

A Deposit Return Scheme for Scotland

Strategic Environmental Assessment Addendum

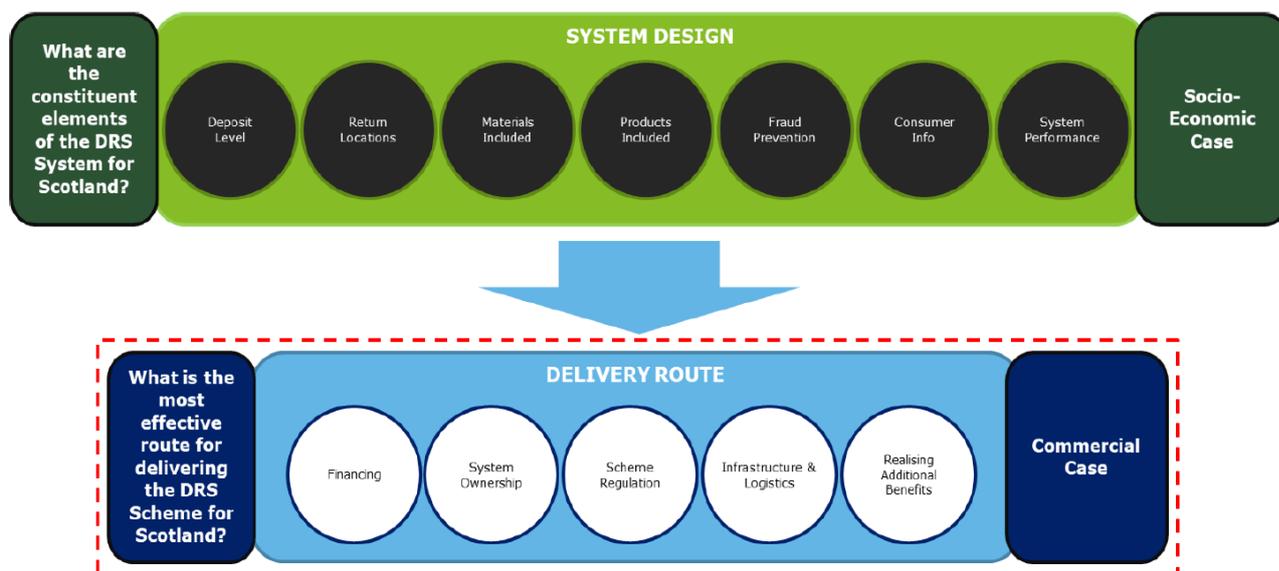


March 2020

Background

In the Environmental Report,¹ developed as part of the Strategic Environmental Assessment for Scotland's Deposit Return Scheme (DRS), four 'example deposit return schemes' were presented.

These were selected to illustrate different possible configurations of the 12 components which make up a functioning DRS:



Extensive modelling was undertaken to determine the likely performance and environmental impacts of these example systems, and the results were presented for public consultation in the Environmental Report.

Following extensive public consultation, stakeholder engagement and further evidence-gathering, the preferred scheme design for Scotland's DRS was announced by the Scottish Government on 8 May 2019.

In December 2019, the Scottish Parliament's Environment, Climate Change and Land Reform Committee requested an update to the original Environmental Report, detailing the characteristics, operational performance, and environmental impacts of the planned DRS for Scotland.

This document addresses this request, illustrating how DRS is expected to provide improved performance and environmental outcomes compared to the four example systems.

¹ [The Scottish Government \(2018\) A Deposit Return Scheme for Scotland - Strategic Environmental Assessment](#)

Comparison of Key Scheme Characteristics

The Scottish DRS will be a national ‘return-to-retail’ scheme for single-use drinks containers made of PET, steel, aluminium or glass, with a deposit of 20p per container.

Cartons, cups and HDPE are not included (for more information, see Section 5.1 of the Post Adoption Statement)².

Table 1 compares the key characteristics of Scotland’s DRS with those of the example systems presented in the Environmental Report. Scotland’s DRS is most similar to Example 3 but features a higher 20p deposit.

Table 1. Example systems considered and Scotland’s DRS

Scheme	Return Point	Materials of drink containers collected	Deposit level	Capture rate	Means of collection
Example 1	Dedicated points	1. PET 2. Steel and aluminium 3. Glass	20p	60%	1,058 automated deposit return points placed in towns with a population of at least 1,000.
Example 2	Dedicated points and some shops	1. PET 2. Steel and aluminium 3. Glass 4. HDPE 5. Drink cartons 6. Single-use paper-based cups	20p	70%	2,009 automated deposit return points placed in, or within a set distance of, any shop selling drinks in containers.
Example 3	Any place of purchase	1. PET 2. Steel and aluminium 3. Glass	10p	80%	Any retailer selling drinks in an in-scope disposable container to operate a (automated or manual) return point for all DRS containers.
Example 4	Any place of purchase	1. PET 2. Steel and aluminium 3. Glass 4. HDPE 5. Drink cartons 6. Single-use paper-based cups	10p	80%	Any retailer selling drinks in an in-scope disposable container to operate a (automated or manual) return point for all DRS containers.
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.

² [The Scottish Government \(2019\) A Deposit Return Scheme for Scotland – Strategic Environmental Assessment: Post Adoption Statement](#)

Comparison of Scheme Performance and Environmental Impacts

Scotland's DRS has been designed to achieve higher recycling performance outcomes for target materials (PET, steel and aluminium, and glass) compared to the four example schemes (see **Table 2**).

This higher performance is driven by a combination of features:

- National return-to-retail coverage is designed to maximise accessibility and return convenience across Scotland;
- The 20p deposit provides a stronger incentive for consumer participation;
- The running costs of the scheme will be funded by producers – this will incentivise them to maximise scheme performance and minimise instances of fraud;
- The target capture rate of 90% will be mandated in the Regulations and it will be the producers' legal responsibility to meet it.

As a result, Scotland's DRS is expected to support greater levels of recycling, and greater carbon savings overall, compared to example schemes 1, 2 or 3.

It is also expected to outperform example scheme 4 for materials targeted under both schemes, but achieve a slightly lower overall recycling tonnage and carbon benefit due to the inclusion, under example scheme 4, of HDPE drink containers, drinks cartons and single-use paper cups. The Scottish Government has committed to reviewing the scope of the scheme in due course. If that review were to result in the inclusion of additional materials, it can reasonably be assumed that further environmental benefits would be realised.

Improvements to DRS Performance Modelling

With the support of industry stakeholders, a number of modelling improvements have been made with respect to materials targeted under Scotland's DRS, including refinements to target product weights and material tonnages placed on the market.

These changes, which occurred after the final design of the Scottish DRS, have not been retrospectively applied to the four example systems presented in the Environmental Report. However, the recycling rates have not been affected by these changes, and it is possible to provide a general performance comparison between Scotland's DRS and the four example systems (see **Table 2**).

Based on the principle that the more material a scheme captures, the greater its environmental impact, Scotland's DRS, with its 90% capture rate target, is expected to deliver enhanced environmental impact compared to the other example schemes (for target material).

The final option will save an estimated 3,909 ktCO₂eq between 2023 and 2048³ and, based on extensive stakeholder engagement, represents an optimum environmental outcome taking account of technical practicalities in establishing and operating a successful scheme.

³ The 25-year timeframe was revised for the final option to reflect the assumed first full year of operation.

Table 2. Expected performance of Scotland's DRS and Example Schemes vs. business as usual (BAU)⁴

	Business As Usual (BAU)	Example 1	Example 2	Example 3	Example 4	Scotland's DRS		
	Take back to dedicated drop-off points	Take back to dedicated drop-off points and some shops (with cartons and cups)	Take back to any place of purchase	Take back to any place of purchase (with cartons and cups)	Final scheme			
	(2018-2043)	(2018-2043)	(2018-2043)	(2018-2043)	(2018-2043)	(2023 – 2048)		
	Recycle Rate	Recycle Rate	Recycle Rate	Recycle Rate	Recycle Rate	Recycle Rate	Increased recycling vs BAU (kt)	Carbon savings vs BAU (ktCO ₂ eq)
Glass drink container	63%	84%	88%	91%	91%	96%	1,319	1,259
Steel drink container	46%	77%	82%	87%	87%	95%	41	73
Aluminium drink container	48%	78%	83%	88%	88%	95%	184	1,843
PET drink container	50%	79%	84%	88%	88%	95%	355	734
HDPE drink container	53%	53%	84%	53%	89%	53%	-	-
Drink cartons	38%	38%	80%	38%	86%	38%	-	-
Single-use paper cups	1%	1%	67%	1%	77%	1%	-	-
Total	57%	78%	86%	84%	90%	88%	1,899	3,909

It should be noted that the figures in the above table do not take into consideration other anticipated interventions, including those which will be required in order to comply with the EU Circular Economy Package.

⁴ Glass carbon factors have been updated as a result of ongoing modelling efforts informed by stakeholder engagement. These changes have been applied to all schemes to maintain comparability.



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