



2021 CITIZEN SCIENCE

# BRAND AUDIT REPORT

AUGUST 2021

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# EXECUTIVE SUMMARY

**Surfers Against Sewage (SAS) launched its flagship week of the Million Mile Clean from 11th May - 23rd May. As part of this event, volunteers took part in a national brand audit, an important citizen science programme to drive corporate behaviour change.**

As the UK's biggest coordinated beach clean event, over 50,000 volunteers took part in 600 cleans, covering 350,000 miles in total over the Million Mile flagship week. Of these volunteers, 3,917 walked and cleaned 11,139 miles of beaches, rivers, mountains and more, submitting 377 brand audit data sets. A total of 26,983 items of packaging pollution were monitored as part of the brand audit.

The top 12 most polluting brands were responsible for 48% of all packaging pollution monitored during the audit. There was little change in the most polluting brands of 2021 compared to 2019 results with Coca-Cola, Walkers, McDonalds, Cadbury, Tesco, Lucozade, Costa Coffee, Mars Wrigley and Haribo all making repeat appearances.

This year's Dirty Dozen companies were responsible for a massive 65% of all branded items collected. Coca-Cola once again took the top spot with Pepsi-Co holding on to the second place.

The COVID-19 pandemic has seen some changes in the most polluting brands and the Dirty Dozen companies. Brands such as Stella Artois and Budweiser have moved up into the top 12 polluting brands with Anheuser-Bush InBev moving from eight to third in the Dirty Dozen companies ranking. This is likely to be due to the closure of pubs, bars and restaurants increasing personal alcohol consumption in public recreational settings during lockdowns.

Looking at the types of items found as part of the brand audit, it is estimated that almost 30% of all material monitored through the brand audit would be captured by an 'all-in' Deposit Return Scheme.

For the Dirty Dozen companies, 52% of items would be captured through an 'all-in' Deposit Return Scheme (DRS) design. Over 80% of coca-cola's packaging, the top polluter, is estimated to be captured through this scheme.

63% of all items monitored as part of the brand audit were unbranded. Cigarette butts were by far the biggest contributor at 25% of the unbranded items. Although receiving considerable attention over the last 18 months, PPE only accounted for 2.5% of all pollution monitored through the audit. Whilst clearly an emerging threat, it is important that this should not distract from the significant amount of pollution caused by brands and their parent companies.

This year's brand audit shows that little has changed in terms of those responsible for the pollution on beaches, rivers, streets and countryside. Despite the corporate promises and commitments made, the plastic production and pollution tap is still not being turned off. We need companies, and their brands, to stop peddling false solutions and instead focus on ways to meaningfully reduce packaging production and pollution and adopt models of reuse and refill.

And we need to see governments introduce policies that are proven to prevent pollution reaching the ocean. We need a Deposit Return Scheme (DRS) that captures all sizes of containers of as wide a range of materials as possible, not one limited to only 'on-the-go' containers. We need to stop the dither and delay and get on with introducing an 'all-in' DRS NOW.

Join us to [#RETURNTOOFFENDER](#)



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# BRAND AUDIT KEY FINDINGS

**9,998 BRANDED ITEMS WERE FOUND**

linked to 328 companies in total, and

**26,938 ITEMS**

were recorded overall including both branded and unbranded items

**ONLY 2.5% OF POLLUTION COLLECTED**

was categorised as PPE, despite receiving considerable media attention over the last 18 months

**AN 'ALL-IN' DRS WOULD PREVENT OVER HALF OF THE REPORTED POLLUTION**

from the Dirty Dozen companies



**ANHEUSER-BUSCH INBEV**

moved from position 8 in 2019 to position 3 in the Dirty Dozen

As one of the world's largest brewers for beer, an increase in this alcohol brand's pollution count could represent how the public have enjoyed outdoor recreational areas during the COVID-19 pandemic

**COCA-COLA AND PEPSICO**

remained at the top of the Dirty Dozen leader board in positions one and two in years 2019 and 2021

This is despite continued promises and commitments to driving progress toward plastic waste reduction targets and stated ambitions to build a circular economy



Cigarette butts, miscellaneous plastic and bottles were found to be the most prolific unbranded items, accounting for

**48% OF UNBRANDED POLLUTION OVERALL**



The top 12 most polluting brands are responsible for

**48% OF BRANDED POLLUTION OVERALL**

These brands included...

**COCA-COLA, WALKERS, MCDONALDS\*, CADBURY**

Tesco, Lucozade, Costa Coffee, Budweiser, Mars Wrigley, Stella Artois, Haribo\* and Aldi, and not much has changed over the past couple of years

**3,913 VOLUNTEERS**

collected branded items from

**11,139 MILES**

for the brand audit



The Dirty Dozen companies are responsible for

**OVER 65% OF ALL BRANDED POLLUTION COLLECTED**

These included Coca-Cola, PepsiCo, Anheuser-Busch InBev, McDonalds\*, Mondelez International, Heineken, Tesco, Carlsberg Group, Suntory, Haribo\*, Mars and Aldi. These are all above the threshold for current EPR guidelines



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# INTRODUCTION

This report presents the analysis of the brand audit data collected at locations across the UK, by volunteers on behalf of Surfers Against Sewage (SAS) during the Million Mile Clean 2021 flagship week.

The flagship week of the Million Mile Clean 2021 ran from 11th - 23rd May 2021 with over 50,000 volunteers walking and cleaning 350,000 miles. Of these volunteers, 3,913 took part in the UK's biggest coordinated brand audit covering 11,139 miles of local beaches and other public recreational spaces across the UK. The brand audit is part of SAS's national programme of citizen science research projects highlighting the major brands and parent companies contributing to the pollution at UK beaches, parks, streets, rivers, mountains and more.

26,983 items of pollution in total, including branded and unbranded items, were identified and submitted. The subsequent analysis covered two levels of branding:

1. The **brand** of the product, and
2. The **parent company** which owns the brand (where applicable), defined as the main brand of a company or organisation which supports product or service subsidiaries by sharing its identity.

All products were categorised into product-type which enabled the subsequent classification of all branded and unbranded items.

This report identifies the Dirty Dozen companies at the source of the pollution chain and the breakdown of polluting brands. In addition, the mapping of the items against their product categories established the likely impact that an 'all-in' Deposit would have on pollution found in the environment.

FIGURE 1  
SHOWS THE NUMBER OF  
BRAND AUDITS SUBMITTED  
ACROSS THE UK DURING  
THE MILLION MILE CLEAN  
FLAGSHIP WEEK

VOLUNTEERS  
SUBMITTED  
BRAND AUDIT  
DATA FROM  
BEACHES,  
RIVERS,  
STREETS,  
PARKS &  
MOUNTAINS



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# POLLUTING BRANDS

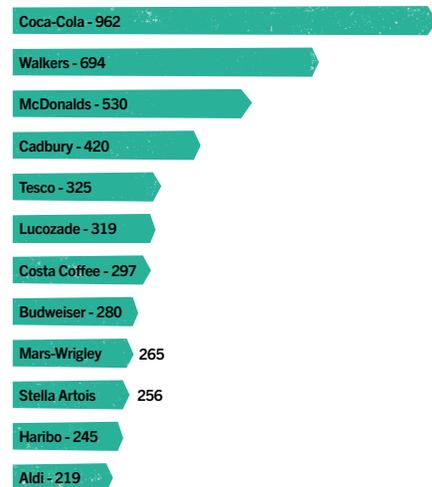
26,983 items of pollution were collected in the brand audit in total, including branded and unbranded items.

Out of the total number of items found, 9,998 were identified as branded and linked to 327 known brands. Of these, the top 12 brands were identified as responsible for 48% of branded pollution overall.

Figure 2 shows the top 12 polluting brands identified from all collected items by volunteers. Top brands included Coca-Cola, Walkers, McDonalds, Cadbury, Tesco, Lucozade, Costa Coffee, Budweiser, Mars- Wrigley, Stella Artois, Haribo and Aldi, the number of items of pollution collected and the percentage of pollution across all brands found. Coca-Cola items were identified over three times more than some of the other top polluting brands.

**FIGURE 2**

**SHOWS THE TOP POLLUTING BRANDS AND THE NUMBER OF ITEMS COLLECTED**



<sup>1</sup> A free and simple way to recycle Walkers crisp packets [online] [www.walkers.co.uk](http://www.walkers.co.uk). Available at [www.walkers.co.uk/recycle](http://www.walkers.co.uk/recycle) [Accessed 13.07.2021]

**FIGURE 3**

**SHOWS HOW THE TOP POLLUTING BRANDS HAVE CHANGED BETWEEN 2019 AND 2021**

2019			2021	
1	Coca-Cola	-	1	Coca-Cola
2	Walkers	-	2	Walkers
3	Cadbury	↓ 1	3	McDonalds
4	McDonalds	↑ 1	4	Cadbury
5	Nestlé	↓ 16	5	Tesco
6	Lucozade	-	6	Lucozade
7	Mars-Wrigley	↓ 2	7	Costa Coffee
8	Haribo	↓ 3	8	Budweiser
9	Tesco	↑ 4	9	Mars-Wrigley
10	Pepsi	↓ 18	10	Stella Artois
11	Heineken	↓ 11	11	Haribo
12	Costa Coffee	↑ 5	12	Aldi

Figure 3 shows that the top two top polluting brands have not changed position for two years years. This is despite both brands publicising their sustainability vision which includes making packaging 100% recyclable globally by 2025 and Walkers even launching the UK’s first nationwide Crisp Packet Recycling Scheme in 2018 announcing ‘hundreds’ of public collection points across the UK to enable re-use.<sup>1</sup>

Whilst the pandemic may have impacted the popularity of a certain brand or product type, it is clear that there are familiar brands appearing consistently year on year as top polluters and still not enough is being done to address this at the source.



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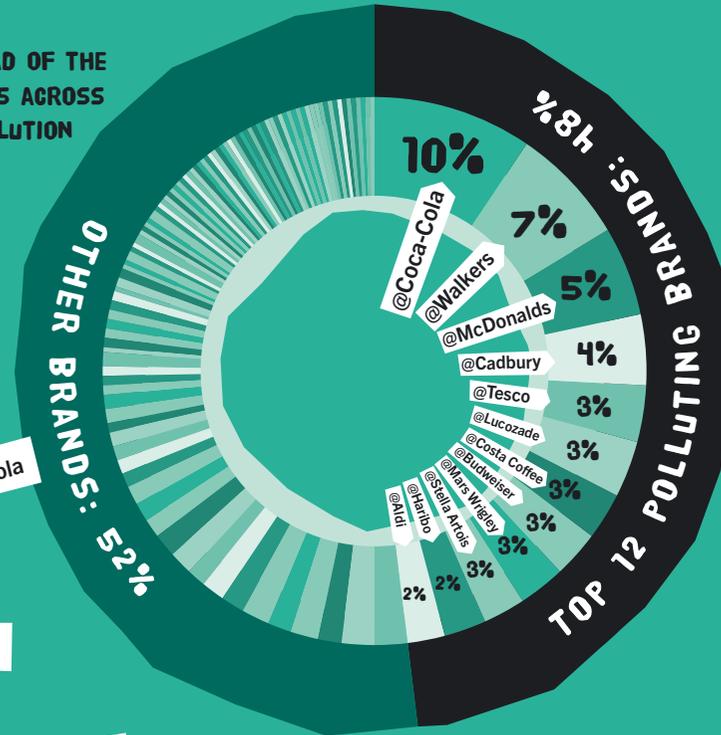




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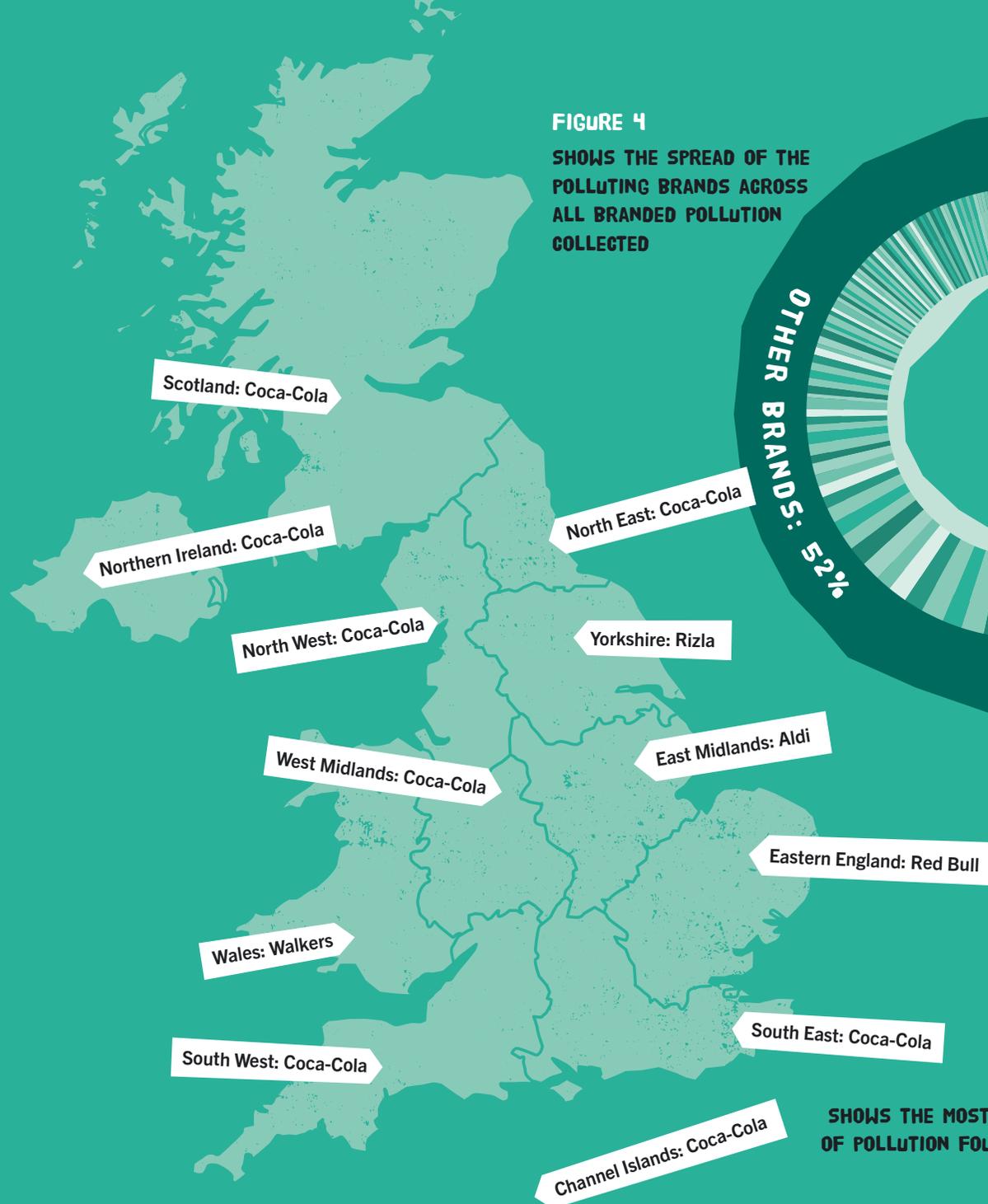
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**FIGURE 4**  
SHOWS THE SPREAD OF THE  
POLLUTING BRANDS ACROSS  
ALL BRANDED POLLUTION  
COLLECTED



**FIGURE 5**

SHOWS THE MOST PREVALENT BRAND  
OF POLLUTION FOUND PER UK REGION

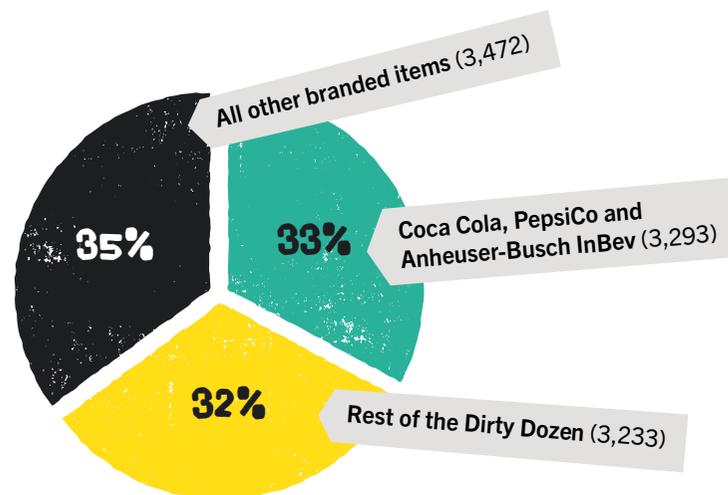


# THE DIRTY DOZEN

Many of the brands submitted through the brand audit were owned by larger conglomerates with broad brand portfolios. These companies have a direct influence over the operations of its subsidiaries.

Branded items were mapped to their parent companies, where applicable. **Figure 6** shows that the top 12 companies, the 'Dirty Dozen', were responsible for over 65% of all branded pollution collected. Breaking this down further revealed that the top three most polluting companies were responsible for over 33% of all branded pollution found: Coca-Cola; PepsiCo; and Anheuser-Bush InBev (AB InBev). The top three of the Dirty Dozen, Coca-Cola, PepsiCo and AB InBev, were responsible for over 33% of all branded pollution found.

**FIGURE 6**  
SHOWS THE TOP THREE DIRTY DOZEN ACROSS ALL POLLUTION



Data obtained from 2019 revealed that Coca-Cola and PepsiCo have continued to occupy positions one and two in Dirty Dozen in 2021. Interestingly AB InBev has moved up from position eight in 2019 to position three in 2021. This is likely to be due to the COVID-19 pandemic and the resulting closure of pubs, bars and restaurants increasing personal alcohol consumption in public settings.

**FIGURE 7**  
SHOWS HOW THE 'DIRTY DOZEN' HAVE CHANGED BETWEEN 2019 AND 2021

2019			2021	
1	Coca-Cola	-	1	Coca-Cola
2	PepsiCo	-	2	PepsiCo
3	Mondelez	↓ 2	3	AB InBev
4	McDonalds	-	4	McDonalds
5	Nestlé	↓ 8	5	Mondelez
6	Suntory	↓ 3	6	Heineken
7	Mars	↓ 4	7	Tesco
8	AB InBev	↑ 5	8	Carlsberg Group
9	Haribo	↓ 1	9	Suntory
10	Heineken	↑ 4	10	Haribo
11	Tesco	↑ 4	11	Mars
12	AMS Sourcing	N/A	12	Aldi



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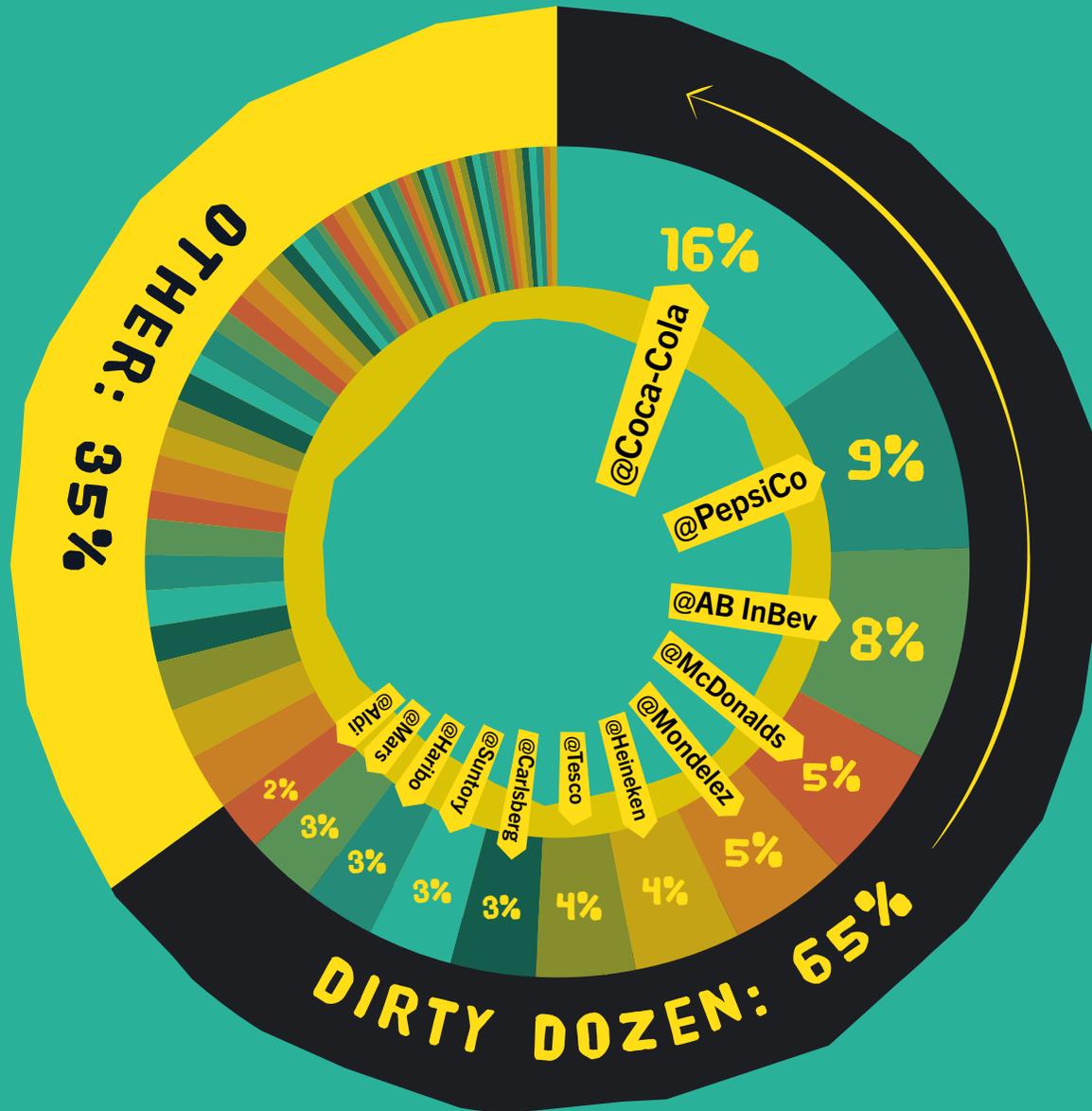
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FIGURE 8

SHOWS THE SPREAD OF THE DIRTY DOZEN ACROSS ALL BRANDED POLLUTION COLLECTED



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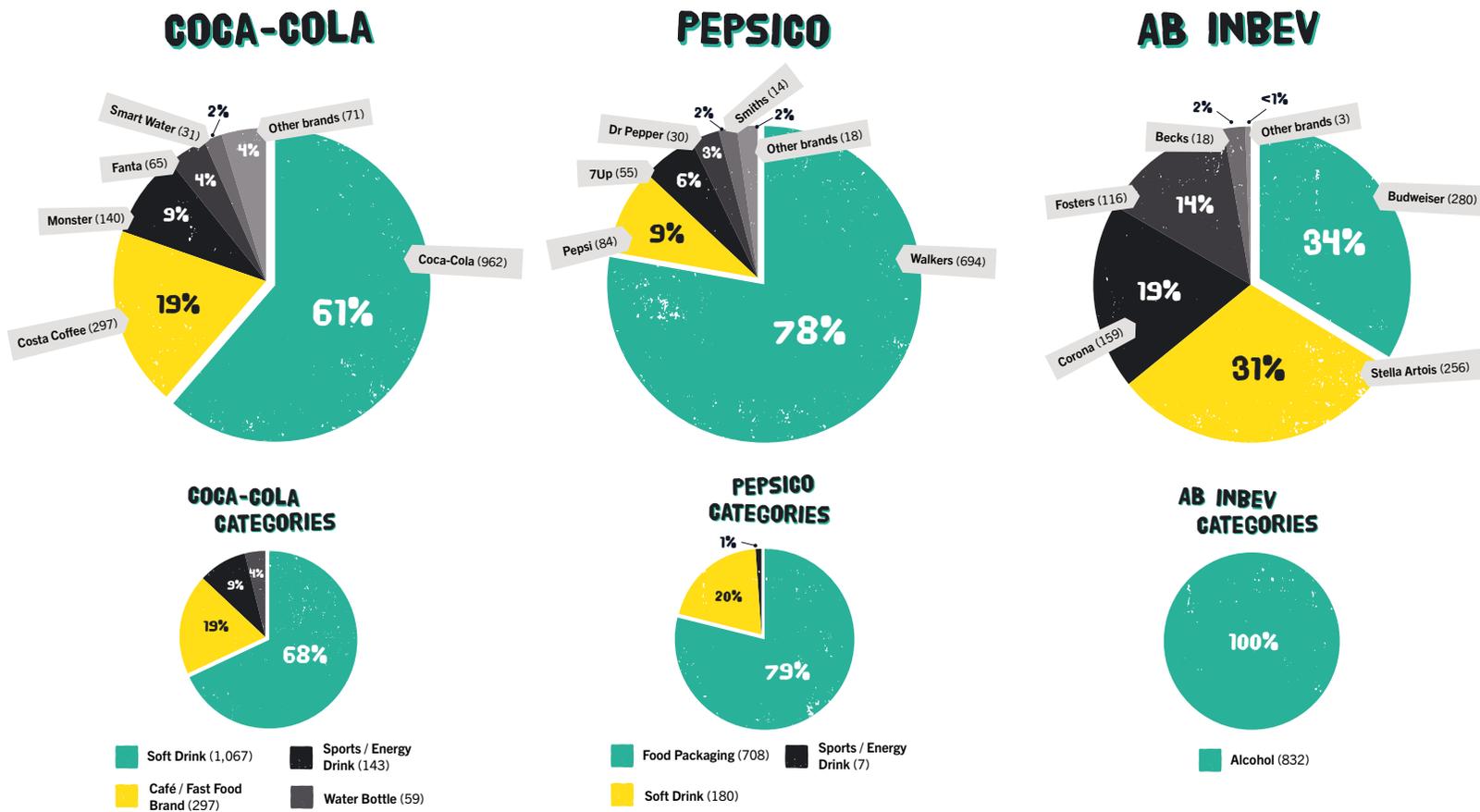


## WHAT MAKES UP THE DIRTY DOZEN?

The following figure shows the detailed breakdown of brands for all items falling within these top three parent companies and the categories of the types of pollution submitted as part of the brand audit.

FIGURE 9

SHOWS THE BRANDS AND CATEGORIES WITHIN THE TOP 3 DIRTY DOZEN



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# POLLUTING PRODUCTS

In order to understand the types of products polluting the environment, pollution was grouped into 16 product categories which were:

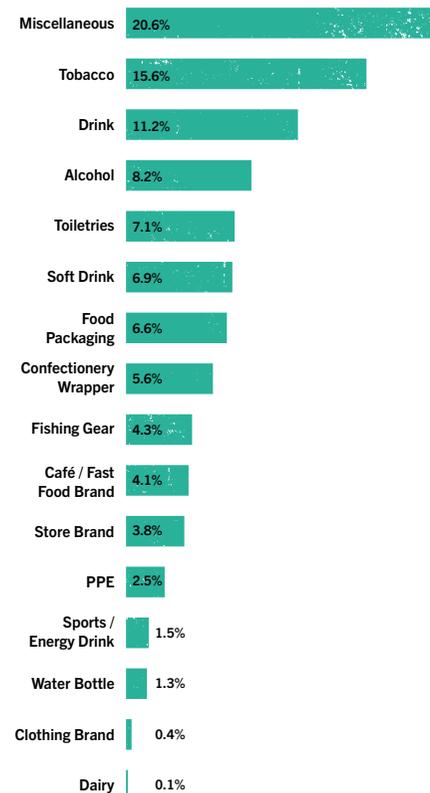
- Tobacco Product
- Drink (unbranded)
- Alcohol
- Soft Drink
- Toiletries
- Food Packaging
- Confectionery Wrapper
- Fishing Gear
- Store Brand
- PPE
- Sports / Energy Drink
- Water Bottle
- Clothing Brand
- Dairy
- Miscellaneous
- Café / Fast Food Brand

These were then grouped further into six parent categories which were:



As shown in **Figure 10**, aside from the miscellaneous items submitted (ranging from car batteries to tyres), items categorised as Tobacco products were most prevalent which included cigarette butts and packaging. This was closely followed by the category 'Drink', which covers all unbranded drink related packaging such as bottle lids, bottle top, plastic cups and bottles.

**FIGURE 10**  
SHOWS THE CATEGORIES OF UNBRANDED POLLUTION COLLECTED



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## POLLUTION SPOTLIGHT

# FISHING GEAR POLLUTION

Fishing gear (Ghost gear) accounts for only 8.6% of all pollution collected at beach locations, despite receiving increased media attention over the past year with the release of documentaries including *Seaspiracy*.

However, with an estimated 640,000 tonnes of lost or discarded gear entering our oceans each year<sup>2</sup>, this remains a key threat to the health of the oceans, waves, beaches and wildlife. As this material is often lost or discarded at sea, it can be assumed that much of this material will remain within the ocean rather than being washed up onto beaches.

<sup>2</sup> Fishing's phantom menace How ghost fishing gear is endangering our sea life. World Animal Protection [online] <https://www.worldanimalprotection.org> Available at /sites/default/files/media/int\_files/sea-change-campaign-tackling-ghost-fishing-gear\_0.pdf [Accessed 13.07.2021]



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**POLLUTION SPOTLIGHT** 

# PPE POLLUTION

**Notably, Personal Protective Equipment (PPE) was found to account for only 2.5% of overall pollution collected within the UK locations cited within the brand audit.**

This is surprising, given that the COVID-19 pandemic has dramatically increased the use of this type of plastic product that can harm the environment and result in significant waste management challenges. In response to high PPE demand among the general public, health care workers, and service workers as the pandemic started, single-use face mask production in China soared to 116 million per day in February 2020, 12 times more than previously required.<sup>3</sup>

The World Health Organization had also reported a 40% escalation of disposable PPE production.<sup>4</sup> It has been estimated that if the global population were to use one disposable face mask per day after lockdown ended, the pandemic could easily result in 129 billion face masks and 65 billion gloves per month being consumed and subsequently disposed of, which is shocking.<sup>5</sup> It's now been over a year since the start of the pandemic and reports do indeed reflect increased observations of PPE at cleanups

3 F. Bermingham, S.-L. Tan, "Coronavirus: China's mask-making juggernaut cranks into gear, sparking fears of over-reliance on world's workshop," South China Morning Post (2020); [online] [www.scmp.com](http://www.scmp.com) Available at [www.scmp.com/economy/global-economy/article/3074821/coronavirus-chinas-mask-making-juggernaut-cranks-gear](http://www.scmp.com/economy/global-economy/article/3074821/coronavirus-chinas-mask-making-juggernaut-cranks-gear) [Accessed 13.07.2021]

4 Shortage of personal protective equipment endangering health workers worldwide (WHO, 2020). [online] <https://www.who.int> Available at <https://www.who.int/news/item/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide> [Accessed 13.07.2021]

5 J. C. Prata, A. L. Patrício Silva, T. R. Walker, A. C. Duarte, T. Rocha Santos, Environ. Sci. Tech. (2020), [online: [pubs.acs.org](https://pubs.acs.org)] 54, 7760, Available at: <https://pubs.acs.org/doi/abs/10.1021/acs.est.0c02178> [Accessed: 27.06.2021]

6 Assessing PPE Pollution's Impact on the Ocean, MARCH 30, 2021, [online] [oceanconservancy.org](http://oceanconservancy.org) Available at [oceanconservancy.org/blog/2021/03/30/assessing-ppe-pollutions-impact-ocean/](http://oceanconservancy.org/blog/2021/03/30/assessing-ppe-pollutions-impact-ocean/) [Accessed 13.07.2021]



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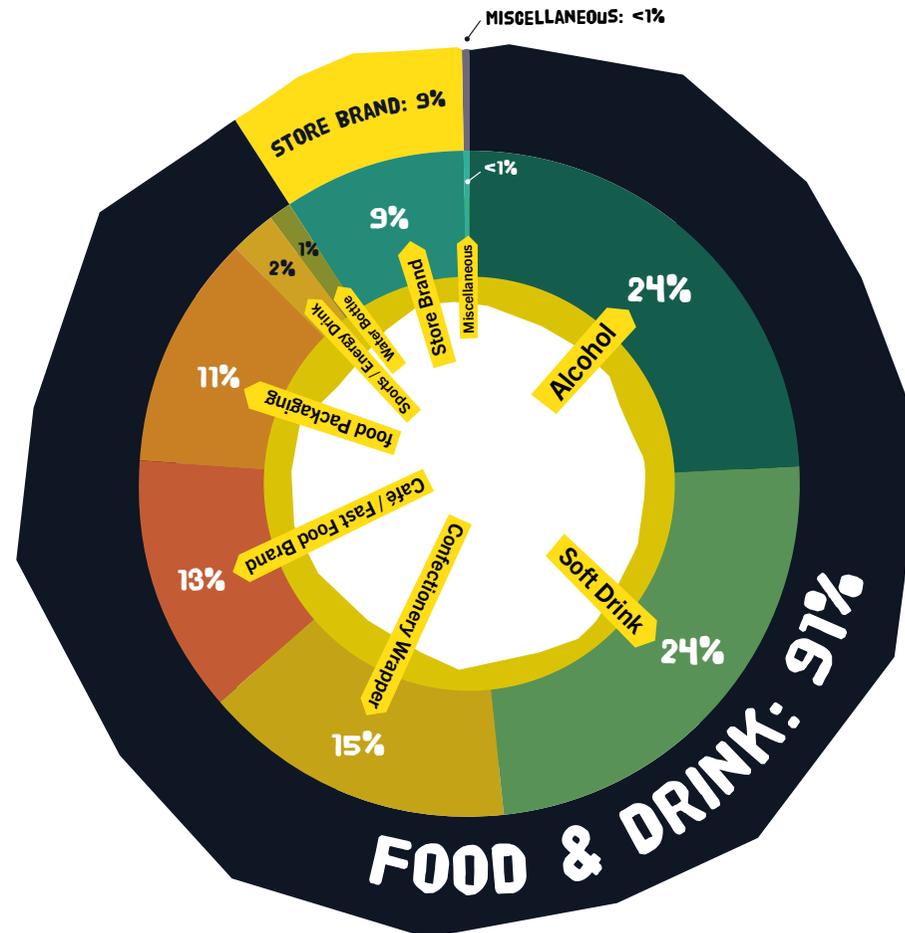
**THE POLLUTION FROM THE DIRTY DOZEN THAT WAS SUBMITTED THROUGH THE BRAND AUDIT LARGELY CONSISTED OF THE PARENT CATEGORY 'FOOD & DRINK' AT OVER 90%.**

This was made up of the sub-categories Alcohol, Soft Drinks, Confectionery Wrappers, Café / Fast Food Brand, Food Packaging, Sports / Energy Drinks and Water Bottles.

Almost a quarter of the Dirty Dozen's pollution was from alcohol packaging, cans and bottles, and a further 24% was that of soft drinks.

This may correspond to increased public use of outdoor recreational spaces during the COVID-19 pandemic restrictions.

**FIGURE 11**  
CATEGORIES AND PARENT CATEGORIES FOR ALL OF THE DIRTY DOZEN



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## POLLUTION SPOTLIGHT

# GLASS BOTTLE POLLUTION

Glass Bottles have just as big an impact on the environment as plastic ones, due to the energy required to manufacture it.

In addition, the fragile nature of glass means that it can often break when in the environment causing serious risk of injury to both humans and wildlife. Capturing these products for recycling before they enter the environment is one of many ways in which pollution and waste can be reduced.<sup>7</sup>

<sup>7</sup> Brock, A. and Williams, I.D., LIFE CYCLE ASSESSMENT OF BEVERAGE PACKAGING (05.Oct 2020) [online: [www.gov.uk/defra](https://www.gov.uk/defra)]. Available at: <https://digital.detritusjournal.com/articles/in-press/life-cycle-assessment-of-beverage-packaging/368> [Accessed 13.07.2021]



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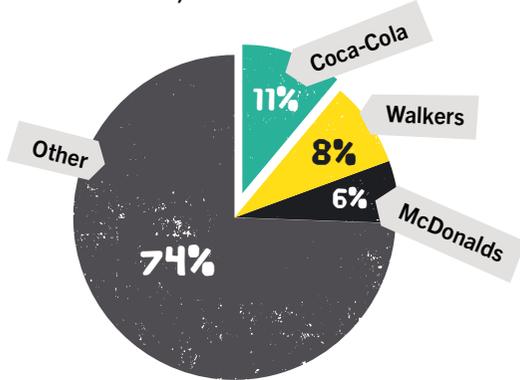


FIGURE 12

SHOWS THE MOST PREVALENT BRANDS IN EACH PARENT CATEGORY

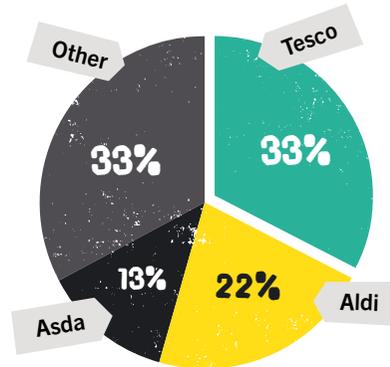
### FOOD & DRINK

8,497 Items



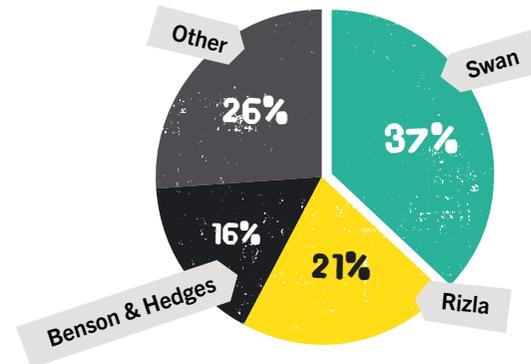
### STORE BRAND

1,000 Items



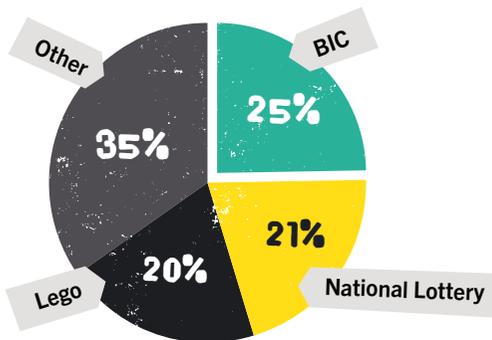
### TOBACCO PRODUCT

323 Items



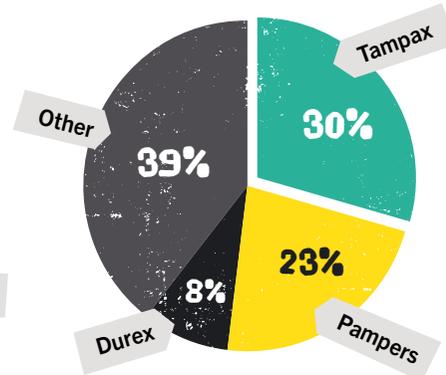
### MISCELLANEOUS

92 Items



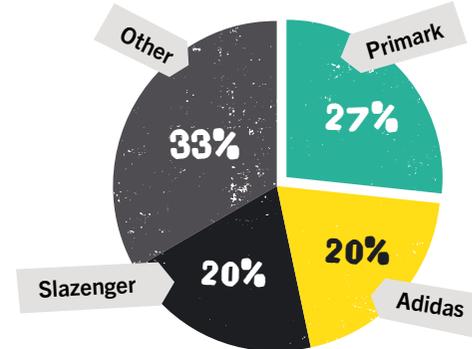
### HEALTH & MEDICAL

71 Items



### CLOTHING BRAND

15 Items



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# THE POTENTIAL FOR A DEPOSIT RETURN SCHEME

A Deposit Return Scheme (DRS) is a system where consumers pay an up-front deposit on an item (such as a sealed drink), at point of purchase, which is redeemed on return of the empty drinks container. In other words, you're buying the contents, but renting the container, obtaining a deposit back on it's return.

This means that high-quality plastic material is kept 'in the loop' and is much easier to recycle into different products, reducing the number of new bottles or drinks containers needing to be made from virgin material.<sup>8</sup> DRS systems are a proven way to capture material through a circular system and dramatically increase recycling and reuse. Recycling rates of over 90% are common in well-designed and all-in Deposit Return Schemes.

## PRIMARY AIMS OF THE PROPOSED DEPOSIT RETURN SCHEME ARE:

- **Reducing** the amount of included drinks container packaging ending up as pollutants in the environment
- **Increasing recycling** levels for included drinks container packaging
- Introducing better quality recycled packaging which can be collected in greater quantities with improved labelling and consumer messaging to further promote recycling, moving towards a more **circular economy**.

In 2018, the Government committed to the introduction of a DRS for drinks containers in England, a commitment further set out in the 2019 Conservative party manifesto.<sup>9</sup>

**"WE NEED TO WORK WITH BUSINESS TO MAKE DEPOSIT RETURN SCHEMES AS EFFECTIVE AS POSSIBLE AND I BELIEVE AN 'ALL-IN' MODEL WILL GIVE CONSUMERS THE GREATEST POSSIBLE INCENTIVE TO RECYCLE."**

*Michael Gove MP, former Secretary of State for the Environment.  
16th July 2019, Kew Gardens*

The powers to implement a DRS are now being set out in the Environment Bill currently going through parliament. This scheme looks to include Polyethylene Terephthalate (PET) plastic bottles, glass bottles, and steel and aluminium cans.

In 2019 and 2021, consultations on the scope of a DRS in England and Wales included consideration of an 'all-in' scheme where drinks containers of all sizes would be included; and an 'on-the-go' system which would be limited to drinks containers less than 750ml.



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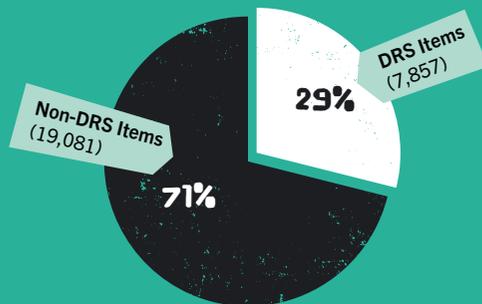
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By categorising brands into product categories, an assessment regarding the likely impact that an 'all-in' DRS might have on prevention of pollution entering the environment can be made. Looking at material categories, it is assumed that up to one third of the categories primarily include items that would be covered within the scope of an 'all-in' DRS. This would be considerably less for an 'on-the-go' scheme. Whilst there is some degree of error as there may be items that are included in material categories but excluded from the DRS scope and vice versa, analysis of these material categories provides a good indication of the likely impact an 'all-in' DRS would have.<sup>10</sup>

**FIGURE 13**  
NUMBER OF ITEMS THAT WOULD BE COVERED BY AN ALL-IN DRS ACROSS ALL POLLUTION COLLECTED



8 What We Waste, April 2021, Reloop, [online] <https://www.reloopplatform.org/> Available at: <https://www.reloopplatform.org/wp-content/uploads/2021/04/What-We-Waste-Reloop-Report-April-2021-1.pdf> [Accessed 13.07.2021]  
 9 The Conservative and Unionist Party Manifesto 2019, [online: <https://www.conservative.com/our-plan>]. Available at: [https://assets-global.website-files.com/5da42e2cae7ebd3f8bde353c/5dda924905da587992a064ba\\_Conservative%202019%20Manifesto.pdf](https://assets-global.website-files.com/5da42e2cae7ebd3f8bde353c/5dda924905da587992a064ba_Conservative%202019%20Manifesto.pdf) [Accessed: 27.06.2021].  
 10 Consultation on Introducing a Deposit Return Scheme in England, Wales and Northern Ireland. Second Consultation [online] [www.gov.uk/defra](http://www.gov.uk/defra). Available at: [www.gov.uk/government/publications](http://www.gov.uk/government/publications) [Accessed 13.07.2021]

**FIGURE 14**  
NUMBER OF ITEMS COLLECTED FROM THE DIRTY DOZEN THAT WOULD BE COVERED BY AN ALL-IN DRS

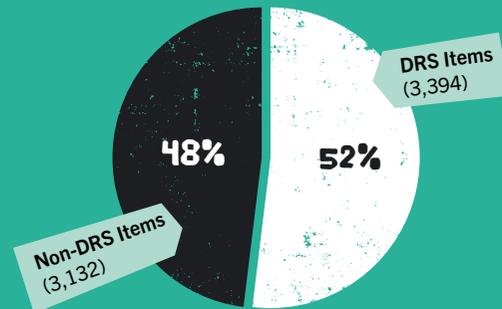
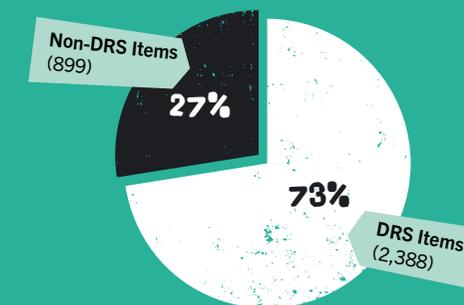


Figure 15 shows that 73% of all items found from the top three Dirty Dozen companies would be captured through an 'all-in' DRS. The introduction of an 'all-in' DRS would have a significant impact on pollution from coca-cola and AB-InBev in particular, capturing 81% and 100% of products respectively.

**FIGURE 15**  
NUMBER OF ITEMS COLLECTED FROM THE TOP 3 DIRTY DOZEN THAT WOULD BE COVERED BY AN ALL-IN DRS



29% OF TOTAL ITEMS COLLECTED AS PART OF THE 2021 BRAND AUDIT, EQUATING TO 7,857 ITEMS OF POLLUTION, COULD HAVE BEEN CAPTURED BY AN 'ALL-IN' DEPOSIT RETURN SCHEME,

providing a huge missed opportunity for increasing recycling rates and decreasing the amount of pollutants entering the ocean.



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# GETTING POLLUTERS TO PAY

Currently, producers only pay for around 10% of the costs of disposing of their products. The Government is currently considering introducing an Extended Producer Responsibility (EPR) scheme in 2023 that will see producers take responsibility for 100% of the costs of managing, recycling, and disposal of their packaging waste, with higher fees being levied if packaging is harder to reuse or recycle.<sup>11</sup>

Current EPR guidelines state that packaging producers who have a turnover exceeding £2 million must register and meet their waste packaging recycling and recovery responsibilities which help to:

- **Reduce** the amount of packaging produced in the first place
- **Reduce** how much packaging waste goes to landfill
- Increase the amount of packaging waste that's **recycled and recovered**<sup>12</sup>

These are in addition to waste duty of care rules all businesses must follow which include methods to:

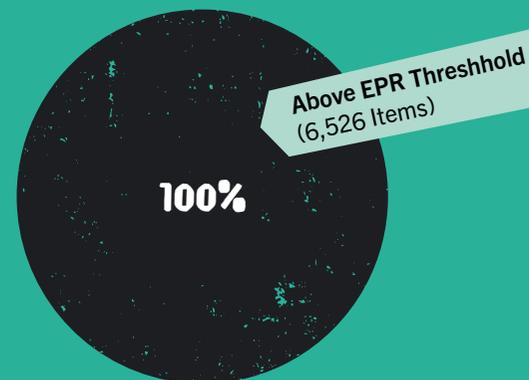
- Keep waste to a minimum by doing everything you reasonably can to **prevent, reuse, recycle or recover waste** (in that order)
- Sort and store waste safely and securely
- Complete a waste transfer note for each load of waste that leaves your premises
- Check if your waste carrier is registered to dispose of waste
- Not allow the waste carrier to dispose of your waste illegally (and report them to Crimestoppers if this is the case)<sup>13</sup>

11 Policy paper- Environment Bill summer policy statement: (July 2019), [online: [www.gov.uk](https://www.gov.uk)]. Available at: <https://www.gov.uk/government/publications/draft-environment-principles-and-governance-bill-2018/environment-bill-summer-policy-statement-july-2019> [Accessed 13.07.2021]

All companies linked with the largest shares of the items found in the brand audit have an annual turnover of far greater than £2 million, putting them above the de-minimis threshold for companies obligated under the current EPR guidelines.

It is evident from this report that the vast majority of branded items collected as part of the brand audit are linked to companies obligated under the existing system of producer responsibility.

**FIGURE 16**  
**SHOWS THE PERCENTAGE OF THE DIRTY DOZEN WHO ARE ABOVE THE THRESHOLD FOR EPR**



12 Producer responsibility regulations, (updated 16 February 2021), [online: [www.gov.uk](https://www.gov.uk)]. Available at: <https://www.gov.uk/government/collections/producer-responsibility-regulations> [Accessed 13.07.2021]

13 Dispose of business or commercial waste, (updated 16 February 2021), [online: [www.gov.uk](https://www.gov.uk)]. Available at: <https://www.gov.uk/managing-your-waste-an-overview> [Accessed 13.07.2021]



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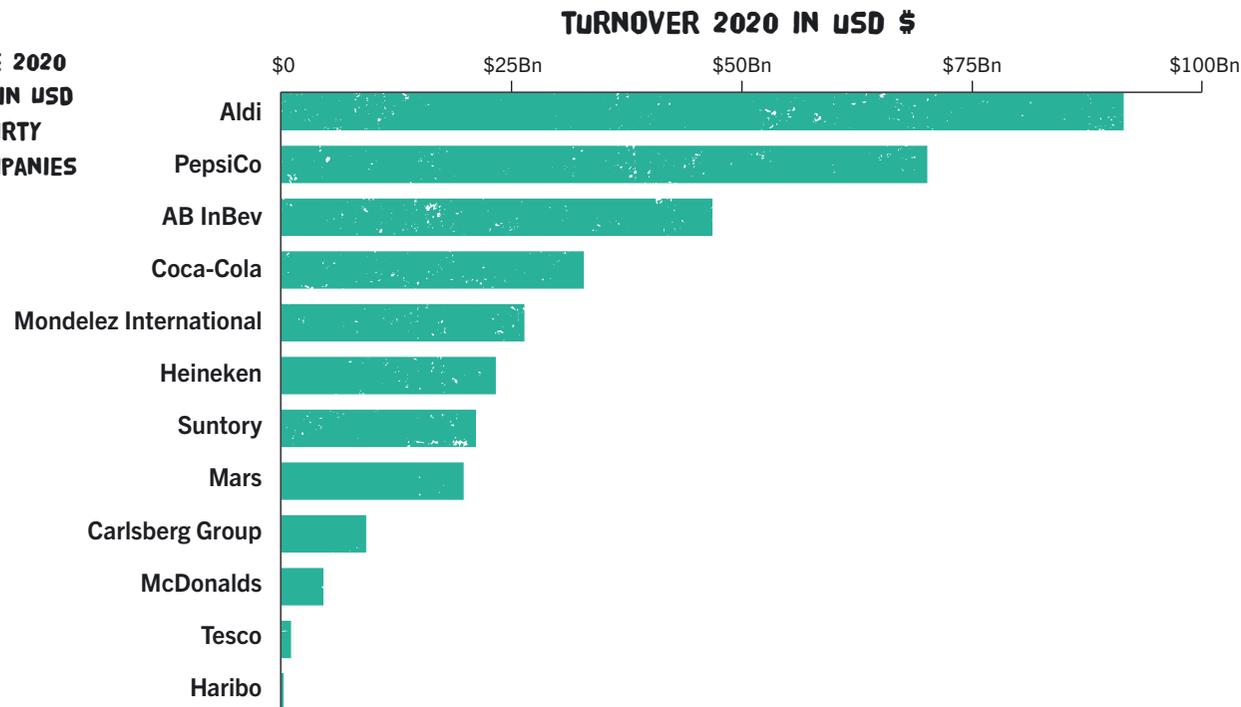
# DIRTY DOZENS' TURNOVER

Many of the Dirty Dozen represent some of the largest companies in the world.

Figure 17 shows the annual turnover of each of the Dirty Dozen for the year 2020<sup>14</sup>. When compared to the amount of pollution collected for each, Figure 18 shows that the most polluting companies do not correspond to the highest turnover.

**FIGURE 17**

**SHOWS THE 2020 TURNOVER IN USD FOR THE DIRTY DOZEN COMPANIES**



<sup>14</sup> Mondelez Revenue 2006-2021 | MDLZ, (2021), [online: [www.macrotrends.net/stocks/charts/MDLZ/mondelez/revenue](https://www.macrotrends.net/stocks/charts/MDLZ/mondelez/revenue)] [Accessed 12.07.21]. Heineken N V reports 2020 full year results and shares updates on EverGreen strategic review, (2021) [online: [www.globenewswire.com](https://www.globenewswire.com)] Available at: <https://www.globenewswire.com/news-release/2021/02/10/2172786/0/en/Heineken-N-V-reports-...-ults-and-shares-updates-on-EverGreen-strategic-review.html> [Accessed 12.07.21]. Tesco Net Income 2006-2021 | TSCDY, (2021), [online: [www.macrotrends.net/stocks/charts/TSCDY/tesco/net-income](https://www.macrotrends.net/stocks/charts/TSCDY/tesco/net-income)] [Accessed 12.07.21]. Global net revenue of Carlsberg from 2012 to 2020, (2021), [online: [www.statista.com](https://www.statista.com)] Available at: <https://www.statista.com/statistics/741358/carlsberg-net-revenue-worldwide/> [Accessed 12.07.21]. Suntory Holdings Limited Summary on FY2020

Earnings, (February 12, 2021), [online: [www.suntory.com](https://www.suntory.com)] Available at: [https://www.suntory.com/about/financial/pdf/comment\\_202012.pdf](https://www.suntory.com/about/financial/pdf/comment_202012.pdf) [Accessed 12.07.21]. HARIBO GmbH & Co. KG, (2021), [online: [www.dnb.com](https://www.dnb.com)] Available at: [https://www.dnb.com/business-directory/company-profiles/haribo\\_gmbh\\_co\\_kg.113844e45499ea6f73c7df909b32db62.html](https://www.dnb.com/business-directory/company-profiles/haribo_gmbh_co_kg.113844e45499ea6f73c7df909b32db62.html) [Accessed 12.07.21]. Net sales of the leading confectionery companies worldwide in 2020, (2021), [online: [www.statista.com](https://www.statista.com)] Available at: <https://www.statista.com/statistics/252097/net-sales-of-the-leading-10-confectionery-companies-worldwide/> [Accessed 12.07.21]. Full Year Results (2021), [online: [www.nestle.com](https://www.nestle.com)] Available at: <https://www.nestle.com/media/pressreleases/allpressreleases/full-year-results-2020> [Accessed 12.07.21]



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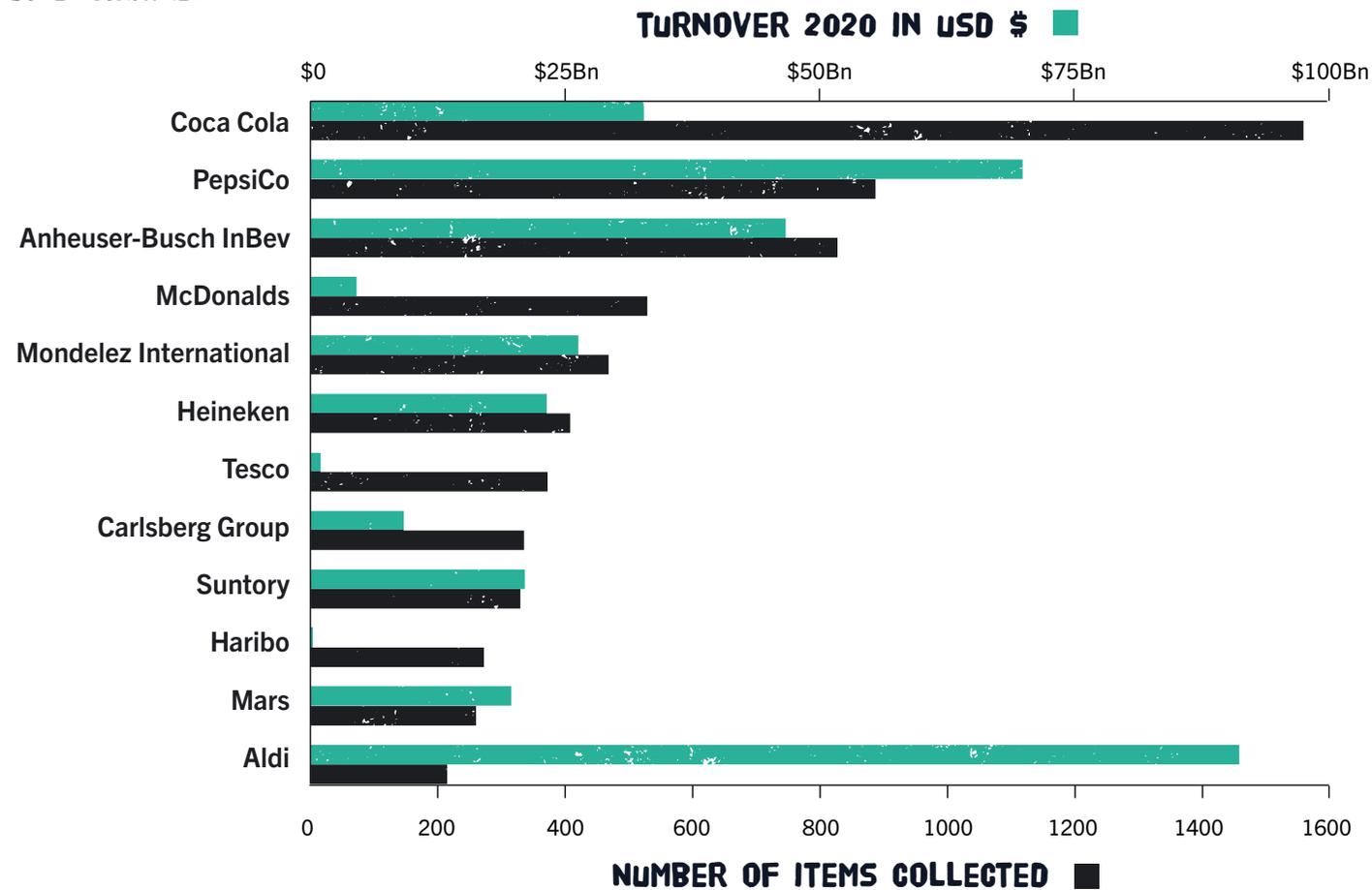
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When compared to the amount of pollution collected for each, **Figure 18** shows that the most polluting companies do not correspond to the highest turnover.

**FIGURE 18**

**SHOWS THE 2020 TURNOVER VS ITEMS RECORDED FOR THE DIRTY DOZEN COMPANIES**



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# UNBRANDED POLLUTION

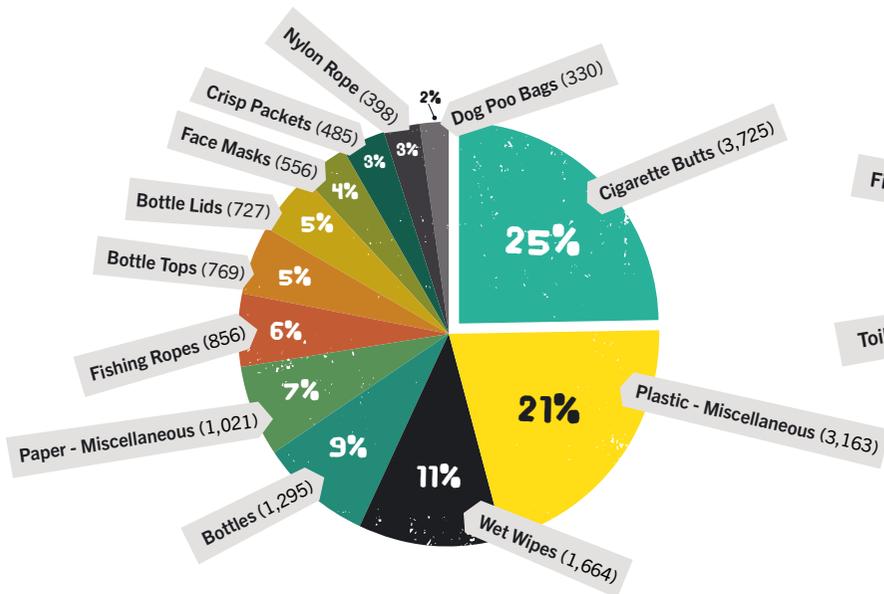
Unbranded items collected, i.e items where a brand was unidentifiable, were a significant proportion of the pollutants across the locations identified for which a brand audit was completed, exceeding the number of branded items found. The total number of unbranded items was 16,940 (63% of the total of items found!).

Unbranded items collected included clothing, straws, sweet wrappers, bottle lids, bottles, plastic cups, fishing gear, nets and ropes, cans, crisp packets, carrier bags, miscellaneous plastic, facemasks, cigarette butts and wet wipes.

Of the unbranded items data submitted, cigarette butts, miscellaneous plastic and bottles were found to be most prolific accounting for 48% of unbranded pollution overall.

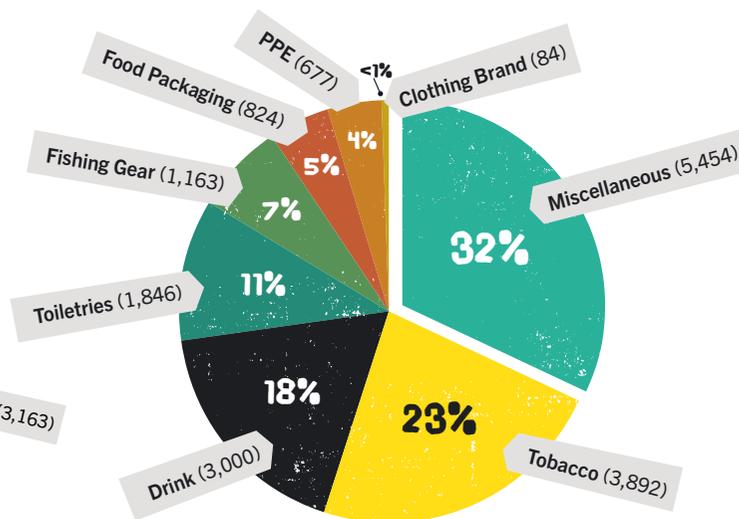
**FIGURE 19**

**SHOWS THE TOP 12 MOST PREVALENT UNBRANDED ITEM TYPES SUBMITTED THROUGH THE BRAND AUDIT**



**FIGURE 20**

**SHOWS CATEGORIES FOR UNBRANDED POLLUTION FROM THE BRAND AUDIT**



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## POLLUTION SPOTLIGHT

# KICK THE HABIT

Given that billions of cigarettes are sold to wholesalers and retailers nationwide, it's no surprise that cigarette butts are one of the highest pollutants globally.

Cigarette butts are often disposed of in the environment, on streets, pavements, and other public areas, and may then be carried as runoff to drains and ultimately end up polluting rivers, beaches and oceans. The butts are primarily made up of plastic filters that don't biodegrade, the butts that aren't eaten by wildlife simply pile up on shorelines or at the bottom of waterbodies. The problem extends to e-cigarettes which have more than doubled in sales over recent years. E-cigarette cartridges are single use products that contain plastic, electronic and chemical waste that also too often end up as pollutants. A survey by Keep Britain Tidy found that less than half of smokers know that cigarettes contain plastic. Meanwhile one in ten smokers do not consider cigarettes to be litter and another one in ten believe that they are biodegradable.<sup>15</sup>

<sup>15</sup> Tobacco industry to blame for polluted waterways and death of marine life, 1 May 2019, [online] <https://ash.org.uk/> Available at: <https://ash.org.uk/media-and-news/blog/tobacco-polluted-waterways-marine-death/> [Accessed 13.07.2021]



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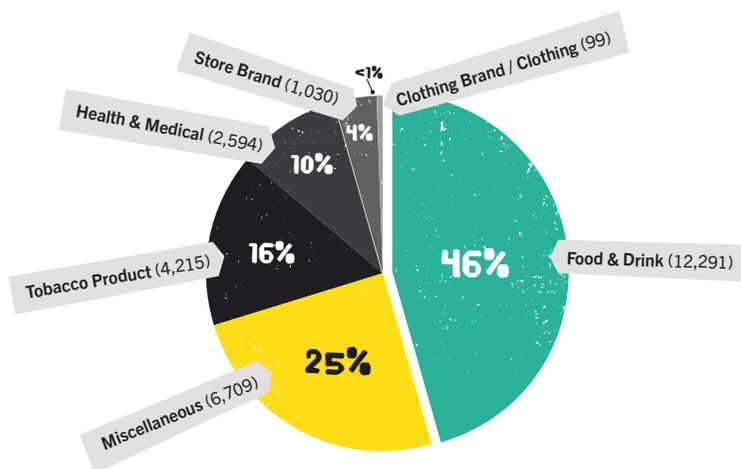
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When looking at branded and unbranded pollution as a whole, **Figure 21** shows how it is distributed across parent categories.

**FIGURE 21**

**SHOWS PARENT CATEGORIES FOR UNBRANDED AND BRANDED POLLUTION FROM THE BRAND AUDIT**



<sup>16</sup> Consultations launched for major waste sector reforms, Defra Press Office, (25 March 2021) [online: [deframedia.blog.gov.uk](https://deframedia.blog.gov.uk/)] Available at: [deframedia.blog.gov.uk/2021/03/25/consultations-launched-for-major-waste-sector-reforms/](https://deframedia.blog.gov.uk/2021/03/25/consultations-launched-for-major-waste-sector-reforms/) [Accessed 13.07.2021]

## ACTION SPOTLIGHT

# WHAT NEEDS TO HAPPEN NOW?

Steps have been taken to address single-use and pointless plastic over the last few years.

Bans have been introduced on microbeads; charges put in place on plastic bags have seen supermarket sales of single-use plastic bags by 95%; and most recently sale and supply of plastic straws, stirrers and cotton buds has been prohibited.<sup>16</sup> So why can't more be done? Further change is urgently required to further reduce single-use products and plastic production, models of reuse need to be adopted; and more of what is used needs to be effectively recyclable. Across Europe, more action is being taken on single-use plastics through the Single Use Plastics Directive which came into force in July 2021, and Wales and Scotland are taking the lead in the UK in adopting progressive policies that tackle single use. England risks being left behind if it does not take decisive action in adopting more progressive single use plastic policies.



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**FURTHER CHANGE IS  
URGENTLY REQUIRED  
TO FURTHER REDUCE  
SINGLE-USE PRODUCTS  
& PLASTIC PRODUCTION**



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# IMPACT ON THE ENVIRONMENT

It is estimated that 8-13 million tonnes of plastic enter the ocean every year and 80% of man-made debris in the marine environment originated on land before being thrown, blown or washed into rivers, canals and the seas.<sup>17</sup>

Pollutants found on the beach are often washed down rivers and drains originating from towns and cities. They can also result from industry spills, shipping containers or lost fishing gear, badly managed landfill sites and overflowing or unsheltered bins near the coast. Some have even been flushed down the loo.<sup>18</sup>

## RETURN TO OFFENDER

8 billion containers are wasted every year that could be captured by an 'all-in' Deposit Return Scheme.<sup>21</sup>

## ARCTIC INTRUDERS

Scientists have recently discovered microplastics embedded deep in the Arctic Ice.<sup>22</sup>

## BLEMISHED BEACHES

Approx 5,000 items of marine plastic pollution have been found per mile of beach in the UK.<sup>19</sup>

## KILLER POLLUTION

100,000 marine mammals and turtles and 1 million seabirds are killed by marine plastic pollution annually.<sup>23</sup>

## PLASTIC POLLUTION

Every day, approximately 8 million pieces of plastic pollution find their way into the oceans.<sup>20</sup>

## MICRO PLASTICS MASSIVE PROBLEM

Plastics consistently make up 80% of all marine debris studied.<sup>24</sup> There may be now around 5.25 trillion macro and microplastic pieces floating in the open ocean, weighing up to 269,000 tonnes.<sup>25</sup>

17 Deposit Return Scheme, Marine Conservation Society, [online: [www.mcsuk.org](http://www.mcsuk.org)] Available at: <https://www.mcsuk.org/ocean-emergency/ocean-pollution/deposit-return-schemes/> [Accessed 13.07.2021]

18 Plastic Pollution- Facts and Figures, SAS, [online: [www.sas.org.uk](http://www.sas.org.uk)], Available at: <https://www.sas.org.uk/our-work/plastic-pollution/plastic-pollution-facts-figures/> [Accessed 13.07.2021]

19 Plastic Pollution- Facts and Figures, SAS, [online: [www.sas.org.uk](http://www.sas.org.uk)], Available at: <https://www.sas.org.uk/our-work/plastic-pollution/plastic-pollution-facts-figures/> [Accessed 13.07.2021]

20 Verschoor, A assisted by Herwijnen, R., Posthuma, C., Klesse, K., and Werner, S. (2017). Assessment document of land-based inputs of microplastics in the marine environment. Environmental Impact of Human Activities Series, [online: [www.ospar.org](http://www.ospar.org)] Publication 705/2017, Available at: <https://www.ospar.org/documents?v=38018> [Accessed: 27.06.2021].

21 What We Waste, April 2021, Reloop, [online: <https://www.reloopplatform.org/>] Available at: <https://www.reloopplatform.org/wp-content/uploads/2021/04/What-We-Waste-Reloop-Report-April-2021-1.pdf> [Accessed 13.07.2021]

22 Kelly, A., Lannuzel, D., Rodemann, T., Meiners, K.M., Auman, H.J., (May 2020), Microplastic contamination in east Antarctic sea ice, Marine Pollution Bulletin, [online: [www.sciencedirect.com](http://www.sciencedirect.com)] Volume 154, Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0025326X20302484?via%3Dihub> [Accessed: 27.06.2021]

23 Facts and figures on marine pollution, [online: [www.unesco.org](http://www.unesco.org)], Available at: <http://www.unesco.org/new/en/natural-sciences/ioc-oceans/focus-areas/rio-20-ocean/blueprint-for-the-future-we-want/marine-pollution/facts-and-figures-on-marine-pollution/> [Accessed: 27.06.2021]

24 "Close the Plastic Tap" Programme, [online: [www.iucn.org](http://www.iucn.org)], Available at: <https://www.iucn.org/theme/marine-and-polar/our-work/close-plastic-tap-programme> [Accessed: 27.06.2021]

25 Eriksen, M., Lebreton, C.M.L., Carson, H.S., Thiel, M., Moore, C.J., Borner, J.C., Galgani, F., Ryan, P.G., Reisser, J., (Dec 10, 2014), Plastic Pollution in the World's Oceans: More than 5 Trillion Plastic Pieces Weighing over 250,000 Tons Afloat at Sea, PLoS ONE [online: [journals.plos.org](http://journals.plos.org)], 9(12): e111913, Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0111913> [Accessed: 27.06.2021]

# REGION & AREA TRENDS

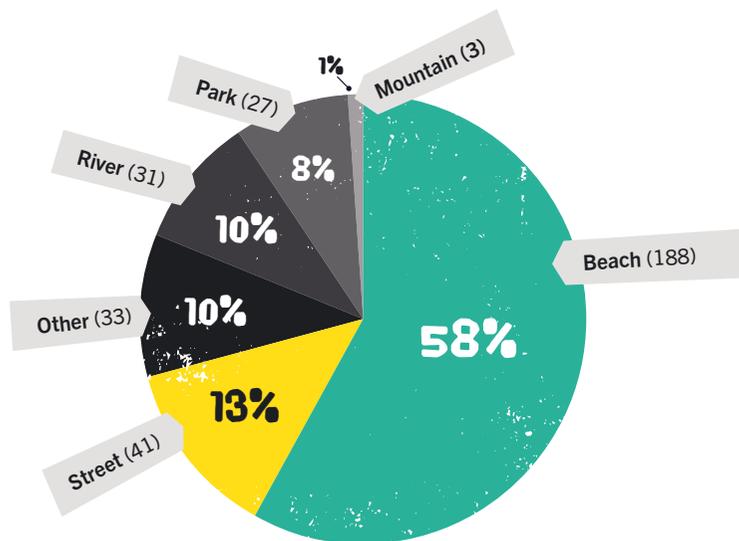


Across the UK, the quantity of pollution items collected per region increased, seemingly in line with the expected engaged audience for SAS, with the majority of items being submitted in the South West and South East regions of the UK.

Pollution data was collected from six location types including: Beaches, Mountains, Parks, Streets and Rivers. Beaches were the most commonly surveyed area. **Figure 22** shows the number of cleans at each location type and the number of items of pollution collected at each.

**FIGURE 22**

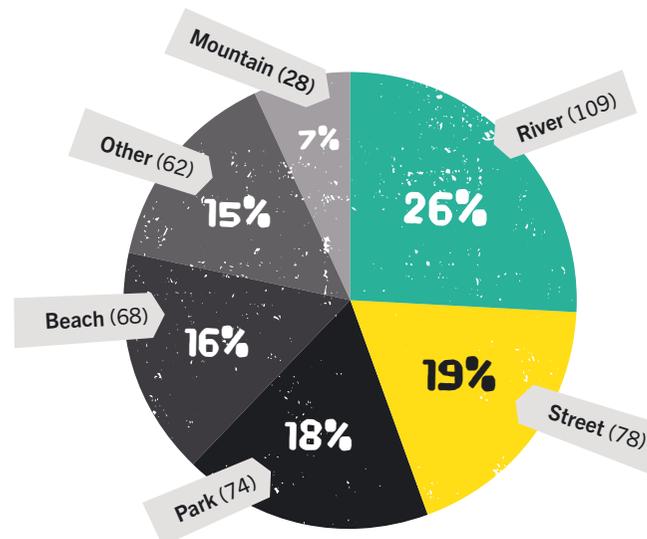
SHOWS THE NUMBER OF CLEANS AT EACH TYPE OF LOCATION



**Figure 23** shows that a significant proportion of polluting packaging is found on land at locations where items can be washed down stream or down drains to the sea.

**FIGURE 23**

SHOWS THE AVERAGE NUMBER OF ITEMS PER CLEAN ACROSS EACH LOCATION



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**ACTION  
 SPOTLIGHT**

**BURSTING BEACHES**

Restrictions placed on the UK population during lockdown resulted in 84% of us missing the beaches and oceans according to the SAS #GenerationSea Blueprint Survey.

It's not so surprising therefore to see that the recent easing of restrictions resulted in so many of us heading to the coastal environment. Unfortunately this has also served to highlight the devastation caused by pollution, evidenced by bins piled high with trash, strewn across beaches by wildlife and wild weather and further exposing the underlying nature of our disposable society. In many instances, even when we dispose of packaging and waste responsibly, waste and recycling systems simply can't cope with the staggering volumes of material, often leading to material escaping into the environment. We need deep rooted systemic change with collective responsibility of industry, government and the public.<sup>26</sup>

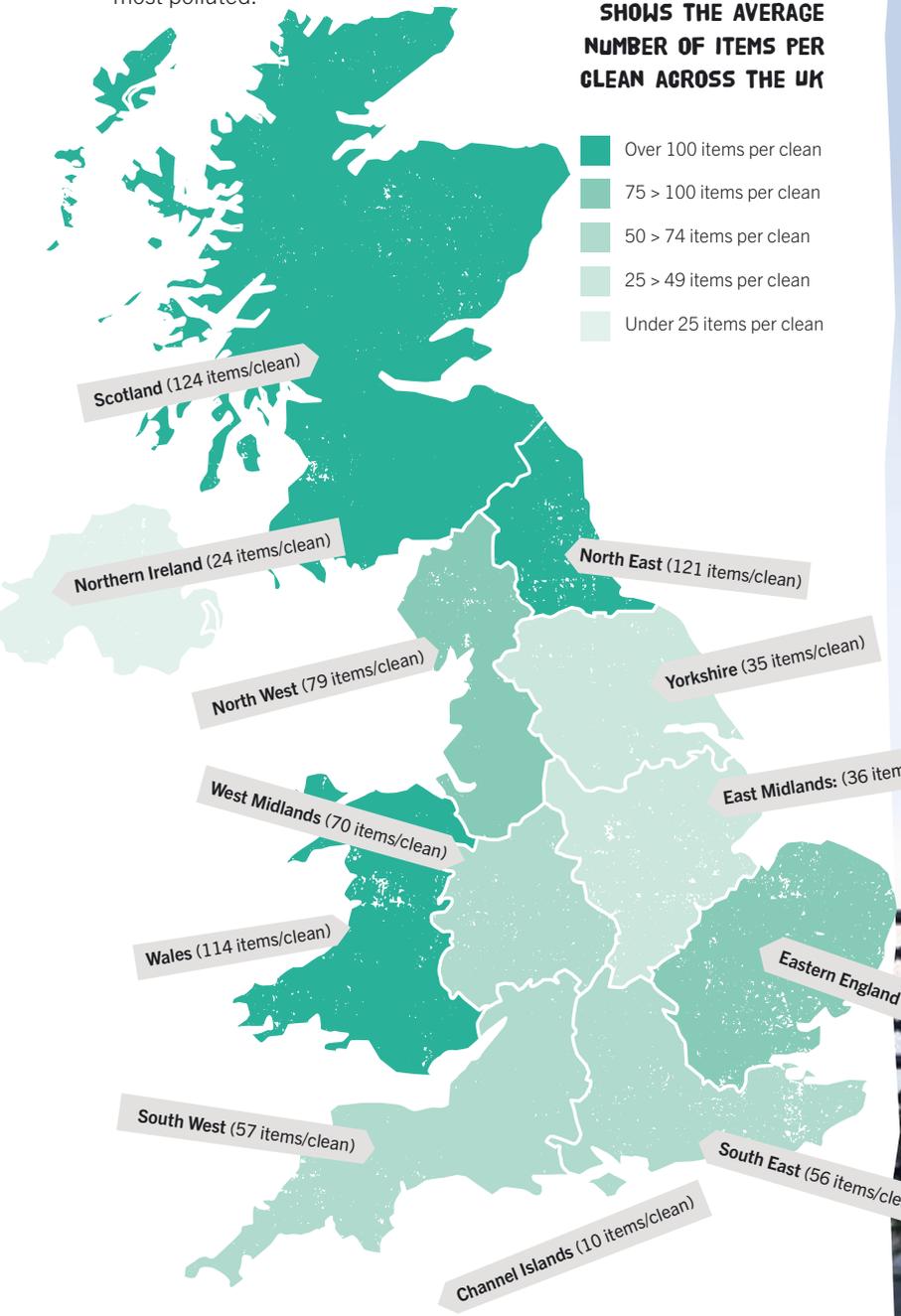


<sup>26</sup> Return To Offender Express Issue 01, (2020), SAS, [online: [www.sas.org.uk](http://www.sas.org.uk)], Available at: <https://www.sas.org.uk/wp-content/uploads/Return-To-Offender-Express-Issue-1-1.pdf> [Accessed 13.07.2021]

Figure 24 shows proportionally, per location, which location was most polluted.

**FIGURE 23  
 SHOWS THE AVERAGE  
 NUMBER OF ITEMS PER  
 CLEAN ACROSS THE UK**

- Over 100 items per clean
- 75 > 100 items per clean
- 50 > 74 items per clean
- 25 > 49 items per clean
- Under 25 items per clean



# THE CONCLUSION

The findings presented in this report clearly highlight the systemic problem the UK faces in regards to plastic and packaging pollution. Brands, wider businesses and the government are still not doing enough to reduce packaging, switch to reuse models and enable recycling. Research on more environmentally friendly alternatives to plastic and glass bottles is progressing rapidly for a range of beverage types. Seemingly the government and producers are simply struggling to keep up in the work to mitigate the environmental harm caused by such plastic pollution.

## TURNING OFF THE TAP

Despite the continued promises and commitments, we are still seeing staggering volumes of plastic and packaging pollution on beaches, rivers, streets and countryside. There is little change on the most polluting companies year on year with Coca-Cola and Pepsi-Co once again filling the top two spots on the Dirty Dozen leaderboard.

It is clear that the COVID-19 pandemic has had an impact this year with brands most associated with consumption of alcohol in outdoor recreational spaces particular influencing what is found in the environment. Whilst we have seen considerable attention on PPE in the last year, the evidence of this brand audit shows that, whilst an emerging pollution threat, by far the most plastic and packaging pollution is coming from big multinational companies. It is critical that the spotlight continue to shine a light on the pollution habits of companies and that the issue of newly visible polluting products isn't used to deflect this attention or assign blame to individuals alone.

## REFORMING OUR RECYCLING & WASTE SYSTEM

Our recycling and waste systems simply can't cope with the sheer scale of the pollution crisis we face and needs reform. The government has proposed a package of policies that, if designed well together, has the potential to overhaul how waste is managed.

In 2022, a tax will be introduced on all packaging that is not made of at least 30% recycled content. As has been highlighted in chapter 6, proposals are also being consulted on to introduce an extended producer responsibility scheme and implement a deposit return scheme (DRS) for drinks containers.

Alongside changes to create a more consistent collection system, these policies will fundamentally shift the burden of waste and its costs from the public to the companies who produce polluting products.

**THE FINDINGS OF THIS BRAND AUDIT SHOW THAT THE INTRODUCTION OF AN 'ALL-IN' DRS COULD HAVE A SIGNIFICANT IMPACT IN PREVENTING A CONSIDERABLE AMOUNT OF POLLUTION IN THE ENVIRONMENT.**

Of the items monitored from this year's dirty dozen, it is estimated that a massive 52% could be captured through a well designed 'all-in' DRS including a wide range of materials.



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## FOR THE NUMBER ONE POLLUTING COMPANY, COCA-COLA, RESPONSIBLE FOR 33% OF BRANDED ITEMS FOUND, OVER 80% OF ITS PRODUCTS COULD BE PREVENTED FROM POLLUTING THE ENVIRONMENT WITH THE INTRODUCTION OF AN 'ALL-IN' DRS.

In July 2021, it was announced that from September 2021, all of Coca-Cola's smaller plastic (PET) bottles made in Great Britain will contain 100% recycled content. Further comments on social media suggest that the company's goal is for 100% recycled or renewable content for bottles larger than 750ml too but can't do this without an 'all-in' DRS scheme as there is not enough locally available recycled plastic to achieve this.<sup>27</sup> An 'all-in' DRS is therefore absolutely essential in the shared ambition to establish a circular economy.

DRS have already proved successful in a number of countries in Europe with recycling rates of over 90% achieved in well-designed systems, a considerable improvement from the 70% recycling rate currently achieved for in scope items. On top of this, there is overwhelming and increased public support for an 'all-in' DRS scheme.

In 2018, 300,000 people signed Surfers Against Sewage's petition for the introduction of an all-in DRS Scheme in the UK. Scotland became the first devolved nation to commit to an 'all-in' DRS, including glass, which will come into force in July 2022. It is vital that the rest of the UK adopt a consistent Deposit Return Scheme in order to achieve the best environmental and economic impacts.<sup>28</sup>

<sup>27</sup> recycle-recover-reuse-an-update-on-our-ambition-for-a-sustainable-future, (2020), [online: [www.coca-cola.co.uk](http://www.coca-cola.co.uk)], Available at: <https://www.coca-cola.co.uk/sustainability/sustainability-in-great-britain/recycle-recover-reuse-an-update-on-our-ambition-for-a-sustainable-future> [Accessed 12.07.21].

<sup>28</sup> We Need an All-In Deposit Return Scheme Now, (2021), [online: [www.sas.org.uk](http://www.sas.org.uk)] Available at: <https://www.sas.org.uk/depositreturnscheme/> [Accessed: 11.07.21]



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**FURTHER DELAY TO THE INTRODUCTION OF AN EFFECTIVE 'ALL-IN' DRS TO 2024 WILL ONLY EXACERBATE THE PLASTIC POLLUTION CRISIS AND RESULT IN A FURTHER 56 BILLION CONTAINERS CHOKING THE PLANET.**



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## ADDRESSING UNBRANDED ITEMS

Unbranded items collected were a significant proportion of the pollutants across the locations identified as part of the Million Mile Clean flagship week, and at 63% of the total, exceeded the number of branded items found! Of the unbranded items, cigarette butts, miscellaneous plastic and bottles were found to be the most prolific, accounting for a massive 48% of unbranded pollution, with cigarette butts accounting for almost half of this, making tobacco products by far the biggest pollutant of unbranded items.

Cigarette butts are found across all beaches and public spaces, with many being washed down street drains into the rivers and oceans. Largely single-use plastic, the filters contain hundreds of toxic chemicals once smoked, persisting in the environment for many years, releasing chemicals to air, land and water and harming plant growth and wildlife.<sup>29</sup>

The Public Health Minister Jo Churchill acknowledged that although smoking rates were at an all time low, *“the environmental impact of smoking due to cigarette butt and package littering is still a major issue”*.<sup>30</sup>

**NEW RESEARCH PUBLISHED EARLIER THIS YEAR INDICATES THAT CLEANING UP CIGARETTE BUTTS CURRENTLY COSTS LOCAL AUTHORITIES IN THE UK AROUND £40 MILLION PER YEAR, RISING TO £46 MILLION WHEN INCLUDING THOSE DISPOSED OF IN PUBLIC BINS.<sup>31</sup>**

The Government has recently announced their intention to explore regulatory options to ensure that the tobacco industry takes financial responsibility for the toxic pollutants resulting from all tobacco products. Supported by the Department of Health and Social Care, Defra is actively exploring the suitability of regulatory options to reduce tobacco litter, working closely with stakeholders and ensuring that policies are developed in accordance with the World Health Organisation Framework Convention on Tobacco Control (FCTC) and its guidelines. No timeframe has yet been provided however, despite the moves to address this type of pollution.

<sup>29</sup> Tobacco industry to blame for polluted waterways and death of marine life, (1 May 2019), [online: <https://ash.org.uk/>], Available at: <https://ash.org.uk/media-and-news/blog/tobacco-polluted-waterways-marine-death/> [Accessed 13.07.2021]

<sup>30, 31</sup> Government explores next step to clean up tobacco litter in England- Press Release, DEFRA, Rebecca Pow MP and Jo Churchill MP, (30 March 2021), [online: [www.gov.uk](http://www.gov.uk)] Available at: [www.gov.uk/government-explores-next-steps-to-clean-up-tobacco-litter-in-england](http://www.gov.uk/government-explores-next-steps-to-clean-up-tobacco-litter-in-england) [Accessed: 13.07.2021]

In March this year, Ministers considered extending and legislating for the EPR schemes within the Environment Bill to force the tobacco industry to pay the full costs of disposal of their products or materials placed on the market, including the cigarette butts. Cigarette and tobacco product packaging should be covered by the reforms to the packaging producer responsibility scheme, which are currently open for consultation.<sup>32</sup>

Other unbranded items receiving considerable attention over the last 18 months due to the COVID-19 pandemic fell under the PPE product type, although surprisingly this accounted for only 2.5% of all pollution monitored through this year’s brand audit. Clearly an increase in this pollutant is an emerging threat but it remains key that this should not distract from the significant amount of pollution caused by companies and their brands.

## WHAT NEEDS TO CHANGE?

This year’s brand audit shows little change in the companies and brands responsible for the main items found consistently polluting over the past few years. It is crucial that a key focus remains on the meaningful reduction of packaging in addition to the continued adoption of reuse and refill models. This requires companies to adopt different business models that reduce the plastic and packaging, focusing on a model of refill and reuse. Government also needs to adopt policies that actually prevent pollution from entering the ocean including the introduction of an ‘all-in’ DRS now, that captures all sizes of container in a wide range of materials. Continued delay to the introduction of an effective ‘all-in’ DRS to 2024 will only further exacerbate the plastic and packaging pollution crisis and result in a further 56 billion containers including plastic bottles, metal cans and drink cartons choking the planet. It’s not too late to prevent this if the government acts now.

**THE PLASTIC AND PACKAGING POLLUTION CRISIS STILL NEEDS AMBITIOUS, URGENT AND FASTER ACTION.**

<sup>32</sup> Landmark Reforms to Boost Recycling and Fight Plastic Pollution - Press Release, DEFRA, The Rt Hon George Eustice MP and Rebecca Pow MP, (24th March 2021). [online: [www.gov.uk](http://www.gov.uk)], Available at: <https://www.gov.uk/government/news/landmark-reforms-to-boost-recycling-and-fight-plastic-pollution> [Accessed: 13.07.2021]



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# OUR AMBITION IS TO END PLASTIC POLLUTION ON UK BEACHES BY 2030



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# WE ARE CALLING FOR

## LEGISLATION THAT ENDS THE PRODUCTION AND CONSUMPTION OF NON-ESSENTIAL SINGLE-USE AND POLLUTING PLASTICS

We need an overarching policy and legally binding targets for the elimination of plastic pollution (in all its forms) and to bring about an end to the manufacture, sale and use of non-essential single-use, throwaway and polluting products.

We need ambitious and consistent bans across the UK on all non-essential single-use products, not just plastics, and progressive taxes and charges for those items where alternatives are not currently available.

We must end subsidies to fossil fuel and petro-chemical companies which are responsible for the systemic over-production of plastics. Instead, as we build back better from the Covid-19 crisis, government needs to incentivise green industries which develop sustainable alternatives to single-use, throwaway and polluting plastics.

## BUSINESS MODELS THAT ARE FOCUSED ON REDUCTION & REUSE

We need businesses that produce products which are fundamentally designed to be reused, repaired and eventually effectively recycled.

We need businesses, large and small, to collaborate with government and each other to adopt consistent policies that create a level playing field and ultimately reduce waste and pollution across industries.

## LEGISLATION THAT ENSURES EFFECTIVE RESOURCE USE AND WASTE MANAGEMENT

We need to develop a circular economy which designs out waste and pollution, keeping products and materials in use and actively regenerates natural systems.

We need a UK wide 'all-in' Deposit Return Scheme (DRS) focused around the principals of reduction, reuse and refill by 2023.

We need an Extended Producer Responsibility scheme (EPR) that fully embraces 'Polluter Pays' principles, covering the full environmental cost of a product throughout its life cycle, from resource extraction to recycling and incentivising business to design products for reuse and repair.

We need to end the offshoring of the UKs domestic waste and develop and invest in domestic systems which keeps this material in the loop.

## CULTURAL CHANGE ACROSS SOCIETY

We need to encourage a shift in narrative that recognises that 'traditional recycling models' don't present the solution to the plastic pollution crisis. We must instead focus on reduction and alternative systems.

We need to educate wider society that plastic pollution is a symptom of our wider unsustainable consumer culture. All forms of single-use products and packaging contribute to this crisis.

Communities and individuals should be encouraged and empowered to reduce their plastic and waste footprints.



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**THANK YOU**



**VOLUNTEERS**



**2021 CITIZEN SCIENCE**



**BRAND AUDIT**





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COMPANY REGISTERED NUMBER: 02920815 | CHARITY REGISTERED NUMBER: 1145877

