

From:
To:
Subject: RE: DRS

From: [REDACTED]
Sent: Tuesday, August 3, 2021 4:44 PM
To: [REDACTED]
Subject: RE: DRS

Hi [REDACTED],

Apologies for not coming back to you on recent emails, it's been a very busy time here as we continue analysing responses to the consultation and working through outstanding decisions.

I can't relate to any specific conversation as I wasn't involved at the time, but having spoken to analysts who were involved, it appears we engaged with Remondis representatives to explore their experience of international DRS provisions. I believe the colour separation point may also be information provided by Remondis, I think they have said something similar to me in a conversation previously, although I am not sure on exactly who [REDACTED] has spoken to I'm afraid.

Also, thank you for providing the information in your email of 3rd June – this is very helpful. We are continuing to work through the final decisions on scope and materials for the DRS.

I hope you are keeping well, and hope to catch up again soon.

Many thanks
[REDACTED]

From: [REDACTED]
Sent: 06 July 2021 09:13
To: [REDACTED]
Subject: RE: DRS

Morning [REDACTED],

I hope you're well although I'm sure very busy with the mammoth task of going through the hundreds of consultation responses!

I just wanted to ask whether you'd had a chance to consider my previous email and whether you were able to share any information regarding the ability of RVMs to 'compact' glass/break into 4, 5 or 6 pieces? We also recently spoke to Special Adviser [REDACTED] who mentioned the possibility of glass being colour separated at the point of collection at the RVM. Any details on this would be much appreciated as we are not aware of any existing systems that use this method of collection in Europe.

Thanks very much,

[REDACTED]

From: [REDACTED]

Sent: 03 June 2021 12:52

To: [REDACTED]

Subject: RE: DRS

[REDACTED],

Hope you're well and had a good bank holiday weekend. Sorry for the delay in getting back to you but as promised, I am sharing a few items as discussed during our meeting a couple of weeks ago.

1. Compaction of glass in RVMs

As we discussed during the meeting, the glass industry have real concerns about how glass would be handled within the DRS. Glass is a permanent material and care must be taken to maximise as much material as possible for recovery and remelt/remanufacture. Any system that subordinates a permanent material like glass to a material that is not 100% recyclable and not a permanent material is sacrificing circularity for expediency. I'm pleased to attach our full DRS consultation response and keen to point you to our response to Q16 which includes images we have taken following an exercise to break glass bottles into as large pieces as possible. I am also attaching the full set of images 'bottle breakage'. British Glass do not believe it is possible to intentionally break glass through any mechanism into a defined number of pieces. We believe any system that intentionally breaks glass will significantly reduce the quantity of glass available to closed loop recycling due to the requirement to colour sort the material before remelting.

We also mentioned during the meeting a specification for collected glass, our understanding is this is the only publicly available specification for glass - [PD CEN/TR 13688:2008 'Packaging Material recycling. Report on requirements for substances and materials to prevent a sustained impediment to recycling'](#). This Technical Report lists requirements for collected unprocessed glass (cullet) and processed glass for remelt. – You will see the recommended bulk density is 350 kg/m³ which equates to a reduction in volume of less than 1.5 (most bottles remain largely intact with some breakage) compared to DEFRA's DRS Impact assessment which states a compaction in volume of 4 or 5.

2. Need for a re-melt target

As you know the glass sector believe a remelt target is essential if glass is included in scope of the DRS to incentivise/obligate a high % of glass back to remelt as part of a closed loop. This would also ensure the DMO handles glass in a way that ensures circularity of the material. As you've heard from us, the economics of glass recycling is very challenging and the split PRN has demonstrated the need for obligated targets to drive glass into remelt. We have attempted to set out our reasoning for this under Q16 and Q24 within our consultation response.

We have also sought to produce a simple model to try to illustrate the cost challenges associated with the RVM collection method (table below and spreadsheet attached). These are all estimated costs and for illustration purposes only but reflect that rather than material value being the key factor for glass (unlike aluminium and PET which can both be compacted without reducing their quality) instead transport will be key. You can see that the model estimates the cost of collecting one tonne of glass from a RVM based on the level of breakage of the glass and the difference between collecting glass whole and reducing the

volume by 2, 3, 4 or 5 times. In reality the transport costs will likely be much higher than £10 (we've spoken to a glass recycler who says it takes around 12 to 15 minutes to make a collection currently from bottle banks and therefore 4 or less collections an hour). We have set the material value at £8 per tonne which reflects the current prices on [Lets Recycle](#) for mixed glass. The economics will drive how glass is handled in a DRS with transport being a considerable cost. The DMO would be heavily incentivised to compact/crush glass and reduce its quality unless regulation stops this.

RVM	Compaction	Glass bottle capacity	Average weight Defra kg	Weight kg	Materials price £/tonne	Material price £	Transport cost per collection £	Number of collections	Transport cost £	Total cost £/tonne
Whole bottles	1	220	0.33	72.6	£8.00	£0.58	£10.00	5	£50.00	£680.71
Broken x2	2	440	0.33	145.2	£8.00	£1.16	£10.00	4	£40.00	£267.48
Broken x3	3	660	0.33	217.8	£8.00	£1.74	£10.00	3	£30.00	£129.74
Broken x4	4	880	0.33	290.4	£8.00	£2.32	£10.00	2	£20.00	£60.87
Broken x5	5	1100	0.33	363	£8.00	£2.90	£10.00	1	£10.00	£19.55

3. Oakdene Hollins report

As mentioned during our meeting, the circular economy consultants Oakdene Hollins have produced a report on the appraisal of the cost and benefits of three policy options for increasing the recycling rate for container glass in England. I am attaching the report which you are welcome to use. There are many findings including the appraisal projection finding that the DRS without glass is the most cost-effective DRS option, resulting in a net benefit of £140m rather than a cost of £903m in the all-in with glass. The report also estimates that it will cost £632 a tonne to recycle glass through a DRS vs £218 under EPR. In terms of recycling rates, the appraisal projects an 84% recycling rate for glass through EPR compared to 85% under DRS. Oakdene Hollins also identify transport costs as a key issue and project their own costs for the DRS.

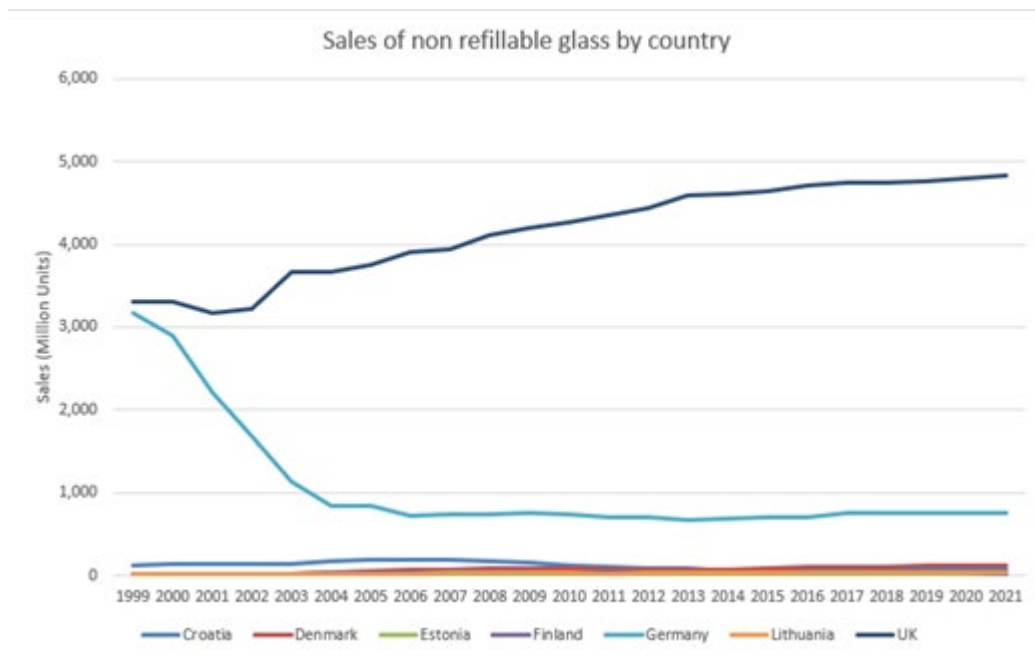
You can find the report on the Oakdene Hollins

website: <https://www.oakdenehollins.com/reports/2021/6/1/appraisal-of-policy-options-for-british-glass>

4. Glass in scope of DRS assumptions

During our meeting I think [REDACTED] questioned the split for glass all-in vs OTG in table 22 on page 26 of the 'Collection and Packaging Reforms' summary of impacts. We are concerned by the assumption in this table and used in calculations when looking at EPR etc that an all-in DRS would achieve a 93% recycling rate for all glass in scope of the scheme – this would assume a collection rate of around 100% (assuming some losses in the recycling process) – are recycling rates being confused with collection rates?

Lastly, I wanted to share the below graph which shows that the proposed DRS for non-refillables in the UK would be handling at least 5 times more glass than the Germany equivalent scheme and even more than other European nations which do include glass in their schemes (data from GlobalData). I just think it reflects the challenge associated with including glass in the UK scheme (and despite some examples of glass being included in European schemes, we are looking at an entirely different scale).



Sorry for another long email but I hope this is useful. As always, if you have any questions or would find another virtual meeting useful then just shout.

Best wishes,

[REDACTED]

From: [REDACTED]

Sent: 19 April 2021 15:11

To: [REDACTED]

Subject: RE: DRS and process losses

Hi [REDACTED],

11am on Weds 12th work well for me if we can go with that?

Many thanks

[REDACTED]

From: [REDACTED]

Sent: 15 April 2021 09:05

To: [REDACTED]

Subject: RE: DRS and process losses

Hi [REDACTED],

Thanks, it will be useful to catch up. Unfortunately we have a British Glass board meeting all morning on the 11th, do any of the below times work for you:

- 10am or 11am on Wednesday 12 May
- 10am or 11am on Thursday 13 May
- 2pm or 3pm on Monday 17 May
- 10am, 11am, 2pm or 3pm on Wednesday 19 May

Many thanks,

[REDACTED]

From: [REDACTED]
Sent: 14 April 2021 11:03
To: [REDACTED]
Subject: RE: DRS and process losses

Hi [REDACTED],

No problem. How does the morning of Tuesday 11th May work?

Many thanks
[REDACTED]

From: [REDACTED]
Sent: 14 April 2021 08:54
To: [REDACTED]
Subject: RE: DRS and process losses

[REDACTED],

Thanks again for your recent email, it's useful to know DEFRA's understanding on these points.

Rather than a long written response, I wondered if you'd be happy for me and my colleague [REDACTED] to meet with you virtually to discuss these issues? My calendar is pretty busy next week and I'm then on AL the following week so can I suggest a meeting during the w/c the 10th or 17th May?

Best wishes,

[REDACTED]

From: [REDACTED]
Sent: 07 April 2021 17:23
To: [REDACTED]
Subject: RE: DRS and process losses

Hi [REDACTED],

Good to hear from you, it's been a busy time as I'm sure it is for all of us, but I definitely owe you an email on a few things so thanks for bearing with me!

So where possible, we tried to set out 'final' proposals for different aspects of the scheme in the consultation. The first consultation sought views on whether each material should be included in the scheme, so it was seen as important to show thinking has moved on since then with a more firm proposition of the materials to be captured by the DRS. Of course, this is still a consultation and policy is still up for debate so subject to change, and we are still listening to views from the sector on

materials proposed to be included. I have no doubt you will continue to engage with us on this for glass.

On the point regarding glass breakage in an RVM, our analysts spoke to a number of RVM manufactures and industry contacts we have to understand the functionality of modern RVMs. We were told there would be no issue with modern RVMs breaking glass into 5/6 pieces, and the analysis has therefore been conducted on this basis. Defra would not propose to provide the final RVM specifications to industry, but leave this down to the DMO to work through, but the best option we thought appropriate for our analysis at this stage is to recommend partial breakage of glass into 5/6 pieces. If you would like further information on this I can try and source more details from my analysts, but I understand the conversations were informally held last year.

On the re-melt target option, for now the position remains that DRS material would not have a re-melt target attached to it. We propose to place a collection target for all materials on the DMO in the legislation. There will then be a contract between government and the DMO, with a series of functions and requirements placed on the DMO. One of these requirements would be that material that is collected through the DRS is sent on to be recycled/reprocessed, and the DMO provide evidence of this material being sent on for reprocessing. It gets more complex at this point, because we need to ensure the DMO remains an independent organisation and isn't susceptible to being defined as a public body. This essentially means it is a fine line between how much control government is able to have over the DMO, so the broader over-arching framework for the scheme is set by the legislation and contract, but the specifics of how/what is left to the DMO where appropriate.

Therefore, because material returned into the DRS is owned by the DMO, it is difficult for us to be too prescriptive over what happens to that material and where it is sent, aside from setting the contractual obligation out for material collected to be passed to a reprocessor. If we were to start exploring whether more detail could be added for where material is sent e.g. glass for re-melt, then we could start to verge over the line of control that starts to risk the DMO being classified as a public body. I will explore this further though as it's a grey boundary and it is something I do understand the value in given the points you have raised previously.

In any case, the thinking was that the DMO selling material on to reproducers is a major source of revenue for the scheme, and therefore the DMO should be incentivised to find the best price for this material. I would have thought that selling glass for re-melt would always attract a better price than selling it for aggregate say, so there is surely an incentive here for the DMO to collect glass for remelt? Assuming RVMs collect glass in partial breakage form as our analysis shows, then there should be no concerns over the glass not being of good enough quality to be sent for remelt? Grateful for any views you have on this though!

I also wanted to flag another point on glass being excluded from DRS and therefore captured under EPR which I wasn't sure if you had fully considered (maybe you have so please excuse me if so!). How unredeemed deposits are treated and reinvested into the scheme is still to be decided, but you'll see the consultation states our preferred position whereby all URDs are reinvested into the scheme to keep costs for producers down. Our analysis shows that this could essentially mean URDs entirely/predominantly fund the scheme with an 85% / 90% collection rate, meaning producers fees could in essence be 0, or at least very low. This is a very different picture to EPR, where there would be no such offset of costs to producers. It's another angle on the DRS which might make the scheme more appealing at least in terms of cost to your industry?

I'm also afraid there haven't been any further developments on the process losses work – the team just haven't had the time to progress this and other work surrounding municipal waste at the moment. I will of course let you know if any updates are able to be given in the future.

Happy to discuss any of the above further, and hopefully sending out the DRS Industry Working Group invite soon, which I hope will take place at the end of April. Hope all is well with you and you had a good Easter break by the way!

Many thanks
[REDACTED]

From: [REDACTED]
Sent: 29 March 2021 15:58
To: [REDACTED]
Subject: RE: DRS and process losses

Hi [REDACTED],

Hope you're well and that things are a little quieter now the consultation is out! I have just finished making my way through the DRS consultation and had a couple of questions/comments.

I'm a bit disappointed there is no clear opportunity for responders to say they do not support the inclusion of glass within the DRS despite the separate impact assessment option for a 'no glass DRS', however, we will of course set out the glass industry's views and the evidence for excluding glass from DRS and keeping at the kerbside through the reformed EPR and consistency as clearly as we can. I wondered if you might be able to help with a question I had on the compaction of glass – the impact assessment assumes glass will be 'compacted' which will involve 'breaking glass bottles into 4, 5, or 6 pieces' – please can I ask what this is based on as it would be useful to understand the RVM specs being considered by DEFRA? British Glass have some data from RVM manufactures but are not aware of widely used RVMs that break glass into 4, 5, or 6 pieces and so we are keen to assess this as it's quite a crucial issue for glass recycling. On the remelt target we discussed recently, I wondered if there had been any developments on this as we are still very concerned there is no cost or regulatory incentive for the DMO or reprocessors to recycle glass for remelt.

Finally, I'm including below a query we had on process losses - you suggested at Christmas that I chase you in the new year to see if there had been any developments on this project.

Thanks as always,

[REDACTED]