# DRS – what value does it add and is it VFM?

Richard McIlwain
Deputy Chief Executive
Keep Britain Tidy

# The issue

# Keep Britain Tidy Litter Survey 2018

Figure Three: Top ten types of litter found on the highest percentage of sites in 2017/18

# Litter ‘Count’ Surveys 2018

- **KBT litter count 2018**

  13% of plastic bottles littered were greater than 1 litre in size

- **CPRE litter count 2018:**

  11,200 containers
  53% of cans >330ml
  19% plastic bottles > 500ml
  33% glass bottles > 750ml

A minimum specification ‘on the go’ DRS would still leave a substantial number of large drinks containers littered

# Beacons of Litter

**‘Control’:** Site cleansed to Grade A standard (completely free from litter).
**‘Beacons’:** Cleanse to Grade A standard, 25 items of ‘beacons’ litter planted
**‘Other’:** Cleanse to a Grade A standard, 25 items of ‘other’ litter planted.

Table 6: Counts of litter item types under each of the three conditions

| Item Type | ‘Beacons’ | ‘Other’ | ‘Control’ |
|---|---|---|---|
| Drinks containers | 54 | 1 | 1 |
| Food packaging and utensils | 24 | 13 | 11 |
| Food | 18 | 13 | 4 |
| General litter (all other waste) | 15 | 11 | 6 |
| Paper | 11 | 19 | 14 |
| Cellophane Wrapping | 10 | 14 | 9 |
| Gum | 4 | 0 | 3 |
| Plastic bags | 3 | 1 | 2 |
| Unknown | 2 | 4 | 4 |
| **Total** | 141 | 76 | 54 |

# Impact on wildlife

- Drinks bottles and cans litter our roadside
- They act as graveyards for some of our rarest and most important small mammals
- Including shrews, bank voles and wood mice
- A recent study found more than 8% of littered bottles and nearly 5% of cans contained animal remains

# Blue Planet, Plastics and Waste

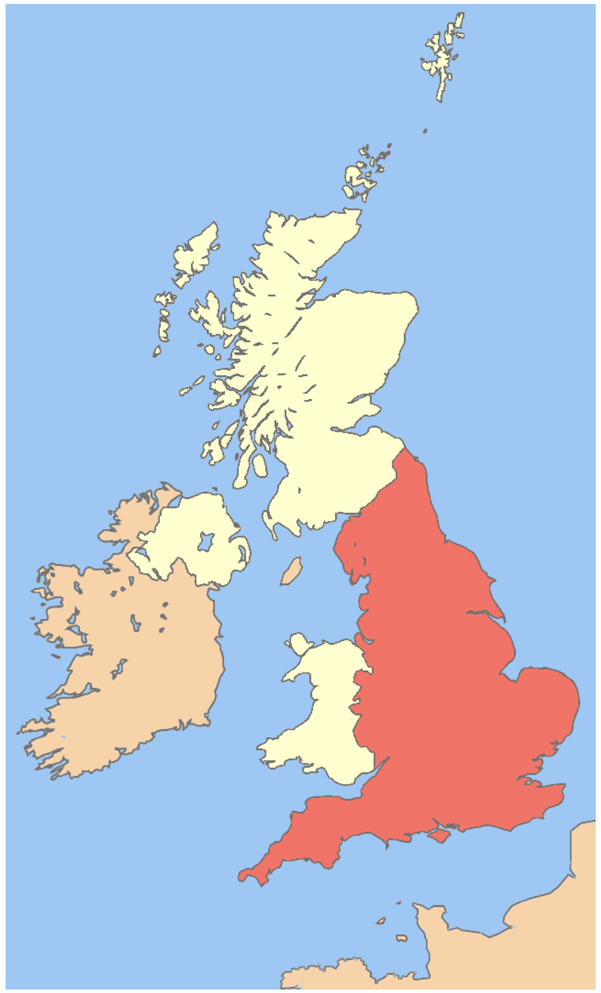
# The benefits of a DRS

# Recycling Rates in England

| Plastic Bottles | |
|---|---|
| Recoup Household Collection Survey 2018 | 59% |
| Valpak Data 2016 | 74% |
| Defra IA 2019 | 70% |

| Aluminium Cans | |
|---|---|
| Alupro Survey 2018 | 72% |

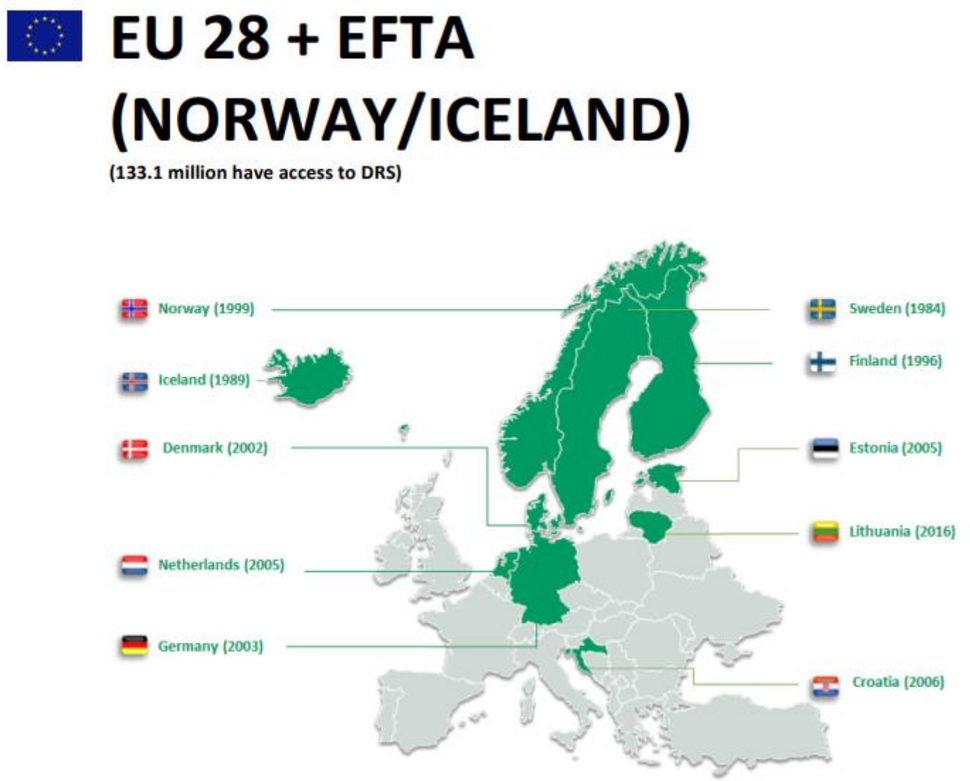
| Glass bottles | |
|---|---|
| Voluntary and Economic Measures Group | 70% |



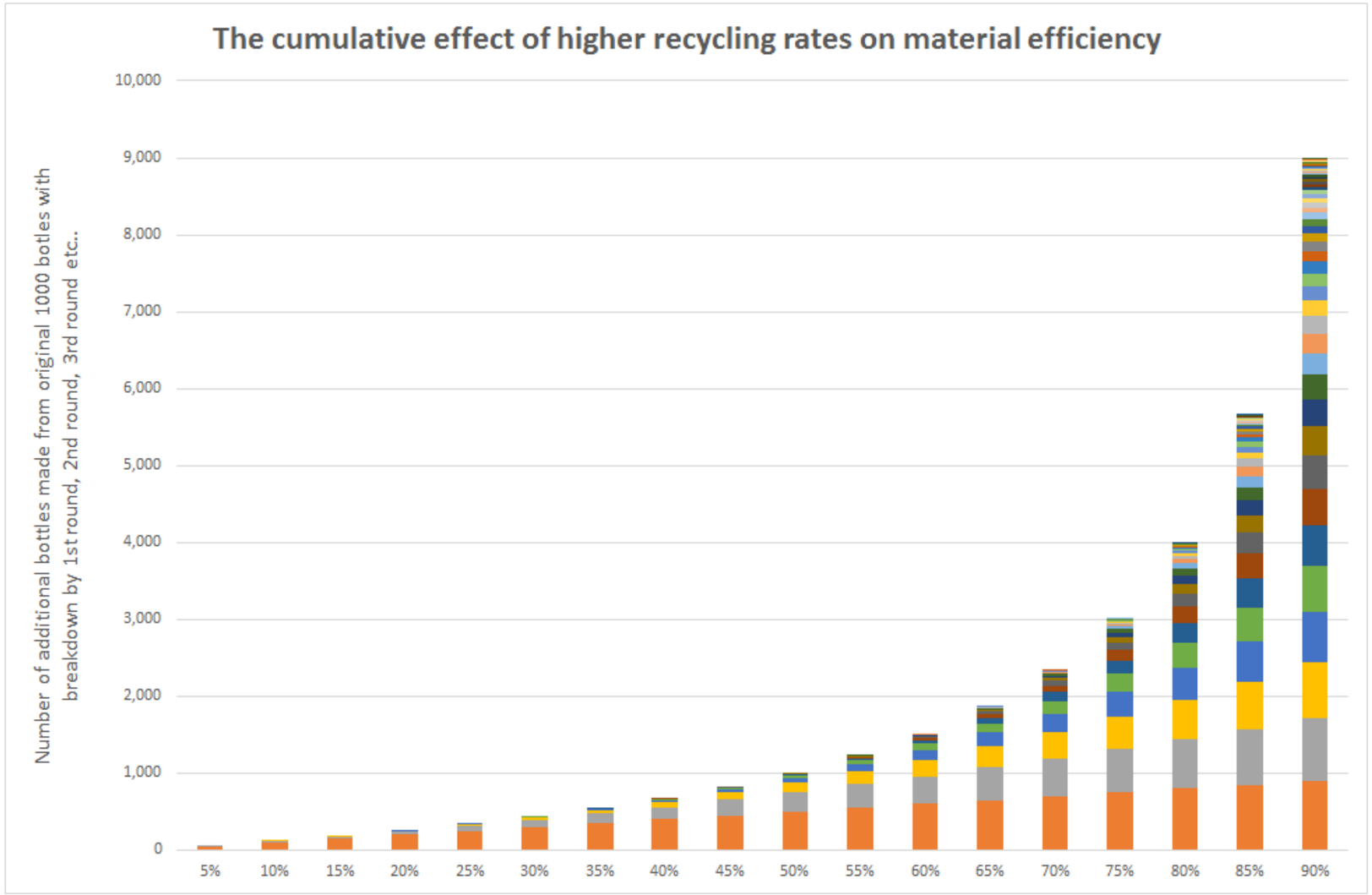
**At least 30% of plastic, aluminium & glass containers are not recycled**

# DRS Recycling Rates at 2016

| | |
|---|---|
| Germany | 98% |
| Netherlands | 95% |
| Lithuania | 92% |
| Norway | 92% |
| Finland | 92% |
| Iceland | 90% |
| Denmark | 90% |
| Croatia | 87% |
| Sweden | 85% |
| Estonia | 83% |



# DRS and Resource Efficiency



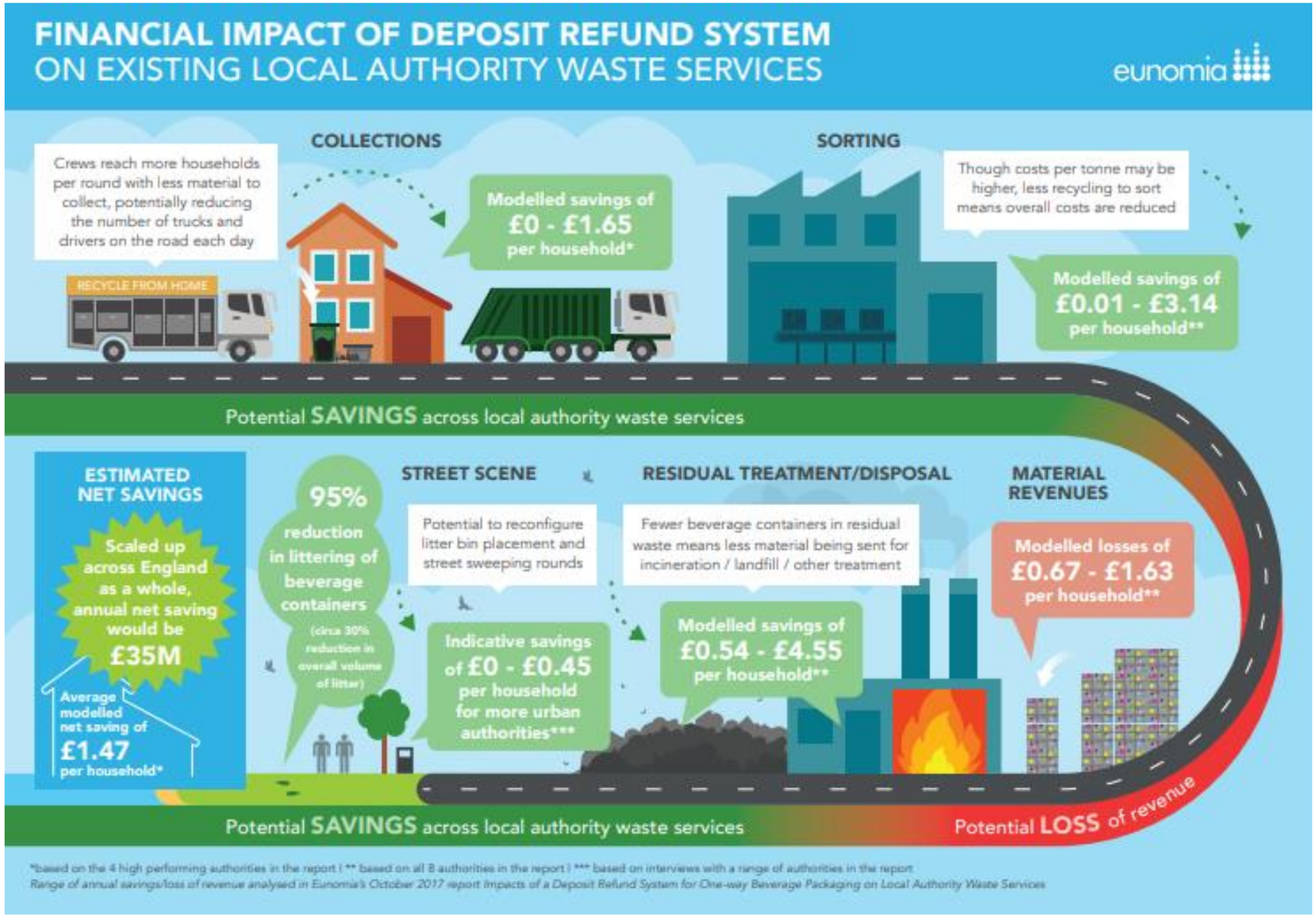
# Contamination

- A DRS provides clean, sorted recyclable drinks containers providing a good quality feedstock for reprocessing

- According to WRAP – evidence from ‘WasteDataFlow’ indicates that rejections rates at MRFs from kerbside collections anything from zero to over 20%

- Less than half of English Local Authorities provide public recycling bins and 54% of those that don’t cite issues with contamination

# DRS and Kerbside – benefits



# DRS and municipal recycling - benefits

| | Study Title, Author and Year | Summary of Findings |
|---|---|---|
| 1 | **Container Deposit Scheme – Consultation Regulation Impact Statement**<br>ACT Government, Transport Canberra and City Services Directorate, 2017[i] | • The benefits transferred from the ACT Government in its capacity as a provider of municipal services to customers of those services are estimated to be $9.7M over the 20-year period. |
| 2 | **Consultation Regulation Impact Statement – New South Wales Container Deposit Scheme (NSW CDS)**<br>NSW Environment Protection Authority, 2017[ii] | • Avoided waste collection and transport costs: The benefits transferred from local government to customers are estimated to be $272M over a 20-year period. |
| 3 | **Costs and Impacts of a Deposit on Cans and Small Bottles in the Netherlands – Extended Summary**<br>CE Delft, 2017[iii] | • Cost savings on current collection systems: €5.5 to €8.0 million<br>• Maximum reduction in costs of litter clean-up: Approx. €80 million (up to 3 eurocent per packaging)<br>• Cost savings on emptying public litter bins: €3 to €10 million (0.10 to 0.37 eurocent per packaging) |
| 4 | **Deposit Return Evidence Summary**<br>Zero Waste Scotland, 2017[iv] | • Residual disposal savings: £2.6M to £6.2M<br>• Recyclate savings costs: £2.8M to £3M (assuming no change in gate fees or material revenue)<br>• Aggregated treatment and management costs savings: £5.3M to £9.2M |
| 5 | **Cost-Benefit Analysis of a Container Deposit Scheme**<br>Sapere Research Group (prepared for the Auckland Council), 2017[v] | • Councils could expect to save $12.5M-$20.9M/year in collection costs ($2,645 to $4,424 per 1,000 pop.)[vi]<br>• Reduced litter collection and public space maintenance costs: $2.9M-$4.4M ($614 to $931 per 1,000 pop.) |

reloop™
resources remain resources

- It is important to look at the costs and benefits holistically.
- While DRSs may divert potential sources of revenue from kerbside programs, they also save municipalities a great deal of money
- Municipalities will realise significant cost savings in terms of reconfigured collections, processing, and disposal costs.
- They will also see significant cost savings in terms of reduced litter abatement

# The costs of a DRS

# Extended Producer Responsibility

Producers will be liable for the costs of collection with full net-cost fees covering collection and recycling of a key set of dry recyclables

The process for cost transfer from producers to Local Authorities needs to be clear and fair

The impact of a DRS on the kerbside service in terms of loss of PET and aluminium drinks containers should be irrelevant if the full net collection and sorting costs are covered by EPR

Where drinks containers do remain in kerbside – can local authorities recommend a system whereby they benefit from the unredeemed deposit?

# The costs of an ‘all-in’ DRS

## Annual Cost estimate

- Year 1 £1.028bn
- Year 2 to 10 £800m

- Includes set-up, RVM costs, transport, counting centre costs
- Funded by producer fees, material revenue & scope for un-reclaimed deposits

## Unit additional cost per drinks container

- From year 2 – from 3p to 0.4p per drinks container
  (dependent on use of un-reclaimed deposits in system funding)

## NPV

- Estimated to be £2.189m

# DRS and VFM

# DRS and VFM

**Potential for:**

- 90%+ collection rates of clean material
- Reduction in littering
- Reduction in harm to native wildlife
- Reduction in marine pollution

**For an additional cost of**

- between 0.4p and 3p per container paid by producers

Keep Britain Tidy contends that an ‘all-in’ DRS represents excellent value for money