

Deposit Return Scheme  
Department for Environment, Food and Rural Affairs  
Ground Floor, Seacole Block, 2 Marsham Street,  
London  
SW1P 4DF

10th May 2019

## **Consultation on introducing a Deposit Return Scheme in England, Wales and Northern Ireland**

*Natural Resources Wales is a Welsh Government Sponsored Body. Our purpose is to ensure that the natural resources of Wales are sustainably maintained, used and enhanced, now and in the future.*

Natural Resources Wales welcomes this opportunity to contribute to the consultation and agrees that any Deposit Return Scheme (DRS) introduced should adhere to the principles proposed in that it is:

- transparent in reporting on performance;
- incentivised to manage costs and efficiencies;
- the organisation managing the operation of the DRS should be not-for-profit;
- it should be operationally workable for those running return points;
- it should be consistent throughout the UK;
- It should work effectively alongside a reformed packaging producer responsibility system.

We recognise the potential that an effective hybrid solution of aspects in each of the consultations (DRS, reformed producer responsibility system and plastic packaging tax) could deliver in terms of practicalities, cost and achieving the best environmental outcomes.

There is evidence that the introduction of a DRS could help to reduce litter and improve recycling of drink containers consumed 'on-the-go' in Wales. To achieve this Reverse Vending Machines should be located in areas of high footfall and where beverages are typically consumed 'on-the-go' such as near bins/recycling points already in existence.

An 'all-in' model is not likely to further improve recycling rates of these containers in Wales as there is a well-established kerbside collection recycling infrastructure. There is a risk

that littering may increase in an 'all-in' model where householders place unredeemed deposit containers on their kerbside for local authority collection, which may subsequently be targeted. Impacts to Welsh local authorities in terms of loss of revenue and ability to meet recycling targets in an 'all-in' model requires further detailed consideration and evidence gathering.

There is a risk that excluding certain difficult to recycle packaging such as tetrapak from a DRS may act as an incentive for producers to change their packaging to types that are 'out of scope'. This would potentially have perverse environmental outcomes.

Preventing fraud throughout the UK requires further detailed consideration for the DRS and Producer Responsibility system. For example, DRS collected glass bottles that are excluded from a Producer Responsibility system could be included in a Producer Responsibility evidence system (as crushed/broken glass).

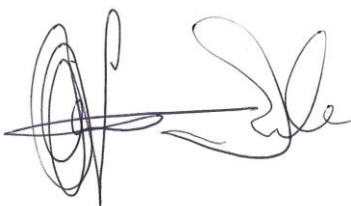
Preventing waste arising is the most sustainable use of our resources and is the most preferred option of the waste hierarchy. A DRS does not encourage reduction in single use packaging items owing to the refund of a deposit, so there is likely to be no reduction in waste arisings. Therefore, the introduction of a DRS in isolation will not achieve the best and most desirable environmental outcome for these types of waste streams.

Any requirement for Natural Resources Wales to monitor/enforce a DRS covering Wales would require detailed consultation with us and funding to cover our full costs for undertaking this additional work.

A more detailed response to some specific aspects of the DRS consultation is provided in Table 1 below.

We are content to be contacted again by Welsh Government in relation to this consultation.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Simon Neale', written in a cursive style.

Simon Neale  
Pennaeth Rheoleiddio a Thrwyddedu (dros dro)  
Acting Head of Regulation and Permitting.

**Table 1 – Detailed comments regarding specific aspects of the DRS consultation**

<p>Reducing litter &amp; litter disamenity</p>	<p>The coastal environment of Wales is a significant natural resource. 77% of the coastline is designated for its environmental importance, and approximately 60% (1.9 million) of the population live on, or near to, the coast (Duigan, CA, Rimington NA, Howe, MA (Eds). 2014. Coastal storms December 2013 &amp; January 2014 – an assessment of environmental change. Natural Resources Wales, Evidence Report No: 33, 122pp, Natural Resources Wales, Bangor).</p> <p>There is evidence that plastic bottles are one of the biggest contributors to marine (<a href="https://www.mcsuk.org/media/gbbc-2018-report.pdf">https://www.mcsuk.org/media/gbbc-2018-report.pdf</a>) and freshwater (<a href="https://ciwm-journal.co.uk/biggest-contributors-to-freshwater-plastic-pollution-revealed/">https://ciwm-journal.co.uk/biggest-contributors-to-freshwater-plastic-pollution-revealed/</a>) litter on a UK level.</p> <p>Research by the EC's Joint Research Centre has identified plastic drinks bottles as one of the ten most commonly found single use plastic items on European beaches. There are some reports to support this:</p> <ul style="list-style-type: none"> <li>• Identifying Sources of Marine Litter (<a href="http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/pdf/MSFD_identifying_sources_of_marine_litter.pdf">http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/pdf/MSFD_identifying_sources_of_marine_litter.pdf</a>)</li> <li>• Top Marine Beach Litter Items in Europe (summary) (<a href="https://mcc.jrc.ec.europa.eu/documents/Marine_Litter/MarineLitterTOPitems_final_24.1.2017.pdf">https://mcc.jrc.ec.europa.eu/documents/Marine_Litter/MarineLitterTOPitems_final_24.1.2017.pdf</a>)</li> <li>• Top Marine Beach Litter Items in Europe (<a href="http://publications.jrc.ec.europa.eu/repository/bitstream/JRC108181/technical_report_top_marine_litter_items_eur_29249_en.pdf.pdf">http://publications.jrc.ec.europa.eu/repository/bitstream/JRC108181/technical_report_top_marine_litter_items_eur_29249_en.pdf.pdf</a>)</li> </ul> <p>A recent study in the composition of local authority litter in Wales reported that paper/card and food waste were among the biggest contributors of litter that was hand-picked from land (<a href="http://www.wrapcymru.org.uk/sites/files/wrap/Litter%20composition%20FINAL%20technical%20report%20WRAP%20Cymru%2020180607.pdf">http://www.wrapcymru.org.uk/sites/files/wrap/Litter%20composition%20FINAL%20technical%20report%20WRAP%20Cymru%2020180607.pdf</a>). The Keep Wales Tidy report referred to in the consultation (<a href="https://www.keepwalestidy.cymru/surveys">https://www.keepwalestidy.cymru/surveys</a>) also provides evidence that smoking related and confectionery litter are the most common types of littering on Wales' streets.</p>
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	<p>The above evidence suggests that the introduction of a DRS could help to reduce litter and litter disamenity through inclusion of metal cans, plastic and glass bottles. This would reduce overall instances of litter to a varying extent in the marine/fresh water environments and on land.</p> <p>It is difficult to estimate the extent that litter would be reduced as a consequence of introducing a DRS. The value of a deposit may not necessarily encourage the desired behaviour by itself. It may be that some 'in-scope' items are still littered but the DRS encourages the litter to be picked up by people seeking to collect unredeemed deposits i.e. an informal waste industry develops.</p> <p>It is likely that an 'all in' model would be no more effective than an 'on-the-go' model in reducing littering since beverage containers consumed at households are just as likely to have been responsibly discarded via dedicated kerbside waste collection services. In Wales, the majority of households have a weekly/fortnightly unrestricted (in terms of quantity) collection of recyclable materials. Therefore, it is currently more convenient to use this service for beverage containers consumed at home rather than to litter the material away from home. This also means that there is considerable uncertainty on the proportion of householders that may not redeem their deposits owing to the convenience of continuing to use established local authority infrastructure. There could be incidents of perverse outcomes in introducing an 'all-in' model, such as householders recycling receptacles being searched or bags ripped open for unredeemed deposits. In instances where bags are ripped, littering of other materials could increase.</p>
<p>More recycling of drinks containers in scope of a DRS, especially those disposed of 'on-the-go'</p>	<p>A DRS is likely to increase quantities of drink containers recycled for those consumed 'on-the-go' because there is evidence that the composition of waste placed in recycling street bins is very contaminated and is similar to that of residual street bins (<a href="http://www.wrapcymru.org.uk/sites/files/wrap/Litter%20composition%20FINAL%20technical%20report%20WRAP%20Cymru%2020180607.pdf">http://www.wrapcymru.org.uk/sites/files/wrap/Litter%20composition%20FINAL%20technical%20report%20WRAP%20Cymru%2020180607.pdf</a>).</p> <p>This indicates that current recycling 'on-the-go' infrastructure is not being utilised correctly and opportunities for recycling are being missed. A well-designed DRS should lead to an increase in the recycling of 'on-the-go' drink containers through improving segregation from other waste streams at source and less drink containers being littered.</p> <p>Increasing quantities of drink containers recycled in a DRS 'all-in' model is less certain in Wales. This is because current local authority kerbside collection infrastructure already encourages high levels of beverage container recycling through restrictions in frequency of residual waste collections and more frequent separate recycling collections. The consultation refers to examples of where DRS works successfully abroad. However, this may not be a like-for-like comparison with Wales since these schemes may have been introduced abroad before or as an alternative to a separate kerbside recycling collection.</p>

	<p>There appears to be a gap in data and evidence available on the expected participation rates of a DRS scheme, so it is difficult to provide a view on the extent that recycling rates may increase, especially since Wales is already a high recycling nation.</p> <p>Preventing waste arising is the most sustainable use of our resources and is the most preferred option of the waste hierarchy. A DRS does not encourage reduction in single use packaging items owing to the refund of a deposit, so there is likely to be no reduction in waste arisings. Therefore, the introduction of a DRS will not achieve the best and most desirable environmental outcome for these waste streams.</p>
Higher quality recycling and greater domestic reprocessing capacity through providing a stable and high quality supply of recyclable waste materials	<p>A well-designed DRS with high participation rates will improve the quality of recycling beverage containers 'on-the-go' through improvements in the segregation of these materials at source and reduction in contamination levels. However, it is essential that the glass, metal and plastic streams are not mixed at the collection or transportation stages to achieve high quality recycling.</p> <p>Improving the quality of material is likely to support the retention of material within the Welsh and UK economies, resulting in economic and social benefits. There is a lack of evidence on the extent that a DRS 'all-in' scheme could improve the quality of beverage containers that are already collected from households via separate kerbside collections in Wales.</p>
If a DRS were to be introduced, should provisions be made so that glass bottles can be re-used for refills, rather than crushed and re-melted into new glass bottles?	<p>The consultation refers to making provisions that glass bottles can be prepared for re-used for refills, rather than crushed and re-melted into new glass bottles through development of additional treatment facilities. This would be a preferable management of this waste stream in accordance with the waste hierarchy with benefits to the environment from a life cycle perspective. However, since the majority of glass bottles contain alcohol, these are more likely to be consumed in pubs or households so there is already infrastructure in place to collect this material and could be explored further, regardless of whether a DRS is introduced or not.</p>
Drinks in-scope of a DRS	<p>Any scheme implemented must be easy to understand and communicate. Excluding multiple drink types from an 'all-in' model could be confusing and difficult to communicate to householders in terms of explaining what to take back for a deposit and what to place in kerbside receptacles.</p> <p>Excluding milk would support an 'on-the-go' model since this is usually consumed at home or where there should be a separate recycling collection infrastructure already in place.</p>

<p>Disposable single use cups (e.g. coffee &amp; fast food cups)</p>	<p>Disposable single use cups are often difficult to recycle and a good example of behaviours that require changing in order for us to move away from being a throw-away society.</p> <p>Preventing waste arising is the most sustainable use of our resources and is the most preferred option of the waste hierarchy. A DRS does not encourage reduction in single use packaging items owing to the refund of a deposit, so there is likely to be no reduction in waste arisings. Therefore, the introduction of a DRS will not achieve the best and most desirable environmental outcome for these types of waste streams.</p> <p>In terms of single use cups, options should be explored to discourage their use. This requires detailed consideration of mechanisms required to change public behaviour. There is evidence that implementing a mandatory 'penalty' charge for the purchase of single use cups could be more effective than the current approach of businesses inconsistently applying discounts for purchases made with re-useable containers. This is evidenced in the taxing of single use carrier bags in Wales: <a href="https://gov.wales/written-statement-update-single-use-carrier-bags-charge-wales">https://gov.wales/written-statement-update-single-use-carrier-bags-charge-wales</a> This reduction in arisings would not have been achieved if a DRS model had been used for single use plastic bags.</p> <p>Simple changes to the pricing of single use cups could also have a big impact in changing behaviour and reducing their environmental impact as evidenced here: <a href="https://www.bbc.co.uk/news/av/stories-44575909/plastic-coffee-cup-waste-is-being-cut-by-a-simple-change">https://www.bbc.co.uk/news/av/stories-44575909/plastic-coffee-cup-waste-is-being-cut-by-a-simple-change</a></p> <p>In conjunction with exploring options for reduction of disposable single use cups, options should be explored for ensuring only recyclable packaging is placed on the UK market. These options are best explored through extending Producer Responsibility requirements (separate consultation) and taxing specific packaging in order to drive innovation. It is essential that the waste industry is included in determining what packaging is currently recyclable and future UK recycling infrastructure requirements.</p> <p>There is a risk that excluding certain packaging such as tetrapak from a DRS may act as an incentive for producers to change their packaging to types that are 'out of scope'. This would potentially have perverse environmental outcomes whereby more products could be produced in packaging that is difficult to recycle.</p>
<p>Reverse Vending Machines (RVM) and manual over the counter return points</p>	<p>RVMs should be located in areas of high footfall and where beverages are typically consumed on-the-go such as near bins/recycling points already in existence. Locating these at public sector facilities such as community centres, libraries, parks, post offices and publically accessible offices should also be considered. These will be of added significance for rural areas.</p> <p>Requiring small businesses to provide an over the counter return point is likely to have a significant impact that requires careful consideration. For example, where there are storage restrictions, an over the counter service could compromise the ability of the small business to separate and recycle its own waste that is produced on site. As well as potentially perverse environmental outcomes, an over the counter return point will have significant resource (i.e.</p>

	<p>scanning individual items returned in bulk) and hygiene implications (i.e. handling waste items potentially collected from the street in an environment where food and drink is sold).</p> <p>An 'all-in' model would have the biggest impact on the above. There is a lack of evidence in the consultation as to how many return counter points and RVM's would potentially be required to adequately cope with the diversion of all 'in-scope' materials that are currently collected from the 1.3 million collection points (households) in Wales.</p> <p>An 'all-in' model has the greatest potential to increase transportation emissions where a person may make multiple dedicated trips to redeem deposits from waste produced at households to a DRS. An 'all-in' model may disadvantage the elderly and other members of society whom will have difficulties in transporting empty containers produced at home to redeem a deposit, especially those that utilise local authority assisted collections at present.</p>
<p>Should there be a de minimis which must be crossed for producers and importers of drinks in-scope of a DRS to be obligated to join the scheme?</p>	<p>This requires careful consideration. A de minimis may benefit small producers in terms of implementing a scheme. However, a de minimis value may be exploited and would not be in keeping with the overall goals if certain producers were not required to join the scheme. For example, there could be a higher proportion of littering from products out of scope of a DRS.</p>
<p>Should certain businesses which sell drinks in in-scope drinks containers host return points, e.g. pubs, hotels, cafes?</p>	<p>For businesses such as pubs, hotels and restaurants, drinks are likely to be consumed on site and thus not taken away. The focus for these businesses should be for them to ensure that recycling is maximised for all types of waste produced on site, not just beverage containers.</p> <p>If these businesses were to sell drinks in-scope but did not host return points, it would encourage people to take empty waste bottles away from the premises i.e. glass bottles from pubs. Therefore, it would be a sensible approach for businesses that sell drinks for consumption on site to be out of scope of an 'on-the-go' model, perhaps only being able to purchase 'out-of-scope' containers for selling on their premises. If this was not feasible to implement, then these businesses would have to host return points to avoid an unpractical scenario of people taking empty containers away with them to redeem the deposit.</p>
<p>Are there any points in the system which you think would be particularly susceptible to fraud?</p>	<p>Manual over the counter return points would be susceptible to potential fraud from double counting deposits.</p> <p>A barcode is also susceptible to fraud with automated take back if the material is not weighed e.g. by cutting the bottle barcode horizontally into many strips and scanning the separate pieces.</p> <p>A system that adopts a special printing technique or can identify individual bottles is likely to be less susceptible to fraud.</p>

	<p>Containers that have not been placed on the market, e.g. process waste, out of date stock etc, being entered into the DRS system</p> <p>There is potential for double counting with an extended producer responsibility system, for example glass bottles from a DRS system that are exempt/excluded from a producer responsibility system being fed in (as crushed/broken glass) to a producer responsibility evidence system.</p> <p>If different systems were introduced throughout the UK, then the risk of fraud would increase.</p>
<p>Do you agree with our definition of 'on-the-go' as excluding multipack containers?</p>	<p>People may not purchase multipacks of cans &amp; bottles to consume these just at home. It often saves money to buy these containers in bulk. These are just as likely to be consumed on the go as bottles/cans purchased singularly.</p> <p>Excluding these could lead to a perverse outcome where people are inadvertently encouraged to buy more multipacks to consume 'on-the-go' since there would be a further reduced up front cost if there was no deposit per container applied at the point of purchase. There would be no incentive for these to subsequently be recycled/not littered when consumed 'on-the-go' if these were out of scope.</p>
<p>Do you agree or disagree with our assessment of other waste legislation that may need to be reviewed and amended?</p>	<p>It is likely that most large organisations, retailers, suppliers etc are already upper tier waste carriers. They would need one registration to cover any activities in GB countries (Wales, Scotland, England) and a separate one for Northern Ireland. Alternatively, the carriers' legislation could be amended to allow transport of DRS material as a lower tier carrier which is free to register and lasts indefinitely. Waste Transfer Notes would still be required to account for any movements. However, this could potentially be electronic in future as part of an electronic Waste Tracking System, which could also identify DRS material for reporting or fraud prevention purposes.</p>
<p>Are there particular local authority considerations that should be taken into account when considering whether to implement either an "all-in" or "on-the-go" model?</p>	<p>The consultation advises that initial analysis has estimated that the introduction of a DRS will reduce Welsh local authority recycling rates by 1%. NRW analysis of Welsh local authority reported data indicates that up to 113 thousand tonnes of metal cans, glass and mixed plastic bottles/PET were sent for recycling in 2017-18. Deducting this quantity from both arisings and recycling suggests that the recycling rate could potentially reduce up to a maximum of 3% points in an 'all-in' model. This estimate is a maximum since it includes tonnages of non-beverage metal cans and milk containers that are out of scope of the proposed DRS and assumes the same participation rate in DRS as current kerbside recycling schemes (which is not likely given the convenience of current kerbside schemes).</p> <p>An 'on-the-go' model could help Welsh local authorities to achieve their statutory targets since less contaminated street bin waste would arise that required disposal. Consideration could also be made as to whether local authorities could also count 'on-the-go' deposits as local authority collected waste where a RVM is placed to complement</p>



existing local authority infrastructure i.e. at places where a local authority has provided a place for persons in its area to deposit their household waste such as bring sites and civic amenity sites.

An 'all-in' model would have the biggest impact to Welsh local authorities in terms of loss of income from selling the recyclates. It is unlikely that this loss of income would be offset through saving expenses since current local authority litter, street bins and kerbside recycling services would still be required. Further in-depth consideration is required on how the DMO could work with Welsh local authorities to underwrite collection costs for 'in-scope' material and refund householders deposits without the need for a householder to return material to a RVM or 'over the counter' collection point. A hybrid between all three collection sources (local authority, RVM and over the counter) should be piloted to test if they can efficiently work together if the preferred option is an 'all-in' model.

The statutory Wales recycling targets were originally set on the assumption that local authorities could include beverage containers that they were collecting at the time. An 'all-in' model would reduce current local authority recycling rates so consideration is required as to whether local authorities would be able to obtain data captured by the DRS and apply a standard agreed household ratio to report towards their waste statistics. If local authorities were able to include DRS data in their statistics, then they would require accurate and timely data to be available to them at the end of each month to fulfil their statutory reporting requirements. Alternatively, an adjustment to local authority recycling targets should be considered.

Further consideration is also required in regard to reporting Wales and UK household statistics, particularly waste from households and measuring progress against the 50% target for 2020. The impact of a DRS to Welsh household and waste from households statistics would be greater than the impact to the overall Wales local authority recycling rates. This is because metal cans, glass and plastic bottles comprise a higher proportion of the waste generated from households statistics than overall local authority waste generation statistics in Wales. It is difficult to estimate the potential impact but a high 'all-in' participation rate could reduce waste from household recycling rates up to a maximum of 8% points in an 'all-in' model. Therefore, a similar consideration is required in terms of obtaining accurate and timely data from the DRS for reporting towards UK and Wales waste statistics.