

**Digital DRS**  
**How does it work?**  
**Eric Randall - June 2022**



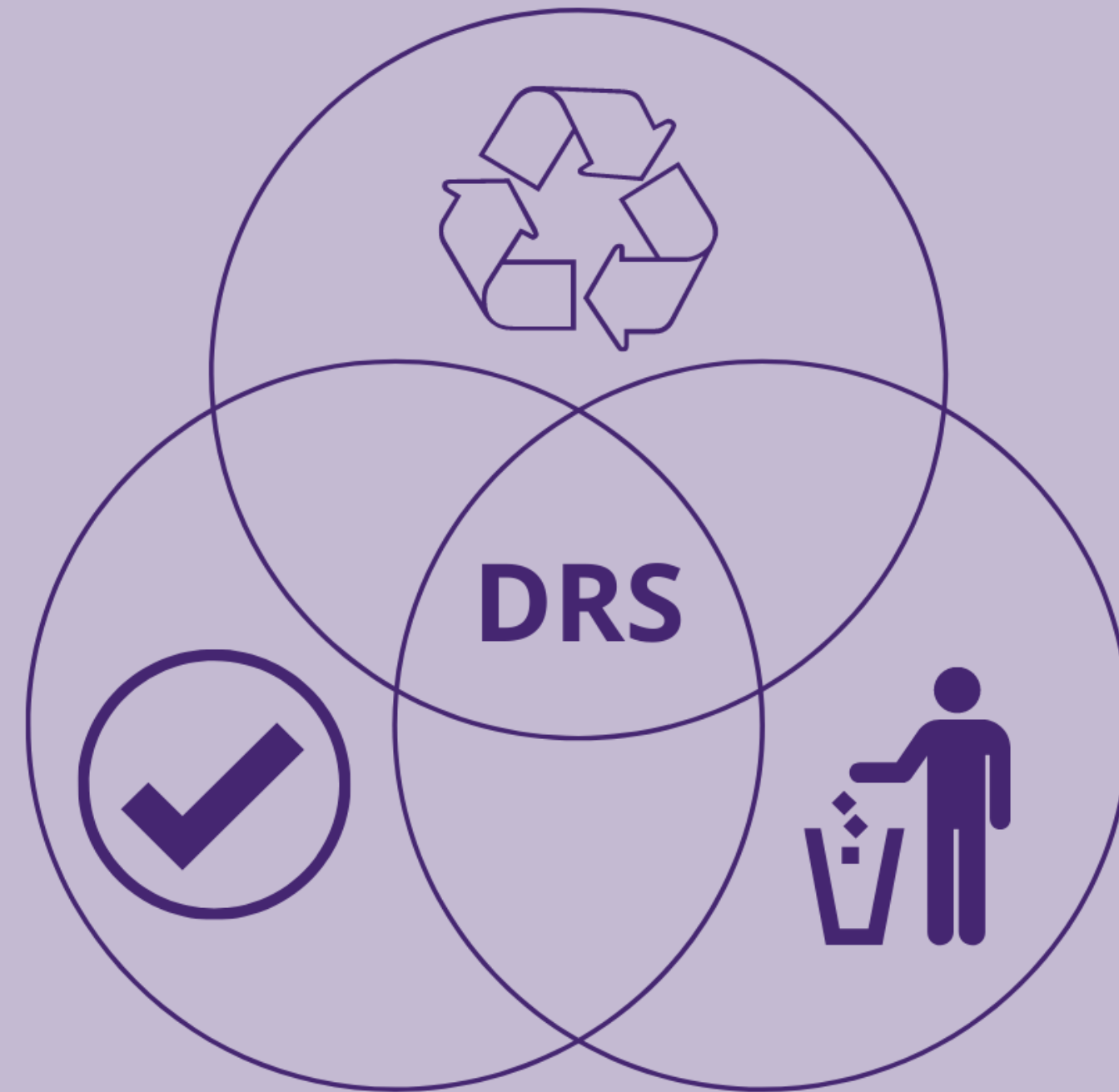
## We exist to make recycling better

- UK's largest social enterprise recycler
- Process recyclables from 50% of NI homes
- Operate 11 Recycling Centres
- Garden & refuse collections
- Employ over 300 staff
- Owned by the Bryson Charitable Group



# Deposit Return Schemes

- **Purpose of DRS:**
  - Reduce litter
  - Increase recycling
  - Improve quality of recycling
- Presumed use of RVM based Nordic models
- DMOs to provide the technical solution



# Recycle the right way



# Reward4Waste Trial

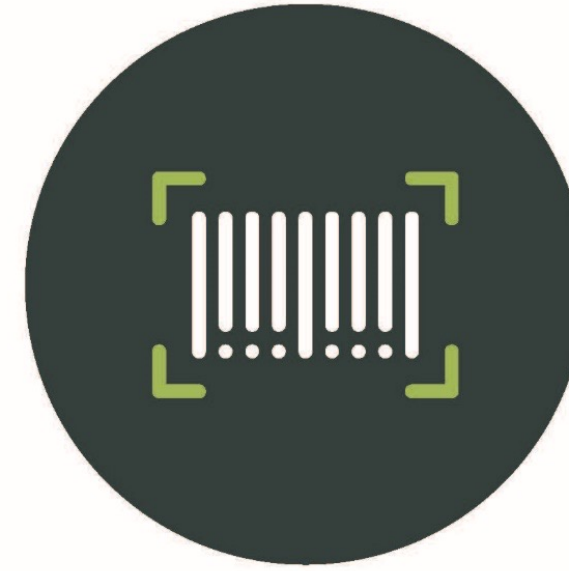
## How to take part



1. Download app



2. Login



3. Scan the recycling bin



4. Scan items



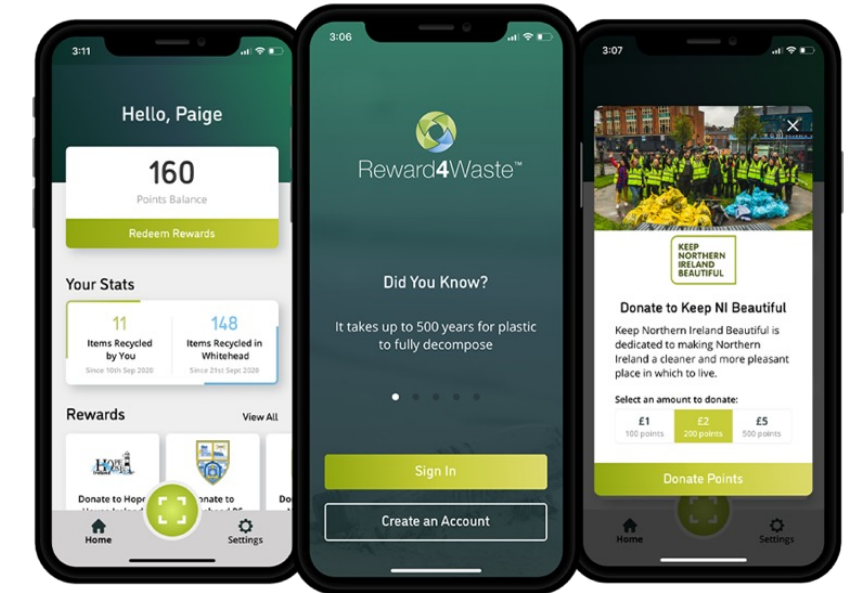
5. Deposit



6. Get rewards

# Reward4Waste Insights

- Over **4000** items recycled
- **20%** of households signed up for the trial

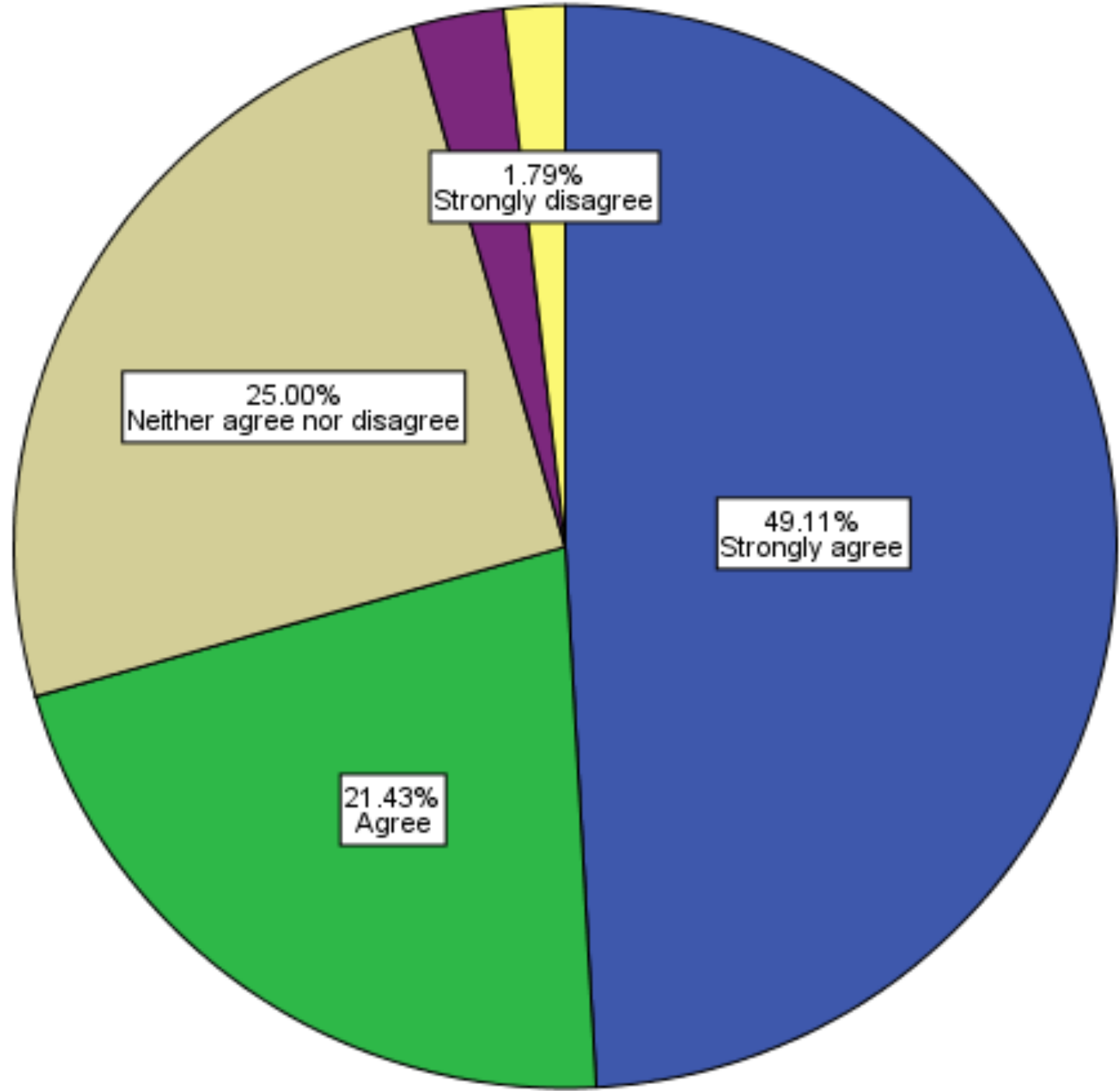


## Independent research by Queens University Belfast found:

- **86%** of respondents either agreed that a DRS is a good idea
- **87%** stated that they would like to see the DRS extended beyond drinks containers to include other types of plastic waste
- **18%** of people said that they would use RVMs as part of a Digital DRS

# Recycling at home vs RVM

How much do you agree with each statement? - I would prefer to recycle my plastic waste at home rather than take it to a Reverse Vending Machine at a central point



Less than 5% disagree



# Digital DRS Industry Working Group





# Digital DRS Providers



- Stakeholder Industry body collaboration across:
  - Materials packaging producers
  - Brands and drinks producers
  - Retailers

<b>Alupro</b> <b>British Glass</b> <b>RECOUP</b> <b>British Plastics Federation</b>	<b>Danone</b> <b>Diageo</b>
British Retail Consortium The Co-operative Group Aldi UK Ocado	Biffa Bryson Recycling GS1

- Understand the opportunity and associated costs

# Possibilities – why members are interested

- Cost reduction – RVMs and related logistics v collecting from homes
- Increased ‘on the go’ provision and decrease litter
- Deterring fraud and counterfeit through unique serialisation
- Reduce retail take back and better for home deliveries
- Flexibility e.g. variable deposits and multipacks
- Prevent migration to other materials
- Customer convenience & accommodate change in shopping patterns
- More accessible for people without cars
- Whole system tracking / waste crime / exports
- Market information
- Greater customer interaction – recycling info – donations

# Stage 1: Economic Appraisal

## Digital DRS Economic Impact Assessment – Resource Futures June 2021

- £3.3 billion savings over 11 years
- Benefit to cost ratio of  $> 2$  against DEFRA's proposed option
- Fewer RVMs, 28 million household deposit points
- No show stoppers identified
- More work required across range of stakeholders



# Stage 1: Digital DRS & Quality Report

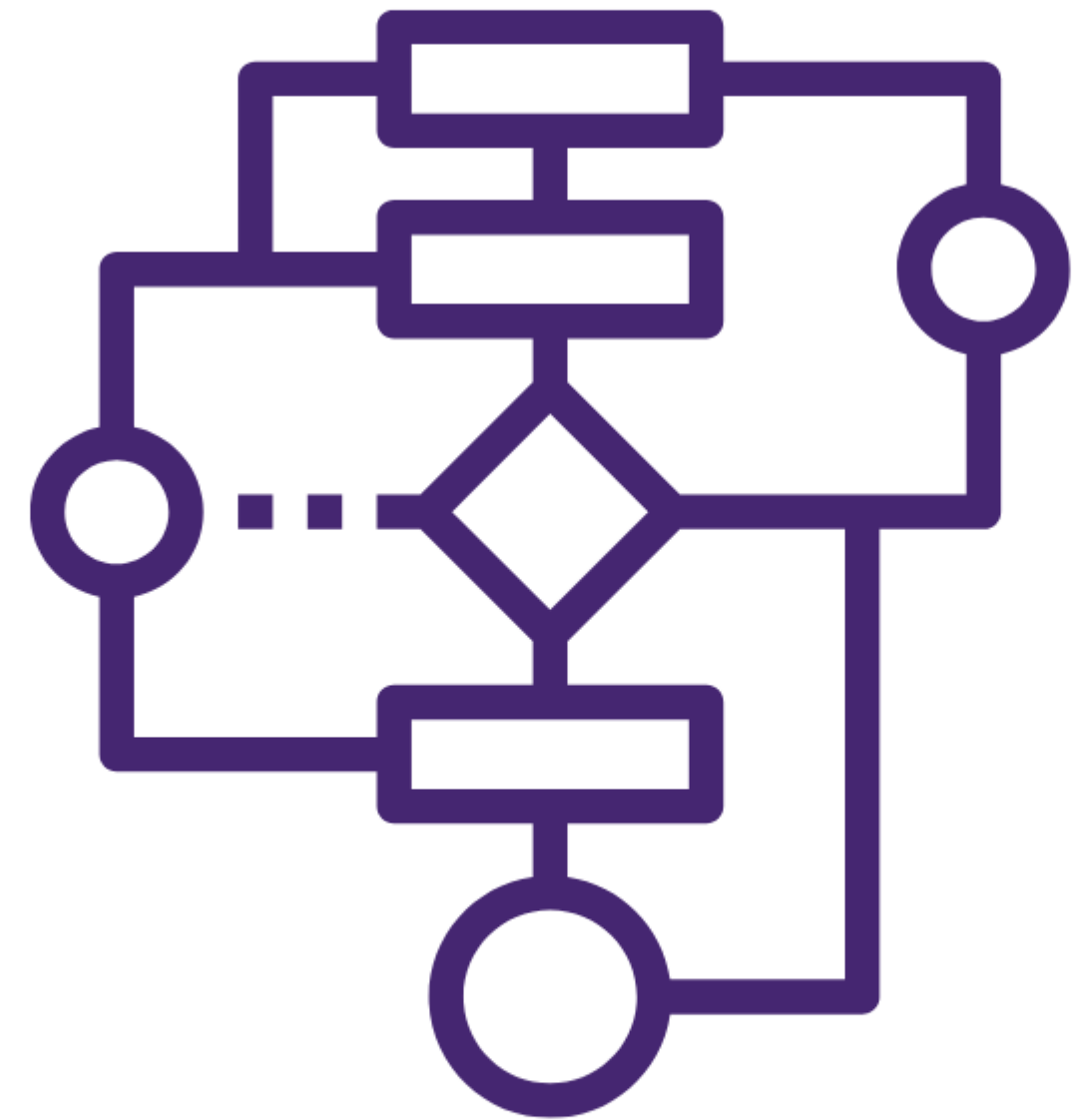
- Conducted by Resource Futures
- Understanding the relationship between household recycling collection systems and recycling quality, and the impact of Deposit Return Systems (RVM and Digital) on Quality

Material	Kerbsort	Single stream	RVMs
Aluminium	Acceptable	Acceptable	Acceptable
PET	Some improvements required	Significant improvements required	Acceptable
Glass	Acceptable	Some concerns	Significant concerns

# Stage 2: Detailed Feasibility Work

## Process Mapping Preparation

- Funded by Welsh Government
- Facilitated by Resource Futures
- Initial process mapping workshops by GS1



# Stage 2: Participants



DIAGEO

SUNTORY  
SUNTORY BEVERAGE & FOOD

ABInBev



TESCO



BRC



ACS | the voice of  
local shops



CONWY  
CYNGOR BWRDEISTREF SIROL  
COUNTY BOROUGH COUNCIL

Bryson  
Recycling

Biffa



valpak

wrap  
Cymru

alupro

BPF

RECOUP



ace UK

# Stage 2: Feasibility Study



## Digital DRS Feasibility Study

Phase 1: Stakeholder perceptions of DRS design  
and feasibility

---

Welsh Government  
January 2022

- Purpose - to investigate key aspects of implementing digital DRS
- Research included over 30 interviews with organisations across supply chain
- Available on Welsh Government website



# Stage 2: Key Themes

Timing  
of  
implentation



Uniform  
solutions  
across UK



No delay  
to DRS



Material  
Quality



Labelling  
& data



Kerbside  
collections



On the go



Public  
behaviour



# Stage 2: End to End Solutions

Ongoing work  
by Resource  
Futures

How will it be  
implemented?

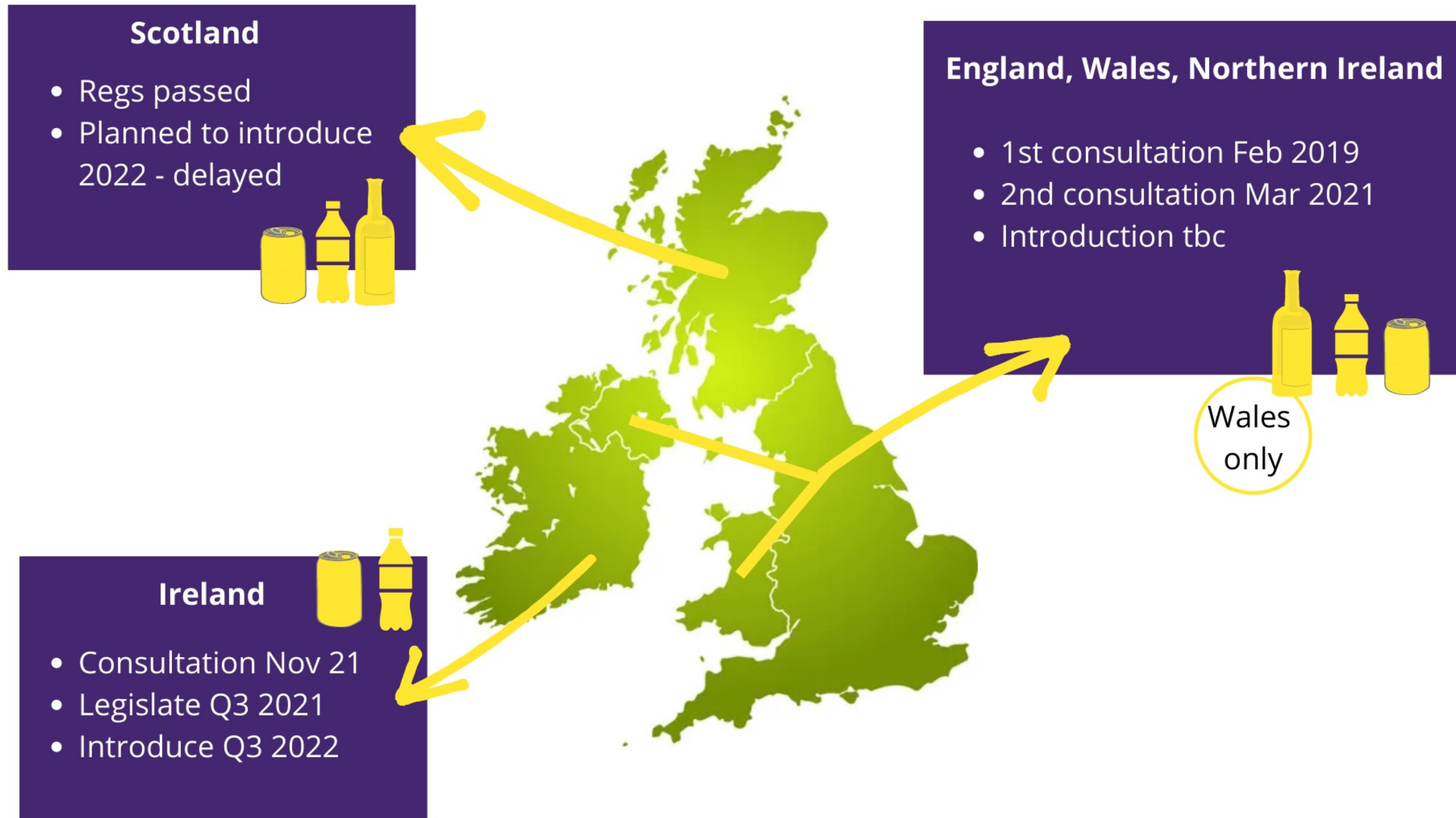
Detailed end  
to end  
solution

When will  
it be  
implemented?

How long will  
it take?

Can benefits  
be realised?

# DRS Introduction Across UK & Ireland



 **Recycle** the right way

 **Bryson**  
Recycling

**THANK YOU**

[Eric.Randall@brysonrecycling.org](mailto:Eric.Randall@brysonrecycling.org)

