Response ID ANON-A12A-K1PF-Q

Submitted to Call for evidence on voluntary and economic incentives to reduce littering of drinks containers and promote recycling Submitted on 2017-11-20 15:09:12

Introduction

Overview- Completing the call for evidence

Section 1 – Introduction: about you

1 What is your name?

Name:

Rachel Shairp

2 What is your email address?

What is your email address?:

rachel.shairp@zsl.org

3 Which best describes you? (Tick all boxes that apply)

Non-governmental organisation

If you answered Other above, please provide details:

4 What specific involvement do you or your organisation have with drinks containers?

For instance, are you involved in their design and manufacture, sale, use, collection, reprocessing, manufacture or reprocessing, or another specialist area?:

The #OneLess campaign[1] is working to reduce ocean plastic pollution by reducing the number of single-use plastic water bottles that are used London. Ultimately, we want London to become a city that no longer uses single-use plastic water bottles; a city where using a refillable water bottle – rather than single-use plastic water bottles - is the social norm; a city where there the systems and the infrastructure are in place to support 'refill' behaviour.

#OneLess is led by the Zoological Society of London (ZSL), Forum for the Future, Communications Inc., and the Thames Estuary Partnership.

[1] www.OneLessBottle.org

5 Please provide any further information about your organisation or business activities that you think might help us put your answers in context.

Further information (optional):

We welcome the opportunity to submit evidence to the Voluntary and Economic Incentives Working Group on measures to reduce the volume of drinks containers that are littered and promote recycling.

The #OneLess campaign[2] is working to reduce ocean plastic pollution by reducing the number of single-use plastic water bottles that are used in London, encouraging instead a culture of reusable bottles and refilling. Our submission therefore focuses on single-use plastic water bottles specifically, with measures to reduce the number that are used and littered, and with measures to encourage reuse.

We support the response of our colleagues at the Marine Conservation Society.

[2] www.OneLessBottle.org

6 Would you like your response to be confidential?

No

If you answered Yes above, please give your reason:

Section 2 - Baseline information

7 How many drinks containers are placed onto the UK market each year?

Please breakdown into UK and England figures. Please specify by container type and whether you are reporting numbers/units or tonnages.

Additionally, if you are a business which sells drinks containers directly to consumers, how many units/tonnes of these containers do you sell annually?:

UK adults buy nearly 7.7 billion single-use plastic water bottles a year. [3]

[3] OnePoll research on behalf of BRITA (2016). Accessed via Marine Conservation Society: https://www.mcsuk.org/press/view/685

8 What percentage (%) of these drinks containers are collected (overall) via kerbside municipal waste, or commercial or industrial collection arrangements?

Percentage (%) of drinks containers collected (please specify by container type and whether number or tonnages). Please breakdown into UK and England figures if possible.:

9 What percentage (%) of these drinks containers are recycled following kerbside/municipal or commercial collections?

Percentage (%) of drinks containers recycled (please specify container type and whether number or tonnages). Please breakdown into UK and England figures if possible.:

10 What percentage (%) of materials collected from street or other 'on-the-go' bins relate to drinks containers?

Composition of street bin contents - what percentage (%) of materials collected from outdoor bins relate to drinks containers. (Please specify by container type, whether number or tonnages, and whether figures relate to UK or England).:

11 Of the total drinks containers recycled, what percentage (%) would have been collected via street or other 'on-the-go' bins?

Percentage (%) of drinks containers recycled, of those collected via street or other on-the-go bins. (Please specify by container type, whether number or tonnages, and whether figures relate to UK or England).:

12 What percentage (%) of drinks containers placed on the market annually in England are littered?

Percentage (%) of drinks containers littered in England (please specify type and whether number or tonnages).:

13 What are the key environmental and/or social impacts of littered drinks containers, and how would you measure these?

Environmental and social impacts of littered containers. If you already have a monetised impact assessment, please provide details. :

Plastic drink bottles are one of the most discernible items of marine and coastal litter, as illustrated by a growing body of evidence:

- Plastic bottles were the second most common item collected on the Ocean Conservancy's 2015 International Coastal Clean-up. [4]
- Plastic drink bottles were in the top 10 items found during the 2016 Great British Beach Clean. [5-6]
- Plastic drink bottles are one of the top three items collected during litter picks on the tidal River Thames. [7]
- 10% of Thames shoreline litter collected is plastic drink bottles and lids, and half of those are water bottles. [8]

Plastic in the ocean degrades and eventually breaks down into 'microplastics' and 'nanoplastics'. [9] Plastic is thought to remain in the ocean for hundreds or even thousands of years. [10]

Plastic debris is unsightly; it damages fisheries and tourism; it kills and injures marine life; it has the capacity to transport invasive species and potentially harmful chemicals; and it represents a threat to human health. [11-12] The majority of marine litter items are traceable from land. [13]

Plastic pollution places added pressure on marine ecosystems that are already stressed by the impact of human activity. [14] It poses a major problem for marine wildlife, causing injury and mortality through entanglement, as well as ingestion which can lead to gut blockage, starvation, suffocation and organ damage from leaching toxins. [15] Plastic has been found in the guts of a large variety of marine species, including seabirds, turtles, fish, marine mammals and lower trophic level marine organisms. [16] Scientists estimate that in the North Pacific, mesopelagic fishes (fish inhabiting depths of between 200 – 1,000 metres), ingest between 12,000 – 24,000 tonnes of plastic each year. [17] A study published in 2015 predicted that plastic ingestion will affect 99% of all seabird species by 2050. [18]

[4] The Ocean Conservancy (2016). 2016 Ocean trash index.

http://www.oceanconservancy.org/our-work/international-coastal-cleanup/2016-ocean-trash-index.html

[5] Marine Conservation Society (2016). Great British Beach Clean 2016 Report.

http://www.mcsuk.org/what_we_do/Clean+seas+and+beaches/Beachwatch/Great+British+Beach+Clean+results+2016

[6] Nelms, SE et al (2017). Marine anthropogenic litter on British beaches: a 10-year nationwide assessment using citizen science data. Science of The Total Environment, 579, 1399-1409

- $\label{thm:condition} \ensuremath{[7]}\ Thames 21\ (January\ 2017).\ Litter\ monitoring\ results.\ http://www.thames 21.org.uk/thames-river-watch-litter/l$
- [8] Thames21 (January 2017). http://www.thames21.org.uk/thames-river-watch-litter/. Unpublished data
- [9] Van Sebille, et al. (July 2016). The ocean plastic pollution challenge: towards solutions in the UK. Grantham Inst., Briefing paper No 19.

 $http://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/briefing-papers/The-ocean-plastic-pollution-challenge-Grantham-BP-19_web.pdf$

[10] Van Sebille, et al. (July 2016). The ocean plastic pollution challenge: towards solutions in the UK. Grantham Inst., Briefing paper No 19.

http://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/briefing-papers/The-ocean-plastic-pollution-challenge-Grantham-BP-19 web.pdf

[11] Thompson, R. et al. (2009). Plastics, the environment and human health: current consensus and future trends. Philosophical Transactions of the Royal Society B: Biological Sciences, 364(1526), 2153-2166

[12] Van Sebille, et al. (July 2016). The ocean plastic pollution challenge: towards solutions in the UK. Grantham Inst., Briefing paper No 19.

http://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/briefing-papers/The-ocean-plastic-pollution-challenge-Grantham-BP-19_web.pdf; and Nelms, SE et al (2017). Marine anthropogenic litter on British beaches: a 10-year nationwide assessment using citizen science data. Science of The Total

Environment, 579, 1399-1409

[13] The United Nations Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP), via Greenpeace. Plastic debris in the world's oceans, available online: http://www.greenpeace.org/international/Global/international/planet-2/report/2007/8/plastic_ocean_report.pdf

[14] Van Sebille, et al. (July 2016). The ocean plastic pollution challenge: towards solutions in the UK. Grantham Inst., Briefing paper No 19.

http://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/briefing-papers/The-ocean-plastic-pollution-challenge-Grantham-BP-19_web.pdf

[15] Rochman, C. (2013). Ingested plastic transfers hazardous chemicals to fish and induces hepatic stress. Nature doi:10.1038/srep03263; and Greenpeace

 $Plastic \ debris \ in \ the \ world's \ oceans: \ http://www.greenpeace.org/international/Global/international/planet-2/report/2007/8/plastic_ocean_report.pdf$

[16] Derraik, D (2002); and Boerger, C.M. et al. (2010). 'Plastic ingestion by planktivorous fishes in the North Pacific Central Gyre' Marine Plastic Pollution 60: 2275-2278

[17] Davidson, P. and Asch, R. (2011). Plastic ingestion by mesopelagic fishes in the North Pacific Subtropical Gyre. Marine Ecology Progress Series 432:173-180

[18] Wilcox, C., Van Sebille, E., and Hardesty, B.D. (2015). The threat of plastic pollution to seabirds is global, pervasive, and increasing. PNAS, 112: 11899 – 11904

14 How would you suggest quantifying, in economic terms, the value of the 'disamenity' (unpleasant qualities) presented by such littered items in England? Do you have any evidence to illustrate this?

Value of disamenity from littered containers. :

Section 3 - Current situation

15 Would you support the carry on 'as normal' approach? If so, what elements of continuing 'as normal' make you think this is the best approach?

Would you support the carry on 'as normal' approach?:

If you answered no to the question above, why do you feel further action is needed?:

16 What aspects do you value in the current approach that you would not want to lose?

What aspects do you value in the current approach that you would not want to lose?:

Section 4 - Evidence on well-designed and well-run deposit and reward and return schemes

17 What impacts might a deposit or reward and return scheme have on:

Littering rates?:

Recycling rates?:

Local Authority household collections and associated costs (and revenues)?:

Street sweeping and park cleaning costs (and revenues)?:

 $Wider \ environmental \ impacts? \ For \ instance, \ as \ evidenced \ through \ Life \ Cycle \ Assessments \ (energy, \ carbon, \ water, \ etc.)?:$

18 What evidence is there that a deposit return or reward and return scheme may enhance or otherwise affect the value or quality of materials sent for recycling?

Evidence on impacts of deposit return or reward and return scheme on the value or quality of materials sent for recycling:

19 What other benefits may accrue from a well-designed and well run deposit system?

Evidence of other benefits:

20 Have you any knowledge or direct experience that would give an indication of the set-up costs or the subsequent administrative and operational costs of a deposit or reward and return scheme?

Evidence on set-up, administrative and operational costs of deposit or reward and return schemes (please reference any examples):

21 What evidence exists on the best funding and management mechanisms of well-designed and well run deposit or reward and return schemes?

Evidence on funding and management mechanisms for deposit or reward and return schemes:

22 What evidence is there on the responsiveness of consumers in returning containers, in relation to the level of any up-front deposit? How do such incentives impact on wider littering and recycling?

Evidence on the responsiveness of consumers in returning containers, in relation to the level of any up-front deposit:

What evidence is there on the locations in which consumers are most likely to return their empty containers? What does this tell us about the optimal location or distribution of collection points as part of any deposit or reward and return scheme?:

23 What measures or regulations might be needed to minimise the potential for adverse effects of any deposit or reward and return scheme on:

Please check all that apply and explain your response in the box below:

What other adverse effects may occur with a poorly designed and run deposit system, and how might they be minimised?:

24 What evidence is there that a deposit or reward and return scheme could sit successfully alongside existing waste management systems and regulations?

For instance, what evidence is there that such schemes could sit successfully alongside Local Authority waste collection arrangements, Packaging regulations and the Packaging Waste Recovery Note (PRN) system, etc.)?:

What mitigating arrangements would be needed to ensure such schemes would not reduce the effectiveness or increase the costs of existing waste management systems and regulations in England?:

25 Do you have examples of other countries – with household and town centre recycling systems similar to England – where successful deposit return or reward and return schemes currently operate?

of other countries - with household and town centre recycling systems similar to England – where successful deposit return or reward and return schemes currently operate:

- 26 If a well-designed and well run deposit system were to be introduced how do you think this intervention should be introduced in England to optimise its effectiveness and cost / benefit (e.g. direct regulation, co-regulation, voluntary agreement, etc.)?
- a. Who would the key players be in implementing the intervention? What governance arrangements would need to be in place?:
- b. Who would be responsible for the costs, management and collection aspects of the scheme to make it self-sustaining? If relevant, please list known examples in other countries where your suggested operational model is in use.:
- c. What commercial arrangements would need to be in place to ensure the financial viability of the scheme, as well as ensuring value for money for the public?:
- 27 What evidence, if any, is missing in order to understand the full impact on your business, sector or society?

What evidence missing on impacts to your business, sector or society?:

Section 5 – Exploring other potential measures

Section 5 - Exploring other potential measures

28 What measure(s), other than deposit or reward and return schemes, would you put forward for consideration on how to reduce the volume of drinks containers that are littered, and, where possible, to recapture these containers for recycling?

Please describe your proposed alternative measure:

Introduce reduction targets for easily avoidable single-use plastic bottle use: UK adults buy 7.7 billion single-use plastic water bottles each year.[19] This single-use application of plastic is largely avoidable since UK tap water is drinkable. Efforts to prevent the use of easily avoidable single-use plastic water bottles, and incentivize or require the use of reusable water bottles in their place, represent a major opportunity to reduce the volume of plastic bottles that are littered. Through our #OneLess campaign, we are leading the way on this work and have already had success in getting businesses and organisations such as Selfridges, Sotheby's, Estee Lauder, Borough Market, Kings College London, ZSL London and Whipsnade Zoos, Broadgate Estates and 15Hatfields to stop or phase out their use of single-use plastic water bottles and embrace a refill culture.

Improve access to drinking water for the public: Efforts to provide easy access to drinking water in the public realm, by scaling up drinking water infrastructure in public spaces, such as parks and transport systems, and by implementing changes at the policy and planning level, would reduce plastic water bottle usage and help to decrease plastic bottle litter.

Demonstrate leadership, and support campaigns such as #OneLess [20], by committing DEFRA to 'go #OneLess' and become the first UK government department to eradicate single-use plastic water bottle usage: Eradicating single-use water bottles and switching instead to a refillable drinking water culture within DEFRA would be a straightforward and high-impact action through which the UK government would reduce its procurement of avoidable single-use plastic bottles, and that would demonstrate leadership to other government departments and organizations. It would also demonstrate the feasibility of such an action and pave the way for a reduction in use of other unnecessary single-use plastic items.

[19] OnePoll research on behalf of BRITA (2016). Accessed via Marine Conservation Society: https://www.mcsuk.org/press/view/685 [20] www.onelessbottle.org

29 What impacts might your proposed measure have on:

Littering rates?: Recycling rates?: Local Authority household collections and associated costs (and revenues)?: Street sweeping and park cleaning costs (and revenues)?: Wider environmental impacts? For instance, as evidenced through Life Cycle Assessments (energy, carbon, water, etc.): 30 What evidence is there that your proposed measure would enhance or otherwise affect the value or quality of materials sent for recycling? What evidence is there that your proposed measure would enhance or otherwise affect the value or quality of materials sent for recycling?: 31 What other benefits may accrue from your proposed measure? What other benefits may accrue from your proposed measure?: 32 Have you any knowledge or direct experience that would give an indication of the set-up costs or the subsequent administrative and operational costs or requirements of your proposed measure? Have you any knowledge or direct experience that would give an indication of the set-up costs or the subsequent administrative and operational costs or requirements of your proposed measure?: 33 What evidence exists on the responsiveness of consumers to your proposed measure? How might such incentives impact on wider littering and recycling behaviours? What evidence exists on the responsiveness of consumers to your proposed measure?: 34 What measures or regulations might be needed to minimise the potential for adverse effects resulting from your proposed measure on: Please check all that apply, and explain your answer in the box below: 35 What evidence is there that your proposed measure could sit successfully alongside existing waste management systems and regulations? For instance, what evidence is there that such schemes could sit successfully alongside Local Authority waste collection arrangements, Packaging Regulations and the Packaging Waste Recovery Note (PRN) system, etc.)?: 36 What mitigating arrangements would be needed to ensure such schemes would not reduce the effectiveness or increase the costs of existing waste management systems and regulations in England? What mitigating arrangements would be needed to ensure such schemes would not reduce the effectiveness or increase the costs of existing waste management systems and regulations in England?: What other adverse effects may occur as a result of your proposed measure, and how might they be minimised?: 37 Can you provide any examples of other countries or locations - with household and town centre recycling systems similar to England where this measure currently operates? a. Who would the key players be in implementing the intervention? What governance arrangements would need to be in place?: b. Who would be responsible for the costs, management and collection aspects of the scheme to make it self-sustaining?: c. What commercial arrangements would need to be in place to ensure the financial viability of the scheme, as well as ensuring value for money for the public?: 38 What evidence, if any, is missing in order to understand the full impact of your proposal on business, sector or society?

What evidence, if any, is missing in order to understand the full impact of your proposal on business, sector or society?:

39 Would you like to propose and provide evidence for any further measures or incentives?

Not Answered

Respondee feedback on the online call for evidence

40 Overall, how satisfied are you with our online consultation tool?

Not Answered

Please give us any comments you have on the tool, including suggestions on how we could improve it. :	