

Written evidence submitted by British Glass

Please find a submission by British Glass to the Environment Audit Committee's Call for Evidence as part of the Next steps for deposit return schemes inquiry.

British Glass welcomes the Committee's continued interest in the proposed Deposit Return Scheme (DRS), providing vital and much needed scrutiny. The legislation relating to a DRS contained within the Environment Bill is primarily enabling legislation – allowing the final details of any future resource and waste decisions, particularly with regards to the introduction of a DRS, to be made via future regulation.

This is of particular concern. A DRS not only introduces a new way in which we collect and recycle beverage bottles in the future, but also creates a significant commercial entity. The scheme will cost hundreds of millions of pounds to establish, tens of millions to operate, and will be responsible for managing significant funds through fees, deposits and materials. The myriad of detail implemented via the back door through regulation, with minimal parliamentary scrutiny on this new commercial entity, is of significant concern to industry.

There is also no blueprint for a 'good' DRS. Different types of DRS operate in different countries, collecting different materials for recycling or reuse, with different recycling rates, and providing varying levels of value for money. The way in which the scheme is established and operates can lead to a range of unintended consequences including the levels of material switching, most commonly increasing plastic bottle usage, but also on the risk of fraud and, importantly for the glass industry, the level of recycling through a DRS and the impact on the recycling of other glass packaging that will remain at the kerbside.

It is for these reasons that we welcome the Committee's further inquiry, which will help ensure full and proper Parliamentary scrutiny not just of the concept of DRS, but the practicalities and unintended consequences of introducing a DRS, in particular in relation to glass bottles.

This submission will address the following:

- Executive Summary
- Information relating to British Glass
- Commentary on the recyclability of glass as a packaging material
- Responses to individual areas of interest as noted in the Call for Evidence

Executive Summary

British Glass, as the representative body for the UK's glass industry, is committed to improving recycling rates and reaching Net Zero by 2050 which is why we have set an industry target of achieving a 90% glass collected for recycling rate by 2030. We believe this target can be achieved through consistent household collections, national recycling campaigns and a new system of Extended Producer Responsibility (EPR), but importantly, not through including glass in a Deposit Return Scheme (DRS). We believe including glass in a DRS would lead to many unintended consequences that stand against the concept of a truly circular economy.

Glass recycling

Glass is one of the most sustainable materials on earth. It is 100% recyclable and can be re-melted endlessly without ever reducing its quality. The UK's glass sector has an excellent, and improving, recycling record, with 71% of all glass bottles and jars placed on the market recycled – one of the highest recycling rates of any packaging material.

When making new glass from recycled glass, CO₂ emissions and energy use is actually reduced, saving 580kg of carbon dioxide emissions with every tonne of glass re-melted, which is why British Glass is tirelessly working with the glass industry to increase glass recycling and collection rates.

The glass industry is not opposed to DRS, however, we believe it is the wrong solution for increasing glass recycling in the UK, where there are already established and successful recycling infrastructures.

Unintended consequences of including glass in a DRS

There are a range of negative consequences that would stem from including glass in a DRS, however, of particular interest to the Committee's remit:

- **Material switching:** International evidence from countries such as Germany, Croatia and Finland – which have included glass in their DRS design – shows that consumers, brands and retailers have switched towards plastic usage³. This is due to higher producer fees for glass and flat deposits. Flat deposits encourage consumers to upsize purchases to large plastic bottles as the upfront cost is less for one three litre plastic bottle with one deposit on it than, for example, six 500ml glass bottles. Meanwhile, Norway achieves one of the highest glass recycling rates in Europe (89.4% in 2016) using EPR. This model operates alongside a DRS for cans and plastic, a system which captures an impressive 97% of plastic bottles.
- **It will increase carbon emissions:** Including glass in a DRS risks increasing the use of raw material and emissions. This is because making new glass from recycled glass significantly reduces CO₂ emissions. A DRS would crush glass to a point where it cannot be colour sorted, and therefore no longer remade into everyday glass containers.
- **A threat to existing recycling structures:** The proposed DRS will be a scheme for collecting bottles for recycling and will not facilitate the collection of reusable bottles; it will simply replace the existing and successful kerbside infrastructure at huge costs to producers and ultimately consumers. There is a real risk that glass packaging not in scope of DRS (such as jars and sauce bottles) making up about 30% of glass packaging will not be recycled.
- **Consumer confusion:** There is a significant risk of consumer confusion over different recycling structures – particularly for glass which will see bottles and jars split between DRS and kerbside systems – which we fear will lead to an increase in materials ending up in landfill.
- **Local authority recycling:** From engaging with local authorities across the UK, we understand many are concerned about the loss of income from material that will move from

the kerbside or bottle bank to DRS and are concerned about the viability of kerbside collections post-DRS for glass.

- **Remelt targets:** There is currently no glass remelt target in the Environment Bill. A remelt target must be legislated for, to ensure more glass does not end up being 'recycled' as aggregate, which would mean more raw materials are needed in the manufacture of glass.

A better way forward

We do not believe a DRS is the right recycling system for glass, instead British Glass believe that the most effective route to increasing glass recycling is a combination of EPR, communications, consistent local authority kerbside and bottle bank collections and increased recycling targets.

This approach would deliver an easy to understand, single glass collection system which would boost recycling figures by capturing all types of glass containers in one stream – all through an existing local authority collection infrastructure enhanced by the new EPR and consistent regulations. This would be more cost effective, increase the quality of the recycled material, reduce the burden on consumers, and help create a truly circular economy.

Within the UK, Wales has been consistently ahead of the rest of the pack when it comes to recycling rates, with the third highest household recycling rate in the world. In Wales, the capture rate of glass collected through kerbside recycling is 87.3%, the highest of any widely recyclable material. This has been achieved by encouraging local authorities to follow the Welsh Government's blueprint for core materials for recycling, paired with £1 billion investment in infrastructure and public nationwide communications campaigns.

British Glass is committed to ensuring we get glass recycling right and that is why we have set out our ambition for a 90% rate of collection for recycling by 2030. This is not some clever CSR initiative – it is actually in the interests of glass manufacturers to increase the amount of recycled glass remelted back into new bottles on the market.

We all know more needs to be done to increase recycling, tackle litter, and move toward creating a circular economy for all packaging formats. To this end, it is vital that we use the opportunity now to get recycling right for generations to come. For glass, this means keeping the collection of food and beverage packaging in a single waste stream through improved and consistent kerbside collections, allied to a dedicated public facing communications, under a system of extended producer responsibility.

British Glass

British Glass is the representative body for our UK glass industry, which contributes around £1.3 billion to the UK economy each year and provides more than 120,000 jobs across the supply chain.

As an industry, we are committed to improving recycling rates and reaching Net Zero by 2050. That is why we have set an industry target of achieving a 90% glass collected for recycling rate by 2030 which will increase the recycled content in glass packaging and reduce the emissions in the manufacturing processes¹. Currently, 76.5%² of glass is already collected through local authority collections across the UK with Wales achieving 87.3%³. We believe this 90% target can be achieved through consistent household collections, a focus on non-consumer recycling, national recycling campaigns and a new system of Extended Producer Responsibility (EPR). However, a DRS is not a one-size-fits-all approach for all packaging materials and including glass in a DRS would have many unintended consequences, standing against the concept of a truly circular economy. The glass sector and much of the supply chain believe glass should be outside of scope of a UK DRS.

Compared to plastic and cans, glass has a number of characteristics which make it unsuitable for a deposit return scheme. Glass is heavier and bulkier, it has a low material value and although it is 100% recyclable, recycled glass must be colour sorted. This can only be done on whole or partially broken bottles, to use the material for remelt into new bottles and jars. Including glass in a DRS risks reducing the quality and quantity of material available for closed loop recycling as it is likely to be broken into small pieces that cannot colour sorted, it risks adding to the overall costs and complexity of the scheme, it risks incentivising a switch away from glass to plastic, it risks reducing the viability and existing success of kerbside recycling and it risks increasing rather than reducing carbon emissions.

Recyclability of glass

Glass is one of the most sustainable materials on earth. It is 100% recyclable and can be re-melted endlessly without ever reducing its quality⁴. Making new glass from recycled glass reduces CO₂ emissions and energy use, saving 580kg of carbon dioxide emissions with every tonne of glass re-melted⁵. That is why British Glass is working with companies at every point in the life cycle of glass products to increase recycling.

The UK's glass sector has an excellent, and improving, recycling record at 71%⁶ of all glass bottles and jars placed on the market – one of the highest recycling rates of any packaging material⁷.

A key focus for the glass sector is to maximise the quantity and quality of recycled glass (cullet) available to remelt. Demand by glass manufacturers for good quality cullet is always high: the industry and its wider supply chain rely upon a consistent supply of good quality, economically sourced, post-consumer glass to maximise the recycled content of new glass bottles and jars.

¹ <https://closetheglassloop.eu/>

² <https://wrap.org.uk/resources/report/quantifying-composition-municipal-waste>

³ https://wrapcymru.org.uk/sites/default/files/2020-09/WRAP-municipal-waste-composition-2015-16_0.pdf

⁴ <https://www.recyclenow.com/recycling-knowledge/how-is-it-recycled/glass#:~:text=Although%20there%20is%20no%20shortage,with%20no%20loss%20of%20quality>

⁵ <https://feve.org/about-glass/facts-product-details/>

⁶ The recycling rate is the percentage of glass packaging placed on the market that is recycled. The 'collected for recycling rate' is the percentage of glass placed on the market collected for recycling.

⁷ <https://wrap.org.uk/resources/report/packflow-covid-19-reports#>

Producing glass packaging from cullet is more cost effective for manufacturers than using raw materials, as such high collection and recycling rates are both economically and resource efficient for the glass industry.

Responses to questions posed in the Call for Evidence

The types of waste to be collected under the scheme

Please see our answer to the next question.

The materials to be included in the scheme's scope

The glass industry is not opposed to Deposit Return Schemes. They have proven to successfully increase the recycling rate of certain packaging items in other countries, but put simply, it is the wrong solution for increasing glass recycling in the UK, where there are already established and successful recycling infrastructures. This document sets out our concerns and evidence for why glass should continue to be recycled through existing infrastructure, enhanced through EPR and consistent regulations, and outside of the scope of a DRS.

Material switching

In countries that have included glass in a DRS, including Germany, Croatia and Finland, consumers, brands and retailers have switched towards plastic usage, driving up plastic pollution and contradicting UK environmental targets. There are two key reasons for this. The first is because including glass in a DRS increases costs (including more complex and costly Reverse Vending Machines (RVMs), the costs to retail increases due to increased space and storage requirements, and the cost of transporting glass – largely due to glass being heavier and bulkier). This is often reflected in the DRS operating fees, for example in Denmark, the fee in 2019 was between 0.076 and 0.103 euros per unit compared to plastic which was 0.023 euros per unit⁸. The glass fee was also 14 times higher compared to aluminium cans (0.005 euros per unit). Higher fees and costs provide a clear cost advantage for brands and retailers to switch from glass containers to plastic. The second reason a DRS incentivises a switch from glass to plastic is when a flat deposit is used. A flat deposit encourages consumers to upsize purchases to large plastic bottles as the upfront cost is less for one three litre plastic bottle with one deposit on it than, for example, six 500ml glass bottles.

Key examples of material switching are included below:

- In Croatia, since introducing a DRS in 2006, 2L PET containers have become the market leader (23.9% share) and 25cl glass bottle sales have dropped from a market share of 40.6% in 2006 to 3.5% in 2018⁸.
- When PET was introduced into Finland's DRS in 2008, the quantity of single use PET increased from around 50 million units in 2007 to 375 million units in 2017, whilst total glass sales declined from around 250 million units in 2012 to 150 million units in 2017⁸.
- In Germany, total glass packaging sales in 2003 when the DRS was introduced stood at 30,000 million units, by 2017 this had declined to 23,000 million units. Plastic in comparison has seen a surge in sales, from 9,000 million units sold in 2003 to 22,000 million units in 2017⁸.

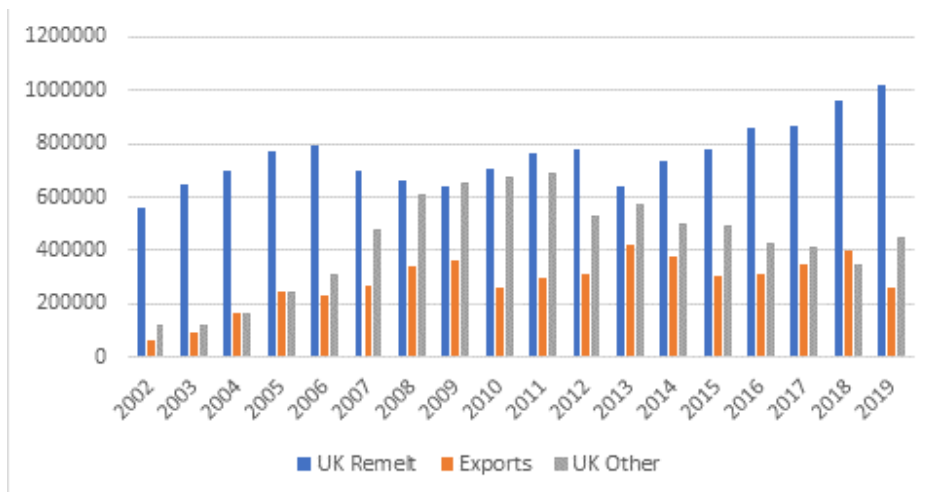
DRS risks reducing the quality and quantity of glass available for closed loop recycling

⁸ https://feve.org/wp-content/uploads/2019/09/Recycling-DRS-in-Scotland_OHL-report_Final.pdf

Advocates of DRS argue that a scheme will increase the quality and quantity of material collected for remelt. In the case of PET, this is a significant advantage, since the sorting and separation of food grade PET at the point of collection reduces the opportunities of contamination from non-food grade plastics and other materials, and hence, makes it more suitable for bottle-to-bottle food grade recycling. However, this is not the case for glass where beverage and food glass do not need to be collected separately. Instead, a DRS will have a detrimental impact on the quality and quantity of glass available for remelt.

A real concern seen in a variety of European countries that include glass in scope of their schemes, is they tend to crush the material at the return point within the RVM. In order to maximise the material within the RVM, cans and PET can be crushed without impacting recyclability. Whilst it does prevent fraud, it represents a problem for glass reprocessors who need the glass to be a minimum size (10mm or above) to be able to colour sort the glass so the material can be remelted and recycled into new bottles. Even breaking glass into larger particles still produces high levels of fines (small particles of glass that are generally lost to the recycling process) which results in lower yield rates of glass available for remelt. While plastic and cans can be compacted at the return point to reduce storage requirements, any compaction of glass at the return point will reduce the quantity and quality of material for remelt.

In the UK there is a cullet (recycled glass) imbalance which means the industry already has high levels of coloured glass going back into our bottles (up to 90% recycled content for green glass) but



This graph shows the split of glass going to remelt, aggregate or export.

The effect of an introduction of a remelt target for glass can be seen in 2013.

British Glass, 2021

requires more clear glass as the industry manufactures more clear glass for the high value export markets, such as for spirits. The DRS will collect glass beverage bottles - predominantly green and brown glass, while the majority of clear glass (in the form of glass food packaging) will be collected at the kerbside or bottle bank. Therefore, a DRS would not be targeting the valuable clear glass that is demanded by industry.

In addition, DEFRA are currently only considering a collection target for materials in scope of a DRS. In our view, if glass is in scope of DRS then a remelt target will be essential to guarantee closed loop recycling for remelt back into bottles and jars – without it, the quality and quantity of glass available for closed loop recycling will be significantly impacted and lead to material being ‘recycled’ as aggregate. This is largely down to the fact that, unlike aluminium, steel and PET, glass has a very low material value (approx. £10 a tonne compared to £800 for aluminium and £150 for PET⁹). It’s heavy and bulky, and must be handled in a way that allows the material to be colour sorted to be remelted

⁹ <https://www.letsrecycle.com/prices/>

back into packaging; this all makes the economics very challenging. Crushing glass at the return point within DRS would be the most economically efficient method of collection but would significantly reduce the availability of glass for remelt in the process. The current producer recovery note (PRN) system recognises glass as a unique material and obligates producers to recycle at least 72% of glass for remelt – this is because remelt offers the greatest environmental benefit as explained earlier.

So, a DRS could actually have a detrimental impact on glass recycling, especially when paired with the fact that kerbside collections will be negatively impacted by the rollout of a DRS. Having two glass systems (DRS and kerbside) puts at risk the future viability of kerbside collections of glass packaging for food, such as jars, which are generally clear glass and represent about 30% of all glass packaging. Encouraging consumers to recycle their clear glass food jars and bottles represents a major challenge, e.g. a US EPA study found that the recycling rate of food jars was less than half of that of beer, wine and soft drink bottles¹⁰. This 50% figure does not represent the situation in the UK but does reflect the fact that glass packaging for food is less likely to be recycled compared to beverage. British Glass believes a DRS is targeting glass packaging that is already being effectively and efficiently recycled at the expense of the more challenging but valuable glass packaging for food. Environmentally, a DRS could increase the need for raw materials by the glass industry (for the production of clear glass as there will be less clear recycled glass) and therefore increase the carbon footprint of the glass industry. Glass production actually uses far less CO₂ when re-melting recycled glass than by using raw materials; a saving of 580kg per tonne of re-melted glass¹¹.

Scheme design ('all-in', 'on-the-go' or other models) and the level and scale of deposit charges

As discussed earlier, international evidence shows that DRS flat deposits encourage consumers to upsize purchases to large plastic bottles as the upfront cost is less for one two litre plastic bottle, with one deposit on it, than, for example, four 500ml glass bottles. This will have a negative impact on plastic pollution and stand contrary to the aims of the DRS.

British Glass is a member of a UK industry working group seeking to develop our understanding around the potential for technological innovations within glass recycling. The working group has the aim of developing a greater understanding of the potential of a 'digital DRS' as an alternative to an RVM based DRS. Whilst we are not advocating for a digital DRS approach, we believe it should be considered as part of the discussions on the design of the upcoming UK DRS. A successful digital DRS could see a deposit system in place but utilise existing recycling infrastructure such as the kerbside system and on-the-go bins with the use of smartphone app, QR code labelling and blockchain technology.

The obligations on retailers at all levels (including online-only retailers) to participate in the scheme

While retailers are best placed to comment on the direct obligations, we would note that retailers are generally not supportive of including glass within a DRS and this is due to space constraints, additional costs of handling glass, and the health and safety risks¹². The Association of Convenience Stores estimates that around 4m staff hours could be lost in the sector per year as a result of a DRS,

¹⁰ https://www.epa.gov/sites/production/files/2019-11/documents/2016_and_2017_facts_and_figures_data_tables_0.pdf

¹¹ <https://feve.org/how-to-calculate-recycled-content-and-pcr/>

¹² BRC, Deposit return schemes (DRS) in the UK: Implications for retailers, Resource Futures

with employees needing to inspect and sometimes clean each bottle deposited through the system¹³.

The cost to retailers of purchasing just one of the estimated 36,000+ RVMs needed to operate a DRS could run as high £40,000, with an annual operational cost estimated to be in the region of £3,000 per machine¹³.

Further, the loss of revenue from reduced floor space by placing RVMs in stores could be as high as £1.3 billion per year to the convenience sector – potentially up to nearly £40,000 in some stores¹³. Although a proposed handling fee would be paid to retailers for each bottle collected through an RVM, evidence from the Netherlands and Sweden suggests handling fees do not cover the costs associated with operating an in-store RVM.

Outside of the significant costs associated with a DRS, glass as a material has its own distinct issues that create challenges for obligated retailers, and consumers alike. Being bulkier and heavier, retailers must give up greater space for it to be stored, at greater cost to the overall scheme (as this would be covered through payments from the scheme administrator to retailers). The alternative to this is for glass to be crushed through RVMs but, as outlined already in this submission, that would be to the detriment of glass recycling, more broadly. This issue is compounded for smaller stores without the floorspace to accommodate an RVM, who will be asked to manually collect glass bottles, and store these.

Further to this, including glass would increase the health and safety risks associated with a DRS, both to retailers and the consumers in stores. We understand some retailers that produce and pack food on site such as a bakery or salad bar are very concerned about the potential of broken glass on the shopfloor.

With accelerating shifts to online retail, UK DRS proposals obligate online retailers to provide a return mechanism. This will be problematic and costly for all material types but has been highlighted as a significant cost for glass due to lost vehicle and storage space. Environmentally, transporting empty glass containers cannot be encouraged. With consumers currently disposing of their recycling at the doorstep, a DRS will mean additional vehicle movements to return empty containers to retail and increase carbon footprints.

There are also challenges for the hospitality sector in relation to DRS with the inclusion of glass being a major focus. Pubs and restaurants often have limited space but will be obligated to participate in a DRS. Within hospitality settings, the deposit is unlikely to be passed on to the consumer to reduce complexity, but pubs, restaurants and cafes risk losing deposits if consumers take used containers out of the hospitality setting and capture the deposit themselves through fraudulent means.

The effect on scheme design of recent changes in patterns of retail activity

The majority of Deposit Return Schemes in operation internationally are premised on a return to retail model, which as outlined above has its own complications for glass. Any DRS must be future facing. Lockdown has shifted consumer patterns with more people buying online. It has also led to an increase in recycling at kerbside, with glass seeing rises of over 60% in many areas¹⁴. Creating a system that relies on a return to retail model when consumer purchasing habits are shifting towards online purchasing and home recycling is not only short sighted but puts at risk the current hard-fought recycling rates.

¹³ https://www.acs.org.uk/sites/default/files/lobbying/acs_submission_-_defra_deposit_return_scheme.pdf

¹⁴ <https://www.youtube.com/watch?v=FHQ9O3dR6hQ>

The impact of any scheme on existing reuse and recycling systems

The proposed DRS in both Scotland and the rest of the UK will be a scheme for collecting beverage bottles for recycling and will not facilitate the collection of reusable bottles; it will simply replace the existing and successful kerbside infrastructure at huge costs to producers and ultimately consumers. This fact is not often understood.

There is a significant risk of consumer confusion over different recycling structures, particularly for glass which will see bottles and jars split between DRS and kerbside systems. This will lead to an increase in materials ending up in landfill, as consumers place their glass in residual waste due to frustration, confusion and misunderstanding. Unlike cans and plastic, there are many industry standard bottles used for both beverage and food packaging which will lead to confusion. See the below example for apple juice and vinegar bottles.



In a recent survey, 48% of people said they were more likely to recycle glass if it was simpler to understand “what goes where”¹⁵. Including glass drinks containers in a DRS, and jars via kerbside collection, will add complexity rather than simplicity to the UK’s recycling system. We believe consumers may be confused by glass recycling, perceiving beverage bottles to have a higher value than glass food bottles (such as oil) or jars, and end up disposing of glass food containers incorrectly. As discussed earlier, glass containers for food such as jars and vinegar bottles are less likely to be recycled compared to glass beverage bottles despite clear glass being highly demanded by the glass industry for recycling.

When consumers were asked which recycling systems they would like to see improved, the majority agreed that the best way to increase glass recycling is through improved kerbside recycling and more bottle banks, with both ranked ahead of a DRS.

Having one, overarching policy of household collections, combined with further information via a communications campaign, will enhance recycling rates through educating the public, rather than confusion through a DRS.

The impact of any scheme on local authority kerbside collections and on local authority revenue streams dependent on the value chain of recyclables

British Glass have engaged with a number of local authorities across the UK regarding DRS. We understand many local authorities are concerned about the loss of income from material that will move from the kerbside or bottle bank to DRS, they are concerned about how the interplay between DRS and EPR will work in practice, and most concerningly, the viability of kerbside collections post DRS for glass, even with EPR in place.

A DRS which includes glass in scope puts at risk the future viability of the collection of glass packaging for food from households, such as jars and olive oil bottles, which represent about 30% of all glass packaging. This 30% is largely clear glass which is of most value and in high demand by the UK glass manufacturing industry. By splitting the total volume of glass captured across two systems,

¹⁵ Glass recycling (England and Wales), Toluna Surveys, Feb 2020

it is less financially viable for Councils to continue collecting glass food packaging at our kerbside, threatening the overall recycling rate for glass, and costing twice as much to collect.

We are already seeing the impact in Scotland ahead of the implementation of the DRS. Dumfries and Galloway Council announced in the second half of 2020 that they would be ending kerbside collections for glass. They explained, “we will only be collecting a small percentage of the glass items we currently collect, making kerbside collections for glass unsustainable and not cost effective”¹⁶. Local authorities are already legally required to collect glass separately from the kerbside accept when not technically, environmentally or economically practicable (TEEP) – we are concerned that even with EPR, local authority glass collections will not be sustainable if the majority of glass is in scope of DRS.

With glass outside the scope of DRS, EPR will allow for the UK to further invest in the whole recycling process, not simply the collection point as is the case for DRS. There will be more funding available to not just collect consumer glass recycling but also to make much needed improvements to non-consumer recycling, as well as funding reprocessing facilities, and importantly promote good recycling practices.

EPR will ultimately lead to more investment in recycling infrastructure across the UK, both for products recycled at home and on-the-go. This will mean better investment in more effective and consistent local authority kerbside recycling as opposed to costly RVMs.

The quality of glass currently collected from local authority collections is high due to investment in infrastructure and sorting facilities to better sort glass into colour streams, and more local authorities moving from comingled to separate collections for glass. We are therefore at a point where kerbside collections provide a high quantity and quality of glass for remelt. This is not the case for plastic, as plastic food and beverage packaging can become easily contaminated if mixed with non-food packaging. Introducing a DRS for plastic creates a completely separate collection system for plastic beverage packaging. In comparison, all food and non-food container glass can be collected together via local authority kerbside or bottle bank collections, without adversely impacting the process of closed loop recycling back into new food and beverage packaging. As glass does not have the same recycling difficulties as plastic, a DRS is not needed to support its separate collection of food and non-food containers. For glass recycling, investing in household collections is unquestionably the right way forward, and is an approach favoured by 73% of people according to consumer research¹⁵.

The potential relationship between deposit return schemes and other packaging waste initiatives promoted under the Resource and Waste Strategy, such as the packaging producer responsibility system and consistency in kerbside collections of dry recyclables

We do not believe a DRS is the right recycling system for glass, instead British Glass believes that the most effective route to increasing glass recycling is a combination of EPR, communications, consistent local authority kerbside and bottle bank collections and increased recycling targets.

This approach would deliver an easy to understand, single glass collection system which would boost recycling figures by capturing all types of glass containers in one stream – all through an existing local authority collection infrastructure enhanced by the new EPR and consistency regulations. This would be more cost effective, increase the quality of the recycled material, reduce the burden on

¹⁶ <https://www.dumgal.gov.uk/article/21420/FAQ-s-New-Waste-and-Recycling-Service>

consumers, and help create a truly circular economy. According to consumer research, 78% of households in England and Wales 'often or always' use kerbside collection to recycle their glass¹⁵. When asked what would increase the recycling of glass, respondents cited more kerbside recycling of glass (73%) and more bottle banks (69%) as the first and second options for improving glass recycling; ahead of a DRS¹⁵.

In consumer research conducted by DEFRA in August 2019, 4 in 10 consumers stated that it would be inconvenient to carry drinks containers back to store, which suggests a barrier to use and a mere 60% DRS participation rate, which is below the current UK glass collection rate of 76.5%¹⁷.

EPR, improved consistent kerbside collections, and a DRS for some materials can work together to improve overall recycling rates, whilst providing a system tailored to what works well for different materials. An all-in DRS does not provide a 'one size fits all' solution – including glass in the DRS materials scope will be to the detriment of the circular economy.

Within the UK, Wales is an example of best practice for glass recycling and reflects the ability of local authority collection infrastructure to capture very high rates of glass for recycling. Wales has been consistently ahead of the rest of the UK when it comes to recycling rates, with the third highest household recycling rate in the world. In Wales, the capture rate of glass collected through kerbside recycling is 87.3%, the highest of any widely recyclable material³.

Wales has achieved this through the majority of local authorities following the Welsh Government's collection blueprint which provides a consistent approach to recycling collection methods as well as a consistent set of core materials for recycling, including glass. The Welsh Government has paired this with investment in infrastructure and public nationwide communications campaigns over the last two decades¹⁸.

British Glass believe a similar approach to Wales can be achieved through the upcoming regulations on consistency of collections across English local authorities and the new EPR that will drive investment in infrastructure and fund public awareness campaigns. Importantly, the rest of the UK is not that far behind Wales in glass collection rates from local authorities. English local authorities already collect 78.2% of glass packaging with a UK average of 76.5%, therefore the glass industry believes the 13.5% increase in collection rate can be achieved through EPR and consistency in a similar approach taken by Wales².

How the use of deposit return schemes is likely to affect the UK's progress towards meeting the targets set in the Resource and Waste Strategy

We understand that DEFRA's modelling suggests a net benefit to including glass in a DRS due to an increase in collection rates and therefore more glass going to remelt (and producing carbon savings). These calculations fail to take into account the issues set out above including the crushing of glass within RVMs, an increase in vehicle movements (from consumers and collection vehicles), the lack of a remelt target to incentivise closed loop glass recycling, and the risk to existing kerbside recycling collections.

¹⁷

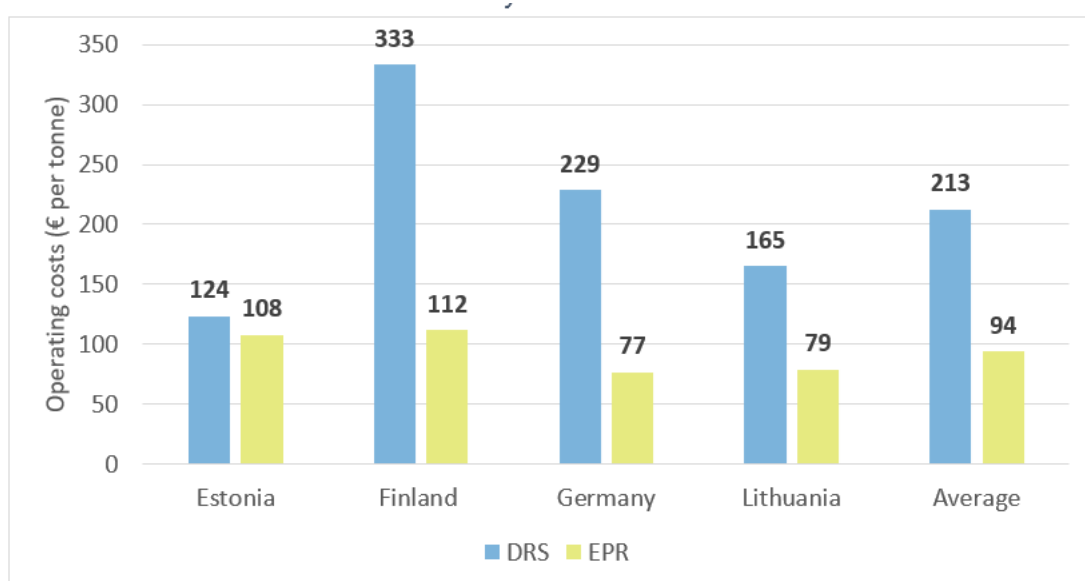
http://randd.defra.gov.uk/Document.aspx?Document=14573_Researchtoinformthedesigofaneffectivedepositreturnscheme-England-Finalreport.pdf

¹⁸ <https://www.icis.com/explore/resources/news/2020/03/23/10485616/welsh-government-sharing-best-practice-to-enhance-uk-sustainability-scheme>

As outlined previously in this submission, the inclusion of glass in a DRS will also likely have a negative impact on the Government's ambition to reduce single-use plastic waste and reduce carbon emissions, as set out in the Resources and Waste Strategy. From parliamentary questions, we understand the Government has not assessed the impact of DRS on material switching¹⁹.

Further to this, the DRS is not a whole lifecycle approach, instead it centres on the maximisation of collection rates rather than recycling or remelt rates. In comparison, the new EPR system will be a full lifecycle approach from eco-modulation and applying recycling targets on packaging materials to financing recycling facilities and littering campaigns. If the majority of glass packaging is in scope of DRS, the glass sector will risk missing out on investment and crucially a remelt target to drive recycled glass back into new bottles and jars. This is also true when it comes to non-consumer recycling – consumer glass recycling rates are already very good achieving a 74% recycling rate, but non-consumer is far lower at 55%⁷. A DRS is targeting the wrong glass recycling streams, however, EPR will target 'household-like' glass packaging within non-consumer setting and therefore improve this 55% figure.

The glass sector recognises the importance of an efficient and cost-effective recycling system which drives the circular economy and supports the proposed reformed EPR scheme to fund it. When looking at the small number of European countries that include a percentage of glass packaging in their DRS, it is clear to see the cost difference of collecting one tonne of glass via the DRS and one tonne via EPR. For example, in Germany the average cost per tonne of glass collected is 229.25 euros, in comparison, through EPR the cost is far lower at 77 euros per tonne²⁰. In Germany only a very small percentage (4%) of glass packaging is within scope of the DRS as EPR is the far more cost-effective method for glass collection with a national glass recycling rate of 84.4%²⁰. The situation is similar in other nations such as Denmark, Finland, and Lithuania where DRS glass collection costs are significantly higher than EPR. International research by FEVE shows that if all glass was managed through a DRS, then the cost across the whole EU-27 member states would be nearly €3 billion, whereas managed through an EPR it would be circa €1.32 billion²⁰. Case studies from abroad show EPR to be a cost effective and efficient solution for glass recycling which is why the glass industry



Graph showing a comparison of operating costs for DRS and EPR for glass in countries operating a dual system in 2017¹⁸.

¹⁹ <https://questions-statements.parliament.uk/written-questions/detail/2021-01-18/138842>

²⁰ DRS True Cost, Summary Document, Oakdene Hollins for FEVE, 2020

supports a reformed EPR to fund and improve our existing kerbside and bring-back sites system for glass in the UK.

The scope for interoperability between any schemes in England, Wales and Northern Ireland to be established under Schedule 8 to the Environment Bill and the scheme to be established in Scotland under the Deposit and Return Scheme for Scotland Regulations 2020

We recognise the serious difficulties associated with not having consistent schemes in operation across jurisdictions in the UK, from manufacturing considerations around SKUs and labelling, to cross-border fraud. Nevertheless, we are clear that this must not be achieved at the expense of our shared wider ambitions of creating a truly circular economy, increasing the collection and recycling rate of packaging materials, and decarbonising our industries.

For the reasons outlined in this submission we believe that including glass in a DRS would have a number of negative unintended consequences. While we are aware the Scottish Government has outlined their intention to include glass in a scheme, this must not dictate the materials that are included in other schemes in the UK, especially where this stands at odds with the Government's stated intention to improve recycling rates and decarbonise the economy.

While we continue to call on the Scottish Government to think again about including glass in a DRS, we are clear that when it comes to our environment, the policy of lowest common denominator is simply not good enough.

The factors which have contributed to the successful implementation of deposit return schemes in other jurisdictions

Deposit Return Schemes across Europe work in different ways. Some countries – such as Norway and Sweden – have kept glass out of their schemes. Norway achieves one of the highest glass recycling rates in Europe (89.4% in 2016) using EPR, bottle banks and bins closer to home⁸. This model operates alongside a DRS for cans and plastic, a system which captures an impressive 97% of plastic bottles⁸. Meanwhile, Sweden operates a DRS for plastic and cans and achieves recycling rates of 85%⁸. At the same time, glass packaging is collected through EPR and maintains a recycling rate of 92.8%⁸.

Whilst these are successful examples of a DRS operating successfully alongside kerbside glass collection, it is also important to note international DRS examples which have encouraged a switch to plastic.

For example, when a DRS was introduced in Estonia in 2005, around 136 million units of glass packaging was sold per year⁸. This declined to around 90 million units in 2017. In comparison, PET remains relatively stable at around 120 to 130 million units sold each year⁸.

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