

Using Economic Instruments to Tackle Litter

Seas at Risk Seminar

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Economic Instruments - Definition

- A means by which decisions or actions of government affect the behaviour of producers and consumers by causing changes in the prices to be paid for these activities.
 - OECD Glossary of Statistical Terms

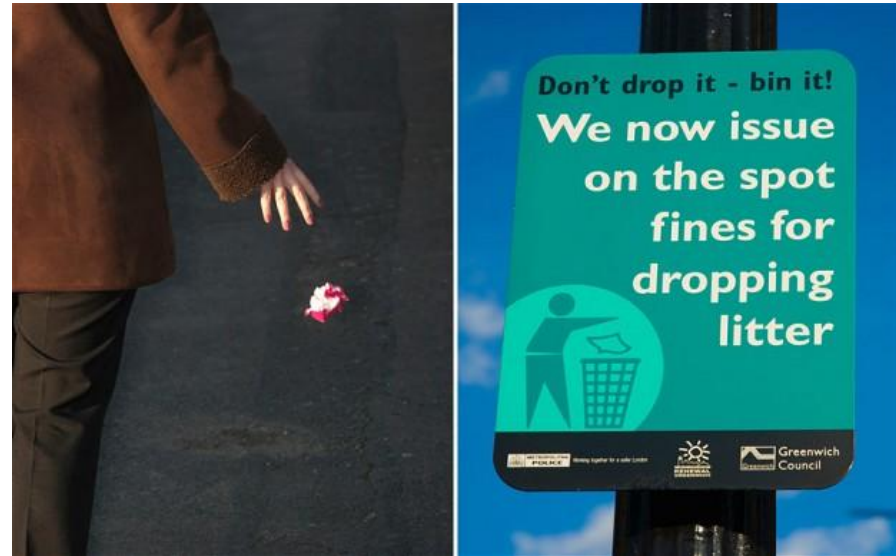
Tackling Litter - Bins



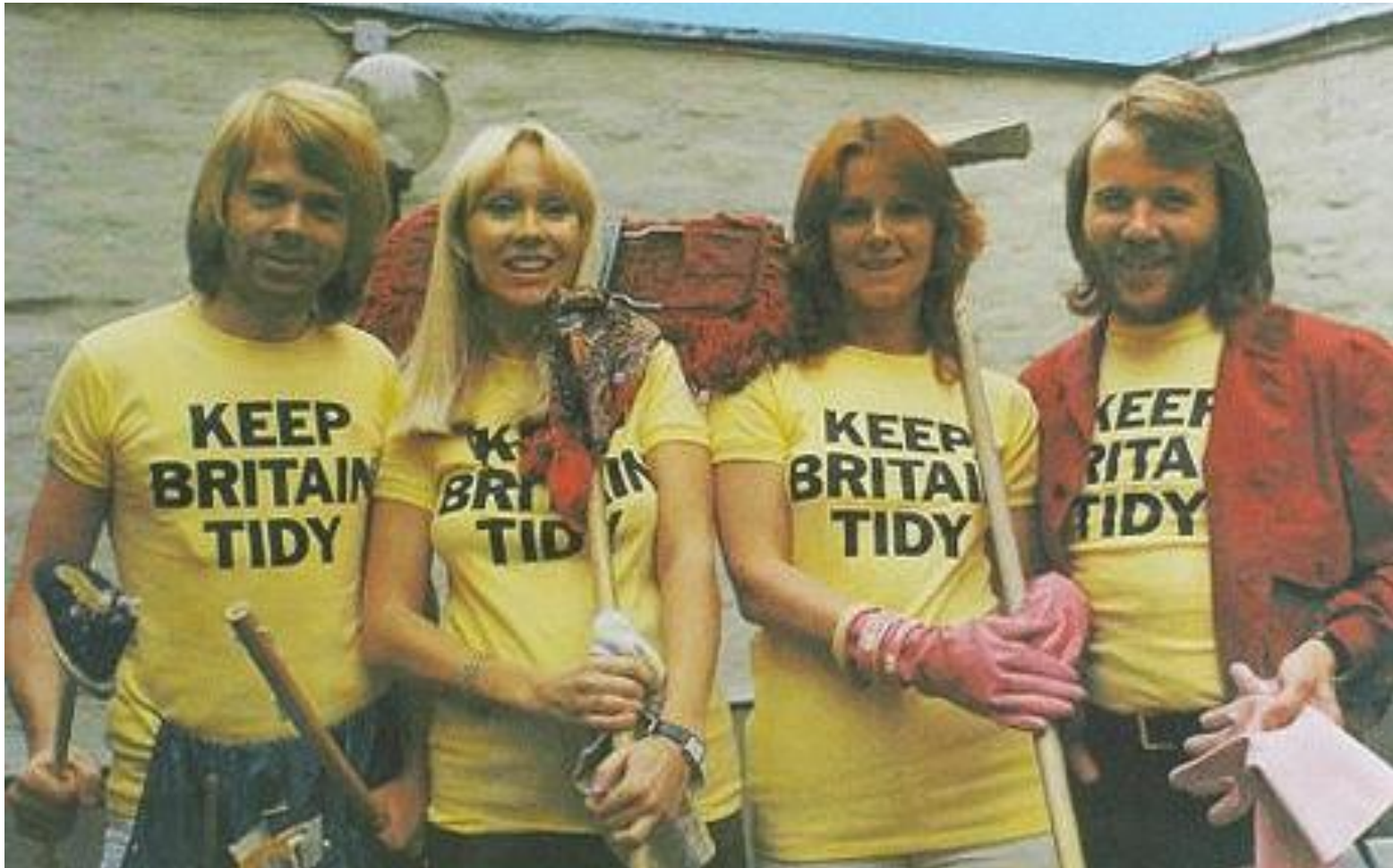
Tackling Litter - Bins



Tackling Litter - Fines



Tackling Litter - Campaigns



Tackling Litter – Economic Instruments

- **Subsidies**

- E.g. subsidies for reusable items

- **Taxes / Fees / Levies/Charges**

- E.g. on disposable cutlery (picnic tax)

- **Deposit-refunds**

- E.g. tyres, batteries

- **In theory, more efficient than other approaches**

Economic Instruments - Litter

- **Levies on single-use carrier bags**
 - Brings about waste prevention (i.e. preventing purchase) with an associated positive impact on litter
- **Deposit refunds on beverage containers**
 - Doesn't necessarily lead to waste prevention but can lead to reduced levels of litter

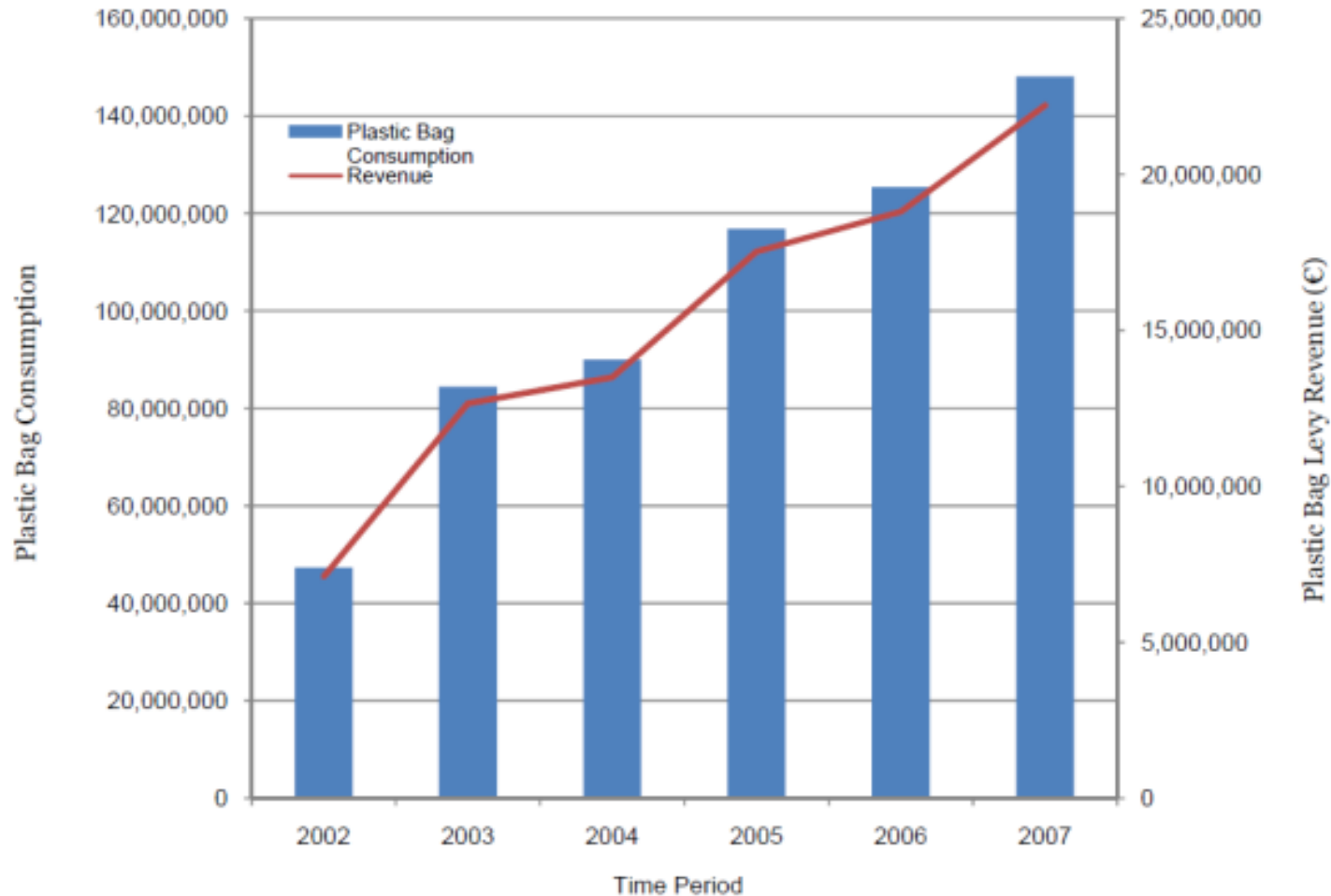
Levies on Single-use Carrier Bags

- **Irish Plastic Bag Levy**
 - Plastic bags only
- **Welsh Carrier Bag Charge**
 - Plastic and paper

Irish Plastic Bag Levy

- **Introduced March 2002**
 - Set at €0.15 per bag
 - Six times average WTP
 - Per capita usage dropped from 328 to 21 per annum

Irish Plastic Bag Consumption



Source: Department of Environment, Heritage and Local Government, 2008

Irish Plastic Bag Levy

- **Introduced March 2002**
 - Set at €0.15 per bag
 - Six times average WTP
 - Per capita usage dropped from 328 to 21 per annum
- **But by 2006**
 - Per capita usage increased to 32 per annum
- **1st July 2007**
 - Levy increased to €0.22 per bag

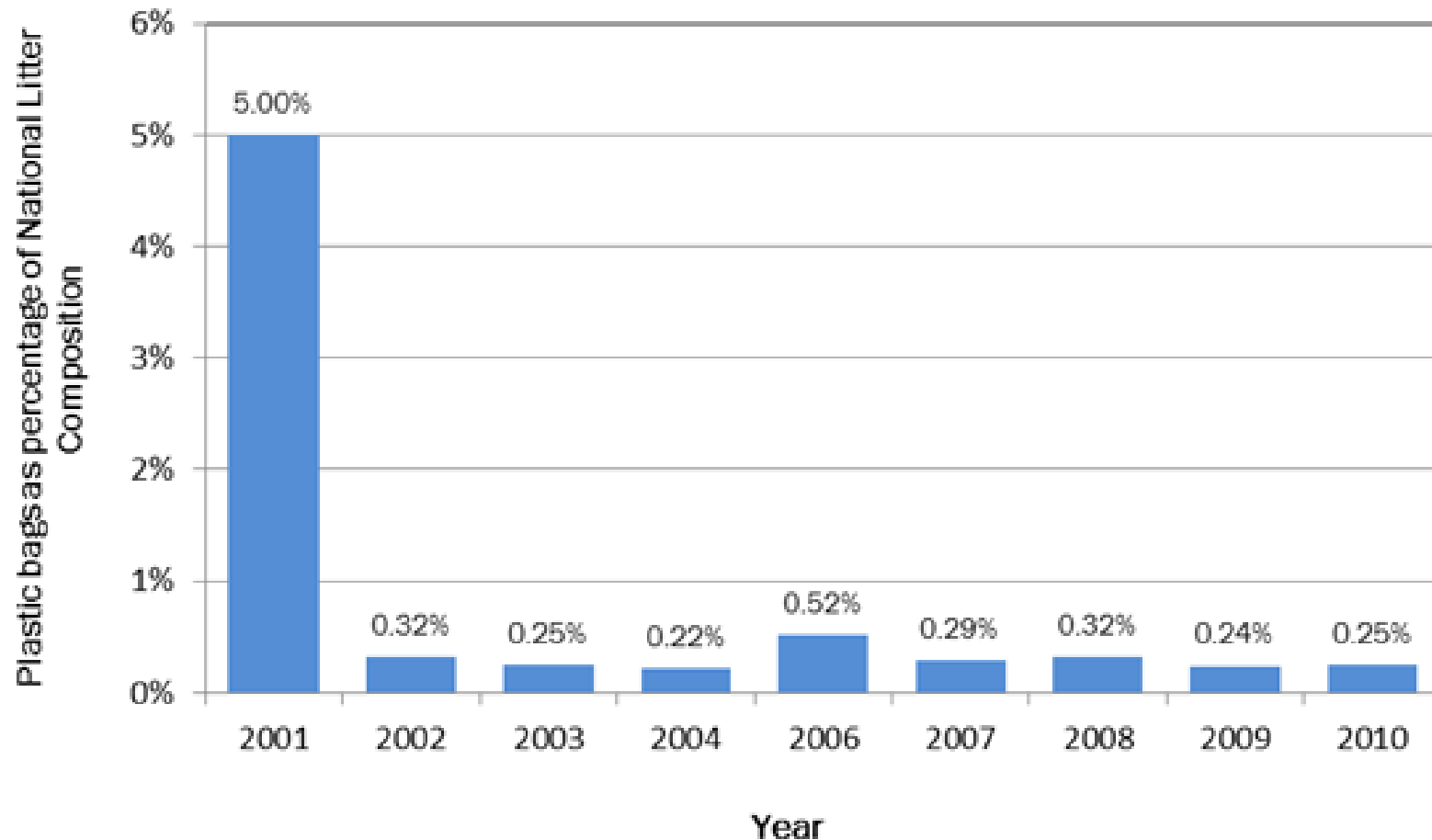
Public Perception

- Levy has reportedly:

- *‘proved so popular with the Irish public that it would be politically damaging to remove it’*

- Convery, F., McDonnell, S. and Ferreira, S. (2007) The Most Popular Tax in Europe? Lessons from the Irish Plastic Bags Levy, *Environmental and Resource Economics*, September 2007, Vol. 38, No. 1, pp. 1-11

Plastic bags as a Percentage of Ireland's Litter Composition



Source: Litter Monitoring Body, Annual System Results, 2011

Lessons from Ireland

- **Important that the instrument is flexible**
 - Able to be adjusted to keep pace with inflation
 - Maintain the real terms effect of the levy

Welsh Carrier Bag Charge

- 5p charge for single-use plastic and paper bags introduced in October 2011
- July 2012 Evaluation
 - Food retail - between 96% and 70% reduction
 - Fashion - between 75% and 68% reductions;
 - Home improvement - 95% reduction;
 - Food service - up to 45% reduction;
 - Telecommunications - 85% reduction
 - 70% of people support the charge

Deposit Refund Systems

- A deposit-refund system is the surcharge on the price of potentially polluting products. When pollution is avoided by returning the products or their residuals, a refund of the surcharge is granted.’
 - OECD, Glossary of Statistical Terms.

Deposit Refund Schemes (DRSs)

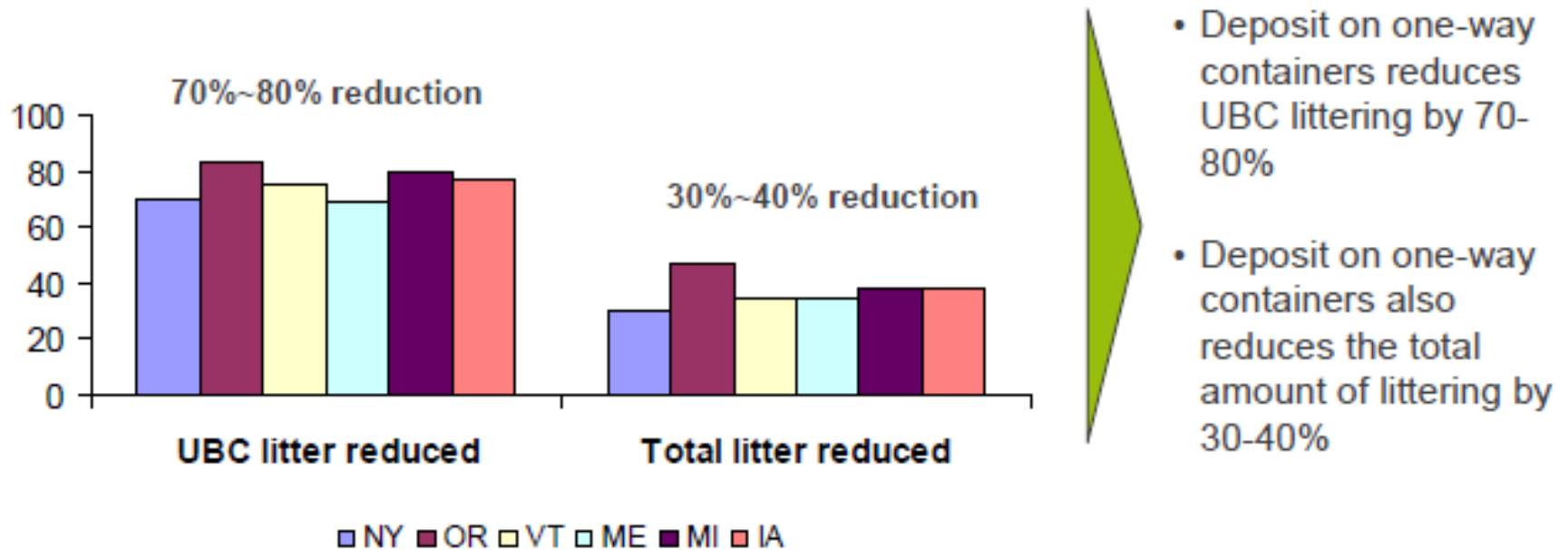


DRSs as a Litter Prevention Measure

- Several one-way DRSs introduced specifically to tackle littering
 - Sweden
 - British Columbia
 - California
 - Michigan
 - Hawaii

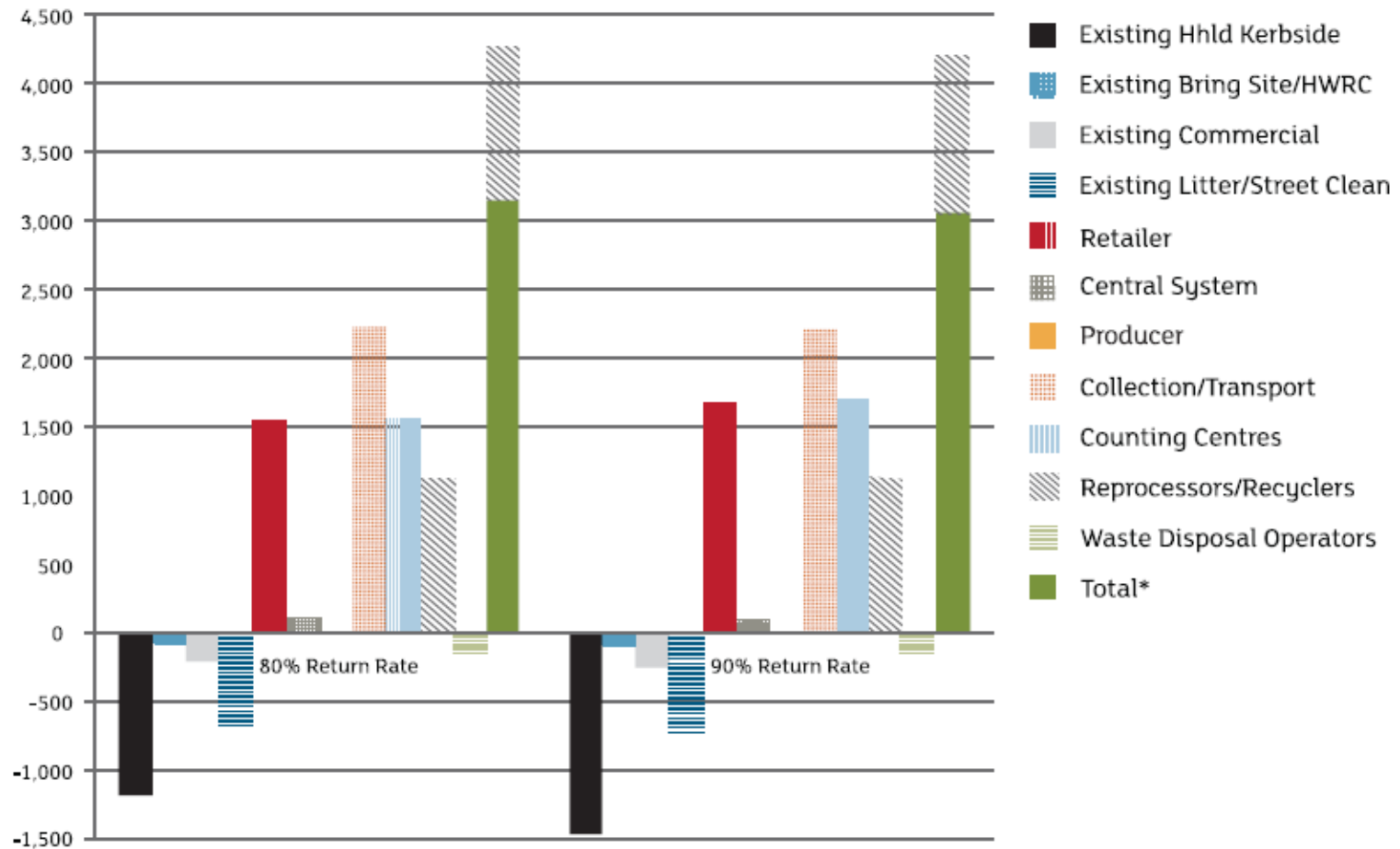
Reduction in Littering associated with Beverage Container DRSs

Reduction of littering in 6 US states after the introduction of container deposit systems.



Source: Container Recycling Institute, USA

Employment Impacts



* Note the solid total bar illustrates the total FTEs without any job creation in the UK reprocessing sector. The shaded part of the bar illustrates the additional FTE posts that would be created if we assume all new reprocessing jobs are created in the UK.

Fishing for Litter?

Ecoveer unveils new sustainable plastic bottles

7 March 2013

• Plastics

From 2014 the cleaning product firm's plastic bottles will incorporate recycled waste plastic collected from the North Sea

Sustainable cleaning products manufacturer Ecoveer unveiled its new type of fully sustainable and recyclable plastic packaging in London on Wednesday (March 6), which it intends to roll out in 2014.

The plastic will incorporate post-consumer recyclables (PCR), waste plastic fished from the sea and its own existing Plantastic product made from 100% sugarcane.

The firm has been using its Plantastic packaging across its product range since 2011, but claims its new form of plastic incorporating this alongside PCR and sea-collected waste plastic is a 'world-first in plastic packaging'.

Sea-collected plastic

Ecoveer will work with Waste Free Oceans (WFO) and UK plastic recycling plant Closed Loop as well as fishing communities to collect waste plastic from the sea and reintroduce it into the recycling chain via Ecoveer product bottles.

According to research by the Marine Conservation Society, plastic debris accounts for almost 60% of all litter found on UK beaches and a large amount of this waste ends up in the sea.



Ecoveer executives at the launch of their new plastic packaging.JPG



DRS Impacts