A Deposit Return Scheme for Scotland Partial Business Regulatory Impact Assessment





Partial Business and Regulatory Impact Assessment

Title of Proposal

Scottish Deposit Return Scheme

Purpose and intended effect

Scotland's household recycling rate has increased substantially in the last decade. The latest figures, published in September 2017¹ by the Scottish Environment Protection Agency, confirm that in 2016 the recycling rate reached 45.2%.

This has been driven by substantial investment by central and local government in kerbside collections. The result has been a dramatic increase in the number of households who have access to recycling facilities. All 32 Local Authorities are now nearing completion of these rollouts, covering most of the properties in their area.

The rate of growth, has however, been slowing. Since 2014, and the introduction of a new methodology for calculating recycling rates, it has only increased by 2.4%. A complex range of factors contribute to this limited improvement and it is clear that further interventions are required to stimulate growth in recycling rates, in order to achieve national recycling targets: 70% of all waste recycled and a maximum of 5% to landfill by 2025.

In September of 2017, the Scottish Government announced in the Programme for Government that it will move to implement a deposit return scheme (DRS) for Scotland for single-use drinks containers².

The consideration of a DRS is referenced in the Scottish Government's Circular Economy strategy - *Making Things Last – A Circular Economy Strategy for Scotland* (MTL)³ published in February 2016. A DRS would go beyond existing Scottish Government policy making further progress towards a resource efficient economy/society. It will support the targets, ambitions and actions set out in:

- The Making Things Last strategy,
- Towards a Litter Free Scotland: A strategic Approach to Higher Quality Local Environments⁴ (TLFS) published in June 2014,
- A Marine Litter Strategy for Scotland⁵ (MLSS) published September 2014.

¹ SEPA 2016 Household Waste Data

² Programme for Government 2017

³ Making Things Last 2016

⁴ Towards a Litter Free Scotland

⁵ Marine Litter Strategy

Objective

It is proposed that a Scottish DRS will:

- Increase the quantity of target materials captured for recycling;
- Improve the quality of material captured, to allow for higher value recycling;
- Encourage wider behaviour change around materials;
- Deliver maximum economic and societal benefits for Scotland.

Achieving these principles will help Scotland progress towards its 2025 waste targets, accelerating Scotland's transition from a 'linear' economy which is environmentally unsustainable and energy and resource intensive, to a more resource efficient and sustainable circular economy.

Growing global and national populations, are expected to increase commodity price volatility and constraints on resources availability, which could lead to adverse social and economic effects. Adoption of circular economy measures like a Scottish DRS should help to provide resilience to such shocks and constraints, and aid in delivering significant environmental benefits and economic opportunities.

By placing a financial value on select single-use drinks containers, a DRS will encourage consumers to return them for recycling, reducing the likelihood that they will end up as litter and increasing the likelihood they will be recycled. This will in part, help to address a growing global concern about the volume and impact of plastic pollution, particularly in marine landscapes.

Separate and material specific collection of select packaging materials under a DRS will also generate higher quality, higher value material streams which may be used domestically by Scottish reprocessing and manufacturing industries, or exported for use abroad.

The fit with Scottish Government Policy has already been indicated in the background sections above. Recent announcements from the UK government⁶, regarding a potential DRS for England, and from the European Commission⁷ with reference to its Circular Economy Package, support DRS as a key intervention to achieve challenging recycling targets.

Rationale for Government intervention

From the National Performance Framework⁸.

Directly applicable Strategic Objectives are: "We value and enjoy our built and natural environment and protect it and enhance it for future generations." "We reduce the local and global environmental impact of our consumption and production"

Directly applicable from the Measurement Set are: "Reduce Greenhouse Gas Emissions." "Improve people's perceptions of their neighbourhood" "Increase natural

⁶ DEFRA

⁷ CE Package 2018

⁸ <u>NPF</u>

capital" "Improve the state of Scotland's marine environment" "Reduce Scotland's carbon footprint"

The introduction of a DRS for Scotland will contribute to objectives set out in the Climate Change (Scotland) Act 2009⁹, and the Climate Change Plan, Third RPP¹⁰.

The 'Climate Change Plan: Third Report on Proposals and Policies 2018-2032' was published in February 2018. This sets out plans to achieve decarbonise the economy in the period to 2032, making progress towards the target of reducing emissions by 80% by 2050.

Resource use and waste generation are recognised as key sources of greenhouse gas generation and the Scottish Government reports on progress against both territorial and consumption emissions.

United Nations Draft Resolutions on Marine Litter and Microplastics¹¹ (2017) and Management of Marine Debris¹² (2014), both reference the role that DRS can have on preventing the harmful escape of plastics into marine environments.

In 2015, the Scottish Government signed up to support the United Nations Sustainable Development Goals¹³. The ambition behind the goals is to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. A DRS will have a positive impact on a number of these goals, most explicitly Goal 12: Responsible Consumption and Production.

In May of 2018 the European Commission's Circular Economy Package¹⁴ was approved. The legislation aims to move supply chains towards a circular economy maintaining the value of products, materials and resources in the economy for as long as possible. This includes more ambitious recycling targets and full cost recovery of recycling costs from producers.

Consultation

Within Government

Zero Waste Scotland has engaged with a number of public bodies. Police Scotland and the Scottish Environment Protection Agency (SEPA) have been consulted on issues relating to fraud and cross border trade while Food Standards Scotland (FSS) and The Royal Environmental Health Institute of Scotland (REHIS) have been consulted on issues relating to hygiene and the storage and transport of empty containers. Zero Waste Scotland has also been in discussions with Scottish Enterprise and COSLA.

⁹ Climate Change (Scotland) Act 2009

¹⁰ Climate Change Plan: The Third Report on Proposals and Policies 2018-2032

¹¹ Marine Litter and Microplastics

¹² Management of Marine Debris

¹³ <u>UN Sustainable Development Goals</u>

¹⁴ http://ec.europa.eu/environment/circular-economy/index_en.htm

Public Consultation

To date Zero Waste Scotland has invited views on a one to one basis, held workshops and undertaken research in countries operating a DRS. This has included:

- Strategic conversations with a large number of organisations and trade associations to understand their concerns and views;
- 13 Sector reference groups (Local Authorities, Third Sector, Public Interest, Dairy, Soft Drinks, Spirits & Wine, Breweries, Large Retail, Small & Community Retail, Resource Management, Packaging, Large Hospitality, Small Hospitality) where 12 system components and their opportunities and challenges for each sector were discussed;
- Regional workshops (focusing on issues that may apply to businesses in these regional areas such as rural or inner-city concerns and opportunities) in Orkney, Western Isles, Aberdeen and Edinburgh;
- DRS Ministerial Summit (May 2018). Attended by 140 representatives from all stakeholder groups. A series of panel sessions gave feedback from the 13 sector reference groups in a cross sector forum.
- 1 to 1 Interviews across a range of sectors (retail, producers, hospitality, packagers, Local Authorities, resource management, transport and logistics) gathering business as usual information;
- Overseas visits (including Iceland, Norway, Sweden, Lithuania, Germany, Estonia, Finland and Denmark) and conversations (Malta, Canada, North America) with overseas nations.

Engagement with stakeholders will continue throughout the consultation process and the next steps in DRS design.

This partial BRIA accompanies the public consultation on DRS. A Full BRIA that builds on the public consultation will then be published.

Business

The 12 businesses in Table 1 below were selected as being a representative crosssection of businesses along the supply chain that will be influenced by the introduction of a Scottish DRS. A questionnaire was sent out to each company in advance of faceto-face interviews which were undertaken in March and April 2018 and individual responses were recorded.

| Table 1. Businesses Consulted for views on Proposed Scottish DRS | | | | |
|------------------------------------------------------------------|--------------|--|--|--|
| Business | Туре | | | |
| Ardagh Group | Packager | | | |
| Changeworks | Third Sector | | | |
| The Coca Cola Company | Producer | | | |
| The Co-operative Group | Retailer | | | |
| Costa Coffee | Hospitality | | | |
| Crieff Hydro Hotel | Hospitality | | | |
| Highland Spring Group | Producer | | | |
| Federation of Independent Retailers | Trade Body | | | |
| Road Haulage Association | Trade Body | | | |
| Scottish Environmental Services Association | Trade Body | | | |
| Scottish Whisky Association | Trade Body | | | |
| Williams Brothers Brewing Company | Producer | | | |

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Options

Provide a list and a brief description of each of the options you are considering. This should include <u>non-regulatory</u> options and the 'do nothing' option must be one of the options you consider.

Over and above the "do nothing" baseline option the DRS comprises of a dozen key components all of which have options within them. How these components fit together constitutes a range of options and hybrid options. These components include:

- Materials in Scope (e.g. Plastic bottle, aluminium cans, steels cans, glass bottles etc.)
- Products in Scope (e.g. fizzy drinks, coffee drinks, milk etc.)
- System Performance
- Return Location
- Financing Model
- Fraud Prevention
- Deposit Level
- Consumer Information
- Infrastructure and Logistics
- Additional Benefits
- System Ownership
- System Regulation

For the Public Consultation four Example schemes including various different components have been modelled (see ANNEX A) for an overview of each Example).

- Example 0: do nothing no scheme is introduced
- Example 1: Take back to dedicated points
- Example 2: Take back to dedicated points and some shops (with cartons and cups)
- Example 3: Take back to any place of purchase
- Example 4: Take back to any place of purchase (with cartons and cups)

The different variations of a DRS outlined above will be incorporated into a full analysis of the policy options that are being considered and the results will be published in the Final BRIA.

Sectors and groups affected

List all the sectors and groups likely to be affected and give details of how they will be affected by each of the options.

- Consumers
- Retailers (both large and small)
- Drinks producers
- Hospitality sector (including pubs, bars, hotels, restaurants, cafes)
- Local Authorities
- Packagers
- Resource Management sector
- Third Sector

- Transport and Logistics
- Public Interest Groups.

Costs & Benefits

The costs and benefits of a Scottish DRS are detailed below and have been modelled to show the net cost-benefit of Example Schemes 1, 2, 3 and 4 where Scheme 0 "do nothing" is taken as the baseline.

Taking a component approach to constructing these options allows "hybrids" to be created or changing options under individual components. Given the complexity of DRS it is possible that the final system design will be a hybrid of the examples or have an alternate selection on one or more components.

These examples are initially compared in terms of costs to a scenario where no scheme is introduced. It is assumed that there are no changes beyond those introduced by the European Commission's Circular Economy Package, including full cost recovery from producers. Existing public and private collection methods of drinks containers from households, commercial businesses and on the go locations continue in their current form. Not introducing a DRS would:

- Fail to improve recycling quantity
- Fail to improve recycling quality
- Have no impact on wider behavioural change around materials
- Miss opportunities to support Scotland's transition to a low carbon economy

This is option is required (in line with common practice) to act as a baseline for comparison.

These figures will continue to be developed and refined. When the final form of the DRS has been agreed upon, the Final BRIA will be published.

Example 1: Take Back to Dedicated Drop Off Points

This example involves containers being taken back to a number of large, dedicated locations, rather than there being lots of smaller return points in shops and public places.

• What this example would look like

This system would see 1,058 deposit return points being placed in towns with a population of at least 1,000 where you can return some types of plastic bottles, aluminium and steel cans and glass bottles to get back the deposit you were charged for the container when you bought it. In this example we have assumed the type of plastic bottles would be ones made of a plastic called PET, which is the most common kind for fizzy drinks and bottled water, and also the most commonly captured by DRS internationally.

The place where you return things would be similar to a recycling point, where the deposit return machines are placed in a range of public locations such as recycling centres or public car parks.

Under this example, shops selling drinks in containers wouldn't have to take the containers back. There would simply be a few drop off points in most towns where you could choose to return your drinks containers.

• Who would run it

In this example, the drinks industry would need to work together to create a nonprofit organisation that would run the DRS. This organisation would make sure the system runs properly, and some of the money made by the deposit system would pay for staff needed to run the system and the costs involved in running it.

The new organisation would need to run the network of designated drop-off points, collect in the money, ensure retailers are paid to cover the deposits being paid back to people and make sure all the items were collected for recycling.

• The effectiveness of these types of systems elsewhere in the world

Systems like this in North America and Australia tend to see around 60% of drinks containers being recycled and this is the return rate modelled in this example. It is important to note that the true national recycling rate for the materials targeted via a DRS will be slightly higher than the system capture rate itself. This is because some items not returned to DRS will continue to be returned to other recycling streams.

• The benefits and drawbacks of the example

While this offers the lowest return rate of the four examples, it minimises impact on retailers and other businesses.

There are drawbacks to this approach. If the designated return points are not located in major shopping areas or are otherwise central, people could find themselves making a special trip to return their containers rather than doing it as part of their normal shopping pattern. This reduces the accessibility of the system, particularly for disabled or elderly people. If the return point is away from a town or city centre, it would also be inaccessible for people without cars and could also lead to increased emissions if people have to drive to it.

This is particularly true for rural areas, as people could find their nearest return point is in a town that is hard for them to get to, particularly if they are transporting a large number of returnable containers. Not being able to access a return point for long periods, if it is hard to reach, will also mean they will have to store a large number of containers at home.

This example has been modelled with a 20p deposit level which reflects the need for a higher deposit rate to compensate for the lower accessibility of the system.

Limited access to the return points might also mean that if someone buys a drink from a retailer and consumes it 'on the go', the container would be more likely to be improperly disposed of - i.e. thrown in a bin or littered.

The estimated likely return rate for containers in this example is 60%, which is only a marginal improvement on current assumed recycling for these materials. It is therefore questionable whether introducing a DRS on this basis would be justified as it will not achieve Scotland's ambitions on recycling rates.

Additionally, the 60% capture rate is assumed to apply equally to both existing residual and recyclate streams, across all sectors. In calculating overall recycling and carbon benefits, remaining recyclate is then also factored in to consideration of net recycling. This may significantly overstate the additionality of this scenario against these criteria, if in fact a greater proportion of DRS capture is diverted from existing recyclate streams, and less from residual.

The modelling suggests that this option would generate a financial surplus given the large number of unreturned deposits.

| Actor | NPV (millions) | | | | | |
|----------------------|----------------|----------|-------------|--|--|--|
| | Costs | Benefits | Net benefit | | | |
| System Operator | -£1,114 | £2,354 | £1,240 | | | |
| Return Points | £0 | £0 | £0 | | | |
| Unredeemed Deposits | -£2,150 | £0 | -£2,150 | | | |
| Producers | -£132 | £800 | £668 | | | |
| Local Authorities | £0 | £110 | £110 | | | |
| Commercial Premises | £0 | £23 | £23 | | | |
| Other Sectors | -£85 | £85 | £0 | | | |
| Value of Public Time | -£165 | | -£165 | | | |
| Society Benefits | | £768 | £768 | | | |
| TOTAL | -£3,646 | £4,140 | £494 | | | |

Table 2: Example 1: NPV Take Back to Dedicated Drop Off Points

Example 2: Take back to dedicated drop off points and some shops (with cartons and cups)

This example is a similar system to Example 1 but it would have 2,009 return points, as some shops may also have to have deposit return points where there isn't a recycling point style dedicated drop off nearby. It would also collect a wider range of container materials in addition to those in Example 1; HDPE, which is the kind of plastic that milk bottles are made of, cartons and disposable cups.

• What this example looks like

This system would see deposit return machines being placed within a set distance of any shop selling drinks in containers, so that there would be somewhere nearby that people could return the containers to get back the deposit they paid when they bought it.

It would cover more types of plastic bottles than Example 1, as well as aluminium and steel cans, drinks cartons, glass bottles and some single use cups like coffee cups. This example would cover PET plastic, which is the kind that fizzy drinks and bottled water are usually made of, and also a type of plastic called HDPE which is the kind that milk bottles are usually made of.

In this example, shops that sell a high amount drinks in disposable containers would need to make sure there was a place to get the deposit back within a set distance. If there wasn't a public recycling point style dedicated point within that distance, then the shop would have to have a way to return your deposit to you in the store.

• Who would run it

In this example, it is assumed that drinks companies and retailers would work together to create a not for profit organisation that would run the DRS. This organisation would make sure the system runs properly, and some of the money collected by the deposit system would pay for staff needed to run the system and the costs involved in running it. The difference in Example 2 is that shops would also have a part to play in making sure there is somewhere to get your deposit back nearby.

The new organisation would need to run the network of designated drop-off points, collect in the deposit money, refund the deposits when containers are returned, pay retailers a handling fee and reimburse deposits they have refunded as appropriate and make sure all the containers were collected for recycling.

• The effectiveness of these types of systems elsewhere in the world

Systems like this in California, Maine and British Columbia can see around 80% of drinks containers being recycled. Given Scotland's geography we assumed a slightly lower rate of return, 70%, than the optimal rates achieved elsewhere in the world. It is important to note that the true national recycling rate for the materials targeted via a DRS will be slightly higher than the system capture rate itself. This is because some items not returned to DRS will continue to be returned to other recycling streams.

The modelling undertaken in developing this partial BRIA assumes that DRS materials are removed equally from the current recycling stream and current residual stream. The model treats all the scenarios equally in this respect but at lower performance rates, or for materials with higher baseline recycling rates, it may in practice be more likely that material disproportionately comes from existing recycling streams. If this is indeed the case, the net recycling gain and associated carbon benefit for this scenario might be overstated when assessed on these two criteria.

• The benefits and drawbacks of the example

This example offers a higher return rate for drinks containers than Example 1. It also limits the impact on retailers but not to the same extent as Example 1 as some retailers may be required to provide return points or take back in store if there are no return designated drop-off points nearby.

It also goes some way towards solving the problem of accessibility as there would be a larger number of return points, potentially in more convenient locations. This could still limit access to the system for people in rural areas, if their local shops do not sell a high enough volume of drinks to warrant having take-back on their premises or close by.

As with Example 1, this example has been modelled with a 20p deposit level which reflects the need for a higher deposit rate to compensate for the lower accessibility of the system.

Table 3: Example 2: NPV Take back to dedicated drop off points and someshops (with cartons and cups)

| Actor | NPV (millions) | | | | |
|----------------------|----------------|----------|-------------|--|--|
| | Costs | Benefits | Net benefit | | |
| System Operator | -£2,086 | £3,013 | £927 | | |
| Return Points | £0 | £0 | £0 | | |
| Unredeemed Deposits | -£2,558 | £0 | -£2,558 | | |
| Producers | -£370 | £1,214 | £844 | | |
| Local Authorities | £0 | £146 | £146 | | |
| Commercial Premises | £0 | £37 | £37 | | |
| Other Sectors | -£153 | £155 | £2 | | |
| Value of Public Time | -£165 | | -£165 | | |
| Society Benefits | | £1,119 | £1,119 | | |
| TOTAL | -£5,332 | £5,684 | £352 | | |

Example 3: Take back to any place of purchase

This example is where you would be able to take your drinks containers back to any retailer that sells drinks in disposable containers.

• What this example looks like

This example would mean that any retailer that sells drinks in disposable containers would have to provide a deposit return service so you can get back the deposit you paid on the container when you bought the drink. You would be able to take your container back to any of these 17,407 retailers – it wouldn't have to be the same one you bought the drink from. It would mean there would be a lot more places where you could claim your deposit back in your local area, compared to Examples 1 and 2.

Bigger retailers may have machines to collect the bottles and cans, and return people's deposits. Smaller retailers with less space could return deposits over the counter, collecting the containers manually.

This example would cover some types of plastic bottles, aluminium and steel cans and glass bottles. We have assumed that the type of plastic bottles would be ones made of a plastic called PET, which is the most common kind for fizzy drinks and bottled water.

• Who would run it

Similar to Examples 1 and 2, it is assumed that the drinks industry and retailers would work together to create a not for profit organisation that would run the DRS. This organisation would make sure the system runs properly, and some of the money made by the deposit system would pay for its staff and running costs. It would need to collect in the deposit money and arrange for handling fees and deposits to be reimbursed to return points to cover the cost of running these. It would also ensure containers are picked up from retailers regularly and recycled.

Retailers that sell drinks in disposable containers would have to provide a system in store to give people back the deposits on any drinks containers covered by the system (PET plastic, cans and glass bottles).

• The effectiveness of these types of systems elsewhere in the world

Systems like this in Scandinavia and the Baltic states are seeing up to 95% of drinks containers being recycled. We have modelled a return rate of 80% for this example given the deposit level of 10p. It would be anticipated that a higher deposit level would increase the return rate.

It is important to note that the true national recycling rate for the materials targeted via a DRS will be slightly higher than the system capture rate itself. This is because some items not returned to DRS will continue to be returned to other recycling streams.

• The benefits and drawbacks of the example

This example offers the highest return rate for containers in scope. As it has the highest return rate for the target containers, it most closely matches the environmental ambitions of the policy of increasing the recycling rate and reducing littering.

It would have an impact on retailers, through either loss of selling space if they install a reverse vending machine or staff time if they take back manually over the counter, plus the requirement to store containers until they are collected. The system would offer a 'handling fee' paid per container returned to reimburse shops for the use of staff time and retail space.

A return to retail system would also be the most accessible. If every retailer either has a reverse vending machine or takes back over the counter, people will be able to return their containers as part of their normal purchasing routine. Even if customers chose to make a special trip to return their containers, the density of return points means it is likely they will not have to travel far to find one.

| • | | | | | |
|----------------------|----------------|----------|-------------|--|--|
| Actor | NPV (millions) | | | | |
| | Costs | Benefits | Net benefit | | |
| System Operator | -£1,304 | £1,304 | £0 | | |
| Return Points | -£859 | £859 | £0 | | |
| Unredeemed Deposits | -£545 | £0 | -£545 | | |
| Producers | -£654 | £890 | £236 | | |
| Local Authorities | £0 | £149 | £149 | | |
| Commercial Premises | £0 | £31 | £31 | | |
| Other Sectors | -£137 | £138 | £1 | | |
| Value of Public Time | -£165 | £0 | -£165 | | |
| Society Benefits | | £1,038 | £1,038 | | |
| TOTAL | -£3,664 | £4,409 | £745 | | |

Table 4: Example 3: NPV Take back to any place of purchase

Example 4: Take back to any place of purchase (with cartons and cups)

This example is similar to Example 3, where you would be able to take your drinks containers back to any shop that sells drinks in disposable containers. The difference is that Example 4 would collect a wider range of drinks containers and would be jointly run by a public body and the drinks/retail industry.

• What this example looks like

This system is similar to Example 3, and would mean that any shop that sells drinks in disposable drink containers would have to provide a deposit return service so you can get back the deposit you paid on the container when you bought the drink. You would be able to take your container back to any of these shops – it wouldn't have to be the same one you bought the drink from.

The difference with Example 4 is that it would collect a wider range of drinks containers. It would collect PET plastic, which is the kind that fizzy drinks and bottled water are usually made of, and also a type of plastic called HDPE which is the kind that milk bottles are usually made of. It would also collect aluminium and steel cans, drinks cartons, glass bottles and some single use cups like coffee cups.

• Who would run it

This example would see an organisation made up of a public body and leaders from the drinks and retail industries being set up to run the system. This organisation would make sure the system runs properly, and some of the money made by the deposit system would pay for its staff and running costs. It would need to make sure the shops paid in the deposits they had taken on drinks they had sold, and also that they received money for all the deposits they returned to customers. It would also arrange for the containers to be regularly collected and recycled.

Shops that sell drinks in disposable containers would have to provide a system in store to give people back the deposits on any drinks containers covered by the system (PET and HDPE plastic, cans, drinks cartons, glass bottles and cups).

• The effectiveness of these types of systems elsewhere in the world

This would be a uniquely ambitious system for Scotland as nowhere else in the world collects this range of material via a DRS. Systems in Scandinavia and the Baltic states are seeing up to 95% of drinks containers being recycled. A return rate of 80% has been modelled for this example given the deposit level of 10p. It would be anticipated that a higher deposit level would increase the return rate. This means the system would be collecting a much wider variety of materials at a high rate, offering the highest possible capture rates and litter reduction.

It is important to note that the true national recycling rate for the materials targeted via a DRS will be slightly higher than the system capture rate itself. This is because some items not returned to DRS will continue to be returned to other recycling streams.

• The benefits and drawbacks of the example

As noted above, this would not only achieve a high capture rate for the materials included in Example 3, it is likely it would also help tackle a range of other materials, increasing the rate of recycling and preventing them from becoming litter.

Some of these items are harder to recycle, however one of the main obstacles to these materials being recycled is that they are not available separate to other materials in sufficient amounts to make recycling them cost effective. This would be addressed in a deposit return system. However, greater attention would need to be devoted to ensuring sufficient recycling infrastructure was in place for items that are not currently widely recycled.

As with example 3, this would also offer the best accessibility due to the high level of return points in both rural and urban locations and the fact that these return points will be where people will be going to shop. It would have the highest impact on retailers, through either loss of selling space if they install a reverse vending machine or staff time if they take back manually, plus the requirement to store containers until they are collected.

| Actor | NPV (millions) | | | | |
|----------------------|----------------|----------|-------------|--|--|
| | Costs | Benefits | Net benefit | | |
| System Operator | -£1,409 | £1,409 | £0 | | |
| Return Points | -£874 | £874 | £0 | | |
| Unredeemed Deposits | -£860 | £0 | -£860 | | |
| Producers | -£446 | £965 | £519 | | |
| Local Authorities | £0 | £168 | £168 | | |
| Commercial Premises | £0 | £42 | £42 | | |
| Other Sectors | -£148 | £149 | £1 | | |
| Value of Public Time | -£165 | | -£165 | | |
| Society Benefits | | £1,285 | £1,285 | | |
| TOTAL | -£3,902 | £4,892 | £990 | | |

Table 5: Example 4: NPV Take back to any place of purchase (with cartons and cups)

Scottish Firms Impact Test

Provide a full analysis here of your face-to-face discussions with business giving details of the questions you asked, responses and how business engagement fed into the development of the proposal.

A summary of responses is given below and a complete account of individual responses can be accessed in "Associated downloadable documents."

Question 1

"The value of the deposit that will be placed on returnable single use containers by the scheme will be decided partly by economic modelling, and partly as a result of engagement with industry and stakeholders more generally. It is expected that the deposit will range from 10p to 30p per item. Does your organisation hold a view on the level of deposit that would be appropriate to achieve the preferred outcome for your organization and, if different, the level required to meet the Scottish Government's ambitions for a DRS in Scotland?"

Low or Zero Value Deposit

Two organisations (Ardagh and Highland Spring), stated that the rate should be low or zero. Ardagh is concerned that a higher rate will increase the risk of fraud, and potentially negatively impact on demand for products whilst Highland Spring has conducted a survey of consumers which suggests that demand for its products will decrease substantially if the sale price of its products are increased to cover even the lower rate of deposit of 10 pence.

High Value Deposit

Conversely, three respondents (Changeworks, Crieff Hydro and the Co-op Group) believe that the rate should be at the higher end: "as high as possible to change behaviour" (Changeworks), and "nearer 30p than 10p" (Crieff Hydro). The Co-op site their understanding of the experience of AG Barr who secured no more than 50% returns on glass beverage bottles when offering a deposit of 30p as justification for a higher rate.

Specific Value Deposit

Costa Coffee and Coca Cola both preferred a rate of circa 10p with Coca Cola suggesting between 5p and 10p. The National Federation of Independent Retailers (NFRN) recommended a rate of 20p.

Variable Rates

Two organisations (Coca Cola and Crieff Hydro) believe that consideration should be given to the application of variable rates. Coca Cola suggest a higher rate for "on the go" packaging with a view to minimising littering whilst Crieff Hydro believe that a variable rate should be considered "to take account of established recycling systems".

No Fixed View

Four organisations, the Scottish Environmental Services Association (SESA), the Scotch Whisky Association (SWA), Williams Brothers Brewing Company and the Road Haulage Association (RHA) had no fixed view on the level of deposit that would be appropriate, although SESA, Williams Brothers and the SWA expressed the view that it should be high enough to encourage consumers to use the scheme but not so high as to encourage fraud.

Question 2

"The type of returnable single use containers that will be will be included in the scheme will be decided partly by economic modelling and partly as a result of engagement with industry and stakeholders more generally. Does your organisation hold a view on what containers should be included or excluded in the scheme and why?"

All Containers/As Inclusive as Possible

Five organisations, Changeworks, Highland Spring, RHA, Williams Brothers and SWA favoured an approach that was as inclusive of as many materials as possible, although Williams Brothers suggested that biodegradable/compostable containers should be exempt.

Limited Range of Containers Included in the Scheme

Coca Cola and NFRN believe that the scheme should be limited to rigid packaging such as glass, plastic and aluminium. Costa Coffee believe that the focus should be on "on the go" packaging and should possibly exclude glass because of its weight. The Co-op Group believe that the scheme should target "on the go" packaging and that which contributes most to littering, although milk and wine bottles should be exempt.

Specific Container Exclusions

Ardagh believe that glass should be excluded because its inclusion will, in its view, result on pressure by retailers to reduce the use of glass packaging in favour of plastics and laminates. This view is based on the belief that glass is less likely to be accommodated in reverse vending machines and because returned glass packaging will be more problematic to store in retail establishments than other packaging. Costa Coffee also believe that glass should "possibly" be excluded. Crieff Hydro believe that metals should be excluded because they are well catered for under established dry mixed recycling (DMR) collection systems. Williams Brothers suggested that biodegradable/compostable containers should be exempt. NFRN believe that milk containers should be exempt on the grounds of hygiene and that coffee cups should be excluded because there is a lack of facilities to recycle them.

Question 3

"Does your organisation have specific concerns on how the scheme might impact smaller retailers if it is rolled out across this segment of the market?"

Space and Logistical Constraints for Small Retailers

This was raised as a concern by eight organisations (Ardagh, Changeworks, Costa Coffee, Crieff Hydro, The Co-op Group, Highland Spring, NFRN and SESA)

Reduced Sales

Ardagh, Crieff Hydro, the Co-op Group and Highland Spring all raised concerns that small retailers would experience a reduction in sales of products covered by the scheme. However, two respondents also expressed concern that if small retailers were not included in the scheme or were given the opportunity to opt out, there is risk of a drift off footfall away from them to larger retailers.

Cash Flow

Crieff Hydro expressed concern about potential cash flow challenges for small retailers if there were delays in recovering deposits they may pay out to consumers. Williams Brothers expressed similar concerns, particularly if small traders are required to pay out deposits for containers that are purchased elsewhere, for example supermarkets

Other Concerns

Coca Cola expressed the view that clear criteria needed to be established to determine which, if any organisations, should be excluded from the scheme The Co-op Group suggested that where feasible, communal reverse vending machines should be provided close to small retail outlets to minimise the impact on this sector. Costa Coffee are of the view that questions about status of small retailers should include all retail outlets with a small footprint, even if the outlet is part of a larger chain. The Co-op had a not dissimilar concern and are keen to understand the definition of "smaller retailers". SESA expressed concerns about potential confusion that the scheme will cause small retailers, many of whom are still coming to terms with their obligations to recycle under the Waste (Scotland) Regulations. NFRN believes that the space taken up by reverse vending machines should be exempted from the calculation of business rates.

No Fixed View

Neither the SWA nor the RHA have a fixed view on this issue.

Question 4

"Does your organisation have specific concerns on how the scheme might impact more remote areas of Scotland e.g. logistical constraints?"

Logistical/Critical Mass Issues/Cost/Cash Flow Issues

Four organisations expressed concerns about logistical and/or critical mass issues, namely, Ardagh, Costa Coffee, NFRN and SESA. The Co-op Group is concerned about the added costs to stores serving island communities where goods have to be delivered by ferry. It suggests that rather than exempting those from the scheme, the body responsible for administering the scheme should make financial provision to island stores to cover the extra cost of back loading returned packaging. Williams Brothers expressed concerns that "out of season" cash flow challenges for small independent retailers in remote areas might be exacerbated.

Explicit Support for Full Geographic Coverage/No Concerns

Coca Cola and SWA support full geographic coverage. Changeworks and RHA expressed no concerns about the potential impact in more remote areas

Remote Areas Exemption

Crieff Hydro and SESA recommended that consideration be given to the introduction of Remote Areas Exemptions to exclude specified areas from the scheme.

No Fixed View

Highland Spring has no fixed view on this issue

Question 5

"Administration of the scheme can include representation from the main stakeholder groups, primarily drinks manufacturers, importers and the retail sector. Does your organization hold a view on what this body should look like including its remit and what groups should be represented?"

Majority View on Scheme Administration

The majority of organisations interviewed are in favour of the scheme being administered by representatives of stakeholders. However, there is no unanimity of who those stakeholders might be.

Additional Views

Some, like Coca Cola and Ardagh Group take a narrower view than others, with the former suggesting the membership should be limited to organisations that are responsible for funding the scheme, and the latter recommending that membership be limited to retailers, manufacturers and fillers. Others, including the Co-op Group and SESA are in favour of expanding membership to include organisations representing local authority waste managers and the wider waste management industry. A number of organisations are explicitly of the view that the Administering body should operate on a not for profit basis.

No Fixed View

Two organisations have differing views to the majority; Changeworks have no fixed view on the issue whilst RHA are of the view that the scheme should be administered by the Scottish Government.

Question 6

"It is expected that the scheme will result in lower levels of litter. How would this impact your organisation?"

No or Minimal Impact on Litter

This was the view of four organisations, Ardagh, Highland Spring, SWA (in relation to packaging used/produced by SWA members) and SESA. A number of these organisations indicated that studies have shown that drinks packaging is not a significant contributor to litter. The Co-op Group is of the view that its costs for litter management will not reduce although there may be a modest reduction in littering.

Contribution to Social Responsibility/Improved Reputation

Two contributors, Coca Cola and Costa Coffee identified these outcomes from lower levels of litter resulting from the implementation of the scheme.

Other

Crieff Hydro anticipate that reduced levels of litter on their estate will reduce clear up costs. The RHA said that reduced roadside litter would be welcomed. Changeworks said that the scheme may improve attitudes to recycling and managing waste as resource. NFRN advised that they would welcome the benefits that reductions in littering would realise. Williams Brothers expressed no firm view on the matter.

Question 7

"It is expected that the scheme will result in higher recycling rates, a decrease in contamination and an increase in the quality of secondary materials available to the recycling industry. How will this impact your organisation?"

Positive Impact on Recycling

The majority of responses were positive. Changeworks, Coca Cola, Costa Coffee, Crieff Hydro, the Co-op Group, Highland Spring and SWA all believe that increased recycling rates, a decrease in contamination and an increase in the quality of secondary materials will result in benefits to their organisations. Williams Brothers advised that if the quality of glass cullet improved as a result of the scheme that in turn would improve the quality of containers available to it.

Negative Impact

Ardagh and SESA are not persuaded that there will any improvement in recycling rates, a decrease in contamination or an increase in the quality of secondary materials as a result of the scheme. Ardagh have expressed concern that the scheme may even result in a reduction in the quality of glass packaging that is presented for recycling, especially if glass packaging is crushed to reduce its volume. SESA believes that DRS will, to a great extent, displace existing recycling collection systems and further decrease the quality of DMR that is sent to MRFs for sorting. If so, this will have a negative impact on the waste industry.

No Impact

NFRN's view is that independent retail sector will realise no impact from an increase in the quality of secondary materials.

Question 8

"The proposed scheme will include a range of measures and safeguards that will deter fraudulent transactions. Does your organisation have any concerns regarding potential misuse of the system? Are there specific issues in this area that you would like to raise?"

Specific Views on Fraudulent Misuse

Coca Cola had very specific views on fraud. They noted that fraud prevention is critically important in any DRS given that each empty pack has a monetary value and needs to be taken very seriously in any detailed design, especially at the boundaries of any scheme. Reverse vending machines (RVMs) provide better fraud control than manual schemes but are more expensive to establish and will not be feasible in all outlets.

Return points and counting/clearing centres will need specific controls to detect and manage individual attempts at low scale fraud as well as to reduce risks of more systematic fraud. Besides potential physical fraud with return, logistics and counting and clearing, potential data fraud also needs to be mitigated. For this reason the role of hardware and logistics service providers will have to be arranged in detail. Typically, well-designed and run Central Deposit Management Organizations operate an anti-fraud program in their operations. Anti-fraud measures need to be closely monitored to assess their success or otherwise, and updated if they are shown to be less than fully effective.

Theft Concerns

Three organisations, Ardagh, Williams Brothers and Changeworks, expressed concern that the scheme could encourage theft of containers; in the case of Changeworks the concern is that packaging material stored for collection by its customers might be stolen, whilst Ardagh and Williams Brothers are concerned that it might have to introduce measures at its premises to prevent theft by employees and others.

Cross Border Fraud

Four organisations, Ardagh, Costa Coffee, NFRN and Highland Spring expressed concerns about the potential for cross border fraud if a scheme is introduced in Scotland but not elsewhere in the UK. Highland Spring advised that in order to minimise this risk for its products it would have to introduce changes to bottle labelling that would reduce operational efficiency and significantly increase costs. This issue is also of concern to the Co-op Group who believe that there is also the potential for reduced consumer choice unless a common UK wide scheme is introduced.

More Information Required/Not Yet Considered

Crieff Hydro advised that they required more information on the fraud risks and the measures to be considered to prevent it before they could provide a response whilst SESA advised that they had not yet considered the issue in any detail.

Other

RHA advised that they had no concerns whilst SWA welcomed the use of tools and technology to manage fraud at reasonable cost. NFRN expressed the view that fraud management measures should not be unduly complex.

Question 9

"One option under consideration for the scheme is for deposits to be gifted by users at the point of return directly to local and national charities. Is this something your organisation would support? Do you have a view on the selection process for appropriate charities?"

Support/No Objection to Charitable Donations

Five organisations, Coca Cola, Costa Coffee, the Co-op Group, NFRN and RHA support the gifting of deposits by users at the point of return. Coca Cola believes that charities that benefit should those that are concerned with environmental stewardship, reducing litter or improving local environments. Costa Coffee advised that beneficiaries should be local, community based charities with a positive local environmental impact. The Co-op Group would wish to make use of their existing Community Fund which channels money into local charities and community groups. Three organisations, SESA, Williams Brothers and SWA had no objections to the proposal, although Williams Brothers requested clarity that consumers would be able to decide whether to receive the deposit or gift it to a charity. SESA has no view on the selection process whilst SWA believes that there would be relevance in the beneficiaries being charities operating in the Environment sector. Williams Brothers preference is that beneficiaries should be smaller, local charities.

Oppose

Two organisations, namely Crieff Hydro and Highland Spring, oppose the gifting of deposits to charities. Highland Spring believes that all monies should be used to finance the running of the scheme or invested specifically in projects to meet the aims of the scheme.

No View

Ardagh and Changeworks advise that they have no view on the matter.

Question 10

"What in your opinion will be the biggest potential impacts to Scottish businesses as a result of introducing a DRS?"

A number of respondents limited their views to forecast impacts in their own industry or sectors, whilst others provided views on impacts for the wider economy. One organisation, the RHA advised that it has no views on the matter.

Own Industry or Sector

5 out of 7 respondents forecast consequences which they regarded as negative and/or would involve significant changes to operational practices. These include the following:

A reduction in the volume and quality of cullet for glass bottle manufacture, and displacement of glass packaging by plastics and laminate. (Ardagh Group).

Additional business costs, the need for more space to store used packaging, and confusion about how the scheme will operate in licensed premises (Crieff Hydro).

Risk to the continued employment of some or all the company's employees and a negative impact on communities in the vicinity of the company's bottling plants (Highland Spring).

Changes in labelling and bottling for SWA members and need for changes in distribution practises to reflect the fact that the majority of products are sold UK wide (SWA).

Williams Brothers expressed concern regarding labelling costs, with major concerns about cost implications for different labelling requirements for goods sold outside Scotland.

Changeworks regards the scheme as an opportunity for it to capture a significant volume of challenging waste as a resource, whilst NFRN views it as an opportunity for the smaller retail sector to increase footfall and revenue.

Wider Economy

The views of the 4 organisations who expressed opinions on the wider economy can be summarised as follows:

Two considered that the main positives would be the potential to increase recycling rates and recover more high quality packaging for recycling

One expressed the view that there is potential for increased employment in the new activities created by the scheme although this might displace existing employment in waste collection and litter clearance.

All four expressed concerns about an ill designed scheme resulting in increased costs, with one also expressing concern about possible reduction in consumer choice, especially if the scheme is limited to Scotland.

SESA expressed a number of additional concerns, including:

Disruption to businesses at the outset as they come to terms with the scheme and its impact on them.

Additional disruption due to new infrastructure.

Responsibilities that councils had for household and business collections will be displaced, resulting in confusion and reduced revenues for councils.

Lack of clarity about who will be responsible for collection of materials from storage locations.

Negative impact on existing collection systems and concern that quality and value of what remains to be collected will deteriorate.

Question 11

"Is there anything else you wish to add not covered by the above questions?" There were few common themes in responses to this question. However two themes did emerge:

The view of a number of organisations that more information was needed about DRS to enable informed and detailed opinions to be given on it.

The desire for a single UK wide scheme or a significant degree of commonalty between schemes introduced by the different countries of the UK, including a common start date, to avoid confusion and unnecessary cost.

Competition Assessment

Introduction

The purpose of the Competition Assessment is to analyse the potential economic impacts of introducing a DRS on the Scottish drinks industry, retail businesses and consumers.

As this is a partial BRIA the Competition Assessment is not final and will continue to be developed in light of consultation responses to inform final system design. The Full Competition Assessment will be published along with the Final BRIA.

Competition and Markets Authority Guidelines

The Competition and Markets Authority defines competition as being a process of rivalry between firms and, where it is effective, encourages firms to deliver benefits to customers in terms of lower prices, higher quality and more choice.

Competing firms may focus on offering the lowest price, particularly where products are standardised. Most suppliers will try to compete in a number of ways in addition to price, for example by developing new improved products, by offering products of differing quality or characteristics, by branding and advertising the differences in their products relative to their competitors', or by using different sales channels. This list is not exhaustive. Competing suppliers will seek to find a unique selling point that offers consumers advantages over rival goods or services.

As part of the impact assessment process, we have considered whether the proposal might have an impact on competition. The CMA guidelines¹⁵ provided assistance in identifying markets that might be affected by a new policy and in undertaking a competition impact assessment.

Scottish Government: Strategic Assessment of Markets in Scotland

In its 2016 strategic assessment¹⁶ "Ensuring the Markets Work Well for Businesses and Consumers" the Scottish Government states that it will use its competition powers to ensure that Scotland's markets are competitive and fair to consumers and, where this is not the case, to work with stakeholders to develop the appropriate evidence to address these concerns. The strategic assessment is the first step in highlighting markets that may not be working well for Scottish consumers.

No competition issues relating specifically to the Scottish drinks, packaging or retail sectors were identified in the assessment.

The following table summarises the initial Competition Assessment. The Full Competition Assessment will be included in the Final BRIA.

Table 6. Scottish DRS Competition Checklist

| Competition Checklist Question | Scottish DRS Scheme Impacts |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q1a: will the measure directly limit the number or range of suppliers | (See Vol.2 of CMA impact assessment guidelines) ¹⁷ . |
| Awarding exclusive rights to supply? | No impact. Creation of exclusivity not expected. The retail market is competitive and the creation of monopoly conditions is unlikely. |

¹⁵ CMA Guidance

¹⁶ Strategic Assessment

¹⁷ CMA Guidance

| A | Purchasing, franchising or licencing from a single supplier or a restricted group of suppliers? | A | No impact. | |
|----------|-------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| ~ | Introducing a licensing scheme that places a fixed limit on the number of suppliers? | A | No impact. Any producer will be able to include their products in the scheme, although the product may need to meet specific criteria to be eligible for the scheme. | |
| ~ | Introducing a licencing scheme that controls quality? | A | Introduction of regulation controlling the quality of recyclate is not under consideration but DRS will positively impact the quality of drinks containers available for recycling due to better separation from other recyclates. | |
| Q′ th | 1b: will the measure indirectly limit e number or range of suppliers | | | |
| by | r: Significantly raising the costs of | | This is dependent on a number of | |
| | current suppliers, causing them to leave the market? | | factors including administrative costs, and how the DRS is financed e.g. the (fixed) cost element of adopting the scheme and the payback period, particularly for small retailers. Average DRS costs & payback versus turnover & profit for small retailer and the impact on public houses, given the high rate of attrition in this sector, will be considered in the final scheme design. Potential impacts on producers will also be considered in the Full Competition Assessment. | |
| A | Significantly raising the costs of new suppliers relative to existing suppliers? | ٨ | No impact. New entrants will face the same costs as existing suppliers | |
| 4 | Significantly raising the costs of some current suppliers relative to other current suppliers? | • | One impact could be an increase in footfall at supermarkets and larger retail outlets that have reverse vending machines at the expense of small retailers e.g. limited car parking at high street shops, the convenience of using machines | |

| | | | over manual take back plus the potential for shoppers to spend their redeemed deposits in-store at the RVM location. These issues will be considered in the Full Competition Assessment. | |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Q2 of > | 2: will the measure limit the ability suppliers to compete by: Controlling or substantially influencing the price a supplier may charge? | ~ | As noted earlier, competitive markets tend to deliver lower prices for the consumer. Consumers can also react to price changes by buying more or less of a good or switching to alternative goods. The Full Competition Assessment will consider potential changes in consumption patterns through own price elasticity of demand and cross price elasticity of demand as well | |
| > | Controlling or substantially influencing the characteristics of the products supplied? | A | as the degree of competition that exists in the retail drinks markets. Dependent on the coverage of containers and beverages that are included in the scheme and the degree of substitutability between container types for different drinks. Potential exists for manufacturers to switch to containers outwith the scheme if it is narrowly focused on limited material types. There may also be some technical requirements for containers to be included in the scheme which may influence the design of packaging over time | |
| A | Limiting the sales channels a supplier can use, or the geographic area in which a supplier can operate? | 4 | No impact. | |
| ~ | Substantially restricting the ability of suppliers to advertise their products? | • | No impact. | |
| > | Introducing restrictions on production processes or how suppliers are governed? | • | A unique DRS labelling requirement will represent a change for any business involved in the production | |

| | and/or logistics of any relevant drinks containers, as currently labelling requirements are consistent across the UK. If required, the creation of a Scottish Stock Keeping Unit, (effectively a unique product barcode) will have a combination of one-off and ongoing costs including printing, increased changeovers during production, increased stock management and impacts on logistic operations and flexibility. It may be possible to avoid these costs through aligning some aspects of the scheme with schemes in other parts of the UK. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q3: will the measure limit suppliers' incentives to compete vigorously by: Incentivising suppliers to coordinate activities over which they would ordinarily compete? | No impact. The retail market is generally very competitive. Sales data will be kept confidential by the System Administrator. |
| Q4: will the measure limit the choices and information available to consumers by: | |
| Limiting the ability of consumers to decide from whom they purchase? | No impact. The expectation is that a very wide range of retailers will continue to sell the products within the scheme. Scottish consumers can choose to purchase beverages from outside Scotland that are not included in the Scottish DRS. |
| Changing the information available to consumers but not improving their ability to make informed decisions? | Pricing information needs to clearly convey the full cost of the item. In a number of countries the cost of the returnable deposit is clearly differentiated to make clear to the consumer the presence of a deposit and its value |
| Increasing the cost of changing supplier? | No impact. |

Overview of Scottish Drinks Markets

The structure of the Scottish drinks industry is complex. On the manufacturing side, there are a number of multinational companies who produce multiple products for different worldwide markets plus a large number of smaller producers. These firms use a large number of smaller firms, from Scotland or abroad, to supply the required inputs for the production process and in some cases may subcontract out part of the production process, such as bottling, to other firms.

The retail sector consists of a small number of large supermarkets and many independents, high street stores, coffee shops, bakery & sandwich, convenience, forecourts, and so on. The food & drink service sector consists of a small number of national chains and a large number of small restaurants, takeaway food shops, pubs, bars and so on. The retail sector and the food & drink service sector sell products produced both within and outside Scotland.

• Drinks Manufacturing

Whisky production dominates the manufacture of Scottish drinks, contributing almost 90% of the sector's GVA and just short of 75% of employment. In terms of GVA, the next largest sectors are soft drinks and waters (6%) and beer (3%). Beer manufacture has a large number of small business units (micro-breweries).

| | Busines | s Units | Employment | | Employment Turnover | | GVA | |
|------------------------|---------|---------------|------------|---------------|---------------------|---------------|-------|---------------|
| | Number | % of total | Number | % of total | (£m) | % of total | (£m) | % of total |
| All Manufacture of | | | | | | | | |
| Beverages | 318 | | 11,100 | | 4,159 | | 2,316 | |
| (of which) | | | | | | | | |
| Distilling, rectifying | | | | | | | | |
| and blending of | | | | | | | | |
| spirits | 186 | 58% | 8,100 | 73% | 3,233 | 78% | 2,057 | 89% |
| Manufacture of | | | | | | | | |
| beer | 95 | 30% | 1,222 | 11% | 374 | 9% | 70 | 3% |
| Manufacture of soft | | | | | | | | |
| drinks including | | | | | | | | |
| waters | 25 | 8% | 1,445 | 13% | 416 | 10% | 140 | 6% |
| Manufacture of | | | | | | | | |
| cider, other fruit | | | | | | | | |
| wines & malt | 12 | 4% | 333 | 3% | 125 | 3% | 50 | 2% |

Table 7. Drinks Manufacturing in Scotland 2015

Source: Scottish Annual Business Statistics 2015

As a proportion of all manufacturing in Scotland, drink manufacture accounts for 6% of employment and 19% of GVA.

• Food & Beverage Service Activities

This sector comprises: licensed and unlicensed restaurants, take away food shops, mobile stalls, event catering, clubs, public houses and bars. Table 8 below indicates the significance of these activities to the Scottish economy.

In terms of employment, Food & Beverage Service Activities account for 5% of Scotland's total workforce.¹⁸ These jobs are geographically diverse and can be particularly important in rural and remote areas.

Table 8. Food & Beverage Service Activities in Scotland 2015

| Food & Poverage | | 1 | | 1 |
|-----------------------|-------|---------|-------|-------|
| ruuu a beverage | | | | |
| Service Activities 12 | 2,275 | 143,500 | 4,176 | 2,303 |

Source: Scottish Annual Business Statistics 2015

• Retail Markets for Drinks Containers

There are a wide range of retail outlets that supply drinks containers into the market; coffee shops, bakery & sandwich, convenience, forecourts, supermarkets and so on. Data provided by Nielsen¹⁹ estimate that there are 5,892 of this type of retail outlet located in Scotland. This Nielsen estimate aligns with a slightly narrower Office for National Statistics (ONS) definition for this type of retail outlet which is shown in Table 9 below.

Table 9. Retail Markets for Drinks Containers in Scotland 2016

| | Business Units | Employment | Turnover (£m) | GVA (£m) |
|------------------|-----------------------|------------|---------------|--------------|
| Drinks Container | | | | |
| Retail Market | 5,601 | 144,400 | 19,400 | n.a. |
| | | | | Courses ONC2 |

Source: ONS²⁰

It should be noted that the sales of drinks containers represent only part of each retail outlets (and food & beverage services) business activities and it is not possible to apportion the measures to drinks activities alone.

• All Scottish Drinks Containers

In Table 10 below, the total number of drinks containers entering the Scottish market is estimated at 2.5 billion and of these, 65% are consumed in-home and 35% out-of-home.

The single largest group by material type for containers is PET²¹ closely followed by aluminium cans and then coffee cups and glass. Out-of-home container use is dominated by coffee cups followed by PET and aluminium. The number of containers used in-home is highest for aluminium and PET. Very few HDPE²²

¹⁸ Labour Statistics

¹⁹ Nielsen retail data for Zero Waste Scotland

²⁰ ONS

²¹ Polyethylene terephthalate. Most commonly used in plastic bottles and fibres (polyester).

²² High density polyethylene. Commonly used for bottles, bottle caps, plastic bags and pipes.

drinks containers (mainly milk) are consumed out-of-home but the reverse is true for coffee cups.

| Table 10. Number of Scottish Drinks Containers by Material Type (millions) | | | | | | | | |
|----------------------------------------------------------------------------|-----|-----------|--------|-------|------|-----------|-------|-------|
| | PET | Aluminium | Coffee | Glass | HDPE | Cardboard | Other | Total |
| | | | Cups | | | Cartons | | |
| Total | 690 | 630 | 480 | 330 | 220 | 110 | 10 | 2,470 |
| In-home | 515 | 520 | 5 | 250 | 220 | 100 | 10 | 1,620 |
| Out-of-home | 175 | 110 | 475 | 80 | 0 | 10 | 0 | 850 |

Source: Kantar Worldpanel for Zero Waste Scotland (figures rounded to the nearest 5 million)

Scottish Drinks Containers by Outlet Type •

Table 11 displays the number of drinks containers by main outlets. Supermarkets are by far the largest single source accounting for more than a 40% share of the market. Convenience stores and discounters (primarily Lidl & Aldi) have a combined 15% share of the market. The 5% share for Multi's including forecourts category is primarily drinks container sales at large supermarkets fuel forecourts.

Table 11. Number of Scottish Drinks Containers by Outlet Type (millions)

| Supermarkets | Convenience | Discounters | High St | Multis | Online | Quick Service | Other | Total |
|--------------|-------------|-------------|---------|--------|--------|------------------|-------|-------|
| 1,040 | 215 | 170 | 140 | 125 | 100 | 95 | 585 | 2,470 |

Source: Kantar Worldpanel for Zero Waste Scotland (figures rounded to the nearest 5 million)

Test run of business forms

Additional administration will be required for a DRS. Once the final details of how the scheme will operate in practice a series of workshops with the relevant stakeholders that test run proposed documentation will be undertaken.

Legal Aid Impact Test

The legal basis for introducing a DRS is the Climate Change (Scotland) Act 2009²³. Once a more complete picture of how the scheme will operate in practice, the Access to Justice Team will be consulted on what the potential impacts may be on Scottish legal aid and the broader Scottish legal system. At the present time, these are expected to be minimal.

Enforcement, sanctions and monitoring

The framework for enforcement and sanctions for a DRS is still to be fully determined but a Scheme Administrator and SEPA, with its role to regulate waste materials, will have central roles. This section will be more fully developed for the Final BRIA.

²³ Climate Change (Scotland) Act 2009

Implementation and delivery plan

Following the Public Consultation, a Final Scheme Design will be chosen and Regulations laid before Parliament. Thereafter depending on scheme design and according to European Commission²⁴ a minimum period of 12 months will be required to prepare for implementation.

There will be regular reviews of the scheme operation after it introduced. We anticipate a high level of scrutiny on scheme performance from business and other stakeholders.

Summary and recommendation

This partial BRIA lays out the rationale behind and the options under consideration for a Scottish DRS. The forthcoming Public Consultation will be used to shape the option choice process. The Final BRIA will provide a more focused analysis of the option that is selected for implementation.

Declaration and publication

I have read the Business and Regulatory Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

Signed:

Date: 27.06.2018

Roseanna Cunningham MSP Cabinet Secretary for Environment, Climate Change and Land Reform

Scottish Government Contact point: Donald McGillivray Donald.McGillivray@gov.scot

Signed:

Date: 27.06.2018

lain Gulland Chief Executive Zero Waste Scotland

Zero Waste Scotland Contact Point: Ewan MacGregor ewan.macgregor@zerowastescotland.org.uk

²⁴ ECJ Ruling

ANNEX A

Example 1 – Take back to dedicated points

| · · · · · | |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| What the example does | Introduce a DRS for Scotland. Place a refundable deposit on PET plastic bottles, aluminium and steel cans and glass bottles. Creates a non-profit organisation to co- ordinate delivery of the scheme, overseen by the drinks industry. |
| What the example does not do | Significantly improve recycling rates for target materials. Require retailers to act as a return location for deposit bearing containers. |
| What changes occur to the status quo | Target containers would have a 20p refundable deposit placed on them. Series of dedicated drop off points for DRS containers. Management of material collected by the system operator. National education and awareness of consumers. Regulation of the scheme. |
| What the scheme would look like practically | Target containers would be taken back by the consumer to a number of large dedicated points. This scheme would see dedicated points being placed in towns of a certain size. Shops selling beverage containers would not have to take containers back. The drinks industry would work together to create a non-profit organisation that would deliver the scheme. |
| | |



| What the example does | Introduce a DRS for Scotland |
|--------------------------------------|----------------------------------------------|
| | Place a refundable deposit on PET and |
| | HDPE plastic bottles, aluminium and |
| | steel cans, glass bottles, beverage |
| | cartons and disposable cups. |
| | Requires some retailers to act as a return |
| | location and accept containers for return |
| | if there is not a dedicated drop off point |
| | located nearby. |
| | Create a non-profit organisation to co- |
| | ordinate delivery of the scheme, |
| | overseen by the drinks industry. |
| What the example does not do | Significantly improve recycling rates for |
| • | different materials. |
| What changes occur to the status guo | Target containers would have a 20p |
| | refundable deposit placed on them |
| | Series of dedicated drop off points for |
| | DRS containers with some shops also |
| | acting as return locations |
| | Management of material collected |
| | National education and ewerenees of |
| | National education and awareness of |
| | Consumers. |
| | Regulation of the scheme. |
| What the scheme would look like | Dedicated points would be within a set |
| practically | distance to any shop selling a beverage |
| | in a disposable container. |
| | There would be more return locations |
| | than example 1 as some shops who sell |
| | high quantities of drinks in disposable |
| | containers would be required to act as |
| | return locations if there is not a dedicated |
| | drop off point within a set distance. |
| | The drinks industry would work together |
| | to create a non-profit organisation that |
| | would deliver the scheme |
| | |
| | <u> </u> |

Example 2 – Take back to dedicated points and some shops (with cartons and cups)



| What the example does | Introduce a DRS for Scotland | | | |
|--------------------------------------|--------------------------------------------|--|--|--|
| what the example does | Place a refundable deposit on PET | | | |
| | plastic bottles, aluminium and steel cans | | | |
| | and glass bottles | | | |
| | Requires retailers to act as a return | | | |
| | location and accept containers for return. | | | |
| | Create a non-profit organisation to co- | | | |
| | ordinate delivery of the scheme, | | | |
| | overseen by the drinks industry. | | | |
| What the example does not do | Have the wide coverage of materials that | | | |
| | examples 2 and 4 have. | | | |
| what changes occur to the status quo | larget containers would have a 10p | | | |
| | Potoilors accost deposit bearing | | | |
| | containers back from the consumer in | | | |
| | exchange for the deposit. Management | | | |
| | of material collected. | | | |
| | National education and awareness of | | | |
| | consumers. | | | |
| | Regulation of the scheme. | | | |
| What the scheme would look like | Any retailer that sells a beverage in a | | | |
| practically | disposable beverage container would be | | | |
| | required to provide a deposit return | | | |
| | Consumers would be able to take | | | |
| | containers to any place of purchase to | | | |
| | receive their deposit back. | | | |
| | There would be more return locations | | | |
| | than examples 1 and 2. | | | |
| | There would likely be a combination of | | | |
| | automatic and manual return methods. | | | |
| | The drinks industry would work together | | | |
| | to create a non-profit organisation that | | | |
| | would deliver the scheme. | | | |



| | Introduces a DDC for Ocational |
|--------------------------------------|--------------------------------------------|
| what the example does | Introduce a DRS for Scotland |
| | Place a refundable deposit on PET and |
| | HDPE plastic bottles, aluminium and |
| | steel cans, glass bottles, beverage |
| | cartons and disposable cups. |
| | Requires retainers to act as a return |
| | Create a non prefit organisation to co |
| | ordinate delivery of the scheme jointly |
| | overseen by industry and a public body |
| What the example does not do | overseen by industry and a public body. |
| What chapage occur to the status que | Target containers would have a 10n |
| what changes occur to the status quo | refundable denosit placed on them |
| | Retailers accepting deposit bearing |
| | containers back from the consumer in |
| | exchange for the deposit. |
| | Management of material collected. |
| | National education and awareness of |
| | consumers. |
| | Regulation of the scheme. |
| What the scheme would look like | Any retailer that sells a beverage in a |
| practically | disposable beverage container would be |
| | required to provide a deposit return |
| | service. |
| | Consumers would be able to take |
| | containers to any place of purchase to |
| | receive their deposit back. |
| | then exemples 1 and 2 |
| | There would likely be a combination of |
| | automatic and manual return methods |
| | The drinks industry would work together |
| | with the public sector to create a non- |
| | profit organisation that would deliver the |
| | |

Example 4 – Take back to any place of purchase (with cartons and cups)

