



Deposit Return Scheme

Lessons from Scotland and implications for the rest of the UK





APSE

APSE (Association for Public Service Excellence) is a not-for-profit local government body working with over 300 councils throughout the UK. Promoting excellence in public services, APSE is the foremost specialist in local authority front line services, hosting a network for front line service providers in areas such as waste and refuse collection, parks and environmental services, leisure, school meals, FM services, housing and building maintenance.

APSE member authorities have access to a range of membership resources to assist in delivering council services. This includes advisory groups, briefings service, training, not-for-profit consultancy support and interim management as well as APSE Performance Networks data benchmarking service and APSE Energy a unique network for municipal energy and renewables work. Working on a tripartite basis APSE brings together senior officers in local government alongside elected members and trade union representatives.

APSE hosts one of the UK largest research programmes in local government complimenting its work on frontline services with the strategic policy issues faced by local councils.

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Foreword

Across the UK over three quarters of all councils have declared a Climate Emergency, and with that many are now developing their own action plans, as to how they can turn those pledges into positive actions. Waste and recycling for many councils is a core service and is therefore central to many of those pledges on climate change. Indeed, in many areas the waste sector has been at the forefront of driving positive environmental changes; from public education campaigns to reduce the amount of waste we produce, to the need for a circular economy, in reusing and recycling waste, and minimising single use plastics and other materials.

In this context we find that proposals are emerging across the UK for Deposit Return Schemes. A DRS operates whereby a deposit is charged to the consumer for the use of drinks containers made from glass, aluminium or plastic to ensure those products are returned for reuse, to the manufacturer. This, it is argued, will ensure that the materials returned will be of a higher quality, more capable of reuse and recycling, and ultimately support the circular economy by avoiding the use of new raw materials.

It is therefore unsurprising, that as local authorities we have a critical role in collecting and disposing of waste and recycling materials, changes in how society deals with glass, aluminium and plastic drinks containers, will have both operational and resource implications for local authorities. This is however now a real prospect across the UK as different Government administrations seek to introduce Deposit Return Schemes. Naturally APSE member councils want to continue to do their best for their local residents, but they are also mindful of the direction of travel set by UK wide administrations when introducing new ways to deal with waste and recycling.

That is why APSE decided to conduct some further research into Deposit Return Schemes using Scotland as an emerging case study, given it is ahead of other UK administrations in bringing forward proposals. Whilst this research publication therefore concentrates on the proposed scheme within Scotland some of the lessons learned are equally applicable to the rest of the UK.

Whilst many APSE member councils may support the principles of a Deposit Return Scheme, in creating higher quality recycling materials, ensuring greater producer responsibility, and avoiding the unnecessary use of raw materials, which support a circular economy approach, there are also many unanswered questions.

APSE is firmly of the view that the success of any DRS approach, wherever in the UK, will benefit from the full involvement of local authorities in the rollout of such schemes. Governments across the UK must avoid uncertainty for local authority waste and recycling services, where great strides have been made to run those services with the maximum efficiency and foresight, including their business-planning decisions, which centre on investing in their workforce, vehicles, plant and disposal arrangements. Proposals which do not reflect the reality of council waste and recycling operations are destined to be problematic.

This report therefore shares findings and recommendations of the ongoing position within Scotland, with analysis on the lessons learned, which will be informative across the UK. We commend this report to you. In doing so, we would like to thank the member councils within APSE Scotland who participated in survey work and information gathering, alongside those officers and councillors who freely gave their time to participate in the working group, which helped in the formation of this research paper.

Cllr Arwyn Woolcock, APSE National Chair Cllr Archie Dryburgh, APSE Scotland Chair

1. Executive Summary

During the course of the research a number of issues emerged from roundtable events with refuse, waste and recycling industry experts within local authorities in Scotland. These issues were also considered against the broader responses received through the survey conducted to support this research.

APSE makes the following recommendations:

1.1 Go Live Date

We recommend that local councils continue to be kept fully informed as well as consulted with on the progress of the implementation in order to enable changes and modifications to services to ensure a planned and smooth transition for the introduction of the Deposit Return Scheme.

1.2 Support for revised compositional analysis

We recommend that all councils are offered support to create new data based on up-to-date compositional analysis. Whilst we recognise existing compositional analysis may still be reasonably valid in some areas this is not universal and appropriate targeted support should be available to all councils to ensure that the data being used to drive decisions, including operational and financial modelling is fit for purpose.

1.3 Modelling software to gauge the impact of changed assumptions

We recommend access to suitable software for all local councils to enable real time decision making and forward planning. This would be a low-cost solution but provide the opportunity to plan for changes with different scenarios. This avoids decisions being made on out of date, inappropriate or unrealistic assumptions.

1.4 Charter review to consider the views of local councils

We recommend that the Charter and associated Code of Practice is reviewed with full consideration of the potential impact of the DRS on the ability of local authorities to comply with a code designed in a pre-DRS era.

1.5 VAT on Deposits

We would respectfully request that the Scottish Minister for Finance and the Economy, Kate Forbes, MSP and Lorna Slater MSP, Minister for Green Skills, Circular Economy and Biodiversity write to their counterparts in Westminster to demand an urgent resolution to this matter.

1.6 Contract advice and securing Best Value

We recommend that urgent advice is provided to local councils, which is consistent with their Best Value Duty, and which provides assurances on contractual issues; including the potential for compensation sums to current contractors / service providers. Arguments of Force Majeure may not hold since this is a creature of the contract itself and not a common law issue. It is therefore essential that advice is provided in a timely and consistent way.

For a more detailed account of our recommendations, go to "6. Conclusions and recommendations" on page 25.

2. Introduction and methodology

2.1 Scope of the research

This research aims to provide APSE's UK wide membership with information and analysis to help those within waste and recycling services to consider the challenges, and opportunities, presented by a Deposit Return Scheme. This report provides information on the UK perspective as well as an overview of other schemes, which have been implemented or are being considered across Europe. It also contains detailed information collated from roundtables and survey work with local authorities within Scotland, who are at a more advanced stage of developing a DRS; this will help to inform decisions in other UK administrative areas, as each administrative area seeks to develop their own system of deposit returns on certain types of containers, but at differing timescales to that which applies within Scotland.

This report is not intended to prescribe technical support for local councils but to highlight issues of concern and consider practical ways in which these may be addressed. Equally, it is recognised, that support or otherwise for the introduction of a DRS will be highly dependent upon local or geographic circumstances, the starting point at which a scheme is introduced in terms of existing recycling rates, and the resources needed to develop and deliver an effective deposit return scheme. It is not therefore intended to be a commentary on current policy direction but rather an opportunity to reflect upon the findings and deliberations from APSE's research on this matter with our member local councils within Scotland.

2.2 Methodology

The research team initially carried out a detailed literature review which outlined the proposals in relation to Scotland's DRS, as well as drawing upon information from across Europe in terms of what other DRS approaches. This also included information on recycling rates from a consecutive 5-year period from the various countries identified. These can be found in Appendix 1 (page 27).

Volunteers from APSE Scotland's Waste and Recycling advisory group were then invited to sit on a specially convened DRS sub-group, with the initial scoping roundtable taking place at the end of March 2021. The purpose of this event was to explore the context of Scotland's DRS as well as the challenges and opportunities for local authorities. These discussions helped to draw out the important questions for our membership survey. Our survey of questions was then issued to the Scotland membership between April and June 2021 with over two thirds of Scottish local authorities responding. The survey highlighted some important concerns for local authorities in terms of: –

- Cost of change,
- Uncertainty on recycle streams
- Impact on commercial services
- Service redesign
- Carbon footprint
- Ability to model different scenarios

The research team held a further two round table events, one at the end of July to explore the context of the findings from the survey as well as provide the opportunity for these findings to be tested and challenged. The second event took place at the start of November 2021 and focused on the report's key recommendations.

In addition, regular updates were provided to the APSE Scotland Waste and Recycling Advisory Group on progress of the report. These meetings also offered the opportunity for the DRS administrator Circularity Scotland to provide updates to the group and DRS sub-group regarding its developments.

3. DRS and UK wide policy perspective

3.1 The UK wide perspective

Across the UK, the four different administrations have made pledges on climate change and their approach to addressing both mitigation and adaptation measures. They are however all moving at a different pace and with different priorities and aims. Clearly, this may create issues where some actions may have a cross-boundary impact between administrative areas, and where those actions may be different or nuanced dependent on statutory requirements or regulatory guidance.

In the context of this research paper, on the proposals within Scotland for a Deposit Return Scheme (DRS) it is important to consider the broader UK perspective.

3.1.1 The UK Government

In June 2019, The UK Government set a new [legislative target](#) for bringing all greenhouse gas emissions to net zero in 2050. Resource efficiency, that reduces demand for energy across the economy, will be critical to achieving this target.

More recently, the UK Government passed the [Environment Act 2021](#) in November 2021, which sets out to make manufacturers more responsible for the packaging they produce and incentivise consumers to recycle more. Part 3 of the Act opens the door to further new legislation by allowing the relevant national authorities – in England, the Secretary of State; in Wales, the Welsh Ministers; in Scotland, the Scottish Ministers; and in Northern Ireland, the Department of Agriculture, Environment and Rural Affairs in Northern Ireland (DAERA) – to make regulations about producer responsibility obligations, including requiring payment towards the costs of disposing of products and materials, the provision of resource efficiency information and resource efficiency requirements, and deposit schemes and charges for single use items. Part 3 of the Act also allows the Secretary of State to make regulations on behalf of the devolved administrations, subject to their consent.

The Scottish Government, the UK Government for England, the Welsh Government and DAERA, within Northern Ireland, have all made commitments to develop policy which works towards achieving greater resource efficiency and resource productivity, not least through the development of producer responsibility proposals.

3.1.2 Scotland

The Scottish Government was the first to commit to a Deposit Return Scheme as part of its pledge towards a Zero Waste Scotland.

The DRS was originally announced in the 2017-18 Programme for Government. The Scottish Government announced the design of DRS on 8 May 2019 and published draft Regulations on 10 September 2019. Following a public consultation, *The Deposit and Return Scheme for Scotland Regulations 2020*, passed by the Scottish Parliament in May 2020, created the legal framework for the scheme.

According to the [Policy Note](#), “The main policy driver for the Regulations is to promote and secure an increase in recycling of materials, forming part of the Scottish Government’s response to the global climate emergency, by ensuring the targeted materials are collected in larger quantities and separately to other materials.”

The scheme also fits into the Scottish Government’s target of 70% recycling for all waste arising in Scotland by 2025, a target set in its [Zero Waste Plan](#) (Published June 2010).

The Regulations require that a 20p deposit is applied each time a drink in a relevant single-use container is sold in Scotland. The seller must also make clear that the packaging can be returned in exchange for reimbursement of the deposit. These obligations do not apply to products sold in export (duty-free) shops, on hospitality premises only selling for consumption on-site, or for sale to a consumer outside Scotland.

The Regulations provide for targets which will increase over the first three years of the scheme's operation (70% in year 1, 80% in year 2 and 90% in year 3). This approach builds on the experience in other countries which have successfully introduced similar schemes. with a target capture rate of 90% of single-use containers through the scheme, with a legal responsibility for the producers to meet it.

Several accompanying documents for *The Deposit and Return Scheme for Scotland Regulations 2020* have been published including:

- [Deposit Return Scheme \(Scotland\) Regulations 2020: accompanying statement](#)
- [Deposit return scheme for Scotland: full business case addendum](#)
- [Deposit return scheme for Scotland: strategic environmental assessment addendum](#)
- [Deposit return scheme for Scotland: equality impact assessment](#)
- [Deposit return scheme for Scotland: business and regulatory impact assessment](#)
- [Deposit return scheme for Scotland: islands communities impact assessment](#)

The Environmental Regulation (Enforcement Measures) (Scotland) Amendment Order 2020 has also been passed, giving additional powers to the Scottish Environmental Protection Agency (SEPA) to enforce the scheme. For more a detailed overview of the Regulations and accompanying documents, please read [APSE Briefing 20-57: Deposit Return Scheme latest reports](#) (published June 2020).

The Regulations state the scheme will go live for the public on 1 July 2022. However, an independent Gateway Review into the impact of the COVID-19 pandemic on the go-live date for Scotland's Deposit Return Scheme was announced by the Cabinet Secretary in March 2021.

In a statement on 14 December, The Scottish government announced that the scheme will go live on 16 August 2023. A phased approach is to be taken and collection processes are planned to start-up from November 2022. with the scheme now expected to be put in place on 16th August 2023.

Circular Economy Minister Lorna Slater, MSP, set out plans for a phased implementation of the scheme and said the target of achieving 90% collection rates by 2024 will be maintained.

The Scottish Government is working with retailers on a voluntary basis to enable people to start returning their bottles and cans for recycling from November 2022.

3.1.3 **England**

A DRS was first announced in 2018 by the then Environment Secretary, Michael Gove, who said it was "absolutely vital we act now to tackle this threat and curb the millions of plastic bottles a day that go unrecycled". DEFRA subsequently ran their first DRS consultation – [Introducing a Deposit Return Scheme \(DRS\) in England, Wales and Northern Ireland](#) – between 18 February 2019 and 13 May 2019, to consider the merits of introducing such a scheme. The UK Government's manifesto promise in 2019 was to introduce a deposit return scheme to incentivise people to recycle plastic and glass.

The [second of the DRS consultations](#), which ran from 24 March 2021 to 4 June 2021, will inform how a future scheme might be designed in the 'best and most coherent way possible'. Options included an all-in deposit return scheme for all plastic bottles, glass bottles and aluminium drinks cans and a scheme that just covers containers bought and used in takeaways. The consultation document revealed a DRS would not be introduced until late 2024 – more than a year after the original deadline for the initiative and after the next general election in May of that year.

Due to the large scope of the consultation, DEFRA are still analysing the responses to the second consultation but expect to publish a full government response by early 2022.

3.1.4 **Wales**

On 28 January 2021, Lesley Griffiths AM, the Minister for Environment, Energy and Rural Affairs, launched the Welsh Government's new plan: 'A Litter and Fly-tipping Free Wales', which outlines how the Government intends to crack down on the issue of littering, while inviting anyone in Wales to submit their own ideas on how to tackle the problem. Included amongst the actions outlined in the plan is a commitment to introduce a DRS to help cut down on the littering of drinks containers.

Alongside the UK Government and Northern Ireland Executive, the Welsh Government launched a second consultation on the introduction of a deposit return scheme for drinks containers which ran from 24 March 2021 to 4 June 2021. The consultation document revealed a DRS would not be introduced until late 2024. DEFRA are still analysing the responses but expect to publish a full government response by early 2022.

Results from Wales' first kerbside digital deposit return scheme pilot, which took place in [Conwy](#), revealed high levels of engagement, with 97% of registered households returning at least one bottle over four weeks, which ran in June and July 2021.

In October 2021, the Welsh Government published [Net Zero Wales](#). Net Zero Wales contains 123 government policies and proposals, including introducing an extended producer responsibility scheme to incentivise waste reduction by businesses.

In Wales, the Wellbeing of Future Generations (Wales) Act became law on 29th April 2015. This means that public bodies, including the Welsh Government, need to ensure that when making their decisions they take into account the impact they could have on people living their lives in Wales in the future. This is clearly an important policy direction in the context of climate change initiatives.

3.1.5 **Northern Ireland**

At the time of writing this report, Northern Ireland has two competing climate change bills on the table, one of which calls for net zero emissions by 2045, the other which calls for an 82% reduction in greenhouse gas emissions by 2050. The first, a private member's bill, completed the first stage in the Assembly in March. The second bill completed its first stage in July, and was introduced by DAERA and its Minister Edwin Poots, MLA.

Alongside the UK Government and Welsh Government, the Northern Ireland Executive launched a second consultation on the introduction of a deposit return scheme for drinks containers which ran from 24 March 2021 to 4 June 2021. The consultation document revealed a DRS would not be introduced until late 2024. DAERA are still analysing the responses but expect to publish a full government response by early 2022.

On 16 November 2021, DAERA announced it will publish a new Waste Management Strategy by 2023, introduce an extended producer responsibility scheme for packaging in 2023 in line with the rest of the UK, and introduce a deposit return scheme for drink containers in 2024/25.

DAERA also issued a consultation on its draft Environment Strategy on behalf of the Northern Ireland Executive. The strategy document consultation opened on the 11 November. This is an overarching strategy document which sets out Northern Ireland's environmental priorities for the coming decades. As well as a commitment to use the strategy as a 'living document' it sets out a series of approaches towards air and water quality, a healthy environment, nature and wildlife, the circular economy and waste and recycling alongside the Green Growth agenda. The consultation draft references the introduction of a Deposit Return Scheme for drinks containers by 2024. Nevertheless, the timescales within Northern Ireland places a further complexity on the overall UK wide timescales for the introduction of Deposit Return Schemes.

3.1.6 **Timescales**

The differing timescales across the UK means that Scotland is 'first out of the block' on introducing a DRS and therefore other APSE members across the UK will be looking to learn from APSE member local councils in Scotland as to how they plan and develop responses to the Scheme, and how this might inform developments elsewhere in the UK.

3.1.7 **Integrated systems**

The differing timescales raise the prospect of different schemes across the UK. This could include the waste streams subject to the DRS, but also the pricing applied to deposits, as well as the requirements for product traceability, to link to the emerging legislation on producer responsibility.

The risk of even marginal differences creating issues with articles subject to Deposit Return Schemes in different administrative areas is very real. Businesses that operate on a UK wide basis such as retail and hospitality chains, who may be recipients of returned DRS articles, or those who are producers of the articles subject to DRS will no doubt view consistency as essential to the smooth operation of the business. Similarly, for boundary consideration, the options to move the articles between administrative areas will be a real issue for those local authorities who operate on or close to boundary areas.

3.2 **Implications of developing DRS policy initiatives for APSE members**

Local councils have faced a turbulent past decade with pressures on local government finance impacting on the resources available for frontline services. Although waste collection is a statutory service, throughout the UK, it has not escaped the financial pressures. Nevertheless, waste services have developed highly efficient operating models; this has led to extensive use of new technologies to assist in domestic collections, such as route mapping software, and alongside this technology public campaigns to increase recycling and reuse of waste.

Although there are differing levels of recycling across the UK administrations, meeting increased targets to recycle materials, such as glass, plastic, aluminum, paper, garden and food waste this has been met with enthusiasm by local authority teams.

In many cases these changes in public policy and the drive to increase recycling rates has been met by investing in the service. Such investments manifest in:

- New fleet and vehicles, adapted to meet the new demands of recycling more
- New team structures and operational or organisational capacity
- Onward disposal arrangements whether through recycle sales or waste disposal treatments and contracts
- Performance reporting to government bodies, on the recycling and waste targets
- Investment in collection containers for kerbside collections and segregation systems
- Public education and behavior change campaigns.

The cost of this level of investment in change is most often calculated based on the benefits of that investment, including a business case, for example to enable the purchase or lease of new fleet to support such changes. Any major change to services, through the introduction of a DRS scheme will clearly have an impact on service cost, quality and productivity and upon both existing and future investment decisions. It is therefore important for both waste and recycling directorates, alongside local councillors, to have an understanding about the potential impact of a DRS approach on existing and future service delivery.

Within any frontline services councils will seek to optimise efficiency in service delivery. This does not necessarily mean that the overall size of a service, or numbers of service users, will have a set optimum level. However, given the drive for efficiency and improvements many councils may feel that introducing a DRS system – which will impact on the volume of articles which they collect from a household – may have a disruptive effect on service efficiencies.

The roundtable events held with APSE members in Scotland highlighted some of the following issues:

- It is difficult to calculate the impact of taking out certain articles from household waste; this includes the volume and weight of the articles and how this may impact on the viability or frequency of certain collection rounds.
- Will the DRS changes impact on the type and volume of fleet required to deliver services?
- This makes it difficult to predict the financial implications for councils; for example, will the changes brought about from a DRS system impact on the income raised through recycling sales? How will these changes impact on existing disposal contracts?
- The medium to long term service plans; for example responding to household growth whilst seeing significant changes to what is collected at a household level
- The potential impact on commercial waste services; particularly those who may have contracts with retail and hospitality businesses.

It was clear from the roundtable events that there is widespread support for DRS, in terms of the aims and objective to provide a better route to less contaminated recyclates, to help support the circular economy approach within Scotland. However, it was felt that greater use of modelling data, and the ability to manipulate that modelling data to plan for different scenarios, and the likely changes in take-up rates in the first three years of the scheme, would be helpful to local councils. Since local councils across the UK will face similar uncertainties, it is fair to state that these issues will not therefore be unique to Scotland. The ability to have data which is capable of looking at different scenarios, such as the level of take-up of the scheme by residents, and micro-level geographic differences between areas, will equally apply across to collection authorities across the UK.

4. Literature Review

On July 2019, DEFRA issued a summary of responses to the Consultation on introducing a Deposit Return Scheme in England, Wales and Northern Ireland. The views of local authorities permeated throughout the analysis, particularly regarding concerns about lost revenue from kerbside collections.

An overview of local authority responses to the Consultation highlighted several positive impacts:

- Cost savings from less waste and reduced littering.
- Flexibility to target resources at different council services.
- Available income from unredeemed deposits (if it was decided to use the funds to support local authorities).

Local authority respondents also identified several issues and concerns:

- Disruption to existing council collection schemes (both household and commercial).
- Loss of revenue from reduced collection and other recycling services.
- Further reductions in available local authority funding as finances are diverted to DRS set-up and operational costs.
- Additional capital investment for local authorities with responsibility for collecting waste from designated DRS return points.

With regards to the pros and cons of introducing a deposit return scheme in Scotland, since the Full Business Case

Stage 1 was published in April 2019, there have been a number of changes relating to the Scheme administrator costs, retailer costs, regulatory costs and carbon pricing. For local authorities, the total cost presented for the DRS is over a 25-year period suggested to be £46 million, and the benefits £214 million, leaving an assumed net benefit of £168 million.

There has been a reduction in benefits “due to changes in the split between Deposit Return Scheme and non-Deposit Return Scheme containers resulting in more materials remaining at kerbside for collection”. Benefits were originally £237 million with a net benefit of £191 million over 25 years.

Other notable changes include:

- The number of containers falling in scope of the scheme increased from 1.67 billion to 2.17 billion.
- Collection targets for target materials is set at 70% for year 1 and 90% by year 3.
- Both estimated costs to the public (£1,019 million) and benefits (£1,187 million) have increased, though there still remains a net benefit of £168 million to the general public over 25 years or just £6.72 million each year.
- Return point costs have increased, though this has been balanced with an equivalent increase in handling fees.
- Modelling assumptions changed on the % of materials eligible for sale (now 95% glass rather than 97%), sale of materials per tonne (now £1,000 aluminium/steel rather than £1,300, and £20 flint, £15 green, £17 brown for glass rather than £17, £6 and £12), average container weights and in other areas relating to the handling fee, non-operating costs and operating costs.

The strategic environmental assessment document features 4 different example systems that were considered and Scotland’s Deposit Return Scheme – with variances in the types of return points, the types of drinks containers included (e.g. other schemes include drinks cartons and single-use paperbased cups), the pricing of the deposit (some have 10p deposits), the capture rate (answers between 60 – 90%) and the means of collection. Scotland’s DRS is shown in the table below:

Scheme	Return Point	Material of drinks containers collected	Deposit Level	Capture Rate	Means of Collection
Scottish DRS	Any place of purchase	1. PET 2. Steel and aluminium 3. Glass	20p	90%	Any retailer selling drinks in an in-scope disposable container to operate a (automated or manual) return point for all DRS containers

What do other Deposit Return Schemes look like?

The scheme design has been informed by examples in place in other countries across Europe. For a detailed overview of the various deposit return schemes across Europe, please see Appendix 1 (page 27).

5. Emerging Findings of the research roundtables and APSE Survey findings

5.1 The emerging issues from the APSE Scotland roundtable events

During the course of the research a number of issues emerged from roundtable events with refuse, waste and recycling industry experts within local authorities in Scotland. These issues were also considered against the broader responses received through the survey conducted to support this research.

The following summary reflects the main issues of concern to emerge.

'Go Live' date delays

At the initial roundtable events the 'Go Live' date for the DRS had been subject to delays. It was accepted that these delays were due in the main to the health pandemic and were therefore largely unavoidable. In March 2021 the Scottish Government launched an independent gateway review on the impact of the pandemic and on the 'Go Live' date for the scheme (which at the time was scheduled for July 2022). These delays meant that during the course of the initial roundtable events local councils were still unable to plan for changes due to the absence of a 'Go Live' date.

A subsequent Ministerial statement by Lorna Slater MSP, Minister for Green Skills, Circular Economy and Biodiversity on Wednesday 17 November 2021 on the circular economy, still provided no definitive information regarding any change to the anticipated 'Go Live' date of July 2022. However, in a follow-up statement on the 14 December 2021, the Scottish Government announced that it would seek to amend the full implementation date for DRS to 16 August 2023.

The lack of clarity during 2021 left local authorities in a state of uncertainty; this has had an impact on their ability to meaningfully plan for changes such as new routes based on differences in collections; cost of change, contractual matters, including disposal issues, workforce and transport and fleet needs. The revised date has therefore been generally welcomed by the research participants but better still would have been earlier certainty to assist local councils in planning for the changes.

Compositional analysis and scenario modelling

The impact of a DRS system is predicated on knowledge of the materials or articles to be included within the scheme; this also means that assessing the impact of removing these articles, from the domestic collection side, is reliant upon robust compositional analysis of the existing domestic waste and recycling streams. However, industry professionals were keen to point out that such analysis is not a static issue. The composition of domestic waste streams will vary from area to area, and from month to month or year to year. It can be impacted by, for example, public behaviour change, industry or changes to the way in which manufacturers change products and packaging. For example, in recent years the weight of glass bottles has generally reduced; consumers are being encouraged to avoid single use plastics, and we know that people are less reliant on reading media content in a printed format. All of these factors will impact upon the volume and type of waste produced by households, including recycling materials.

When added together with a DRS system proposal the future waste streams need to be additionally assessed, and gauged, in terms of the predictions of scheme take-up; how many consumers will engage with the DRS system? What articles may be the most 'successful' in terms of being returned for the deposit to be redeemed? Will the take-up levels increase or decline over time, for example differing in years 1,2, and 3 of scheme implementation?

Whilst the roundtable participants welcomed initial compositional analysis the inability to manipulate outline data for different scenarios, to better inform planning for changes, has created some degree of frustration. To afford time for analyzing different scenarios it was felt by research participants that the ability to access modelling software to compare and contrast outcomes, not just internally, but across the sector would be helpful to ensuring a smooth rollout of a DRS system.

Charter Review

Local collection authorities within Scotland are subject to the Charter for Household Recycling, and its accompanying Code of Practice, which were introduced by the Scottish Government and CoSLA. The documents set out a series of principles and commitments which aims to bring more consistency to recycling services. The

Charter was developed before the DRS system and as such it was felt the Charter is now timely for review.

For example, outcome two of the code commits to maximizing high-quality materials; whilst this is a laudable aim, if councils are left with materials in the domestic waste and recycling streams, that are not covered by the DRS system, there are questions as to the potential for quality of the remaining recycling streams/non-DRS articles to diminish in quality.

The roundtable participants were therefore of the view that the Charter and the Code should be revisited to ensure both are able to reflect the potential disruptive nature of the DRS to existing commitments, and where necessary be amended, to ensure that the principles behind the Charter and the Code remain robust and workable.

VAT on Deposits

During the course of the research a worrying development was relayed to participants which related to discussions on the application or otherwise of VAT on returned articles. It appears that in spite of an anticipated resolution with HMRC the Scottish Government, Circularity Scotland and organisations from the supply chain, are so far awaiting a resolution on the issue of VAT. In practice this could create a number of difficulties.

- First of all, the complexity of VAT on returned articles adds an unnecessary burden in administering a scheme, which is designed to help support a circular economy; this appears to be at odds with the stated public policy intentions of both the Westminster and Scottish governments.
- Secondly this could have an additional burden on consumers dependent upon the point at which the VAT is charged. Should this translate to additional charges to consumers that it is de facto a perverse form of taxation on consumers who choose to do the right thing and participate in the scheme.
- Thirdly the price point of 20 pence on returned articles was not an accidental conclusion or figure. This is a round sum and can easily be commuted by consumers, e.g. 'If I return 5 bottles I will receive a £1 back'. If VAT is top sliced from the sum it risks breaking the psychology of the price point of 20 pence, and its ease of multiplication on returned articles.

The APSE research team took the liberty of checking the VAT position on similar schemes emerging in Europe. It would appear that a value added tax on returned articles has not been implemented elsewhere based up communications with European researchers/academics. Whilst the principal of 'producer pays' has led to some price increases passed on to consumers in terms of the product costs, consumers have not been expected to pay a value added tax on 'doing the right thing'. This appears to be a counterintuitive measure, which might be best described as a tax on recycling.

Contracts and procurement

Council contracts for waste and recycling treatment and disposal are, by their nature, complex and often set out with lengthy terms of operation, for example 5 to 10 years or longer. Whilst many of these contracts will include break-clauses or review dates the risk of uncertainty can increase prices. The higher the level of uncertainty the higher the cost.

Nevertheless, councils have an overarching Duty of Best Value. In the context of delays and uncertainty in future operations, 'Best Value' may be difficult to achieve if ad-hoc extensions and interim arrangements are added to existing contracts. In some cases, changes may be so significant as to give rise to compensatory measures under contract terms.

A further frustration of the research participants came from other procurement and business planning decisions such as when or if to renew fleet, in part due to uncertainty in the issues addressed above in terms of composition

and volume predictions. This was also the case in exploring new households and potential upticks in service demand and how far this perceived increase in demand would be offset by the volume of articles removed from domestic waste and recycling streams.

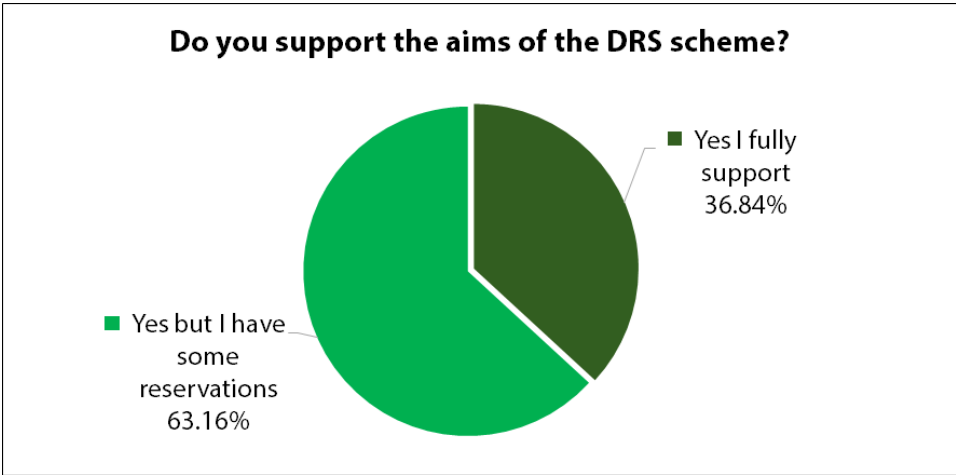
Many felt that support on contracts, procurement and reassurance on additional monetary resources if needed to address these issues would be welcome and appropriate to the scale of change anticipated.

5.2 The emerging issues from the APSE Survey

As part of APSE's research on the Deposit Return Scheme in Scotland, APSE conducted an online survey during April and June 2021. The questions contained within the survey have been formulated to understand any concerns and potential opportunities for waste and recycling services and were reviewed as part of a round table meeting in July, to help investigate and understand the reasons for particular responses. The questions have been written in co-operation with local authority waste and recycling managers, with 38 respondents from Scottish local authorities. The majority of Scottish local authorities were represented in the survey respondents.

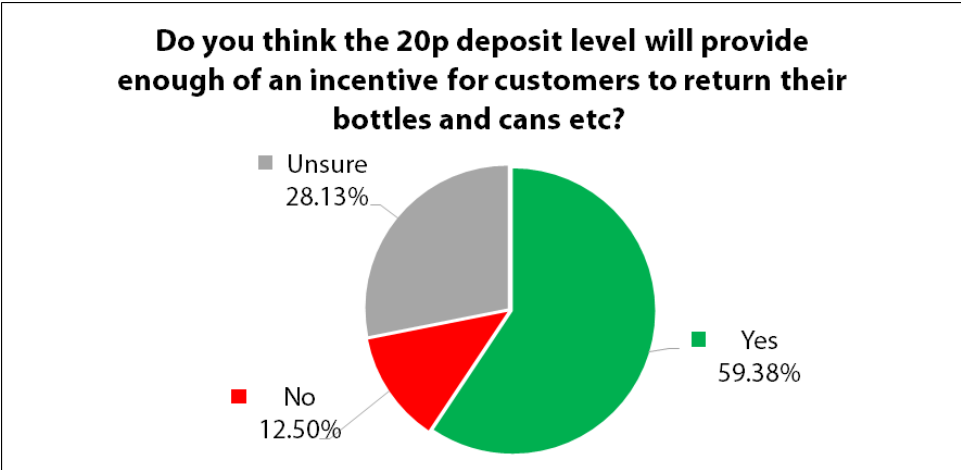
The key findings from this survey are outlined below: –

1. Do you support the aims of the DRS scheme?



36.84% of respondents fully support the aims of the DRS scheme, though the majority (63.16%) have some reservations which are further explored below. But issues include quality, timelines for the introduction of the scheme, infrastructure concerns and the importance of communications and messaging. It should be noted that none of the respondents were opposed to the objectives of the scheme.

2. Do you think the 20p deposit level will provide enough of an incentive for customers to return their bottles and cans etc?



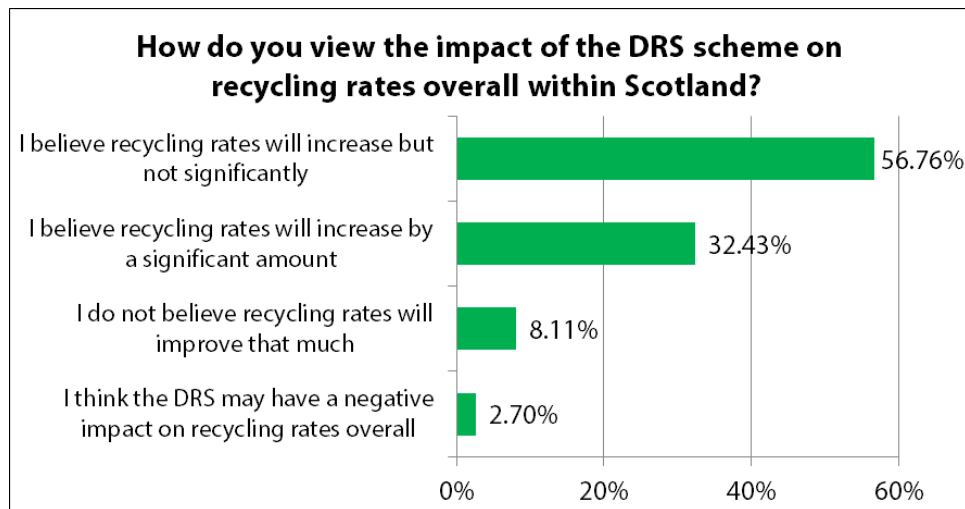
As part of the scheme, it has been confirmed that there will be a 20p deposit for returning containers in scope and therefore we asked our members whether they felt this level of deposit would provide enough incentive for customers to return items.

The majority of respondents (59.38%) believe that the 20p deposit level will provide enough incentive for customers to return their bottles and cans; although 28.13% were unsure, and 12.50% did not believe this to be enough of an incentive.

Some respondents noted that they felt the change might not have the desired effect in highly affluent areas who may fail to see the value in redeeming the deposit, However, it was noted that the introduction of a charity element (donating the deposit) may help to encourage consumers to use the scheme.

Respondents also had concerns about the affordability of the scheme in lower income areas with the increased initial purchase cost (20p increase on the product at the point of sale); along a similar theme, another thought that the effectiveness of the scheme will vary from authority to authority because of the different balance of low, and high, income areas. One respondent noted that while this is a fair starting point, the price of the deposit should be kept under review. The members of the round table noted that there would be a combination of factors regarding incentives but at the moment local authorities were still having difficulties in getting individuals to use the correct bins without the added element of the deposit return scheme.

3. How do you view the impact of the DRS scheme on recycling rates overall within Scotland?

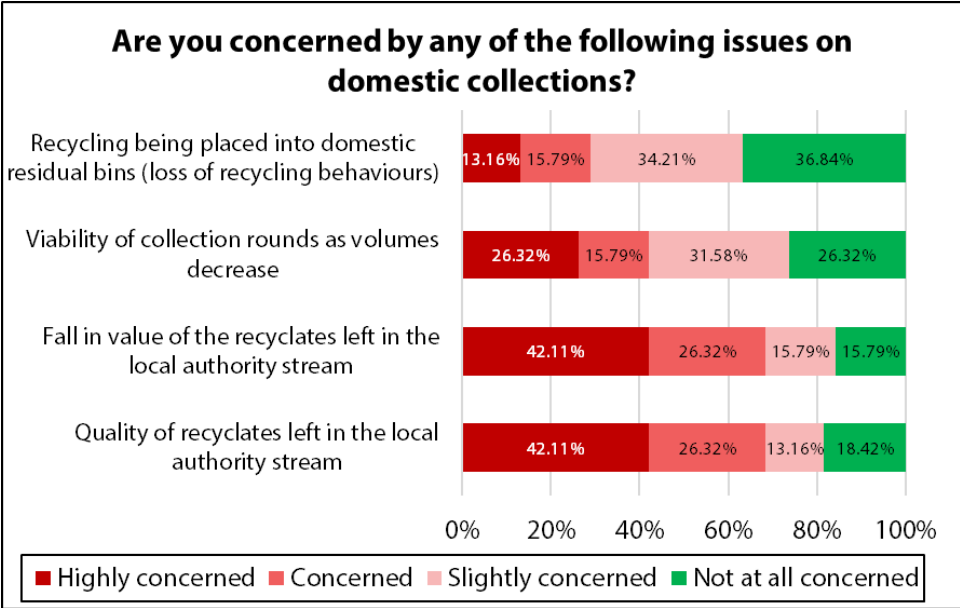


56.7% of respondents felt that whilst recycling rates will increase this would not be significant while 32.43% believe recycling will increase significantly as a result of the introduction of the Deposit Return Scheme, 8.11% of respondents believe recycling rates will not improve that much and 2.70% are of the opinion that it may have a negative impact on recycling rates overall.

Feedback from the roundtable confirmed the importance of undertaking a national communications campaign in order to help achieve positive impacts on recycling rates. Information from similar schemes across Europe have highlighted an increase in recycling rates. However, there was a note of caution, in regards to the many differences in consumer behaviour, not only across Europe, but also within the UK itself.

The round table also noted that the response information may be linked to the system design of individual local authority collections, in terms of having services available but finding they are not currently utilised by individuals. Other areas for consideration included proportionality, what will the data from the scheme highlight compared to what is happening on the ground as the scheme is rolled out? What will the overall increase mean when compared to the remaining general waste stream analysis? Could there possibly be a loss on other items as a value is placed on certain containers? The round table members highlighted that it will be important to manage assumptions of the overall scheme.

4. **Are you concerned by any of the following issues on domestic collections? Please rate**



The areas of the highest concern for respondents were the quality of recyclates left and the value of the recyclates left in the local authority stream alongside a fall in the value of those. 42.11% of respondents were highly concerned but taken with concerns overall this rises to 81.59% with some level of concern. Respondents were also concerned about the viability of collection rounds as volumes decrease (31.58% slightly concerned, 73.69% with some level of concern). Recycling being placed into domestic residual bins was also a concern for the majority of respondents (63.16%), although this statement also had the highest proportion of respondents who were not at all concerned about this (36.84%).

Again, the round table confirmed that the starting point with regards to responses was likely to depend on how each individual local authority service is run and the history of the service design, as there may be nuances. It was felt that there was a number of competing factors such as public perceptions and communications messaging. Other factors which may impact the areas of concern identified include contracts, market pricing and most importantly the timelines for the roll out of the scheme.

There has been some welcome modelling on current data, undertaken by Zero Waste Scotland, to consider the impacts of the scheme but unfortunately there has been no flexibility to tweak data, in order to review what impact a particular change could have.

If the modelling moving forward, provided more flexibility to enable local authorities to review different scenarios and sensitivity shifts, new compositional analysis could be undertaken which would help to provide additional comfort for local authorities. This is important when considering the number of unknowns at the moment including commodities not being in a stable state, post Brexit, the impact of COVID, with changes in consumer behaviours and large-scale homeworking, as well as international markets and the impact of the introduction of the Extended Producer Responsibility for Packaging.

5. **Thinking about your commercial waste collections which of the following applies to your service?**



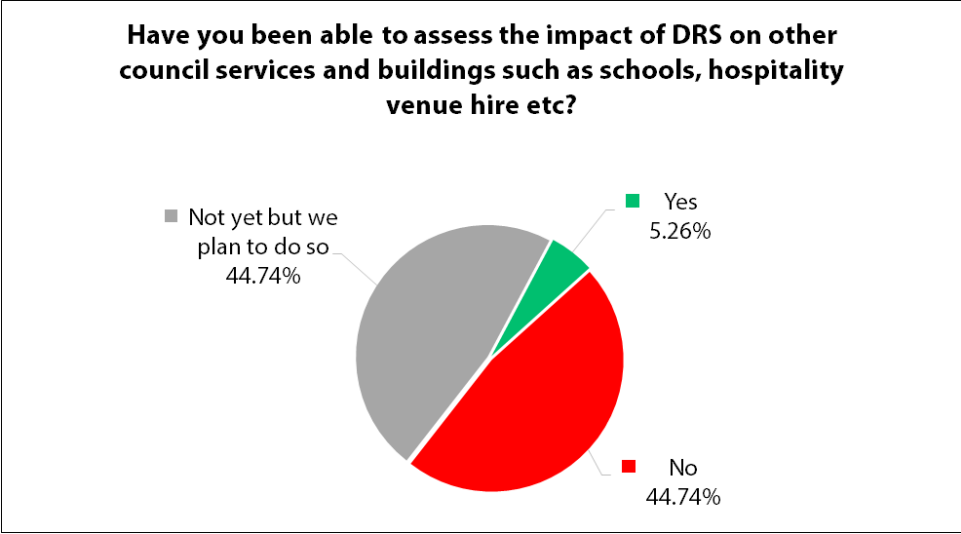
The majority of respondents (65.79%) felt that they may lose some trade waste business as a result of DRS, 7.89% felt they will lose significant business and 10.53% felt DRS will have no impact on their trade waste operations. Due to the implications and challenges which COVID has presented for local authorities, this is likely to be a moving picture and that the impact would depend on the local authority commercial waste portfolio and what was being generated by customers.

At the time of the report, it was felt by the members of the round table that there had been limited discussion in terms of the hospitality sector but that this was very much an important sector with a number of challenges including space constraints, current infrastructure projects underway and the importance businesses place on having a “one stop shop” for any current trade waste queries and questions. Therefore, engagement with organisations already involved in trade waste services, including local authorities, would be extremely beneficial in order for the administrator of the scheme (Circularity Scotland) and others to learn and understand the unique requirements this sector presents.

This may include information such as: –

- frequency of collection services;
- bespoke arrangements for rural/ island authority areas;
- very small businesses;
- information on the current routing models for local authority areas.
- Other factors which should be considered may include: –
- the engagement of planning teams in terms of DRS and
- the importance of reviewing safe collection windows.

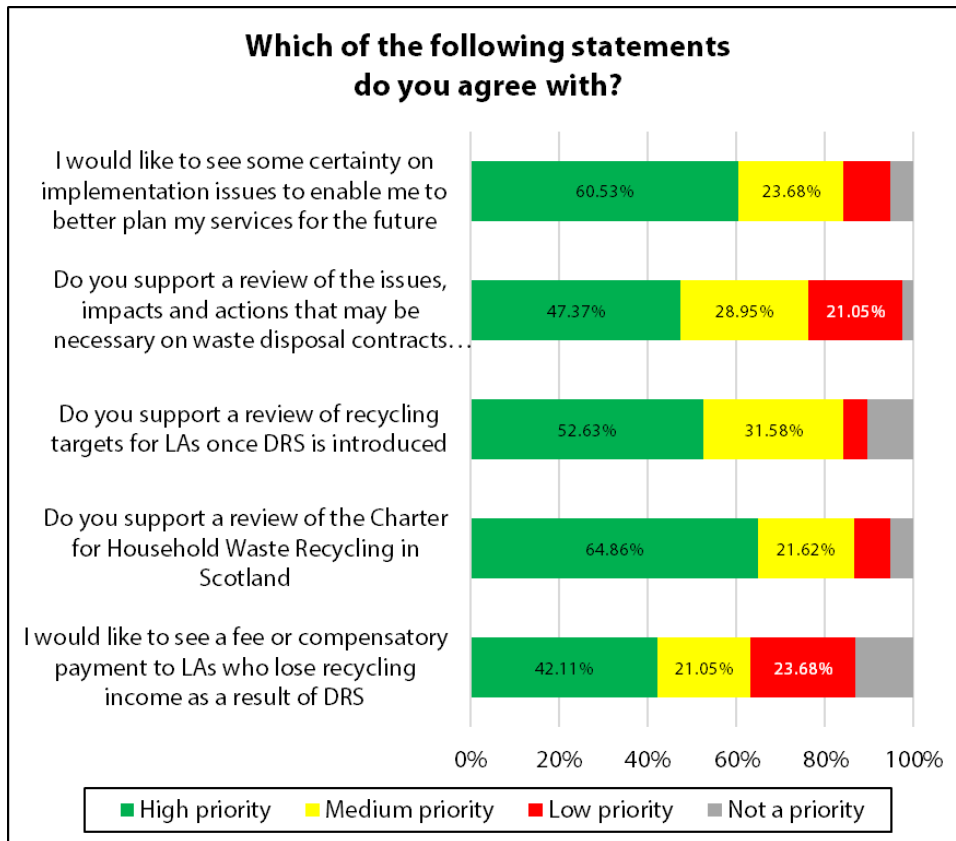
6. **Have you been able to assess the impact of DRS on other council services and buildings such as schools, hospitality venue hire etc**



Very few respondents have been able to assess the impact of DRS on other council services and buildings (5.26%), though 44.74% plan to do so. It was felt that although local authorities are trying to be pro-active in terms of their arrangements for the upcoming deposit return scheme, due to the unknowns outlined earlier in the report and in particular due to managing the many challenges COVID has presented, this has proved extremely difficult.

The school setting was one area which has been very heavily impacted by COVID but also one which brings a number of considerations for local authorities in terms of the ability of a school food service operating as a return point, the potential safety and security measures required should a school setting operate a reverse vending machine. This in particular relates to members of the public having access to the reverse vending machine when needed.

7. Which of the following statements do you agree with?



The statements in which respondents most felt were of high priority were a review of the Charter for Household Waste Recycling in Scotland (64.86%), certainty on implementation issues to enable them to better plan their services for the future (60.53%) and a review of the recycling targets for local authorities once DRS is introduced (53.63%).

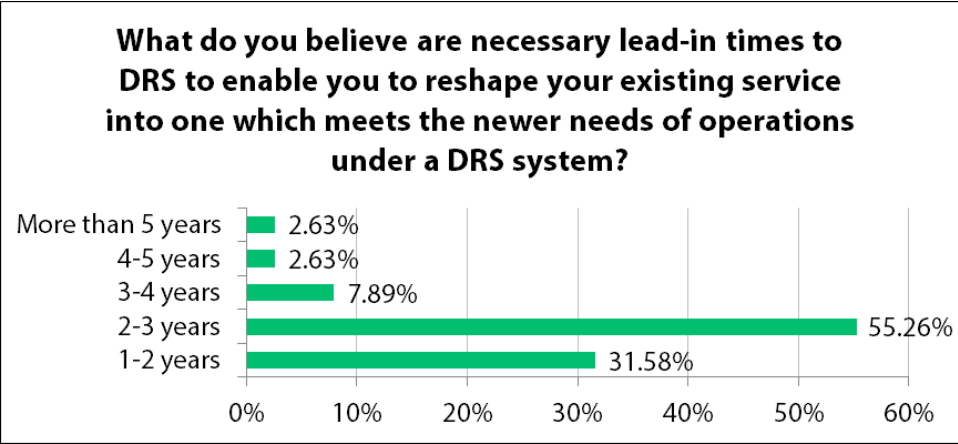
Other issues respondents would like to see addressed as a priority included:

- A more detailed explanation of how the scheme will work in practice
- How DRS will link to the review of packaging Extended Producer Responsibility scheme
- How local authorities will be compensated for any DRS packaging they collect
- Practical and logistical information in terms of the storage of bottles and cans prior to uplift

As has been highlighted previously within the report, COVID has had a significant impact on services with regards to both residential and commercial waste streams, with an increase in the number of individuals working from home and the lack of physical commercial premises open for business during the various lockdowns. Therefore, understanding what impact this has had on recycling behaviours and the volumes of waste within the different recycling streams would be beneficial in order to look at the current landscape.

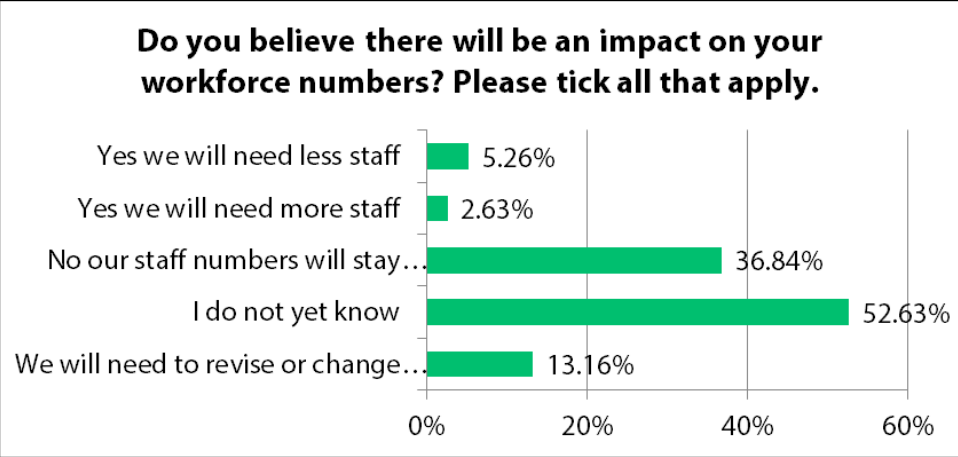
As part of the roundtable feedback, waste and recycling colleagues highlighted that in terms of income this may not necessarily translate into profit, particularly as every local authority set up is different, with some operating a cost neutral service. As a result, reviewing the overall finances of waste and recycling services in terms of a holistic approach would be more beneficial. Linked to the overall financial picture for local authorities, is the current infrastructure arrangements and what impact DRS will have on these arrangements in terms of whole-life costing as well as carbon costing. Again, the complexities of the current waste and recycling setting as a whole emphasises the importance of further investigation into what this means “on the ground”.

8. What do you believe are necessary lead-in times to DRS to enable you to reshape your existing service into one which meets the newer needs of operations under a DRS system?



Most respondents felt that 2-3 years (55.26%) or 1-2 years (31.58%) are the necessary lead-in times to enable their local authority to reshape their existing service to meet the newer needs of operations under DRS. Given the information outlined earlier in the report, it is apparent that it has been extremely difficult to plan for the introduction of the scheme. At the time of the report, the outcome of independent Gateway Review which was announced by the Cabinet Secretary in March 2021 regarding the go live date (currently 1 July 2022) only confirmed a revised date of 16 August 2023 at the end of December 2021.

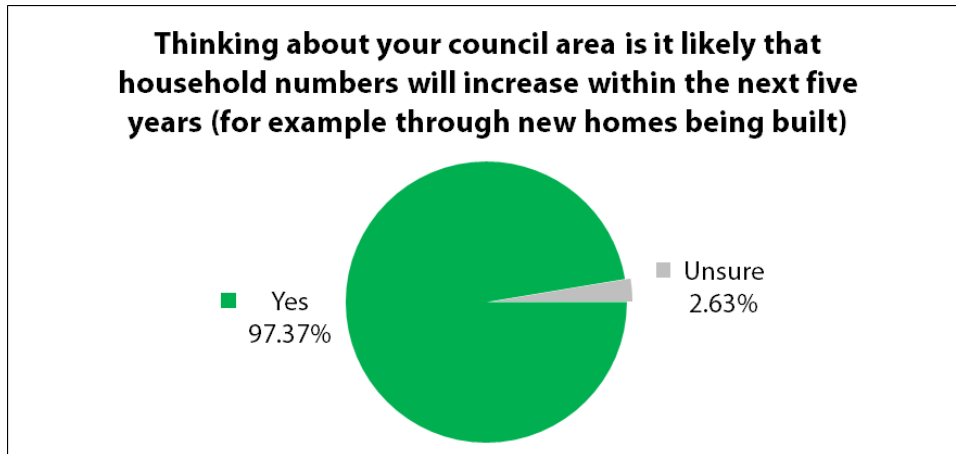
9. Do you believe there will be an impact on your workforce numbers? Please tick all that apply.



Most respondents either did not yet know (52.63%) or felt their staff numbers will stay about the same (36.84%) with the introduction of DRS. It was felt that it was difficult to predict the impact on workforce numbers until the role of local authorities was clearer (for example involvement in collections) and the scheme itself had been bedded in properly.

Also, some local authorities are already in the process of making collection frequency and/ or service changes which may be impacted by DRS when it goes live. Hence, highlighting once again the importance of early clear timelines in order to put any additional plans into place.

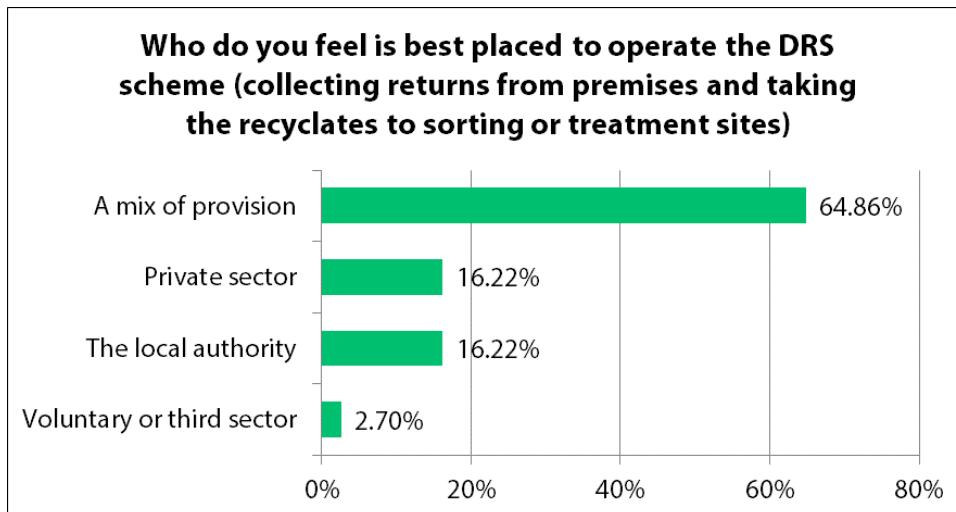
10. Thinking about your council area is it likely that household numbers will increase within the next five years (for example through new homes being built)



Only 2.63% of respondents were unsure if household numbers will increase within the next five years, with 97.37% confident that numbers will increase.

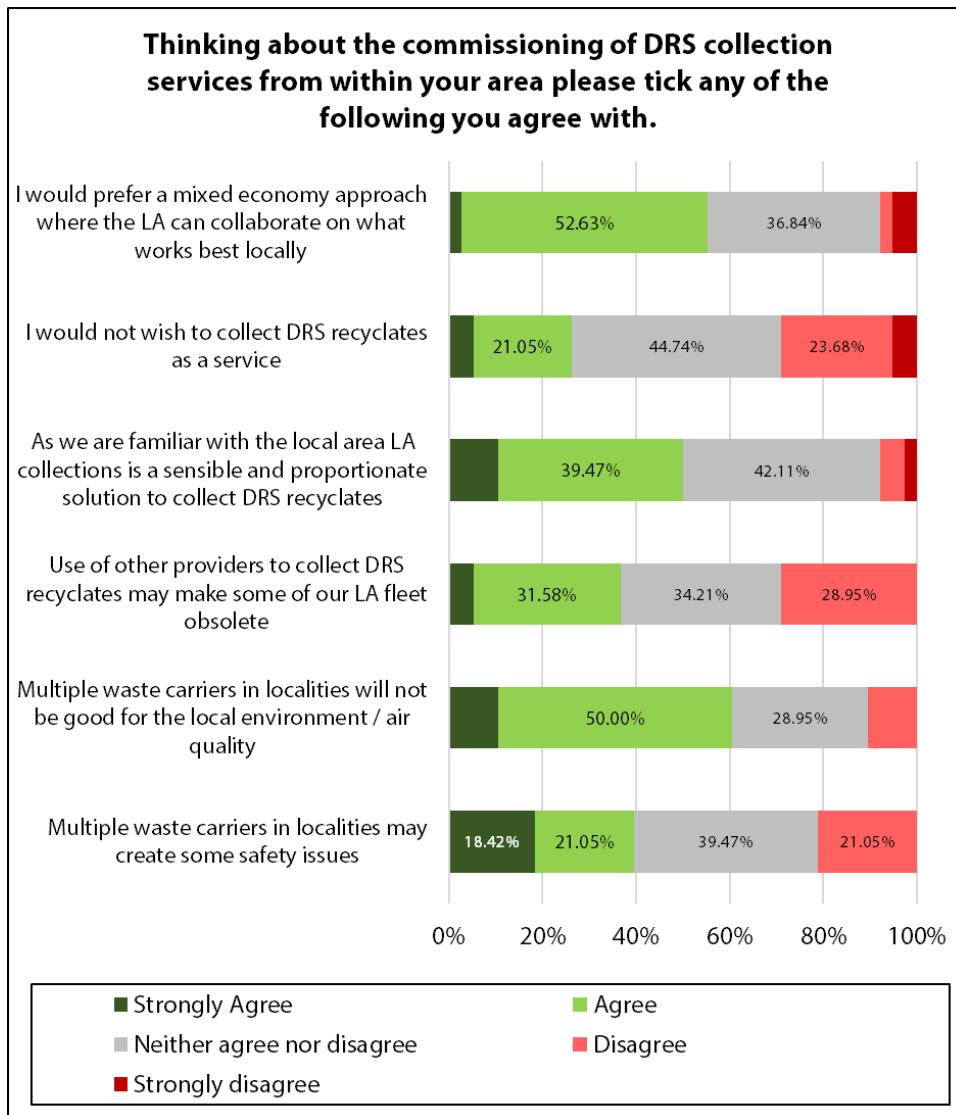
Looking ahead in terms of the increasing household numbers, the importance of involving planning departments in discussions at the earliest opportunity will prove beneficial for planning control issues and considerations such as the requirements for storage/ capacity for DRS and non-DRS collection containers, particularly in regards to new schools, houses and flatted developments.

11. Who do you feel is best placed to operate the DRS scheme (collecting returns from premises and taking the recyclates to sorting or treatment sites)?



Most felt that a mix of provision was the best way to operate the DRS collection and sorting/ treatment processes (64.86%), with 16.22% thinking the local authority is best placed, 16.22% answering the private sector and 2.70% answering the voluntary or third sector. The results support the wider aims of the scheme and the need for the most appropriate local arrangements to be put in place, as one size will not fit all.

12. **Thinking about the commissioning of DRS collection services from within your area please tick any of the following you agree with.**



This is perhaps a core question on the practical and workable rollout of the scheme with some interesting responses which all point to at the very least local authority collaboration in the process:-

- 60.53% either strongly agreed or agreed with the statement that multiple waste carriers in localities will not be good for the local environment and air quality.
- 55.26% strongly agree or agreed that they would prefer a mixed economy approach where the local authority can collaborate on what works best locally.
- 50.00% strongly agreed or agreed that as they are familiar with the local area, local authority collections are a sensible and proportionate solution to collect DRS recyclates.
- 39.47% strongly agreed or agreed that multiple waste carriers in localities may create some safety issues, 21.05% disagreed with this.
- 36.84% strongly agreed or agreed that the use of other providers to collect DRS recyclates may make some of their local authority fleet obsolete, 28.95% disagreed with this.
- 26.31% strongly agreed or agreed with the statement that they would not wish to collect DRS recyclates as a service, 28.94% strongly disagreed or disagreed with this.

As has been emphasised earlier in the report, impact assessments and exploration of routing systems as well as gaining insights and learning from those currently providing the collection provision, would help to ensure the transition to the new DRS is one that is as smooth as possible for all. Given the wealth of knowledge and experience which already exists within local authority waste and recycling services, their involvement would help to provide an easier transition. However, with the many variables and unknowns it is very difficult to predict what the model approach will look like.

13. Is there anything further you would like to add or views you would like to share?

Respondents had some additional interesting thoughts regarding the DRS, these included: –

- Whether the level of investment and infrastructure required for DRS would have been better spent on public education campaigns and improving the quality of recycling waste collected by local authorities
- The problems for local authorities who are already Charter compliant whose service models are going to be affected by having so many high value materials taken away from them leaving only less valuable and unrecyclable materials to be collected
- The difficult logistics of collections in rural and island communities with the need to keep containers intact until they reach counting centres
- A feeling that if the DRS is unsuccessful in engaging the public in order to encourage individuals to participate and this is combined with local authorities reducing their services, more recyclates may end up going into the wrong collection containers/ going to landfill

6. Conclusions and recommendations

6.1 Go Live Date

In March 2021 Scottish Government launched an independent gateway review on the impact of the pandemic on the 'Go Live' date for the scheme (which at the time was July 2022). During the write up of the report there was a Ministerial statement by Lorna Slater MSP, Minister for Green Skills, Circular Economy and Biodiversity on Wednesday 17 November 2021 on a circular economy, which at the time provided no definitive information regarding any change to the current 'Go Live' date. As a follow up on the 14 December 2021, the Minister for Green Skills, Circular Economy and Biodiversity announced that the Scottish Government would seek to amend the full implementation date for DRS to 16 August 2023. The extensive lack of clarity has meant local authorities have been left in a state of extreme uncertainty for most of 2021; meaning they have been unable to plan for changes such as new routes based on the changes to collections; cost of change, contractual matters, workforce and transport and fleet needs.

We recommend that local councils continue to be kept fully informed as well as consulted with on the progress of the implementation in order to enable changes and modifications to services to ensure a planned and smooth transition for the introduction of the Deposit Return Scheme.

6.2 Support for revised compositional analysis

At the time of writing this report Zero Waste Scotland are currently undertaking funded waste compositional analysis for approximately 10 Scottish councils. Compositional analysis is vital to the success of the scheme. This will vary from area to area, from rural place to high-density urban areas and cities, and existing recycling performance, collection methods and values. Compositional analysis may also have varied significantly from the initial early analysis as changes from the impact of COVID-19 on behaviour and waste stream volumes have changed, including in many areas reports of sustained increases in household waste tonnages.

We recommend that all councils are offered support to create new data based on up-to-date compositional

analysis. Whilst we recognise existing compositional analysis may still be reasonably valid in some areas this is not universal and appropriate targeted support should be available to all councils to ensure that the data being used to drive decisions, including operational and financial modelling is fit for purpose.

6.3 Modelling software to gauge the impact of changed assumptions

Whilst initial calculations enabled local councils to look at the impact of the proposed DRS scheme on their services this did not allow for the manipulation of data based on differing scenarios. This is essential to them in order to properly plan for the changes to services and finances. Particularly give the impact of COVID-19 but also in terms of the changes to the number of scheme articles per year (previously 2.17bn but now upped to between 2.7bn – 3bn) as well as the changes to mix of materials from the initial calculations.

We recommend access to suitable software for all local councils to enable real time decision making and forward planning. This would be a low-cost solution but provide the opportunity to plan for changes with different scenarios. This avoids decisions being made on out of date, inappropriate or unrealistic assumptions.

6.4 Charter review to consider the views of local councils

Whilst a review of Household Recycling Charter Code of Practice appears to be underway this must give full consideration to the impact of the DRS in Scotland.

We recommend that the Charter and associated Code of Practice is reviewed with full consideration of the potential impact of the DRS on the ability of local authorities to comply with a code designed in a pre-DRS era.

6.5 VAT on Deposits

We understand that Scottish Government, Circularity Scotland and organisations from the supply chain are in discussions with HMRC and the Treasury but the unresolved issue of VAT on the deposit remains deeply concerning. This could mean price increases for consumers whereby the VAT is placed on the product deposit value or passed through to retailers and wholesalers. In either scenario the application of VAT on the deposit element is a tax on consumers choosing to do the right thing. This also breaks the psychology of the price point of 20 pence being an easy to understand and easily computable sum on the deposit goods. This adds a needless level of bureaucracy and is a tax on a green innovation. This is inconsistent with the stated climate declarations of administrations throughout the UK.

We would respectfully request that the Scottish Minister for Finance and the Economy, Kate Forbes, MSP and Lorna Slater MSP, Minister for Green Skills, Circular Economy and Biodiversity write to their counterparts in Westminster to demand an urgent resolution to this matter.

6.6 Contract advice and securing Best Value

There remains a large amount of concern about the impact of the changes on existing contracts; councils have faced uncertainty and have been unable to effectively negotiate on new contracts or have been forced to extend existing contracts, which has turned what should be longer-term financial planning into short term decisions due to their inability to commit given the considerable amount of time Scotland had an unknown 'Go Live' date. This has also had an impact on procurement decisions in areas such as fleet and machinery, long-term planning for the workforce and an inability to plan for household growth and new homes – which remains buoyant in Scotland.

We recommend that urgent advice is provided to local councils, which is consistent with their Best Value Duty, and which provides assurances on contractual issues; including the potential for compensation sums to current contractors/service providers. Arguments of Force Majeure may not hold since this is a creature of the contract itself and not a common law issue. It is therefore essential that advice is provided in a timely and consistent way.

7. Appendix 1: What do other Deposit Return Schemes look like*?

*Latest verified data

Croatia

Croatia's system was implemented in 2006 as part of the 'Ordinance on Packaging and Packaging Waste'. The system includes plastic, metal and glass, and the typical return rate on items is 0.5 HRK (£0.06). This applies to non-refillable beverage packaging over 0.2 litres. Producers pay a range of fees into the Environmental Protection and Energy Efficiency Fund (a disposal fee, a returnable fee and a stimulative fee). This means the producer of products is responsible for the expenses of collection, disposal and recovery of materials they have placed on the market. Unlike many other systems, consumers do not pay a deposit, but they are rewarded a small amount for returning containers to producers.

Disposal fee – a non-refundable fee of 0.10 HRK.

Returnable fee – this is initially paid by the producers of single-use beverages to the Environmental Protection and Energy Efficiency Fund, which is returned to the producers when reusable containers are returned. Exemptions apply to producers who collect more than 50% of the material themselves that they put on the market (0.5 HRK).

Stimulative fee – for producers that do not sell reusable containers, a fee of between 0.3 and 1.0 HRK per unit applies.

In 2019, their reported total return rate was 88.7% and a target collection rate of 95%. They operate a return to retail system, and the system is operated and administered by the government.

Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below. This has been provided to show an overall impression of each country's recycling performance generally.

	2013	2014	2015	2016	2017
Packaging (All)	58.8%	52.7%	60.1%	54.7%	53.3%
Plastic	45.3%	37.7%	46.3%	41.1%	37.3%
Glass	65.4%	63.5%	65.2%	56.4%	57.0%
Metallic	12.2%	11.6%	13.9^	16.4%	16.5%

Denmark

Denmark's Deposit Return Scheme was first implemented in 2002 under the 'Statutory Order on Deposits and Collection of Packaging for Beer and Certain Soft Drinks'. The system includes plastic, aluminium and glass, with a typical deposit rate of 1 to 3 Danish Krone (DKK – £0.12 to £0.36) depending on the type and size of container, and is known as the ABC deposit system.



This is separated into 3 categories:

- Pant A = DKK 1.0 (glass bottles and aluminium cans less than 1 litre) (£0.12)
- Pant B = DKK 1.5 (plastic bottles less than 1 litre) (£0.18)
- Pant C = DKK 3.00 (all bottles and cans of 1-20 litres) (£0.36)

Their reported total return rate for 2019 was 92%, with a target of 95%. Their system is a return to retail system, operated and administered by a private non-profit organisation known as Dansk Retursystem A/S. Their system uses a Danish deposit mark with a series of dots under two arrows in a circle which can either be printed directly onto the bottle or can, or can be attached as a small sticker.

Empty bottles and cans can be deposited at reverse vending machines in nearly 3000 stores, deposit stations and at most grocery stores and petrol stations without reverse vending machines. If stores without reverse vending machines sell cans, they must take back all cans, and the same applies for plastic bottles regardless of brand. Businesses such as restaurants, cafes and hotels are not required to take back bottles and cans that were not sold on the premises.






Deposit return banks known as 'pantstations' allow deliveries of up to 90 bottles and cans at a time in special deposit sacks, in a process that usually takes less than a minute. Pantstations are located in 12 towns/cities in Denmark.

Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	69.8%	69.8%	73.9%	79.0%	71.5%
Plastic	29.1%	30.7%	30.5%	36.1%	41.8%
Glass	93.0%	83.6%	79.5%	85.0%	94.9%
Metallic	57.0%	71.3%	71.9%	87.7%	73.2%

Estonia

Estonia's Deposit Return Scheme was first implemented in 2005 under the Packaging Act. The system includes plastic, metals and glass. A deposit rate of €0.10 (£0.09) applies to all single-use containers. In 2018, they had a reported total return rate of 90.7%. They have separate targets for the collection of PET plastic and glass (85%) and cans (50%) of the total mass of packaging waste per calendar year. According to Eesti Pandipakend, the system operator and administrator, all beverage packaging bear emblems to show that they have a monetary value.

	Non-refillable plastic package – up to 0.5L (including 0.5L) – €0.10 deposit
	Non-refillable plastic package – above 0.5L (excluding 0.5L) – €0.10 deposit
	Non-refillable metal package – all volumes – €0.10 deposit
	Non-refillable glass package – all volumes – €0.10 deposit
	Refillable glass package – all volumes – €0.10 deposit

Single-use packaging with the Eesti Pandipakend markings can be returned to everywhere where beverages are sold or to collection points with either manual processing or automatic reverse vending machines. The Estonian system works in a similar way to the proposed UK systems, where consumers pay a deposit which is reimbursed when the consumer returns the packaging to the retailer.

Eesti Pandipakend also run a joint project with the Estonian Traders Association to award a quality mark of the 'Excellent Collection Point' that was first established in 2011; the best 100 were selected of 1,000 and awarded this quality mark. This was launched as a response to the "highly variable quality and frequent negative feedback from consumers on the return of packaging". More information can be found on this at: <https://eestipandipakend.ee/en/excellent-collection-point/>



Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	58.4%	60.3%	59.0%	56.0%	53.5%
Plastic	28.1%	29.3%	27.8%	24.6%	26.5%
Glass	71.5%	72.8%	62.1%	63.4%	61.0%
Metallic	58.4%	78.0%	68.4%	66.1%	67.7%

Finland

Finland's Deposit-Based Return System was first implemented in 1996 and iterated upon in 2008 and 2012. The system is operated and administrated by PALPA (Suomen Palautuspakkaus Oy), a non-profit company. Plastic, aluminium and glass are collected as part of the system, with a 93% total return rate in 2019 (95% for cans, 90% for PET bottles and 87% for glass bottles) against an overall collection target of 80%.

The deposit rate varies between different sizes and types of items.

- Plastic under 0.5L = €0.10 deposit (£0.09)
- Plastic between 0.5L and 1L = €0.20 deposit (£0.18)
- Plastic over 1L = €0.40 deposit (£0.36)
- Aluminium can = €0.15 deposit (£0.14)
- Glass bottle = €0.10 deposit (£0.09)

PALPA's website has a 'package barcode search' function that allows you to check the deposit rate any item – <https://extra.palpa.fi/pantillisuus>.

PALPA manages the return systems, and consumers can return their packaging to stores and reverse vending kiosks. Hotels, restaurants and similar business return their packaging through the suppliers of the beverages. A membership fee and package-specific recycling fees are collected from the manufacturers and importers of beverage packaging.

The plastic bottle and can packaging contains a deposit marking, but glass bottles do not. This is instead displayed on purchase receipts, shelf markings or the aforementioned package barcode search on PALPA's website.

Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	58.0%	57.4%	60.9%	64.7%	65.2%
Plastic	22.7%	24.6%	23.7%	25.4%	26.5%
Glass	76.8%	81.4%	78.4%	89.8%	91.8%
Metallic	81.8%	82.3%	83.5%	84.9%	87.8%

Germany

Germany's Deposit System was set up in 2003 under the Packaging Ordinance. The system accepts plastic, aluminium and glass deposits for packaging with a full deposit of more than 0.1 litres and less than 3.0 litres. The deposit rate is €0.25 (£0.23) and as of 2018, the total return rate was 98%.

The system is administrated by Deutsche Pfandsystem GmbH. Unlike many other systems, the German clearing system is decentralised, and Deutsche Pfandsystem GmbH provides a legal and organisational framework system for the settlement of deposits and standards for a labelling system that enables automatic collection of drinks packaging. The system is operated by retail and industry with involvement from the German Retail Association and German Food Association.

Retailers must accept all single-use deposits of the packaging material they distribute, but are not obligated to collect materials they do not sell (e.g. a retailer selling exclusively plastic bottles is not obligated to collect glass). An exception applies to shops with a sales area of less than 200m² which are only obligated to accept packaging of the brands that they sell.

Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	71.8%	71.4%	69.3%	70.7%	69.9%
Plastic	46.8%	47.3%	47.4%	48.4%	48.0%
Glass	88.7%	89.0%	85.2%	85.5%	84.4%
Metallic	93.2%	92.5%	91.5%	91.6%	91.6%

Iceland

Iceland's Deposit System was established in 1989 under Act no 52/1989. Endurvinnslan Hf was established in the same year as the system operator and administrator, with ownership split between the Ministry of Finance and Economy, the State's Alcohol and Tobacco Stores, the Association of Icelandic Local Authorities, Coca Cola European Partners Iceland and other partners. 58 offices are open around Iceland for the receiving of goods.

Their system collects aluminium, glass and plastic, with a deposit rate of 16 ISK (£0.09). In 2019, they reported a total return rate of 87.4%. Recycled glass is used in road preparation and experiments are being carried out on the use of asphalt glazing.

Their last 3 years of available Eurostat data in recycling rates for packaging waste is shown below. This data is unfortunately unavailable for 2013 and 2014:

	2013	2014	2015	2016	2017
Packaging (All)	No data	No data	50.6%	51.6%	46.8%
Plastic	No data	No data	37.2%	42.7%	29.7%
Glass	No data	No data	0.3%	0.0%	0.0%
Metallic	No data	No data	76.4%	75.5%	63.7%

Lithuania

Lithuania's Deposit System was implemented in 2016 for plastic, metal and glass containers between 0.1 litres and less than 3 litres (with an exception for fruit wine, fruit wine based drinks or fruit wine cocktails in one-way

glass packaging). The deposit rate is €0.10, and as of 2019 their total reported return rate was 92%. Their target for packaging recycling was originally 90% by 2025.

The system is operated and administered by Užstato Sistemos Administratorius (USAD), a non-profit organisation founded by the Lithuanian Association of Breweries, Association of Lithuanian Trade Enterprises and the Lithuanian Natural Mineral Water Manufacturers' Association, who release more than 80% of the deposit packaging material to market.

Materials in the deposit system must bear this mark established by the minister for the environment.



Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	53.5%	57.7%	59.8%	69.5%	62.3%
Plastic	42.9%	51.2%	54.8%	74.4%	74.2%
Glass	54.8%	60.5%	74.3%	71.0%	45.8%
Metallic	65.6%	66.6%	74.9%	77.3%	79.9%

Netherlands

Netherlands Deposit System was implemented in 2005 under the Verpakkingsverordening Productschap Dranken, and only covers disposable PET plastic bottles from 75cl with a deposit rate of €0.25 (£0.23). As of 2018, their total reported return rate was 95%.

State Secretary Stientje van Veldhoven recently announced in April 2020 that the introduction of a deposit on small plastic bottles (under 1 litre) would be implemented on 1 July 2021 with a deposit rate of €0.15 (£0.14), with the original €0.25 (£0.23) deposit now only applying to plastic bottles over 1 litre. This change was made as a result of an agreement in 2018 between the business community and Association of Netherlands Municipalities VNG that if a reduction in small plastic bottles in the environment was not achieved, a deposit system for them would be introduced. There is a similar agreement in place for cans, where if the number of cans found in street litter is not reduced by 70-90% by autumn 2021, a deposit system for cans will be introduced.

The scheme is operated and administered by Stichting Retourverpakkingen NL.

Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	70.4%	70.5%	71.7%	72.6%	78.1%
Plastic	46.6%	50.6%	49.8%	51.5%	50.4%
Glass	79.8%	80.1%	82.7%	84.4%	86.2%
Metallic	93.1%	93.5%	94.6%	95.2%	94.9%

Norway

Norway's Deposit System was implemented in 1999, and covers plastic and metal beverage cans with a deposit mark. They have an overall recycling target of 95%; in 2019, they achieved a total return rate of 89.5%. The scheme is administered by Infinitum, which is owned by the grocery and beverage manufacturers.

Their deposit rate is between 1 NOK (£0.08) and 2.5 NOK (£0.21). Bottles and cans are collected through automatic vending machines, manual processes in shops and the system supports other collection schemes such as sports

teams, schools, office communities and the Norwegian Red Cross, who have collected more than 20 million NOK from the deposit of boxes and recycling bottles.

Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	54.5%	55.7%	55.1%	56.3%	56.1%
Plastic	38.8%	36.1%	37.1%	39.3%	36.1%
Glass	86.2%	87.8%	86.8%	89.4%	83.5%
Metallic	69.9%	77.8%	81.8%	83.5%	89.5%

Sweden

Sweden's Deposit Scheme was originally implemented in 1984 for aluminium cans and for PET plastic bottles in 1994. The centralised system is operated and administered by AB Svenska Returpack (Pantamera), which is a privately owned company (50% Swedish Brewery Association, 25% Swedish Food Retailers' Federation and 25% the Grocery Store Association).

The deposit system for cans and PET bottles up to 1 litre is 1 SEK (£0.08) and 2 SEK (£0.17) for bottles over 1 litre. In 2019, the total reported return rate was 84.9%. The system is a 'nationwide and compatible return system', which means you can buy cans or bottles in one store and return them in another.

Their last 5 years of available Eurostat data in recycling rates for packaging waste is shown below:

	2013	2014	2015	2016	2017
Packaging (All)	71.9%	70.5%	71.8%	68.2%	71.7%
Plastic	45.6%	47.5%	49.0%	50.7%	48.4%
Glass	89.0%	94.7%	93.6%	92.8%	93.0%
Metallic	77.4%	76.5%	77.7%	81.5%	84.5%

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8. Appendix 2: Statutes

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