

## Deposit return systems and marine litter

### A response to the call for evidence from Zerowaste Scotland

Return deposit schemes have been identified as one of the key measures for tackling beverage packaging marine litter. Drink bottles feature in the top 15 items found during beach litter monitoring for the Black Sea, Mediterranean, and the North Sea<sup>1</sup>. Only the Baltic does not have plastic bottles in their top 15, but they do have bottle caps. Although research has so far not made a direct correlation between the presence of return deposit schemes and plastic bottle marine litter, it would be common sense that any economic measure that results in 89% collection rate of beverage packaging, as seen in Denmark, would have a positive effect on this source of marine litter.

To get a scale of the problem of beverage packaging, a good example is the recent comprehensive study on litter densities in the European deep sea<sup>2</sup>, they found that glass bottles are one of the most common items on a heavily littered sea floor. These items would not be there if the appropriate return deposit schemes were in place.

The Honolulu Strategy<sup>3</sup> is a global framework for prevention and management of marine debris, developed by NOAA and UNEP. Strategy A2 is to employ market-based instruments to support solid waste management, in particular waste minimisation, giving the example of return deposit schemes as key. UNEP has also highlighted return deposit schemes and their importance for tackling marine litter in the 2009 report 'Guidelines on the Use of Market-based Instruments to Address the Problem of Marine Litter'<sup>4</sup>, stating that they have been proven to reduce roadside litter and are highly suitable to combat marine litter.

The impact assessment for the Commission's headline marine litter reduction target states that: "Economic incentives such as the Deposit-Refund scheme for drink containers seem to be very effective in increasing collection rates of high-quality material to recycle and based on the results of short-term pilot projects, have a greater impact than those based on awareness and subsequent voluntary initiatives of the individual."

The circular economy concept is being strongly encouraged by the European Commission. Their Communication 'Moving towards a circular economy: a zero waste programme for Europe'<sup>5</sup> includes the marine litter reduction target. As the policy framework is put in place to incentivise this new economic model, reusable packaging and return-deposit schemes will become essential. As well as contributing to this new economic model, these systems will contribute to the goals of the Marine Strategy Framework Directive to achieve Good Environmental Status for European Seas by 2020, of which descriptor 10 on marine litter.

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<sup>1</sup> Pg 91 [Marine Litter study to support the establishment of an initial quantitative headline reduction target](#)

<sup>2</sup> <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0095839>

<sup>3</sup> <http://www.marinelitternetwork.org/honolulu-commitment>

<sup>4</sup> [http://www.unep.org/regionalseas/marinelitter/publications/docs/Economic\\_Instruments\\_and\\_Marine\\_Litter.pdf](http://www.unep.org/regionalseas/marinelitter/publications/docs/Economic_Instruments_and_Marine_Litter.pdf)

<sup>5</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52014DC0398>