and should therefore not be sold at a higher price than single-use containers. For this, accompanying measures are required, such as sub-targets. If properly designed, DRS can promote the switch to reusable packaging, since all beverage packaging must be returned in the same way. A clear shift towards reuse is ultimately necessary to move away from our throw-away culture, to stop the waste of resources and to significantly reduce the consumption of fossil fuels for plastic production, thereby protecting the climate.

**Figure 10:** Overview of DRS systems in Europe

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