



2022 CITIZEN SCIENCE

BRAND AUDIT

EXECUTIVE SUMMARY

EVERY YEAR, 12 MILLION TONNES OF PLASTIC ENTER THE OCEAN.

As an island nation with 7,700 miles of coastline and over 7,000 miles of inland waterways, industry and government has a moral and legal obligation to ensure the ocean is protected from pollution.

THE OCEAN IS FILLING UP WITH PLASTIC

Plastic and packaging pollution have been found in the deepest parts of the ocean, as far away as the Antarctic and across the UK's beaches.

Birds, whales and turtles are killed when they mistake pollutants for food or when they get tangled in packaging. Pollution can also carry toxic chemicals, pathogens and invasive species across the ocean and into isolated and pristine marine habitats, harming wildlife.

Microplastics and microfibres from pollutants get broken up by the waves enter the ocean food chain, causing unknown impact on wildlife and human health.

Through the Million Mile Clean campaign, a national network of ocean activists have mobilised to take action and demand change from industry and government. Practices and legislation must be focused on reduction, reuse and refill.

Our campaign provides groundbreaking data for this national brand audit, a crucial citizen science programme to drive this change.

SO WHY IS THIS HAPPENING?

The root cause of plastic pollution is the systemic over-production and over-consumption of non-essential, single use, throw away items, including plastics.

There are a multitude of reasons why pollution was found across the areas cleaned, from deliberate or accidental littering, to overflowing bins and even strong winds.

Our research found that the majority of this litter came from just a handful of the world's largest companies. With their massive resources and influence, they have real power to positively change consumer behaviour to stamp out this excessive and often unnecessary production and pollution of plastic.

The UK has seen lots of positive changes implemented in recent years to stamp out many single use plastic items such as straws and plastic bags, but there is more that must be done. The following report discovers what pollution was recorded across the UK this year, where it originated from, and discusses what can be done to see these figures drop next year and beyond...

Join us to **#RETURNTOOFFENDER**



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**THIS YEAR, 12 GLOBAL ORGANISATIONS
ACCOUNTED FOR OVER 70%
OF ALL BRANDED POLLUTION FOUND**

Together we recorded 10,843 items of branded packaging pollution across beaches, mountains, rivers, streets, woodlands and green spaces.

Our findings show that over 70% of these items come from some of the world's most powerful, profitable and influential companies.

WE CALL THEM THE "DIRTY DOZEN"

It's time for these global companies to step up and take responsibility for the pollution they are putting into the environment and help positively influence consumer behaviour.

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02 INTRODUCTION



INTRODUCTION

CITIZEN SCIENCE OVERVIEW

The following report analyses the data for items collected at hundreds of locations across the UK, by volunteers on behalf of Surfers Against Sewage (SAS) during the Million Mile Clean. The Million Mile Clean runs year-round, supporting a mass brand audit data collection as part of SAS's programme of citizen science research. This year's data was recorded between the 15th of June 2021 up until the 5th of June 2022.

Our analysis covers two levels of branding:

**PRODUCT
BRAND**



**PARENT COMPANY
OWNING THE BRAND**

All products are categorised into product-type, enabling us to classify all pollution recorded.

Using this data, we are able to call out the top 12 parent companies who are at the source of the pollution chain, AKA the Dirty Dozen, exploring how their brands contribute towards this pollution.

AREAS SURVEYED

The Million Mile Clean marks the UK's biggest coordinated clean event, with over 3,796 volunteers participating in 563 cleans across 13,047 miles in a year.

As part of this, Brand Audit data came from local beaches, mountains, streets, woodlands, green spaces, rivers and other public recreational spaces across the UK.

▲ mountains ▲ woodland ▲ streets ✕ other 🌊 rivers 🌊 beaches 🌳 green space



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WHO ARE THE DIRTY DOZEN?

A BRAND OR A PARENT COMPANY?

Many of the brands submitted through the brand audit were owned by larger conglomerates with broad brand portfolios. We are referring to these as 'Parent Companies'. These companies have a direct control over the operations of its subsidiaries, and their sheer scale and dominance in the marketplace means they are in a position of great power to change the way the industry operates as well as influence consumer behavior.

WHO ARE THE DIRTY DOZEN?

WE ARE NAMING THE 12 PARENT COMPANIES, RESPONSIBLE FOR THE HIGHEST AMOUNT OF PACKAGING POLLUTION RECORDED, THE 'DIRTY DOZEN'.

This year, they were responsible for 70% of all branded pollution collected, an increase from 65% last year. Breaking this down further revealed that the top three most polluting companies were responsible for 38% of all branded pollution found, increasing again from 33% last year.

MEET THIS YEAR'S DIRTY DOZEN

The following shows the top 12 most polluting parent companies during each year in which we have performed the brand audit.

- #1 **THE Coca-Cola COMPANY**
2,137 items
- #2 **PEPSICO**
1,103 items
- #3 **McDonald's**
927 items
- #4 **ABInBev**
725 items
- #5 **Mondelēz International**
599 items
- #6 **Nestlé**
367 items
- #7 **TESCO PLC**
351 items
- #8 **Red Bull**
297 items
- #9 **SUNTORY**
278 items
- #10 **Carlsberg Group**
251 items
- #11 **HEINEKEN**
247 items
- #12 **MARS**
229 items

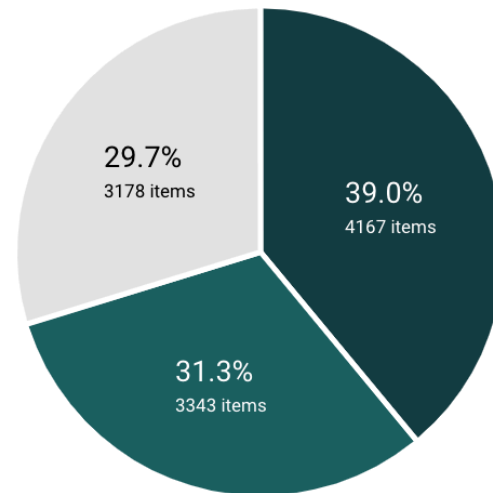
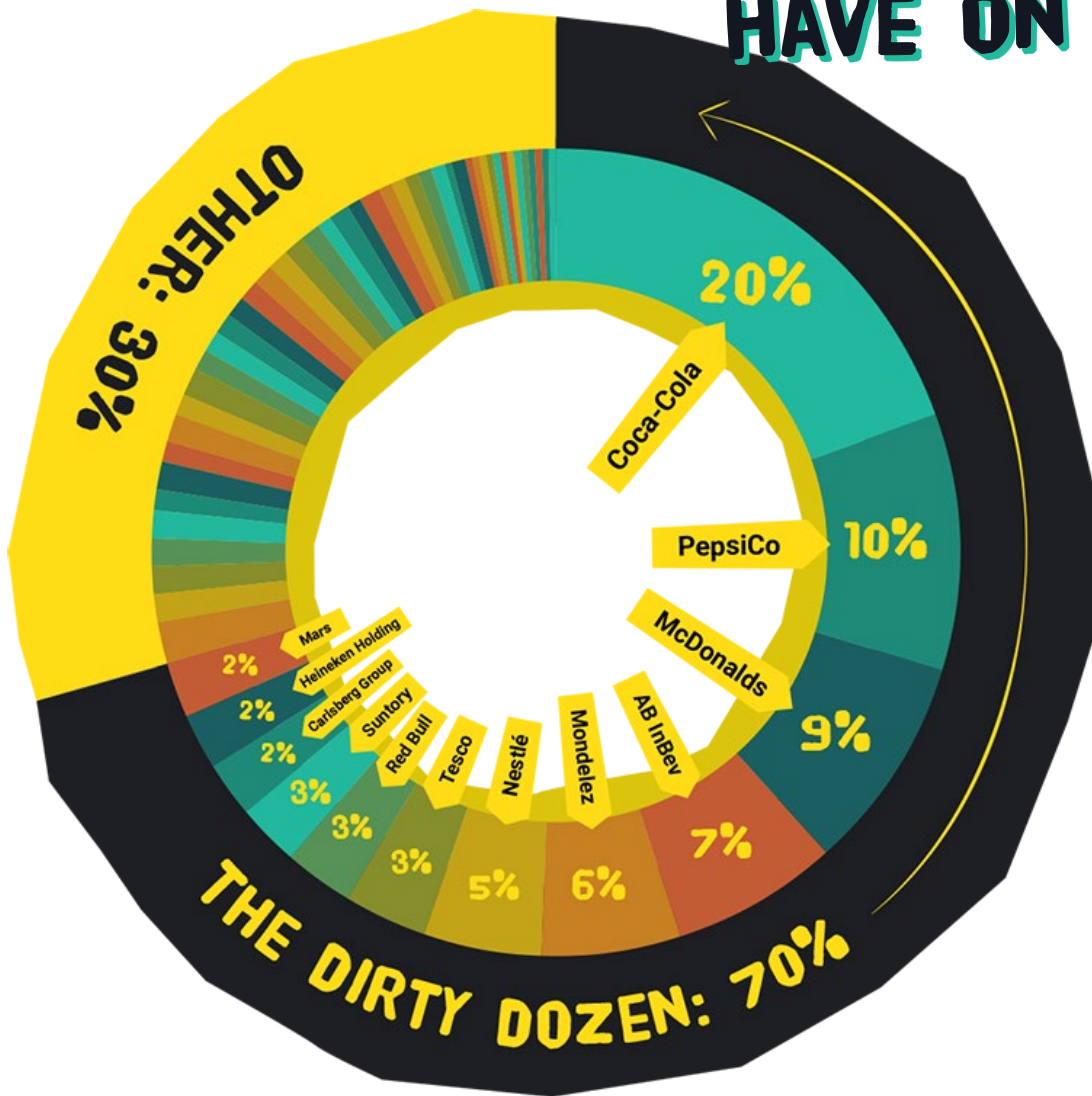


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THE IMPACT THE DIRTY DOZEN HAVE ON POLLUTION



- Top 3 Dirty Dozen parent companies: Coca-Cola, PepsiCo & McDonalds
- Remaining 9 of the Dirty Dozen parent companies
- All other brands



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WHAT ARE THEY DOING ABOUT IT?

The Dirty Dozen have published the following policy targets. We have assessed them in line with our priorities of refill and reduction along with appropriate timescales.

COCA COLA

- 100% of packaging to be recyclable by 2025.
- At least 50% recycled material in all products by 2030.
- At least 25% of all beverages worldwide by volume sold in refillable/returnable glass or plastic bottles or in fountain dispensers with reusable packaging by 2030.
- Collect and recycle a bottle for each one sold by 2030.
- Bring people together to support a healthy, debris free environment.



<https://www.coca-colacompany.com/reports/world-without-waste-2021>

PEPSICO

- 100% of packaging recyclable, compostable or biodegradable by 2025 globally.
- 100% of bottles made from recycled plastic in the UK by 2022 along with 8 other EU countries.
- Globally, recycled content to increase to 25% of packaging by 2025.
- Reduce 35% of virgin plastic content across beverage portfolio by 2025.
- Invest to increase recycling rates in key markets by 2025



<https://www.pepsico.com/our-impact/sustainability/2021-esg-summary/pepsico-positive-pillars/positive-choices>



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MC DONALDS

- Customer packaging made from renewable, recycled or certified sources and designed to be recyclable or compostable by 2024.
- By 2027, waste collected from restaurants given a second life by recycling, reusing or composting.
- By 2030, reduce the amount of material used across customer packaging and kitchen areas by 20% versus 2020.
- Currently trialling a reusable cup scheme allowing cups purchased with a deposit to be more readily recycled.

STOP CLOWNING AROUND MCDONALDS. YOUR PRODUCTS ARE CURRENTLY **NOT EVEN RECYCLABLE.** PUT AN END TO THIS CIRCUS. **THE WORLD DOESN'T HAVE TIME TO WAIT.**

<https://www.mcdonalds.com/gb/en-gb/our-plan-for-change.html>

MONDELEZ

- Achieve net zero waste by 2025.
- Support the development of a circular pack economy by 2050.
- 5% recycled plastic by 2025, currently 0.5%.
- 5% reduction in virgin plastic by 2025.
- 25% reduction in rigid virgin plastic by 2025, currently 4%.
- 100% of packaging designed to be recyclable by 2025, currently 95%.

LIKE THE **FOSSIL FUELS** YOU WASTE, YOUR STRATEGY IS PREHISTORIC. **THE PUBLIC DEMANDS BETTER.**

<https://www.mondelezinternational.com/Snacking-Made-Right/Packaging-Innovation>

AB INBEV

- 100% of packaging either returnable or made from majority recycled content by 2025.
- Currently 35% of volume is sold in returnable glass bottles.
- In 2020, entire beer portfolio made plastic-ring free, eliminating 850 tons of plastic waste.
- Ongoing decrease in the use of plastic shrink wrap.

WE ARE INTERESTED IN WHAT YOU MEAN BY YOUR PRODUCTS BEING RETURNABLE... **DO YOU JUST MEAN RECYCLABLE?**

<https://www.ab-inbev.com/sustainability/circular-packaging/>

NESTLÉ

- 3.8 million tonnes of total packaging materials in 2021, down from 4.5 million tonnes in 2020.
- 39.5% of packaging made from recycled and/or renewable materials.
- 100% recyclable or reusable packaging by 2025.
- Five pillars established, based around less and better packaging and systems.
- Reduce use of plastic packaging material, including less virgin plastic.
- Scale reusable and refillable systems.

IT APPEARS YOUR PACKAGING STRATEGY IS TO HAVE **NO STRATEGY.** GREENWASH WILL NOT WORK. **THE PUBLIC DEMAND TANGIBLE ACTION.**

<https://www.nestle.com/sustainability/waste-reduction/packaging-strategy>



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TESCO

- Remove hardest-to-recycle plastics from packaging by 2019 for tesco products: make all own brand products in fully recyclable packaging and work with other brands to do the same.
- Removed 1.6bn pieces of plastic (1,200 tonnes) from the business in 2021/22.
- Installed soft plastic recycling points in all large stores.
- Currently 24% of plastic packaging is made of recycled content.
- All packaging to be 100% recyclable by 2025 (currently 87%).
- Partner with Loop to deliver products only in reusable packaging and extending to 10 tesco stores.

WE LOVE THAT YOU'VE **REMOVED LOTS OF PACKAGING** BUT IT FEELS LIKE RECYCLING IS THE ONLY TANGIBLE GOAL IN YOUR STRATEGY WHEN IT SHOULD BE A LAST RESORT.

WHY NOT ROLL OUT REFILL MODELS TO ALL YOUR STORES?

<https://www.tescopl.com/media/759064/packaging-factsheet.pdf>

REDBULL

- Uses 100% recyclable material for packaging.
- Signed on to the Unesda Circular Packaging Vision 2030 but no action currently evident related to this.

ARE YOU COMPLETELY WINGING IT? YOU APPEAR TO HAVE **NO PLANS TO REDUCE YOUR PACKAGING.**

CLEAN UP YOUR ACT.

<https://www.redbull.com/gb-en/energydrink/red-bull-can-lifecycle#production>

SUNTORY

- Make all bottles currently made from plastic from recycled or plant-based material by 2030 to achieve zero use of virgin plastic. Currently 12% of packaging made from recycled or plant based material.
- Reduce materials used by changing design of packaging and look for alternatives.
- Invest in innovation for materials and processes that improve recycling rates and minimise environmental impact.
- Promote activities that change consumer behaviour.
- Employees to change lifestyle, promote sorting and collection, and make social contributions such as river and beach cleans.

HEY, SUNTORY, HOW ABOUT LOOKING AT PROMOTING **REFILL AND REUSE** RATHER THAN FOCUSING ON RECYCLING AND RECYCLED CONTENT?

MORE PROGRESSIVE THINKING PLEASE.

<https://www.suntory.com/csr/themes/package/>

CARLSBERG GROUP

- No public strategy available.
- Use less material overall and introduce more recycled or renewable content where feasible.
- Case studies available in select areas for reduced packaging initiatives, i.e. shift away from plastic rings or shrink wrap to glue dots to hold cans together, available in 9 markets.

HELLO, ARE YOU THERE? THE PUBLIC DEMANDS **A PACKAGING REDUCTION PLAN OF ACTION.**

WHERE IS IT?

<https://www.carlsberggroup.com/media/48860/carlsberg-group-esg-report-2021.pdf>



HEINEKEN HOLDING

- No public strategy, packaging is currently part of Carbon emissions strategy.
- Replaced plastic rings to hold cans together with cardboard, saving 500 tonnes of plastic a year.



<https://www.theheinekencompany.com/sites/theheinekencompany/files/Downloads/PDF/AR-2021/heineken-nv-annual-report-2021-25-02-2022.pdf>

MARS

- Top 300 executives have remuneration linked to delivering against company packaging targets.
- 100% of packaging reusable, recyclable or compostable.
- Reduce new “virgin” plastic by 25%.
- Incorporate 30% recycled content into plastic packaging.
- 44% of their portfolio is recyclable with the right infrastructure.
- Eliminated 99% of PVC from packaging.
- Redesign 12,000 packaging components across portfolio to make it easier for consumers to reuse or recycle packaging- ongoing. Employees to change lifestyle, promote sorting and collection, and make social contributions such as river and beach cleans.



<https://www.mars.com/sustainability-plan/healthy-planet/sustainable-packaging>



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OVERVIEW

This year, 10,843 items of packaging pollution were collected, recorded and identified as belonging to specific brands.

The 2022 Brand Audit results recorded packaging pollution from 264 unique brands, and most shockingly, **JUST 12 BRANDS ACCOUNTED FOR OVER 50% OF BRANDED POLLUTION COLLECTED.**

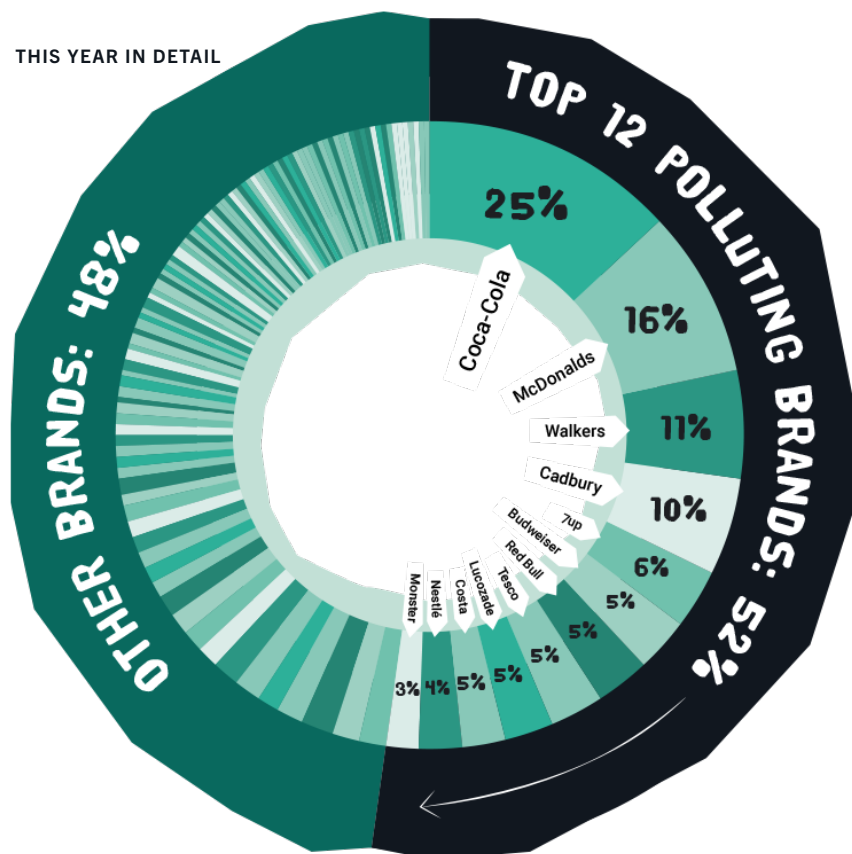
The most polluting brand was identified as **COCA-COLA**, whose items were identified five times more often than most of the other top polluting brands.

The following table shows the top 12 most polluting brands during each year in which we have performed the brand audit. The arrows depict each brand's change in position from the previous year.

THE TOP 12 MOST POLLUTING BRANDS

1	Coca-Cola	1427	=	7	Red Bull	297	↑
2	McDonalds	927	↑	8	Tesco	297	↓
3	Walkers	604	↓	9	Lucozade	261	↓
4	Cadbury	555	=	10	Costa Coffee	259	↓
5	7Up	331	↑	11	Nestle	228	↑
6	Budweiser	309	↑	12	Monster	177	↑

THIS YEAR IN DETAIL



COCA-COLA REMAINS THE HIGHEST POLLUTING BRAND

Coca Cola was found to be the most prevalent brand in pollution packaging for the third year in a row. The remaining top spaces are occupied by fast food and snack food brands. Despite pub and bars being open as usual, Budweiser was found to be more prevalent as packaging pollution, moving from 8th to 6th position.















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BRAND PREVALANCE ACROSS THE UK

-  Coca-Cola
-  McDonalds
-  Walkers
-  cadbury
-  7Up
-  Budweiser
-  Red Bull
-  Tesco
-  Lucozade
-  Costa Coffee
-  Nestle
-  Monster



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05 WHAT'S HAPPENING WITH DRS?

CURRENT STATUS:

There has been little progress by the UK Government since commitments were made to introduce DRS in 2018. Even the UK's first Deposit Return Scheme in Scotland has been delayed until 2023. Meanwhile billions of items of packaging pollution are still entering the ocean and impacting the environment and human health.

Live updates: consult.defra.gov.uk/environment/consultation-on-introducing-a-drs/

DELAYED



WHAT IS THE 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 a 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 your deposit back on its 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.

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.

The UK Environment Act became law in 2021, and it acts as the UK's new framework for environmental protection, including powers to implement a Deposit Return Scheme.

WHAT POLLUTION DOES THE DRS INCLUDE?

This scheme originally proposed to include Polyethylene Terephthalate (PET) plastic bottles, glass bottles, and steel and aluminium cans, but recent announcements indicate glass may, frustratingly, be excluded, despite the Conservatives Party manifesto promise for glass to be included.

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. Including glass will also hugely reduce the CO2 emissions associated with producing and recycling it.

The scope of a DRS in England and Wales is still under consideration. It is yet to be decided whether drinks containers of all sizes would be included (an "all-in" scheme) or just limited to drinks containers less than 750ml (an "on-the-go" scheme).



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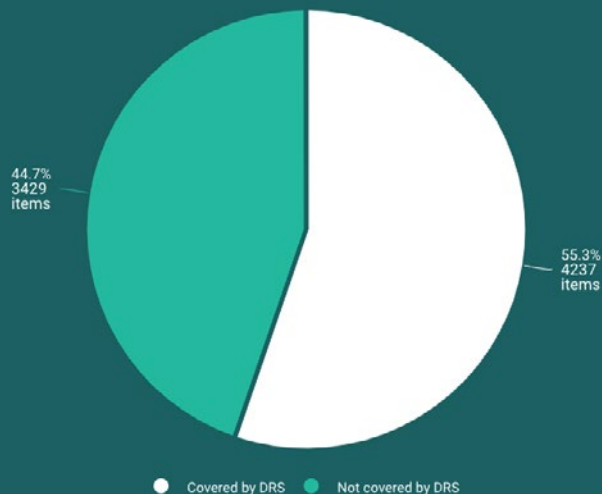


WHAT WOULD THIS MEAN PACKAGING POLLUTION ACROSS THE UK?

We categorised brands into product categories to assess the likely impact that an 'all-in' DRS would have on the prevention of packaging pollution entering the environment.

Data collected from the audit showed high levels of packaging pollution in the UK in the food and drinks packaging category, with significant numbers eligible for the proposed 'all-in' Deposit Return Scheme (DRS) in England, Wales and Northern Ireland. This scheme looks to include Polyethylene Terephthalate (PET) plastic bottles and steel and aluminium cans of all sizes.

NUMBER OF ITEMS ESTIMATED TO BE COVERED BY DRS



The evidence collected through the brand audit strongly supports an 'all-in' scheme. Our analysis suggests that over 5,342 items of packaging pollution, equating to almost 50% of items collected, could have been captured with an 'all-in' DRS in place. This demonstrates a huge opportunity for reducing packaging pollution and increasing recycling rates.

Every year since the government's commitment, 8 billion containers including plastic bottles, metal cans and drink cartons have ended up polluting the environment, that's 32 Billion containers. By 2024, that will mean a massive 56 billion EXTRA containers chocking the planet THAT COULD HAVE BEEN PREVENTED. This can still be prevented though if the government deliver on their promise of an effective all-in Deposit Return Scheme.

The primary aims of a proposed Deposit Return Scheme, outlined by Defra in the second consultation dated March 2021, are summarised as follows:



REDUCING THE AMOUNT OF IN-SCOPE PACKAGING ENDING UP AS POLLUTANTS IN THE ENVIRONMENT



INCREASING RECYCLING LEVELS FOR IN-SCOPE 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.



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WHAT'S BEING DONE?

The UK Government for England, the Welsh Government and the Department of Agriculture, Environment and Rural Affairs in Northern Ireland launched a consultation in March 2021 requesting input as to how the Deposit Return Scheme could work. Almost 1.5 years later, we are still waiting for a response. In Scotland we have seen a plethora of delays. Originally due to be implemented in April 2022, the Scottish Government have now committed to introducing the UK's first Deposit Return Scheme in August 2023.

Meanwhile tons of plastic pollution is still entering the ocean and impacting the environment and human health.

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.

TAKE ACTION NOW: EMAIL YOUR MP

<https://www.sas.org.uk/depositreturnscheme/>

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06 POLLUTION FROM UNIDENTIFIED BRANDS

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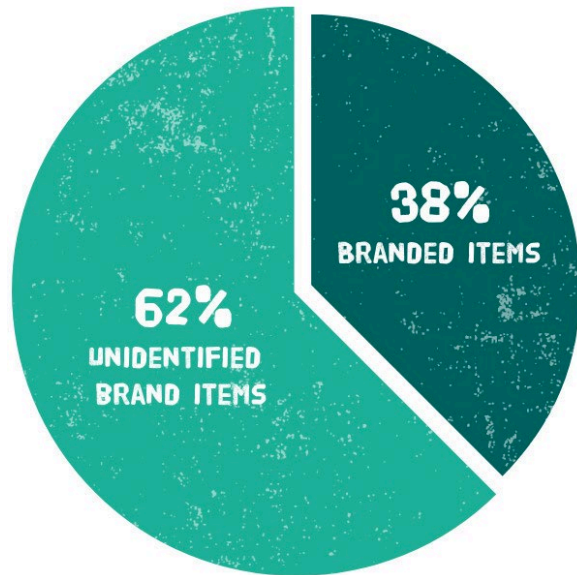
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OVERVIEW

Many of the items of pollution collected could not be identified as a brand, either because the logo or label had been removed, washed away, was too small to see, or it wasn't present on the item collected. Cigarette butts, bottles and pieces of plastic accounted for the majority of these items.

These items made up a significant proportion of the packaging pollution recorded overall, amounting to a staggering 17,884 items, but it is important to note that these all originally belonged to a brand.

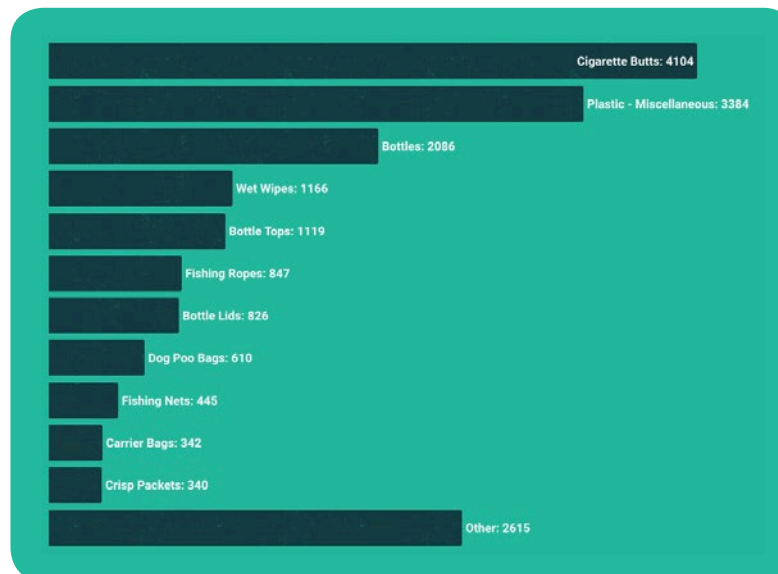


TYPES OF ITEMS

Our Brand Audit Citizen Scientists were able to record all of the unbranded items of pollution found from an existing set of commonly found items. Where an item was not available to choose, they could manually enter a description.

Cigarette butts, miscellaneous plastic and bottles were found in abundance across the UK, with cigarette butts accounting for over 20% of all unbranded pollution found. Miscellaneous plastic was the second most prevalent unbranded item, which varied in size greatly and would have likely come from a huge variety of sources. The following table shows the unbranded items found, and how these levels and trends have varied across previous years.

UNBRANDED POLLUTION PERCENTAGES FOR 2022



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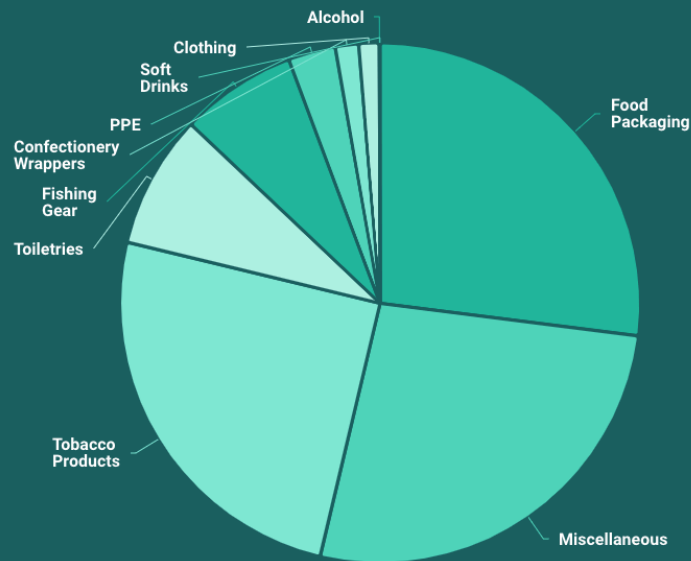
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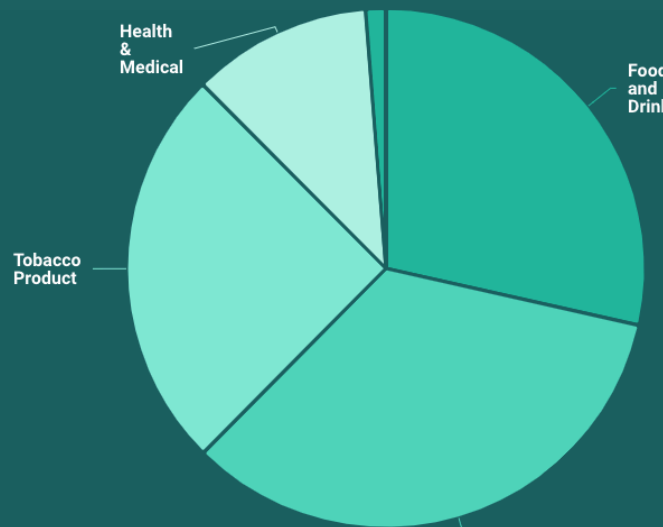
CATEGORIES OF POLLUTION

Each item was grouped into the same set of categories as branded pollution to better understand the prevalence of certain pollutants across the UK. We then grouped these further into high level parent categories; food & drink, health & medical, tobacco, miscellaneous, store brands and clothing brands.

CATEGORIES OF UNIDENTIFIABLE POLLUTION



PARENT CATEGORIES OF UNIDENTIFIABLE POLLUTION



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07 TOBACCO POLLUTION

CURRENT STATUS:

Defra, supported by the Department of Health and Social Care, is still exploring the suitability of regulatory options to reduce tobacco pollution, 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. A timeframe has still not yet been provided, despite the moves to address this type of pollution.

Live updates: www.gov.uk/government/publications/environment-bill-2020

STILL IN PROGRESS



WHY DOES TOBACCO POLLUTION REMAIN A PROBLEM?

Cigarette filters or “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.

The World Health Organisation (WHO) reports that globally, tobacco waste is the largest type of pollution by count. A 2017 environmental report by the WHO found that cigarette butts make up the majority of plastic waste in the world, with around 4.5 trillion individual butts polluting our global environment.

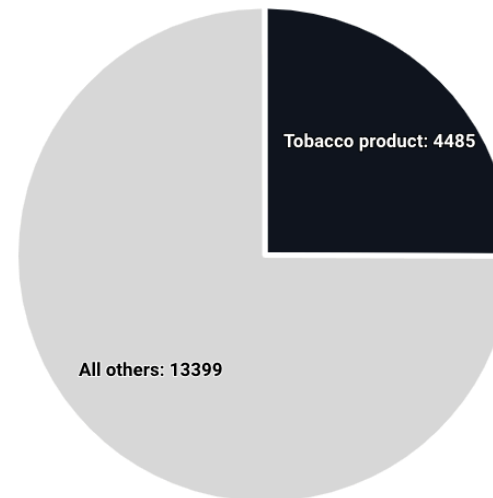
Our research reflects this trend by the fact that cigarette butts accounted for 25% of items across all submitted clean data, and this figure has increased year on year.

The costs of cleaning up littered tobacco products fall on taxpayers, rather than the industry, creating the problem. Each year, this costs China roughly US\$ 2.6 billion and India roughly US\$ 766 million. The cost for Brazil and Germany comes in at over US\$ 200 million. In the UK, cigarette butt clean up costs local authorities around £40 million per year, rising to £46 million when including those disposed of in public bins.

Conservative MP Jo Churchill, who previously served as Public Health Minister and Minister in Defra, acknowledged that although smoking rates were at an all time low, “the environmental impact of smoking due to cigarette butt and package pollution is still a major issue”.

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 pollution and another one in ten believe they are biodegradable.

NUMBER OF TOBACCO RELATED ITEMS RECORDED



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WHY DOES TOBACCO POLLUTION REMAIN A PROBLEM?



Multiple toxic components contained in cigarette butts make them hazardous waste and harmful.

CIGARETTE BUTTS ARE PRIMARILY PLASTIC.

They are made of cellulose acetate, a man-made plastic material, and contain hundreds of toxic chemicals. The cigarette filters (the plastic part of butts), can take years to degrade and, even as they do, they break down into tiny pieces of plastic, called microplastics, which are hazardous in waterways and oceans.

The chemicals released remain in the environment for many more years with lingering toxins including arsenic (also used in rat poisoning), lead (a poison that can affect the brain development of children) and nicotine.

What about e-cigarettes?

E-cigarette use has skyrocketed in recent years. These tend to be made up of the cartridge or pod that holds the “e-juice” solution, a heating element, a battery, and a mouthpiece. Pods are replaceable but the single use plastic and circuitry go straight into the bin or onto



the streets. The mix of electronic components and nicotine puts them in a grey area for disposal and currently is not regulated. We do not yet understand the full effects of e-cigarette waste on the environment.



STUDIES HAVE SHOWN THAT IN A WATERWAY ONE CIGARETTE BUTT PER LITRE OF WATER KILLS HALF THE FISH.

Source: [National Geographic](#)

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HOW DO THEY GET INTO THE OCEAN?

Around the world smokers buy roughly 6.5 trillion cigarettes per year or 18 billion per day. Most of a cigarette's tobacco and paper wrapping disintegrates when smoked, but trillions of cigarette butts are left over, with only an estimated third being put into a bin.

The rest of these toxic plastic butts are improperly disposed of onto the streets, routinely washing down the drains into waterways, and eventually oceans.

Slowly leaching toxins into the environment and turning into microplastic pollution, these present a serious threat to humans, wildlife and natural habitats.

Cigarette butts are now commonly found inside dead sea birds, sea turtles, fish and dolphins who mistake them for morsels of food. What gets thrown onto the streets ends up in the Ocean.



IF THESE CONTAMINATED FISH ARE CONSUMED THEY CAN AFFECT HUMAN HEALTH.



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WHAT NOW?

The Government is STILL exploring regulatory options for the tobacco industry to take financial responsibility for toxic pollutants from all tobacco products. This includes the reduction of tobacco pollution and developing policies in accordance with the World Health Organisation Framework Convention on Tobacco Control (FCTC) and its guidelines. A timeframe has still not yet been provided however, despite the moves to address this type of pollution.

What could this mean in England?

Tobacco companies may have to pay for the pollution created by cigarettes under plans being explored by ministers to protect the environment and save local councils money.

Among the options being looked at by Ministers is a regulatory extended producer responsibility (EPR) scheme for cigarette butts in England, a new power currently being legislated for in the Environment Act. This would require the tobacco industry to pay the full disposal costs of tobacco waste products, ensuring the sector takes sufficient financial responsibility for the pollution its products create.

What's happening in the rest of Europe?

The Single-Use Plastic Directive¹ covers tobacco with plastic filters, requiring Member States to establish Extended Producer Responsibility schemes. This ensures that producers of tobacco products with plastic filters cover the costs of awareness raising measures, pollution clean up, data gathering and reporting, and the costs of waste collection for those products discarded in public collection systems.

Wider society needs to support practices that ensure cigarette butts find their way to the waste bin or sent to a recycling facility. Smokers should consider finding designated smoking areas or carrying their own "pocket ashtrays" to collect their waste.

What does the WHO Recommend?

Despite tobacco industry marketing, there is no evidence that filters have any proven health benefits. The WHO is calling on policy-makers to treat cigarette filters as what they are, single use plastics, and consider banning cigarette filters to protect public health and the environment.

The WHO is urging countries and cities to implement a Polluters Pay Principle, as well as give support to tobacco farmers to switch to sustainable crops, implement strong tobacco taxes (that could also include an environmental tax) and offer support services to help people quit tobacco.

1 Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (Text with EEA relevance), OJ L 155, 12.6.2019, p. 11-19



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08 CATEGORIES OF POLLUTION

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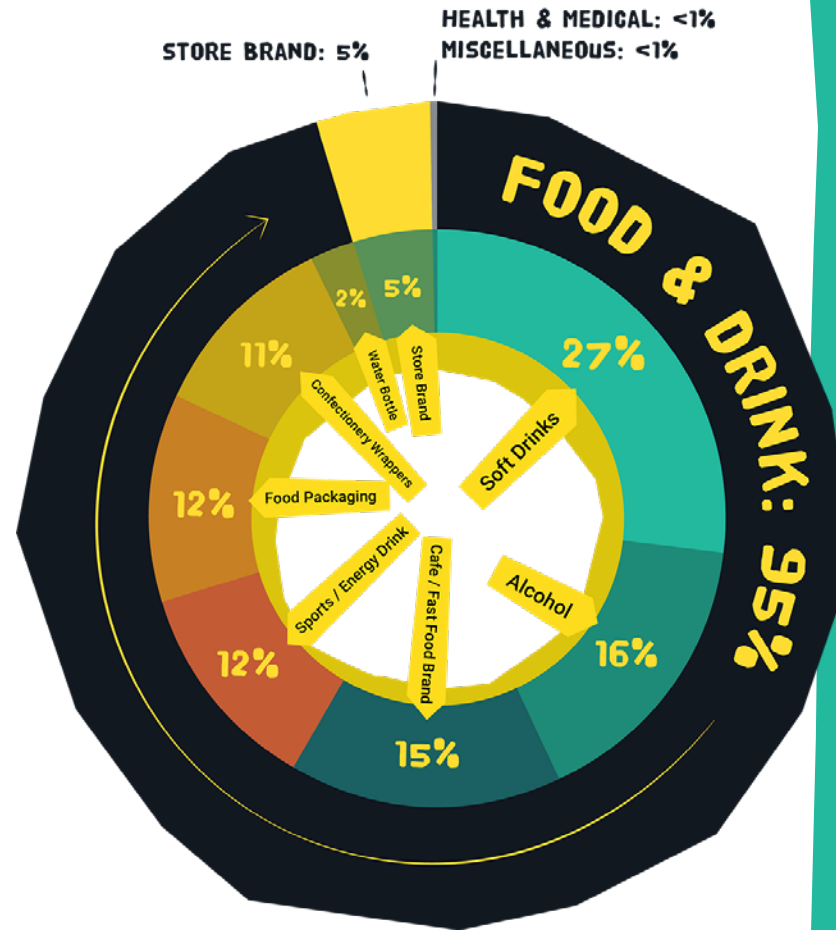
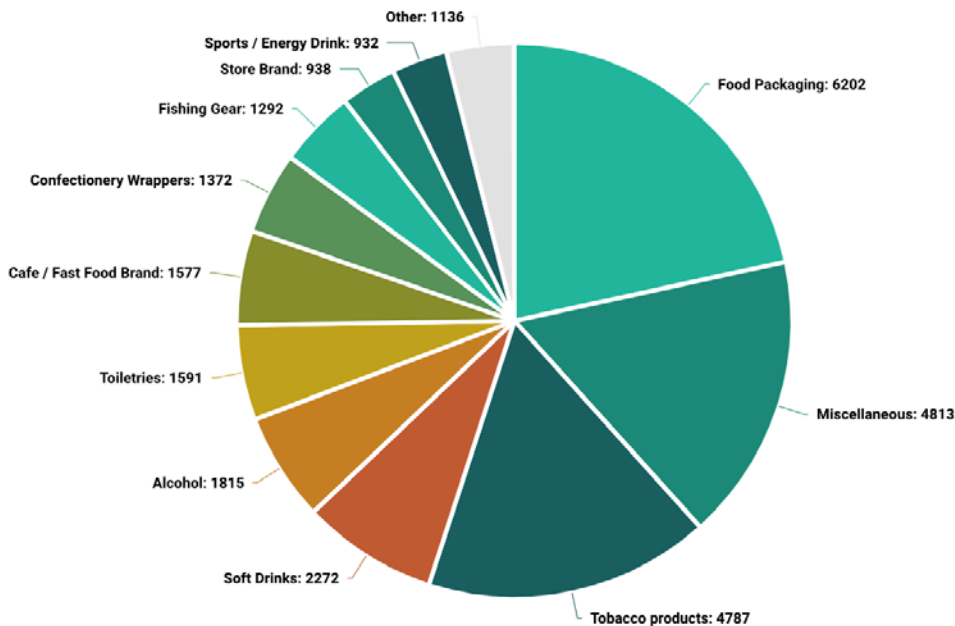
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CATEGORY FINDINGS

Over 50% of all pollution fell into food and drink categories, and accounted for 88% of all branded items. The consistent high levels of pollution resulting from food packaging over the past few years highlights the need to move towards models of reuse and address food packaging and legislation relating to enforcement.

CATEGORIES OF POLLUTION ESTABLISHED FROM THE AUDIT FINDINGS



THE DIRTY DOZEN'S CATEGORIES

Looking at the Dirty Dozen exclusively, we can see that 95% of their pollution came from food & drink categories - all of which are single use items.



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SINGLE-USE PACKAGING: 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.

So why can't more be done?

Further change is urgently needed to further reduce plastic production and single use products. Additional bans are needed on pointless single-use items, models of reuse and refill need to be adopted and embedded into industry and society, and much more of what is used needs to be recycled through close looped systems.

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.

In February 2022, the UK signed onto the Global Plastics Treaty, committing to prevent and remediate plastic pollution. We now need to see the Government adopt an ambitious and far reaching action plan that will address the plastic pollution crisis quickly



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IMPACT ON ENVIRONMENTS

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.

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.

KILLER POLLUTION

100,000 marine mammals and turtles and 1 million seabirds are killed by marine plastic pollution annually.

ARCTIC INTRUDERS

Scientists have recently discovered microplastics embedded deep in the Arctic Ice.

BLEMISHED BEACHES

Approx 5,000 items of marine plastic pollution have been found per mile of beach in the UK.

TOXIC CIGARETTE BUTTS

...wash down from streets into the drains, waterways, and eventually oceans. Toxins are released into the environment and turn into hazardous microplastic pollution.

PLASTIC POLLUTION

Every day, approximately 8 million pieces of plastic pollution find their way into the oceans.

MICROPLASTICS

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



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10 WHAT DOES OUR RESEARCH HIGHLIGHT?



TURNING OFF THE TAP

Our findings highlight the systemic problem the UK faces with 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.

Despite 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 for the last three years, with Coca-Cola and Pepsi-Co once again filling the top two spots on the Dirty Dozen leaderboard.

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. A well designed Deposit Return Scheme and Extended Producer Responsibility scheme will insure that polluters pay for the costs of their pollution products and allow products to be captured for effective recycling in order to meet taxes set for the proportion of a product made using un-recycled content.

Alongside change to create a more consistent recycling collection system to make it easier for us to separate our waste, these policies could fundamentally shift the burden of waste and its costs from the public to the companies who produce pollution products.

Defra initially launched a consultation on introducing a DRS in England in conjunction with the devolved administration, where central government provides the framework and strategy, and local governments can manage the schemes independently. However, the government's dithering and delay will mean these policies are then further implemented in a hugely disjointed way, putting their effectiveness at reducing packing pollution at huge risk. Four years since it was announced, we have had two consultations on DRS and have been waiting over a year for a response to the second one, with implementation now not likely until the end of 2024!

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 55% could be captured through a well designed 'all-in' DRS including a wide range of materials.

DRS has 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.



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CONTINUED...

ADDRESSING UNIDENTIFIED BRAND POLLUTION

Unidentified branded pollution continues to make up a significant proportion of the items recorded. Cigarette butts, miscellaneous plastic and bottles were found to be the most prolific pollutants, with cigarette butts accounting for a massive 25%.

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.

In 2021, Ministers considered extending and legislating for the EPR schemes within the Environment Act 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 still open for consultation.

WHAT NEEDS TO CHANGE?

This year's brand audit again shows little change in the companies and brands responsible for the main items found consistently polluting over the past few years.

It's essential that we see 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. Legislation needs to be introduced to end the production and consumption of single-use plastic, including cigarette filters. 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.

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.



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



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, the 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 the Government and each other to adopt consistent policies that create a level playing field and ultimately reduce waste and pollution across industries.



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WE ARE CALLING FOR...

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.

LEGISLATION THAT ENSURES EFFECTIVE RESOURCE USE AND WASTE MANAGEMENT

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

We need a UK wide all-in Deposit Return Scheme (DRS) focused around the principles 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 UK's domestic waste and develop and invest in domestic systems which keeps this material in the loop.



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SURFERS AGAINST SEWAGE

Unit 2, Wheal Kitty Workshops, St Agnes, TR5 0RD

Email: info@sas.org.uk | Telephone: 01872 553 001 | www.sas.org.uk

 facebook.com/SurfersAgainstSewage

 instagram.com/SurfersAgainstSewage

 twitter.com/sascampaigns

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