



Environmental Audit Committee Inquiry Coffee cups and plastic bottles: disposable packaging

A submission by the #OneLess campaign April 2017

This inquiry invites submissions on plastic bottles and coffee cups and how the committee can help increase recycling and reduce the amount of disposable packaging ending up in landfill or the environment.

The #OneLess campaign team welcomes the opportunity to provide written evidence to the Environmental Audit Committee (EAC) inquiry into disposable packaging.

Executive summary

- Marine plastic pollution is pervasive¹ and poses a serious threat to marine biodiversity.² It places added pressure on ocean ecosystems that are already stressed by the impact of human activity.³
- Plastic bottles are one of the most discernible items of marine litter. Around the world, they were the second most common item collected on the Ocean Conservancy's 2015 International Coastal Clean-up,⁴ and here in the UK plastic drink bottles were in the top 10 items that were found during the Marine Conservation Society's 2016 Great British Beach Clean.⁵
- UK households are thought to use over 13 billion plastic drink bottles each year.⁶ Recent research estimates that UK adults used 7.7 billion single-use plastic **water** bottles in 2016.⁷

¹ Jambeck et al. (2015). Plastic waste inputs from land into the ocean. *Science*, 347(6223): 768-771

² Derraik, D (2002). The pollution of the marine environment by plastic debris: a review. *Marine Pollution Bulletin*, 44: 842-852; and Boerger, C.M. et al. (2010) 'Plastic ingestion by planktivorous fishes in the North Pacific Central Gyre' *Marine Plastic Pollution* 60: 2275-2278

³ 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

⁴The 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 RECOUP UK (2016). Household plastic collection survey. <http://www.recoup.org/p/229/2015-uk-household-plastics-collection-survey>

⁷ OnePoll research on behalf of BRITA (2016). Accessed via Marine Conservation Society: <https://www.mcsuk.org/press/view/685>

The consumption of bottled water in the UK is rising, with volumes having almost doubled over the past 15 years.⁸

- UK tap water is extremely good quality, subject to continuous monitoring and stringent tests.⁹
- Significantly reducing our use of single-use plastic **water** bottles presents a major opportunity, both in London and across the UK, to combat disposable plastic waste. In line with DEFRA's waste hierarchy guidance,¹⁰ efforts should be directed towards preventing plastic bottle waste in the first place, and encouraging re-use.
- The #OneLess campaign is working to reduce the number of plastic bottles that enter the marine environment by encouraging a London-wide switch from using single-use plastic water bottles to using a refillable water vessel; key to this will be developing the infrastructure and systems to support a refillable culture.
- It is crucial for the UK government to take a leading role, both nationally and internationally, in reducing the amount of single-use plastic used. We recommend the removal of single-use plastic water bottles from the Houses of Parliament and across government buildings, and the scaling up of infrastructure to allow for a refill culture.
- We also encourage the UK Government to commit to improving public access to drinking water, by scaling up drinking water infrastructure in public spaces, such as parks and transport systems, and by implementing changes at the planning and policy level.

Introduction

1. The **#OneLess**¹¹ campaign, launched in June 2016, and led by partners in the **Marine CoLABoration**,¹² is working to reduce ocean plastic pollution by reducing the use of single-use plastic water bottles in London. London is linked to the ocean by the River Thames, and the daily actions that citizens take in London impact upon the ocean. The #OneLess vision is a city where using a refillable water vessel – rather than single-use plastic water bottles - is the social norm and where there are the systems in place across the city to support this behaviour. The Marine CoLABoration is a group of nine NGOs with wide-ranging interests and areas of expertise, working together to increase the impact of solutions to ocean degradation by making a broader range of values - not just short-term economic gain - count in decision-making.
2. We welcome the EAC's decision to investigate coffee cups and plastic bottles, with a view to reduce the amount of disposable packaging ending up in landfill or the environment. We would like to see a reduction in the amount of single-use plastic used in the UK, and a shift towards more sustainable and less wasteful alternatives. Our submission to this inquiry addresses a number of the questions laid out in the terms of reference, and provides some information that is specific to single-use plastic **water**

⁸ Foodbev.com (March 2016). UK Consumption of bottled water 'rises 8.2% to 3.3bn' in 2015. <http://www.foodbev.com/news/uk-consumption-of-bottled-water-rises-8-2-to-reach-3-3bn-litres/>

⁹ For example, see <http://www.legislation.gov.uk/ukxi/2016/614/contents/made>

¹⁰ Defra (June 2011). Guidance on applying the waste hierarchy.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf

¹¹ The #OneLess campaign (<https://www.zsl.org/one-less>) is supported by the [Calouste Gulbenkian Foundation](#) and the [Oak Foundation](#), and is being implemented by the Zoological Society of London (ZSL) and the Thames Estuary Partnership (TEP) as part of a coalition of organisations, known as the Marine CoLABoration

¹² Members of the [Marine CoLABoration](#) include: [ClientEarth](#), [Comms Inc](#), [Fauna and Flora International](#), [Forum for the Future](#), [Institute for European Environmental Policy](#), [Marine Conservation Society](#), [NEF](#), [Thames Estuary Partnership](#), [Zoological Society of London](#).

bottles. We do however strongly support the reduction in use of other single-use plastic bottles, and of disposable coffee cups.

3. Marine plastic pollution poses a serious threat to marine biodiversity.¹³ It is a burgeoning global issue driven by the exponential increase in demand and subsequent production of plastics. In 2014, single-use plastic represented the largest share of the European plastic market, at 40%, and 7% of this packaging was for PET, typically used for drink bottles.¹⁴
4. It is estimated that UK households currently use over 13 billion plastic drink bottles a year.¹⁵ Recent OnePoll research carried out on behalf of BRITA found that UK adults used nearly 7.7 billion single-use plastic **water** bottles in 2016.¹⁶ Currently just over 55% of plastic drink bottles in UK household waste streams are collected for recycling;¹⁷ the rest go to landfill, incinerators, or can end up as litter.¹⁸
5. UK tap water is extremely good quality, and is subject to continuous monitoring and stringent tests.¹⁹ Through the #OneLess campaign, we are encouraging a London-wide switch from using single-use plastic water bottles to using a refillable water vessel, with the drinking water infrastructure in place to support this. Significantly reducing our use of single-use plastic water bottles presents a major opportunity, both in London, and across the UK. It is one of the simplest and most achievable actions we can take immediately, to combat disposable plastic waste and marine litter.

Response to inquiry questions

Impact

What is the environmental impact of waste from coffee cups and plastic bottles? Are the rates of use, collection levels and recycling levels of these products increasing or decreasing over time?

Environmental impact

6. Via the Sustainable Development Goals (SDGs), the Member States of the United Nations (which includes the UK), have recognised the threat of pollution to ocean ecosystems, and have committed the following under SDG14:

¹³ Derraik, D (2002). The pollution of the marine environment by plastic debris: a review. *Marine Pollution Bulletin*, 44: 842-852; and Boerger, C.M. et al. (2010) 'Plastic ingestion by planktivorous fishes in the North Pacific Central Gyre' *Marine Plastic Pollution* 60: 2275-2278

¹⁴ Plastics Europe (2016). Plastics – The Facts 2016. (p21). <http://www.plasticseurope.org/Document/plastics--the-facts-2016-15787.aspx?Page=DOCUMENT&FoIID=2>

¹⁵ RECOUP UK (2016). Household plastic collection survey. <http://www.recoup.org/p/229/2015-uk-household-plastics-collection-survey>

¹⁶ OnePoll research on behalf of BRITA (2016). Accessed via Marine Conservation Society: <https://www.mcsuk.org/press/view/685>

¹⁷ RECOUP UK (2016). Household plastic collection survey. <http://www.recoup.org/p/229/2015-uk-household-plastics-collection-survey>

¹⁸ 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.

¹⁹ UK Government Legislation (2016). Water supply (water Quality) regulations (2016). <http://www.legislation.gov.uk/uksi/2016/614/contents/made>

“By 2015, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.”²⁰

7. Plastic pollution poses a serious threat to marine biodiversity,²¹ and places added pressure on marine ecosystems that are already stressed by the impact of human activity.²² The most recent peer-reviewed research estimates that between 4.8 and 12.7 million tonnes of plastic entered the ocean in 2010 from land.²³ If current trends continue, there will be one tonne of plastic for every three tonnes of fish in the ocean by 2025, and by 2050, plastic in the ocean could outweigh fish.²⁴
8. Once in the ocean, the action of the waves, wind and ultraviolet light causes larger plastic pieces to degrade and eventually break down into ‘microplastics’ and ‘nanoplastics’.²⁵ Plastic is thought to remain in the ocean for hundreds or even thousands of years, however information on degradation rates is lacking.²⁶
9. Plastic debris is unsightly; it damages fisheries and tourism; it kills and injures a wide range of marine life; it has the capacity to transport invasive species and potentially harmful chemicals; and it can represent a threat to human health.²⁷⁻²⁸ The majority of marine litter items are traceable from land.²⁹
10. Plastic in the ocean 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.³⁰ 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.³¹ 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.³² A study

²⁰ Available at: <https://sustainabledevelopment.un.org/sdg14>

²¹ 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

²² 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

²³ Jambeck et al. (2015). Plastic waste inputs from land into the ocean. *Science*, 347(6223): 768-771

²⁴ World Economic Forum & Ellen MacArthur Foundation, with support from McKinsey & Company (Jan 2016). The new plastics economy: rethinking the future of plastics. <https://www.ellenmacarthurfoundation.org/publications/the-new-plastics-economy-rethinking-the-future-of-plastics>

²⁵ 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

²⁶ Ibid.

²⁷ 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

²⁸ 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

²⁹ Ibid; 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

³⁰ 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

³¹ 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

³² Davidson, P. and Asch, R. (2011). Plastic ingestion by mesopelagic fishes in the North Pacific Subtropical Gyre. *Marine Ecology Progress Series* 432:173-180

published in 2015 predicted that plastic ingestion will affect 99% of all seabird species by 2050.³³

Prevalence of plastic bottles in the marine environment

11. Plastic bottles are one of the most discernible items of marine 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.³⁴
- During the Great British Beach Clean 2016 of the UK coastline by the Marine Conservation Society, plastic drink bottles were in the top 10 items that were found.^{35,36}
- Plastic drink bottles are one of the top three items collected during litter picks on the River Thames.³⁷

12. To further inform the #OneLess campaign, we are coordinating a collaborative, standardised litter monitoring programme to complement, inform and extend the existing work being carried out on the Thames, and to provide a model that can be replicated nationally. The programme aims to determine and monitor over time the total levels of plastic and single-use plastic bottles in the Thames, as well as identifying sources, pathways, and fate of plastic litter in the Thames. This includes water column, strandline and foreshore surveys (with Thames21); photo quadrat surveys of Passive Debris Collectors (with the Port of London Authority); river hinterland surveys of bottle litter on the streets and hydrodynamic modelling to establish litter behavior once in the water column (with HR Wallingford). Outputs to date are as follows (further outputs of this work will be shared with the EAC as trends emerge):

- Monitoring work carried out by #OneLess and Thames21 has shown that 10% of Thames shoreline litter collected is plastic drink bottles and lids, and half of those are water bottles (unpublished data).³⁸
- Plastic drink bottles account for 25% of the litter picked up by floating passive debris collectors on the River Thames.³⁹

Rates of use

³³ 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

³⁴ The Ocean Conservancy (2016). 2016 Ocean trash index. <http://www.oceanconservancy.org/our-work/international-coastal-cleanup/2016-ocean-trash-index.html>

³⁵ 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

³⁶ 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

³⁷ Thames21 (January 2017) Litter monitoring results. <http://www.thames21.org.uk/thames-river-watch-litter/>

³⁸ <http://www.thames21.org.uk/thames-river-watch-litter/>

³⁹ Port of London Authority (2017) pers. comm., unpublished data

13. It is estimated that UK households currently use over 13 billion plastic drink bottles a year.⁴⁰ Recent OnePoll research carried out on behalf of BRITA found that UK adults used nearly 7.7 billion single-use plastic **water** bottles in 2016.⁴¹ According to the latest soft drink report by the British Soft Drinks Association, the consumption of bottled water in the UK is rising,⁴² with volumes having almost doubled over the past 15 years.⁴³
14. UK tap water is extremely good quality, subject to continuous monitoring and stringent tests,⁴⁴ and is cheaper than bottled water.
15. Currently just over 55% of plastic drink bottles in UK household waste streams are collected for recycling;⁴⁵ the rest go to landfill, incinerators, or end up as litter.⁴⁶

What are the challenges of recycling these products? What obstacles have prevented greater progress in increasing recycling rates?

16. Progress must be made to improve recycling rates across the UK through more streamlined waste management infrastructure and education for domestic disposal of clean recyclable materials. However, efforts must also be directed towards reducing the amount of plastic entering the system in the first place, especially when considering single-use plastic. This is in-line with Defra's Waste Hierarchy Guidance, which ranks waste management options according to what is best for the environment and gives top priority to preventing the creation of waste in the first place.⁴⁷

Progress

How could we increase awareness amongst the public and what impact would this have?

17. Environmental awareness is at an all-time high, with the ocean finally being recognised as a key component of planetary function and a growing understanding that we are damaging it in ways that are critical to humanity. This is reflected in its higher recognition in the policy arena, with an ocean-specific Sustainable Development Goal (SDG14) being ratified in 2015, and a supporting high level ocean conference at the United Nations being convened in 2017.⁴⁸

⁴⁰ RECOUP UK (2016). Household plastic collection survey. <http://www.recoup.org/p/229/2015-uk-household-plastics-collection-survey>

⁴¹ OnePoll research on behalf of BRITA (2016). Accessed via Marine Conservation Society: <https://www.mcsuk.org/press/view/685>

⁴² British Soft Drinks Association (BSDA) (2015). The UK soft drinks annual report 2015. http://www.britishsoftdrinks.com/write/mediauploads/publications/bsd_a_annual_report_2015.pdf

⁴³ Foodbev.com (March 2016). UK Consumption of bottled water 'rises 8.2% to 3.3bn' in 2015. <http://www.foodbev.com/news/uk-consumption-of-bottled-water-rises-8-2-to-reach-3-3bn-litres/>

⁴⁴ For example, see <http://www.legislation.gov.uk/ukxi/2016/614/contents/made>

⁴⁵ RECOUP UK (2016). Household plastic collection survey. <http://www.recoup.org/p/229/2015-uk-household-plastics-collection-survey>

⁴⁶ 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

⁴⁷ Defra (June 2011). Guidance on applying the waste hierarchy.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf

⁴⁸ For more information, see: <https://sustainabledevelopment.un.org/sdg14>

18. Recent public-facing campaigns, such as Hugh Fearnley-Whittingstall's 'War on Waste', have helped increase awareness of the issue of disposable coffee cups, and a recent increase in media attention on plastic bottles,⁴⁹ along with campaigns and initiatives such as the #OneLess campaign, Surfer Against Sewage's 'Message in a Bottle' campaign, and the Plastic Ocean film, are helping to place the issue on the public agenda.
19. However, there is still much work to be done and progress, in our view, remains slow. As with many environmental issues, it is difficult to engage the public as they are often left feeling helpless, without solutions and easy actions that they can take themselves. The #OneLess campaign provides Londoners with a very simple action that if taken collectively, will significantly reduce single-use plastic waste. #OneLess is already gaining momentum across London, with numerous businesses, organisations, brands and institutions committing to phase out their use of single-use plastic water bottles and enable a refillable culture (e.g. Sotheby's, Estee Lauder, Borough Market, amongst many others).
20. In order to achieve a '#OneLess London' that is free of single-use plastic water bottles, and that successfully reduces the levels of single-use plastic waste across the city, a cross-sectoral, collaborative approach is needed.
21. We are engaging and mobilising forward-thinking businesses, land-owners and organisations, and working with them to phase out their use of single-use plastic water bottles and develop the infrastructure and systems they need to support a refill culture – such as the organisation-wide provision of refillable water vessels and water bottle refill stations. Additionally and importantly, we are asking these leaders to champion and communicate the issue to their networks, audiences, and circles of influence – and we are providing materials to help them do this.
22. A range of simple and effective tools could be employed to engage the public and other actors further, including: social media campaigns by a range of different partners and stakeholders about the need for individual action; engaging cafes, bars and restaurants across London and encouraging them to refill water bottles for free; the promotion of water fountains; and media campaigns.

What actions are being undertaken by industry to reduce waste generated by coffee cups and plastic bottles? How effective have these initiatives been? How could the Government better support these initiatives?

23. To date, not enough responsibility has been placed with the industries responsible for producing and using single-use plastic water bottles (and indeed coffee cups), in particular the bottled water industry. This must change. Please see the Greenpeace response to this Inquiry; paragraphs 15, 16, 17, 18, 19 and 20.

⁴⁹ For example: The Guardian (2017). Millions of single-use plastic soft drink bottles sold every year, report shows, Wednesday 15 March, <https://www.theguardian.com/environment/2017/mar/15/millions-of-single-use-plastic-soft-drink-bottles-sold-every-year-report-shows>; Daily Mail (2017) 2,500 plastic bottles are found in the Thames in just one day: litter pickers also discover thousands of wet wipes, 2 February 2017, <http://www.dailymail.co.uk/news/article-4182562/2-500-plastic-bottles-Thames-just-one-day.htm> |

Solutions

What initiatives could be utilised to reduce coffee cup and plastic bottle waste or to lessen the impact of this waste? In particular what are the opportunities and risks associated with:

- ***Incentives to encourage the use of re-usable alternatives for these products;***
- ***Charge, taxes, deposits or levies on the use of these products.***

24. Key to the success of the #OneLess campaign is increased access to drinking water 'on-the-go' across London. We anticipate this to include more drinking fountains in both public and private spaces, and across our transport systems, as well as welcome access to refilling points and tap water in shops, restaurants, visitor attractions and venues.
25. To help facilitate this infrastructure improvement and subsequent 'culture-shift', a change at the planning and policy level is needed. This may, for example, include incentives in planning for both residential and commercial new-builds and refits, to encourage drinking fountain installation in buildings, public transport stations and London venues.
26. We are working with senior policy advisors within the Greater London Authority to identify policy areas within the themed strategies of the London Plan currently being reviewed and revised. Potential policy areas include the circular economy; waste management – i.e. removal of materials from the waste stream as a key to a carbon sensitive floor for emissions; public realm – infrastructure for refill stations, public health benefits, sustainable design, and water efficiency.
27. To inform our campaign approach, in 2016 we implemented over 30 structured interviews and a large number of informal interviews, with a cross-sectoral range of stakeholders. Information gathered has enabled us to understand some of the challenges that will be involved in shifting the drinking water delivery system in London to a more sustainable 'refillable' model, and identify those actors in the system who might help to create change. Our research uncovered a number of 'leverage points' (Annexes 1 and 2), which if tackled could help London to make this shift. We are now working with our partners, collaborators and early #OneLess adopters to address these leverage points at different scales across London and build new practices together.
28. For example, there are a number of emerging product-service solutions, some with innovative business models, entering the market at present, which have the potential to positively disrupt the way water is delivered in London and reduce our use of single-use plastic water bottles (e.g. HydraChill, Give Me Tap, Ohoo). The #OneLess project team is exploring how we might engage, mobilise and connect these actors, and work with them to counter some of the challenges that prevent them creating impact at scale and create the conditions and market to scale up their reach and the impact of their solutions.
29. In addition to the #OneLess movement, we recognise a suite of further solutions is needed to address the issue of single-use plastic bottles more broadly. While our focus remains on water, other solutions, such as Deposit Return Schemes, will be appropriate for other beverages and liquids, i.e. those that are not available out of the tap. In this regard, we support the work of Surfers Against Sewage, Greenpeace and the Marine Conservation Society.

How can we encourage households, businesses, food and drink outlets, and offices to change behaviours or introduce policies to reduce their coffee cup and plastic bottle waste?

30. The #OneLess movement encompasses individuals and households, as well as businesses, retailers, food and drink outlets, places of work and education, and spans different geographical areas. How best to encourage each stakeholder and help them make the shift will depend on the specific barriers they face, and where they are located in the system. Through our research we have identified a number of areas of leverage (see Annexes 1 and 2), which if unlocked could help to create the conditions for change.
31. A major part of our work is to learn from the early-adopters in this movement and share those learnings to encourage others to follow suite. In 2015, as part of the Project Ocean initiative,⁵⁰ Selfridges was the first retailer in the UK to permanently remove and stop the sale of all single-use plastic water bottles throughout its stores, amounting to approximately 400,000 bottles annually. Customers were instead encouraged to purchase, or use their own, refillable bottles and refill in-store for free. The move saw an in-store increase in the sale of refillable water vessels by 1,780% over the initial campaign period (9 July through to 3 September 2015). This uplift in refillable vessel sales more than offset any decline in revenues from single-use plastic water bottles (unpublished data).
32. In June 2016 ZSL London Zoo and Whipsnade Zoo also permanently ceased selling single-use plastic water bottles across both sites. Visitors are instead able to purchase refillable drinking vessels, which they can refill for free at fountains and water refill stations across both sites. For visitors who need a 'to go' option, 'Water In A Box', a 100% recyclable paper-card-packaged water, is stocked. The move resulted in a cease in sale of 100,000 single-use plastic water bottles per year, and an increase in refillable bottle sales by 28% in 2016, compared to 2015. Additionally, 1,500 ZSL staff were given their own refillable bottle to aid the transition throughout the organisation.
33. While working at the organisational level and above, we continue to encourage individuals (and thereby households) to make the #OneLess pledge themselves. If all 16 members of the EAC used the average amount of 150 single-use plastic water bottles per year,⁵¹ and made the switch to a refillable bottle instead, this would save 2,400 bottles each year, or 24,400 in a 10-year period. The scalability impact of all Londoners 'going #OneLess' is significant, and entirely achievable.

Government call to action

34. We have three recommendations for the UK government (further information for each is provided in the paragraphs below):

⁵⁰ Project Ocean is a long-term partnership between Selfridges and the Zoological Society of London to stop overfishing and pollution, and take marine conservation to new audiences. <http://www.selfridges.com/GB/en/content/project-ocean>

⁵¹ OnePoll research on behalf of BRITA (2016). Accessed via Marine Conservation Society: <https://www.mcsuk.org/press/view/685>

- Remove single-use plastic water bottles from the Houses of Parliament and across government buildings, to set an example to London and the rest of the UK.
- Use the forthcoming UN Oceans Conference as an opportunity to position the UK as a global leader in tackling marine pollution, and reducing its single-use plastic footprint.
- Implement changes at the planning and policy level to encourage innovation around access to drinking water in the public realm, new developments and regeneration projects.

35. It is crucial for the UK government to take a leading role, both nationally and internationally, on the issue of marine plastic and on significantly reducing the amount of single-use plastic used. **We recommend in the first instance, the removal of single-use plastic water bottles from the Houses of Parliament and across government buildings, to set the example to London and the rest of the UK.** Switching to a refillable drinking water culture within parliament, with all MPs taking the pledge to 'go #OneLess' would be a straightforward and high-impact action that would demonstrate the feasibility and importance of this movement, and set the way for other unnecessary single-use plastic items. With the Houses of Parliament on the banks of the River Thames, the move would be iconic, reinforcing London as a 'city-on-the-sea'. To our knowledge no other national government in the world has taken this step; it is something that the UK could lead the way in, and we anticipate would gain significant media attention.

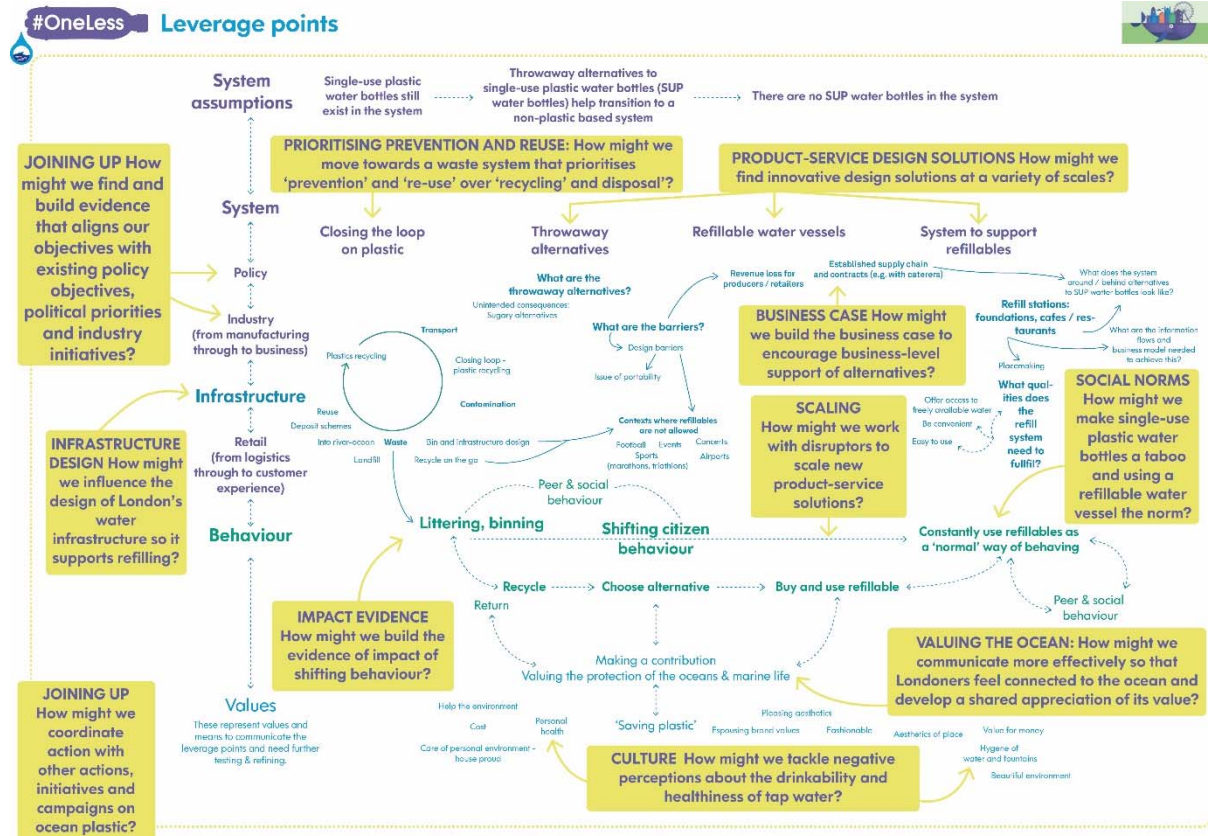
36. The upcoming high-level UN Oceans Conference in New York in June – '*Partnering for the implementation of Sustainable Development Goal (SDG) 14*,⁵² provides a huge opportunity to increase public and political awareness and gain international traction, with marine plastic being high on the conference agenda. The #OneLess team will be hosting a high-profile event at the conference, with the Government of Costa Rica and with the support of the Conference Hosts, Sweden, in partnership with the United Nations Environment Programme, Monterey Bay Aquarium and the Zoological Society of London, to which the Mayor of London has been invited. We are currently working with the UN Department of Economic and Social Affairs to make the entire conference #OneLess, which includes: signposting fountains; discouraging delegates from bring single-use water bottles into the meeting, asking delegates to make the #OneLess pledge. The initiative includes working with the UN to become single-use plastic free across all its buildings and meetings in perpetuity and encourages states and individual delegations to consider what measures they can take to go #OneLess domestically. #OneLess is also working with the meeting organisers to utilize Radio Everyone and OceansInc – two broadcasting channels covering the meeting which reach in excess of 450 million people globally. All these efforts will help to place the issue firmly on the international SDG agenda. **We urge the UK to use this opportunity to position itself as a global leader in tackling marine plastic pollution, and reducing the UK's single-use plastic footprint.**

37. We encourage the UK Government to commit to **improving public access to drinking water, by scaling up drinking water infrastructure in public spaces, such as parks and transport systems, and by implementing changes at the planning and policy**

⁵² United Nations – The Ocean Conference (5 – 9 June 2017). New York. <https://oceanconference.un.org/>

level. We recommend that the current review of the ‘The London Plan’ incorporates planning and policy language to encourage innovation around access to drinking water in the public realm, new developments and regeneration projects.

Annex 1: #OneLess system map with leverage points



Annex 2: Leverage points

BUSINESS CASE: How might we build the business case to encourage business-level support of alternatives?

PRODUCT-SERVICE DESIGN SOLUTIONS: How might we find innovative design solutions at a variety of scales?

SCALING: How might we work with disruptors to scale new product-service solutions?

INFRASTRUCTURE DESIGN: How might we influence the design of London's water infrastructure so it supports refilling?

PRIORITISING PREVENTION AND RE-USE: How might we move towards a waste system that prioritises 'prevention' and 're-use' over 'recycling' and 'disposal'?

IMPACT EVIDENCE: How might we build the evidence of impact?

SOCIAL NORMS: How might we make single-use plastic water bottles a taboo and using a refillable water vessel the norm?

CULTURE: How might we tackle negative perceptions about the drinkability and healthiness of tap water?

JOINING UP: How might we coordinate action with other actions, initiatives and campaigns on ocean plastic?

JOINING UP: How might we find and build evidence that aligns our objectives with existing policy objectives, political priorities and industry initiatives?

VALUING THE OCEAN: How might we communicate more effectively so that Londoners feel connected to the ocean and develop a shared appreciation of its value?