

# BRANDED

**Vol. II** Identifying the World's Top Corporate Plastic Polluters



# Cocabola









# **Executive Summary**

On the occasion of World Clean Up Day on September 21, 2019, individuals and organizations around the world mobilized their communities to conduct clean-ups and brand audits to hold corporations accountable for the extensive use of single-use and throw-away plastic packaging in their products. Thanks to our members and allies who led and organized efforts on the ground, Break Free From Plastic engaged 72,541 volunteers in 51 countries to conduct 484 brand audits. These volunteers collected 476,423 pieces of plastic waste, 43% of which was marked with a clear consumer brand.

By combining hard data, citizen science, and community organizing, brand audits have become a powerful tool for recording and tracking down the companies responsible for polluting the planet with plastic. Participants catalogued almost 8,000 brands for this year's global audit. Our analysis of this year's data reveals the following as the 2019 Top 10 Global Polluters: Coca Cola, Nestle, PepsiCo, Mondelez International, Unilever, Mars, P&G, Colgate-Palmolive, Phillip Morris, and Perfetti Van Mille.

We determined the list of "Top Global Polluters" primarily based on the number of countries where these companies' brands were found to be polluting the environment, while also taking into account the number of plastics collected per brand/manufacturer. Together, these metrics capture both the distribution and depth of plastic pollution associated with companies and their brands. **To put it simply, these** 

results reveal the companies polluting the most places with the most plastics.

For the second year in a row, Coca Cola came in as #1 Top Global Polluter. A total of 11,732 branded Coca Cola plastics were recorded in 37 countries across four continents, more than the next three top global polluters combined.

It will be impossible for the world to reduce plastic pollution without these brands making major changes to how they deliver their products. The time of relying on single-use packaging is over.

Break Free From Plastic is calling on the top polluters highlighted in this report to lead the way in revealing how much single-use plastic they use, setting clear, public, measurable targets on how they will reduce the quantity of single-use plastic items they produce, and finally to completely reinvent their product delivery systems in order to avoid creating more plastic pollution.

# Acknowledgements

BFFP member organizations played a seminal role in developing the brand audit tool and piloting the original methodology in 2017. This report and the data within it would not have been possible without the foundational work of the Global Alliance for Incinerator Alternatives (GAIA), Mother Earth Foundation, and the Citizen Consumer and Civic Action Group (Chennai, India).

We are also grateful for the contributions from 5 Gyres, Greenpeace Southeast Asia, Ecowaste Coalition, Health Care Without Harm - Asia, War on Waste Negros Oriental (Dumaguete, Philippines), and Yayasan Pengembangan Biosains dan Bioteknologi (Bandung, Indonesia) for their contributions in helping to improve the brand audit tool, methodology, and process.

Thank you to every single individual volunteer and over 200 participating organizations that conducted brand audits, both large and small, and submitted their data to be featured in this report. Your hard work in hosting cleanups, recording the brands, and submitting your data is the backbone of this report and we deeply appreciate your invaluable participation.

We would also like to acknowledge and extend our sincerest gratitude to the Flotilla Foundation and Plastic Solutions Fund for their financial support that made this brand audit coordination and report publication possible. Finally, thank you to the entire BFFP Brand Audit report team for their diligence and commitment to delivering reliable data, narrative, and graphic designs for this report.

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# Introduction

Plastic is everywhere in our lives, and so too are the negative effects of its production, use and disposal. Production of plastic has skyrocketed over the last few decades, and looks set to continue with huge investments being made in new plastic production facilities. We don't have any way to sustainably dispose of all this plastic in our lives; landfilling it, burning it, recycling it or just dumping it are all problematic. With so much plastic in the world, and so much designed to be used only once, it is no wonder that we are seeing severe environmental and social effects.

Fast moving consumer goods companies rely on plastic to deliver their products to us, their business models depend on this cheap material and not having to pay for its collection or disposal. The result of this is that communities around the world are left to shoulder the cost of irresponsible company decisions to produce huge quantities of plastic that is used just once. Plastic is accumulating in our oceans, streets, rivers, landfills and soil.

Many of the top global plastic polluting companies have made commitments to reduce the impact of their products by promising to make them '100% recyclable'. Making a product recyclable does not mean it is actually recycled. Recycling is not the magic solution it is often claimed to be. This is because plastic polymer chains get shorter when they are recycled, which means the quality deteriorates. A plastic bottle can only be recycled a few times and in reality most recycled plastic is made into clothing, construction materials or other products that will not get recycled

again. We cannot recycle our way out of the plastic problem, and companies that are claiming it is the solution are simply avoiding making real change.

The Break Free From Plastic movement is civil societies' response to this growing crisis. More than 1800 organisations from around the world have joined forces to work on solutions together. Countries in the Global South have often been blamed for the plastic pollution problem, but the Break Free From Plastic movement is revealing that it is mainly companies based in Europe and the United States that are producing massive quantities of single-use plastic packaging and spreading it all over the world. By collecting waste from beaches, streets, homes, offices and parks and then counting what brands are on that packaging, the movement is holding fast moving consumer goods companies accountable for their packaging. Only by highlighting the real culprits can we push them to change their packaging and destructive throwaway business model.

Ultimately companies need to rethink how products are delivered to the consumer. In the transition to avoiding throwaway plastic, replacing virgin plastic with nontoxic, recycled (and recyclable) plastic only has a limited role in addressing plastic overproduction. There is no silver bullet, one-size-fits-all option for new reusable/refillable packaging that will be applicable to every company, product or geography.

However, as detailed in the Greenpeace
USA report "Throwing Away the Future:
How Companies Still Have It Wrong on
Plastic Pollution 'Solutions'," big brands
and retailers urgently need to prioritize
investment into the delivery of reuse and
refill options that meet the following criteria:

# HOW CAN COMPANIES SOLVE THE PLASTIC POLLUTION CRISIS? REUSABLE SOLUTIONS THAT ARE:



### **AFFORDABLE**

Producers must take responsibility for the cost of the material, the refillable/reusable packaging and its collection, and not create only 'premium' reusable containers for well-off consumers.

### SIMPLE

A transition to an agricultural system designed around ecological principles would include more consumption of food closer to the point of production, meaning that we would need less packaging and transportation.

### NON-TOXIC

Reusable containers should be free of hazardous chemicals, extending not just to chemicals that have been regulated or restricted in certain regions but to all chemicals that have intrinsically hazardous properties.

### JUST

A reusable system should value manufacturing and delivery workers, small business owners, and consumers more than profits for upper management.

### DURABLE

Materials should be long-lasting and as strong as possible, to have the least amount of health and environmental impacts.

### CONVENIENT

Reusable packaging should be collectible, and companies should take responsibility for designing collection systems to ensure that reusable containers don't become disposable. Retailers should allow customers to bring their own reusable containers as well as offer collectible options.

# Plastic, Health, Climate and Poverty

The world's use of plastic is deeply interwoven with many of the problems facing our planet today. Plastic production, use and disposal cause harm that goes far beyond the pollution of our oceans. This chapter explores briefly how plastic is interlinked with public health, climate breakdown, and poverty.



The evidence is growing that plastic is affecting human health in a multitude of ways and at every stage in its production and use. Producing plastic from fossil fuels causes air pollution that has been linked to a range of health problems for communities that live near these facilities. The chemicals that are released can cause people to suffer breathing, skin and eye problems, and can cause long term changes to reproductive, digestive, neurological and respiratory systems. A lot of plastic today is made from ethane from hydraulic fracturing (fracking) in the United States. Studies are now linking fracking to a variety of serious health impacts. Mothers living near fracking sites have a higher risk of giving birth to their babies prematurely. Fracking also poses a danger to safe and clean drinking water supplies in the surrounding area.

Once the plastic product has been made, we know that harmful additives in plastic can leach from the plastic into our food, drinking water and bodies. Different chemicals added to plastic can result in different colours, flexibility and strength.

Some of these chemicals are known to change hormone systems and some are carcinogenic. The chemical additives in plastic are known to leach into the food that it packages and some of them are harmful at very low doses. We have often thought of plastic as being completely safe and clean but it's becoming clearer that this is often not the case.

### Climate

As the vast majority of plastic is made from fossil fuels, it is common sense that plastic use is contributing to the climate crisis. In fact, plastic production, use and disposal is responsible for such a significant amount of greenhouse gas emissions that if left unchecked, it threatens our ability to keep global warming to under 1.5 degrees celsius. If we continue using plastic in the same way, by 2050 emissions from plastic use and production could reach over 56 gigatones a year, which represents 10-13% of the remaining carbon budget.

Despite the global backlash against plastic,

companies are betting on plastic use continuing to grow and are investing in new plastic production facilities.

The climate effects of plastic start at the extraction of fossil fuels. Extracting oil and gas is a dirty business, and releases significant greenhouse gas emissions. Refining fossil fuels to become plastic is incredibly energy intensive. The way we dispose of plastic also contributes to carbon emissions. Incineration creates the most greenhouse gasses compared to landfilling or recycling and is set to grow as the preferred plastic disposal method. According to a **report** by CIEL, the production and incineration of plastic will in 2019 produce more than 850 million metric tonnes of greenhouse gasses, equal to the emissions of 189 five-hundred-megawatt coal plants.

# **Poverty**

The environmental and health effects of plastic production and pollution disproportionately impact the world's poorest communities. Poverty is also often used as a justification for some of the worst forms of plastic packaging such as single-serve multi layered sachets. Companies claim that they are 'pro-poor' by allowing those on low daily incomes to purchase goods such as shampoo and soy sauce.

Over the past few decades, consumer goods packaged in plastic have flooded into countries that have limited waste management infrastructure to deal with it. In places where until very recently all waste was made of natural materials and could be burned or buried safely, people have



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few options to dispose of plastic. Plastic waste builds up in the streets, vacant lots, drainage channels and waterways as there is nowhere else to put it. This increases the likelihood of flooding, and has been shown to increase mosquito-borne diseases such as malaria and dengue fever. A **report** by Tearfund estimated that between 400,000 and 1 million people die each year in low- and middle-income countries because of diseases related to mismanaged waste. While countries need to increase waste management infrastructure, consumer goods companies should take responsibility for placing products on the market in places that cannot safely dispose of them.

n many countries in the Global South, the burden of waste management falls on the poorest and most vulnerable in society. Waste pickers sort through rubbish dumps looking for recyclable plastic such as PET bottles that they can sell. This job is dangerous and informal, and often done by women. Waste pickers often have few rights, but play an important role in waste sorting and recycling.

Recycling plastic in the Global North is rarely economical because of its low value and higher labour costs. Because of this, rich countries have been exporting plastic waste to countries with much lower labour costs for decades. China used to take the bulk of this waste until it closed its doors to this waste in 2018, and now plastic from Europe and America is shipped to Indonesia, Thailand, Malaysia and anywhere else where pay is low enough to make it worth while. This has resulted in whole villages becoming swamped in plastic that is dumped, waste that has come from rich countries and been dumped on poor communities and counted as recycled.



The links between plastic and poverty and not restricted to the Global South. Infrastructure for plastic production and disposal is disproportionality located close to communities of lower income. In the United States, 79% of incinerators for waste are located within 3 miles of lower income and minority communities.

As we can see from this brief overview, plastic production use and disposal is a social justice and climate problem.

Simply improving waste management and recycling will not change the huge greenhouse gas emissions associated with plastic production, and it will not help those in low income communities who suffer from poor air quality from incinerators.

Only a dramatic reduction in plastic use

will address all of these issues at once.

# Methodology

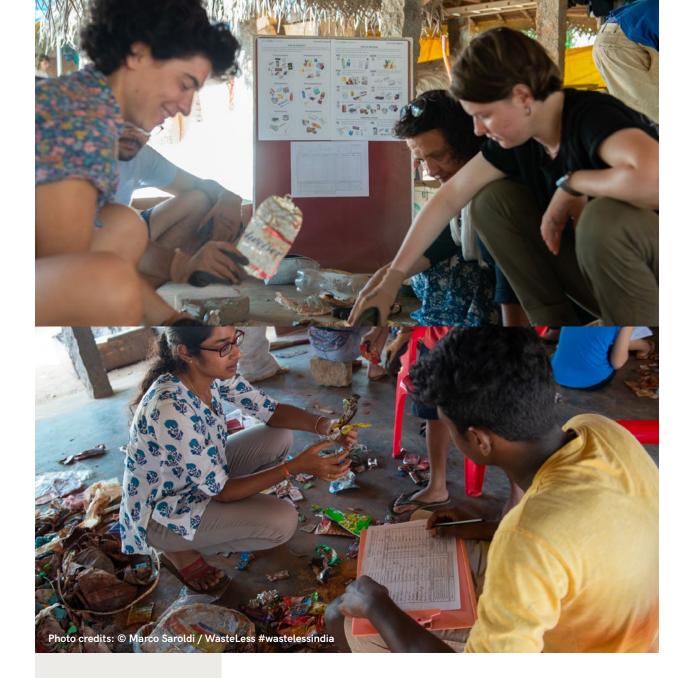
### Changes from last year's methodology

2018 was Break Free From Plastic's first year mobilizing people around the world to conduct a global brand audit. In 2019, we made a few small changes to improve and incorporate new additions. These updates were reflected in our new Brand Audit Toolkit, available online to the public. While our basic methodology remained consistent, we added a few new categories and encouraged people to get creative in choosing their sites. We invited participants to consider auditing their homes and offices, as well as locations near plastic production facilities, to highlight that plastic pollutes at all stages of its life cycle.

In September 2019, on the occasion of World Clean-up Day, Break Free From Plastic members in 51 countries united to conduct brand audits of single-use plastic waste using a standard methodology. Hundreds of individuals, groups of volunteers, and organizations signed up to take their clean-up plans to a higher level and hold plastic polluters accountable for the seemingly unending cycle of plastic pollution. Leading up to this day, BFFP provided a series of online webinar trainings (in English, Spanish, French, and Portuguese) to guide participants throughout their planning process. All participated voluntarily, and some groups qualified for microgrants ranging up to 500 USD to help cover the expenses of brand audit materials and event hosting.

Participants were directed to use our <u>new</u> toolkit, <u>this data card</u> and accompanying <u>visual guide</u>. The toolkit page was made available in a dozen different translations, while BFFP volunteers provided additional translations of the data card and visual guide.

Brand audit participants gathered singleuse plastic waste from their selected site, recorded the total volume of plastics collected, and used the standardized data card to identify the waste's composite categories: brand names, item descriptions, types of products, types of materials, layers, and local recyclability. Participants were asked to include both branded and unbranded items found, and to write "unknown" if brands were not clearly marked. *Item description* provided space for participants to write in whether the item was a cup, bottle, bag, fragment, etc. *Types of products* were divided into 7 predetermined categories: food packaging, personal care, household products, smoking materials, fishing gear, packing materials, or other/unknown. Types of materials were also divided into 7 predetermined categories of the main types of plastic: PET, HDPE, PVC, LDPE, PP, PS, O. Lastly, participants recorded whether an item was single-layer or multilayer, referring to composite packaging.



In WasteLess Auroville's brand audit in India, over 52% of audited plastic waste was non-recyclable multilayer packaging used by corporates to sell biscuits, chocolates, chewing gum, mouth fresheners and candies. Most of these products are specifically designed to be eaten on the go and sold in a country which does not have a sufficient number of public waste bins or developed waste management infrastructure to deal with such waste streams.

After recording their data, participants submitted this data to the Break Free From Plastic team in one of three ways: a web-based app called TrashBlitz, an online form on the BFFP website, or by emailing us a completed Excel template. The submitted self-reported data was reviewed, cleaned, and confirmed before the final publication of this report.

### Why Volume and Not Weight?

The reason we asked for volume instead of weight is because plastics often don't weigh very much, but they do take up a lot of space in our environment. Because of that, we wanted to know how much SPACE the plastic takes up in cleanups and brand audits around the world.

# Limitations

This report is based on self-reported data submitted by volunteers in diverse cultures and environments around the world. We relied on their local efforts, and while some intentional effort was made to invite new participants, the majority of volunteers were self-selected. Furthermore, we left the site location process entirely up to these volunteers, so there is a wide variety of locations represented. Nonetheless, the brand audits data collected across these locations remains only a sample. The sample is not evenly distributed globally, and skews more heavily toward places with a strong BFFP member presence. This report

cannot claim to be fully representative of all plastic polluters, as there are more brands than are captured in this report. It is possible, therefore, that some of those brands produce even more plastic pollution than those listed in this report. Nevertheless, taking into account the total number of countries represented in this year's brand audits, the results should give us a good indication of the most common brands found in clean-ups around the world. Lastly, we did not accept brand audit data from participants that did not use our standard methodology or data submission platforms.



PART 1

# The Polluters

For years, the plastic industry has worked tirelessly to promote the idea that if only we just recycled better, we would solve the problem of plastic pollution.

Unfortunately, recycling as the solution just isn't true.

# Brand Audit Background

# BFFP Brand Audit

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### NOUN

Identifying, counting, and documenting the brands found on plastic and other collected packaging waste to help identify the corporations responsible for pollution.

Example: In 2019, Break Free From Plastic members around the world conducted brand audits to record the names of plastic producers trashing their communities.

Brand audits are a powerful tool to challenge the corporate narrative that plastic pollution is a waste management issue caused by individual consumers. For years, the plastic industry has worked tirelessly to promote the idea that if only we just recycled better, we would solve the problem of plastic pollution. For decades, the plastics industry has lobbied against proposed legislation by carefully shifting responsibility for their waste away from companies and onto consumers, epitomized by anti-littering campaigns that have been running for decades and funded by companies.

Unfortunately, recycling as the solution just isn't true.

Of the total amount of plastic produced since the 1950's, only 9% has actually been recycled globally, with the rest being burned, landfilled or left polluting our environment. While many companies have made commitments to increase the 'recyclability' of their products, they are still designing plastic that is either too low quality to recycle or impossible to recycle due to the design, chemical additives or hard-to-seperate layers. Even if all plastic packaging were collected to be recycled, in most cases

it would only be 'down-cycled' to a lower quality product and will not be recycled a second time. The world only needs so many park benches and water pipes!

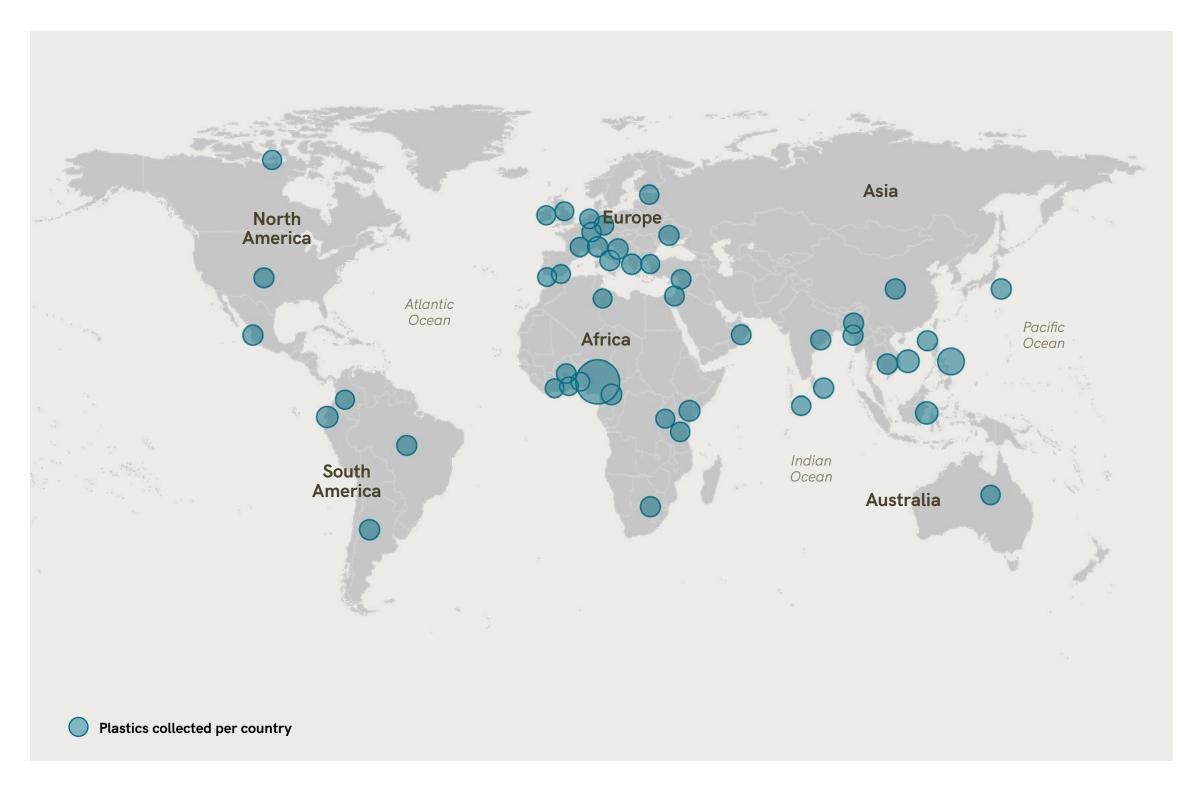
Meanwhile, plastic producers plan to quadruple production by 2050 fueled by cheap fossil fuel extraction like shale gas.

Much of this plastic boom will be used to make single-use packaging to be placed on the market in the fast growing economies of Asia and Africa. This single-use plastic production model is broken, and it's time to replace it with alternatives that promote social justice, preserve our environment, and protect our future.

When the Break Free From Plastic movement was founded in September 2016, its members vowed to mobilize around a common mission to massively reduce single-use plastic at the source: plastic producers. The result was the development of brand audits, a citizen science initiative to record the names of these producers trashing communities worldwide with their single-use plastic waste. With hard data on our side, corporations can no longer frame the issue as one of only consumer responsibility - the numbers just don't add up.

# preakfreefromplastic BRANDED VOLUME

# Locations



Thanks to our members who mobilized on the ground, Break Free From Plastic engaged 72,451 volunteers in 51 countries to conduct 484 brand audits. These volunteers collected 476,423 pieces of plastic waste, 43% of which was marked with a clear consumer brand. These brand audits were concentrated between August 1 - September 30, 2019 and most took place on World Cleanup Day (Sep 21).

TOTAL NUMBER OF CONTINENTS

6

TOTAL NUMBER OF COUNTRIES

**51** 

TOTAL BRAND AUDIT EVENTS

484

TOTAL NUMBER OF VOLUNTEERS

72,451

TOTAL PIECES OF PLASTIC AUDITED

476,423

# Shoutout to this year's biggest brand audits!

This report relies on the efforts of thousands of people who diligently mobilized their networks in communities around the world to take part in Break Free From Plastic's #BrandAudit2019 initiative.

Cleanups and brand audits can be time consuming

hard work, and we deeply appreciate the commitment of everyone who participated in this important citizen science initiative! While each and every single volunteer deserves a round of applause, a few exceptional groups merit a standing ovation.

### Winners of the Most Volunteers Award



GOLD MEDAL
TAIWAN

31,198 volunteers

Led by Let's Do It Taiwan



# SILVER MEDAL INDONESIA

7,520 volunteers

Led by Trash Hero Indonesia

Sincerest admiration and appreciation to the volunteers of Ambon, Indonesia who submitted their brand audit data despite getting hit with 6.5-magnitude earthquake. They were evacuated and had been living in a camp with lots of limitations, but they nonetheless returned to their houses to retrieve the printed brand audit forms and submit their data. Thank you for your bravery, courage, and commitment. You are true heroes!



BRONZE MEDAL
BHUTAN

5,300 volunteers

Led by Green Bhutan Waste Management

## Winner of the Most Plastic Collected Award



GOLD MEDAL
NIGERIA

127,762 plastic items collected

Led by We Care Network and Rural Communities Development Initiative



cans and coffee cups topped the list. Of the big brands, Coca-Cola, Nestlé, and Swiss retailer Coop ranked highest, followed by other global brands Mars, Danone, RedBull, Mondelez, McDonalds and Starbucks. Swiss retailers also figured prominently, with Coop followed by Migros, Denner, and Lidl.

Not surprisingly, cigarette butts, beer

### A recent report by Greenpeace USA

exposed that companies like Nestlé are investing in false solutions like replacing plastic with paper or bioplastics, relying more heavily on an already overburdened and broken global recycling system, and even harmful chemical recycling and incineration.



Nestlé is one of the biggest fast moving consumer good (FMCG) corporations in the world, with a massive plastic footprint. In 2018, Nestlé was found to be the **third** biggest plastic polluter in global brand audits. Spoiler alert: In 2019, Nestlé rose in ranking to #2 top global polluter!

Following a global campaign earlier this year to push the company to reduce its production of single-use plastic packaging, Greenpeace Switzerland decided to conduct a brand audit near the company's global headquarters. The company claims it's taking steps to combat the plastic pollution crisis, but what's the situation in its own neighborhood?

Nestlé's global headquarters are located on the shore of Lake Geneva in the small city of Vevey, Switzerland. Vevey is generally

a very tidy city, so the volunteers were uncertain what, if anything, they would find. But plastic pollution is everywhere, and the area around Nestlé's global headquarters was no exception. Despite the fact that the walkway around the public lake and nearby recreational park are cleaned daily by street sweepers and waste patrols—and sometimes by Nestlé employees themselves— Greenpeace Switzerland's volunteers found quite a load of waste.

Within 2 hours the volunteers collected at least 8 bags of garbage, or about 16.5 kg of discarded singleuse packaging—a total of 1,124 items!

The real problem is the continuation of the throwaway culture which is at the core of the company's business model.

Greenpeace International is urging Nestlé to end its reliance on throwaway packaging and turn instead to massive investment in delivery systems based on reusable and refillable systems as part of the #ReuseRevolution.



# **Top Polluting Brands**



These results are ranked primarily according to widespread global distribution - in other words, by the number of countries where brand audits reported finding these companies. Our priority metric was to examine these companies' presence across the highest number of countries, to be consistent with last year's

methodology. We also factored in the total number of branded items recorded that were produced by these companies as a secondary metric. Together, these "Top 5 Global Polluters" emerged, reflecting both depth and breadth. To put it simply, these results reveal the companies polluting the most places with the most plastics.

1 Coca Collaboration 11,732

COUNTRIES 37

PIECES OF PLASTIC 4,846 COUNTRIES 31

PEPSICO

PIECES OF PLASTIC 3,362
COUNTRIES 28

For the second year in a row, brand audit data revealed Coca Cola as #1 Top Global Polluter. A total of 11,732 branded Coca Cola plastics were recorded across 4 continents in 37 countries, more than the next three top global polluters combined.

PIECES OF PLASTIC 1,083
COUNTRIES 23

5 Unilever
PIECES OF PLASTIC 3,328
COUNTRIES 21

PIECES OF PLASTIC 543
COUNTRIES 20

7 Procter&Gamble
PIECES OF PLASTIC 1,160
COUNTRIES 18

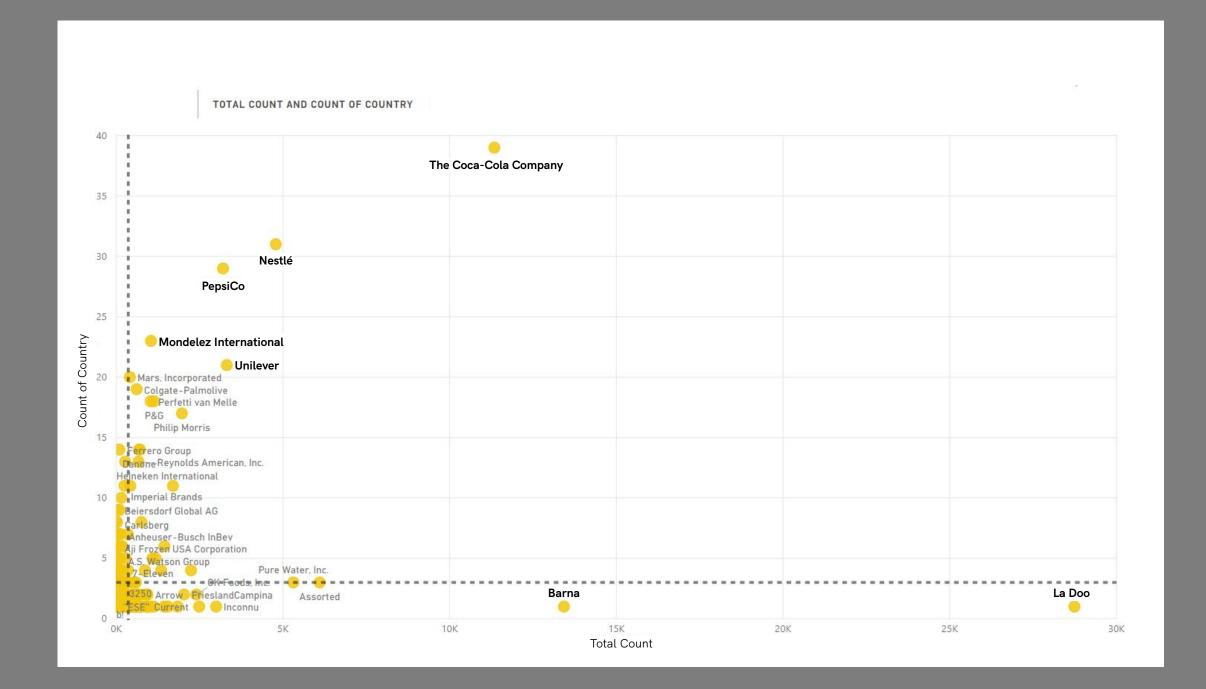
PIECES OF PLASTIC 642
COUNTRIES 18

PHILIP MORRIS INTERNATIONAL
PIECES OF PLASTIC 2,239
COUNTRIES 17

PIECES OF PLASTIC 1,090
COUNTRIES 17

"There are plenty of people out there in the world who would like to see plastic go away. We know that's not going to happen ... We're all going to be using plastic for years and years, right?"

- Ben Jordan, Senior Director of Environmental Policy Coca-Cola



This scatterplot graph maps out the top polluter in terms of the number of countries where this brand was found (vertical Y axis), as well as in terms of the number of plastics collected (horizontal X axis).

Presenting both metrics in one visual is useful to highlight brands with a more significant global distribution versus those that have a sizable impact but are contained to just one country. For instance, Coca Cola (upper middle) is a global producer found in 37 countries, while La Doo (bottom right) is a highly local producer that pumps out a huge amount of single-use plastics in one specific state in Nigeria.

### What's the dotted line?

What is particularly strong in this representation is the dotted line that distinguishes the 99th percentile. Anything above and right of the two dotted lines mean 99% of all other brands fall below it, highlighting the significant scale of difference between those top producers that emerge in the top 1%.

# **Top Polluting Brands per Continent**



RESULTS
TYPE OF PLASTIC

# Top 3 most common types of plastic found: **PET, LDPE, and O contributed to 93% of the type of plastic picked up**



While there are close to 50 different types of plastic worldwide, we typically group them in 7 major categories. These different types of plastic range widely in terms of quality, health risks, and recyclability.

### PET: Polyethylene terephthalate

(Ex: Clear or tinted plastic; often used for drink bottles, cups, pouches, etc.)

### **HDPE: High-density polyethylene**

(Ex: White or colored plastic; often used for product bottles, jars, milk jugs, etc.)

### **PVC: Polyvinyl chloride**

Durable plastic, hard or rubbery; often used for building materials, toys, shower curtains, etc.

### LDPE: Low-density polyethylene

Clear, white, or colored plastic; often used for bags, plastic trays, holders, dispensers, etc

### **PP: Polypropylene**

Hard but flexible plastic; often used for food containers or tubs, bottle caps, etc.

### **PS: Polystyrene**

Rigid, brittle plastic OR foam; often used for cups, take-out food containers, lids, etc.

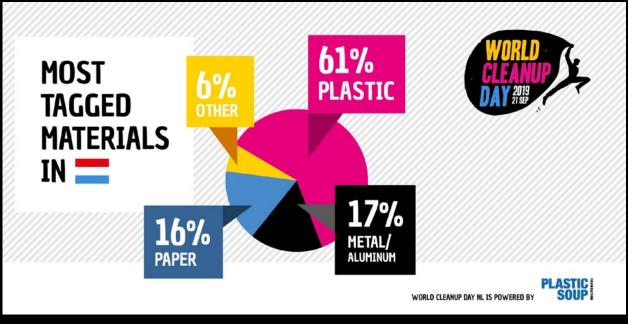
### O: Other / unknown

Bioplastics, products containing other plastics or types of materials, including textiles, etc.

# SPOTLIGHT **NETHERLANDS**

World Cleanup Day 2019 was a big success in the Netherlands! Over 15,000 people participated in over 1,500 cleanups and with the help of the Litterati App over 77,000 items were registered this year. Single-use plastic made up 61% of what people recorded finding. Across the Netherlands, Red Bull emerged as the top polluting brand followed by Heineken, McDonalds, Marlboro, and Coca Cola.

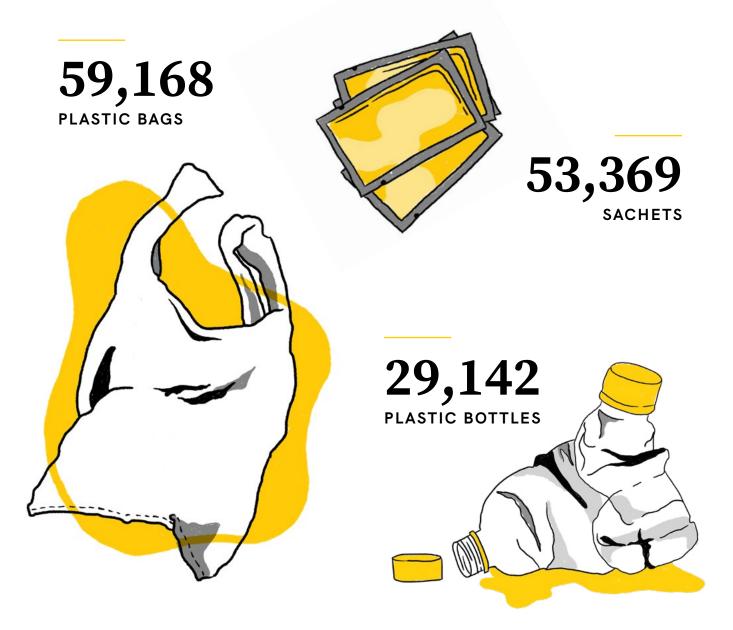




Graphic credit: World Cleanup Day Netherlands / Plastic Soup Foundation

RESULTS
TYPES OF ITEMS

Top 3 most common plastic items found: plastic bags, sachets, and plastic bottles.



# SPOTLIGHT WATER SACHETS IN NIGERIA

Sachet water, referred to locally as "pure water," is a major source of drinking water for many middle and low income Nigerians. Essentially a small sealed polypropylene plastic sleeve, sachet water has grown to become a primary source of drinking water for many urban households in West Africa. According to Justin Stoler, a sachet water research expert based at the University of Miami, it is now "an important component of regional water security," although increasingly exacerbates "issues related to governance, quality control, environmental pollution, and social justice." The first water sachets were developed in the 1990s and since then have grown into a highly profitable industry. Originally celebrated for their ability to deliver cheap, clean water to areas without reliable access to drinking water, people have grown increasingly concerned about sachet water's unintended consequences to their health and the environment.

"Sachets (pure water) were invented by West African entrepreneurs to address the problem of poor access to water as a cheap alternative to water bottles. There are over 250 companies involved in its production in the city of Jos alone. Sachets constitute the biggest content of environmental waste, clogging drains, breeding mosquitoes and localizing floods. There is an urgent need for sustainable solutions to this challenge."

Benson Dotun Fasanya,
 Centre for EarthWorks (CFEW)



In just two brand audits in Nigeria, volunteers from We Care Network and Rural Communities Development Initiative together counted a total of 28,742 sachets just from one company: La Doo. In addition to La Doo, these volunteers also recorded 13,430 water sachets from another company called Barna. According to one brand audit leader, who preferred to remain anonymous, La Doo is a major water factory in the Nigerian state of Benue. She elaborated that "plastic bags and empty water sachets are everywhere [but] I was encouraged to do something when I learned of #breakfreefromplastic. It was challenging, but I am optimistic that we will one day get to where a legislation will be passed to address this issue."



Recent scientific research has suggested that significant concentrations of plastic waste in the world's oceans comes from a small handful of coastal countries in Asia. The team of U.S. and Australian researchers, led by Jenna Jambeck, calculated this largely based on population size and the quality of waste management to estimate which countries contribute "the greatest mass of uncaptured waste available to become plastic marine debris."

### Their conclusion:

China, Indonesia, the Philippines, Vietnam, and Sri Lanka are the largest sources of land-based marine plastic pollution. But these results do not tell the whole story. Thanks to Break Free From Plastic brand audit data collected in 2017 and 2018, we now know that the real drivers of much of this plastic pollution in Asia are actually multinational corporations headquartered in Europe and the United States.

In fact, even countries with a strong track record for recycling have been sending their mixed waste to Southeast Asia, supposedly to be recycled but in reality much of it has to be burned or dumped. It is easy to find American and European packaging polluting the countryside of Southeast Asia. While being blamed for causing the plastic problem, these countries are effectively paying the price for multinational corporations' reliance on single-use plastics.

When people in the Global North throw something "away," much of it ends up in the Global South because there is no such thing as "away." The people who live in countries on the receiving end of this unjust cycle have had enough. Break Free From Plastic members in these countries took part in this year's brand audit, and here's what they found.

# China\*

NO. OF AUDITS

48

TOTAL PLASTIC COLLECTED

3,459

TOTAL NO. OF VOLUNTEERS

1,439

TOP ITEM
DESCRIPTION
bottles

TOP MATERIAL TYPE

O & PET

TOP BRANDS BY COUNT OF PLASTIC COLLECTED



ingyi Holding Corp







\*all references to China in this report refer to Mainland China where 48 brand audit events took place



# Indonesia

NO. OF AUDITS

**32** 

TOTAL PLASTIC COLLECTED

13,309

TOTAL NO. OF VOLUNTEERS

6,850

TOP MATERIAL TYPE

O, PET, LDPE



plastic straws, plastic bags, single-use plastics

TOP BRANDS BY COUNT OF PLASTIC COLLECTED







# The Philippines

NO. OF AUDITS

**20** 

TOTAL PLASTIC COLLECTED

37,016

TOTAL NO. OF VOLUNTEERS

3,751

O, LDPE, PET

TOP BRANDS BY COUNT OF PLASTIC COLLECTED



**Nestlé** 



plastic bags, sachets, plastic film





### HIGHLIGHT

# Waste Assessment and Brand Audits in Gresik, Indonesia

Contributing Author: Daru Setyorini, ECOTON

Environmental groups in Indonesia are already taking strong action to manage their waste locally. ECOTON is developing a Zero Waste City model in Wringinanom Village of Gresik City Indonesia. They did waste assessment and brand audits (WABA) of solid waste from 62 households as part of baseline study to assess and plan a zero waste city model for the community. Over 8 days, 26 volunteers continuously collected and segregated waste into 45 different types.

Their aim is to develop a sustainable decentralized solid waste management system at the village level in order to prevent solid waste leakage or dumping into the environment, especially rivers and beaches in the Brantas River Basin. The Zero Waste City model is an effective way to prevent river and marine pollution

by developing a decentralized solid waste management system that shares the burden of waste management with all citizens, involving community participation, providing economic benefit for the local community and improving environmental health.

The waste collected over the 8 days of the WABA totaled 773.7kg and the average waste generated per household was 1.5kg/day. Organic waste composed 67% of total waste, largely consisting of moist kitchen waste which is typically used to feed chickens. The inorganic waste was dominated by single-use sanitary residuals such as diapers, menstrual pads, tissues, wet wipes, and cotton buds (adding up to 11.6% of total waste generated), followed by recyclable plastic waste at 9.1% and residual non-recyclable plastic waste at 4.9%.

# Vietnam

NO. OF **AUDITS** 

TOTAL PLASTIC COLLECTED

10,887

TOTAL NO. OF **VOLUNTEERS** 

400

TOP MATERIAL TYPE O, PET, LDPE

TOP BRANDS BY COUNT OF PLASTIC COLLECTED









TOP ITEM DESCRIPTION

plastic bags, bottles, clear plastic packaging

# Comparing the Results

2018 marked the first year Break Free From Plastic members mobilized on a global scale to track down plastic polluters through a worldwide brand audit. The data that emerged set the stage for more people demanding more corporate accountability in more places. Thanks to the success of last year's global brand audit, this year's audit was the biggest citizen science effort to record corporate plastic polluter responsibility ever seen!

In 2019, we had over seven times as many volunteers mobilize to record over double the amount of single-use plastic than in 2018. And the Top 3 **Global Polluters remain** exactly the same.

# Sri Lanka

NO. OF **AUDITS** 

TOTAL PLASTIC COLLECTED

3,871

TOTAL NO. OF **VOLUNTEERS** 

48

TOP MATERIAL TYPE LDPE, PP, O

TOP BRANDS BY COUNT OF PLASTIC COLLECTED

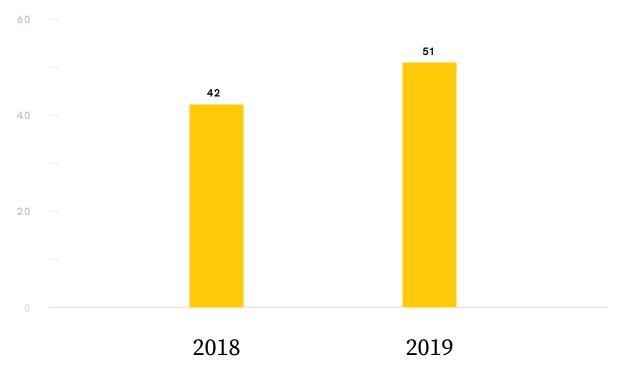






TOP ITEM DESCRIPTION wrappers, cups, bottles

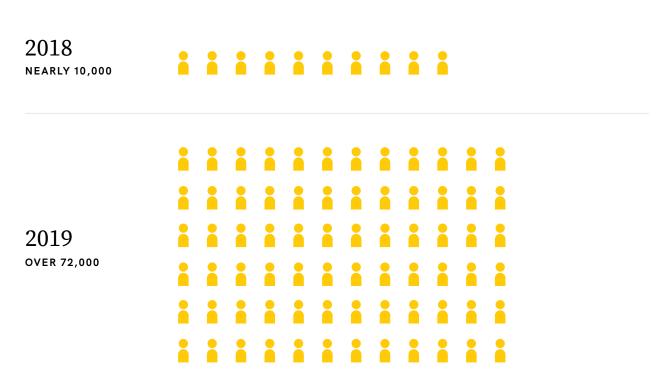
### NUMBER OF PARTICIPATING COUNTRIES

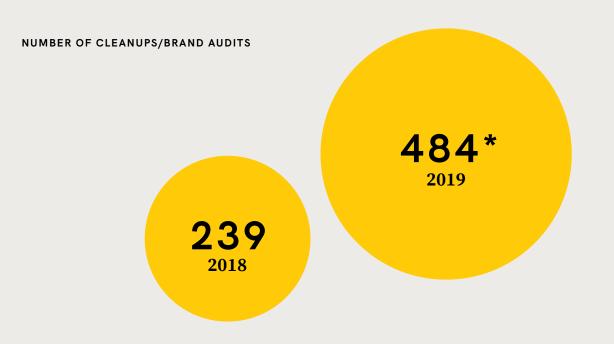


37



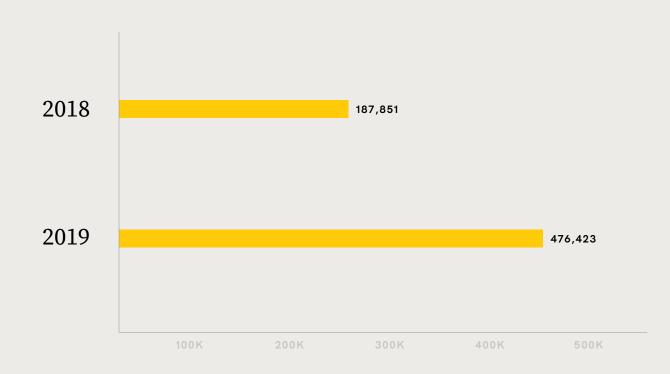
### NUMBER OF VOLUNTEERS





# \*We received over 484 brand audit event submissions, but could not accept (1) data that deviated from our standard methodology and/or submission platforms, or (2) data that was incomplete or otherwise compromised.

### PIECES OF PLASTIC AUDITED





2018



40 countries





**2,950 PCS** 31 countries NUMBER OF COUNTRIES WHERE TOP POLLUTER

OCA Goda, WAS FOUND

**40 of 42** participating countries (more than 75% of all 239 participating cleanups reported finding Coca-Cola)

2019



37 countries



**4,846 PCS** 31 countries



**Nestlé** 

3,362 PCS 28 countries **37 of 51** participating countries (52% of all 484 participating cleanups reported finding Coca-Cola)

# RESULTS COMMENT ON "UNBRANDED"

While the focus of this report is to reveal the brands responsible for trashing the planet, you'll notice that we still include plastic waste that is "unbranded." You might be wondering, what do we mean by "unbranded?"

Much of the plastic waste we find littering our communities has been there for so long that the brand's label has washed away or faded beyond recognition. But whether it's a new Coca Cola bottle or an old plastic fragment lying on a beach, every piece of plastic we find has a producer behind it. And this company has a name, an address, and a CEO. Just because a company's brand label may have faded away, doesn't mean

this brand is no longer responsible for what they produced. In fact, we think they should be held accountable for as long as this plastic lasts —forever.

This year, we counted over 470,000 pieces of plastic trash around the world. 43% of these actually had a brand identified, while the remaining 57% no longer had a recognizable brand.

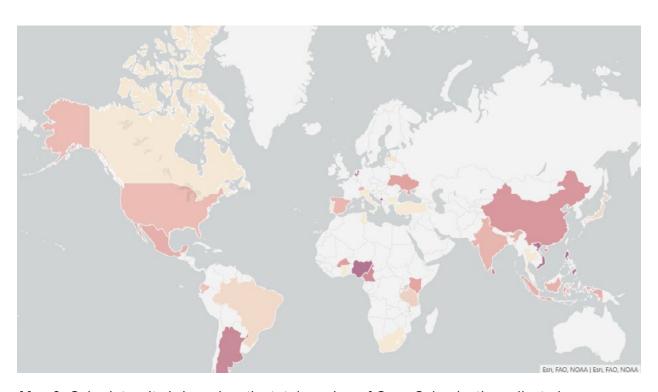
# Branded: 43 % Unbranded: 57 %

Most of what we found and recorded was unbranded plastic produced by irresponsible companies - almost 8,000, to be exact. We intentionally include this "unbranded" plastic because these polluting companies have gotten away with avoiding responsibility for far too long, and we will no longer allow it. Whether or not the brand label still exists, that producer's responsibility remains.

# COUNTRIES WHERE COCALCOLA ITEMS WERE FOUND



Map 1. Size of the circles are based on total # of Coca Cola plastics collected in each country.



Map 2. Color intensity is based on the total number of Coca Cola plastics collected.



# #BrandAudit2019 Around The World

This year's brand audit was loud on social media. Break Free From Plastic's official event hashtag, #BrandAudit, was used hundreds of times across three social media platforms (Facebook, Instagram, and Twitter) from the time the first brand audit began on September 21, 2019, up to the days after the audits were finished and data has been forwarded to Break Free From Plastic.

From coastal cleanups to trash collection at public spaces, big organizations and individual citizens documented their audits exposing brands that contribute to the plastic pollution in their communities.

# Philippines

In Baler, Aurora, Philippines, Ocean
Care Movement lead a coastal cleanup
where they collected an assortment of
personal items and branded trash.



## Indonesia

Greenpeace Indonesia's tweet (and Instagram post) clearly captures an offending brand, with a packaging that is decades old. The post was retweeted 162 times on Twitter, while a related Instagram post by the organization garnered 13,881 likes. Brand audits conducted in Indonesia revealed both local and international manufacturers contribute to the problem.



## Cameroon

<u>SDG Cameroon</u> organized a group of young people for a city cleanup. Their movement captured the curiosity of the locals, hopefully bringing attention to the growing trash problem of the country.

## Lebanon

Recycle Lebanon along with Save
Kfaraabida and Beirut RiverLESS called on manufacturers to #ecodesign their packaging and to put human and environmental wellness before profit.
Their Instagram post reveals branded packaging for food and hygiene products.



# Nepal

Himalayan Heroes Nepal submitted a photo of their brand audit event to Break Free From Plastic. A quick look at the results exposes big brands that contribute to the plastic pollution in the area.



## Australia

<u>@plasticfreemermaid</u> organized a cleanup in Byron Bay, NSW, Australia. Her Instagram account is dedicated to educating the public about the perils of single-use plastic.

# Australia

Alliance for a Living Ocean's beach and bay cleanup at Barnegat Light in New Jersey, United States collected 597 bottle caps in addition to almost 50 pounds of trash. Comments on the post offered some great recycling ideas for these pieces of plastic!



# Switzerland

### Greenpeace Switzerland's brand audit

identified brands that ranked pretty high in last year's tally. On their Instagram Stories, they showed their march to the Nestle headquarters to display a portion of what they collected.



# #breakfreefromplastic BRANDED VOLUME II

# I Zero Waste City Solutions II Extended Producer Responsibility Solutions III Policy Solutions IV Business Redesign Solutions



ZERO WASTE CITY SOLUTIONS Separate collection in action, Ljubljana

# Introduction

In the face of the undeniable evidence provided by the global brand audits, top industry polluters have been quick to acknowledge their role in perpetuating the plastic pollution crisis, but have been equally aggressive in promoting false solutions to address the problem.

"I sometimes wonder if we're in the branded litter business, branded trash..."

- Alan Jope, Unilever CEO during a Davos 2019 panel debate

The plastic industry polluters are tough to beat, but despite these corporations' best efforts, real people-powered solutions are popping up and blooming like wildflowers. All over the world, community-led solutions show us that a world without single use plastic is not only possible — it already exists.

We know how to live SUP-free; we've done it for thousands of years. Remember,

the plastics industry only really took off in the 1950s with the growth of the fossil fuel industry and mass consumerism that popularized the concept of 'disposable' goods. And while companies try hard to sell us **false solutions** like bioplastic, 100% 'recyclable' packaging, incineration and chemical recycling — all of which carry problematic consequences — these are merely distractions that detract from much more effective alternatives for long-term change. For instance, switching to paper is one of the most common false solutions, as the consequences can lead to increased deforestation.

Real solutions must change systems and power structures. While individuals play an important role in paving the way for these changes, individuals cannot solve the plastic problem alone — that takes community. And zero waste communities have in fact been showing the way towards the proper and safe management of discarded waste, highlighting as well the problematic materials that could not be managed and should therefore be taken out of commerce.

In 2016, Break Free From Plastic movement members launched the Zero Waste Cities

Real solutions must change systems and power structures.

While individuals play an important role in paving the way for these changes, individuals cannot solve the plastic problem alone - that takes <u>community</u>



project in Asia to promote Zero Waste models working toward "the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning, and with no discharges to land, water, or air that threaten the environment or human health." With 25 participating cities to date, these Zero Waste Cities have conducted valuable waste assessments and brand audits that provide critical data for their waste management. It has also strengthened Break

that provide critical data for their waste management. It has also strengthened Break Free From Plastic's ability to engage with companies that produce single-use plastic by providing valuable data.

The concept of 'Zero Waste Cities' is not new. In small towns and big cities spread across the Global North and South, communities are joining the Zero Waste Revolution en masse. More than 400 cities and municipalities in the European Union have already pledged to transition towards

Zero Waste in partnership with Zero Waste Europe, which has produced a **Zero Waste Cities** Master Plan for decision makers, city planners, and project implementers. Cities across the United States have also implemented Zero Waste strategies, from Boston, Massachusetts to Berkeley, California and beyond.

No matter where in the world you live, community power is the key to creating solutions that last.

Through long-term commitment and cooperation, communities are already gaining important wins and holding single-use plastic producers accountable.



I Zero Waste City Solutions



### ASIA PACIFIC FROM GROUND ZERO TO ZERO WASTE

Contributing Author: Sherma Benosa, GAIA, and GAIA Asia Pacific Staff

For many years, developing countries in Asia have been maligned as the world's worst marine polluters—a narrative that Break Free From Plastic challenged in 2018 when member organizations showed through coordinated global brand audits that the sources of pollution in Asia were actually multinational corporations headquartered in the Global North. These findings were consistent with those of the massive cleanup and brand audit conducted in the Philippines in 2017. Most recently, a new GAIA investigative report published in early 2019 showed that many countries in the Global North, including the US and

Germany—known for high recycling rates—have been exporting their mixed waste to Southeast Asia in the guise of recycling.

Now we know:

Asian countries may be the leakage points of marine plastic pollution, but the pollution starts somewhere else—right in the backyards of the Global North countries that point to Asia as the culprit.

Because of the undue focus on Asia as the poster child of the global plastic pollution, the world has failed to see and recognize the solutions springing up in the region.

Sometimes these solutions come even in times of greatest adversity.

Nearly flattened in 2013 after becoming ground zero of Typhoon Haiyan—the strongest typhoon ever in recorded history to landfall—Tacloban City, a highly urbanized area in central Philippines, is well on its way to becoming a Zero Waste model city.

But getting on the road to Zero Waste was tough. Already burdened with waste problems due to the lack of efficient waste management system, the city suddenly found itself having to deal with massive waste from the wreckage wrought by the typhoon. Having to clear the city of the debris from uprooted trees and broken buildings and houses, among many others, Tacloban City immediately filled up its dumpsite which should have long-ago been closed.

In 2016, three years after the killer storm, the city continued to use the dumpsite, already swollen with the typhoon debris. At the time, garbage collection services

only covered 30% of the households, yet cost for hauling waste alone reached 80 million PHP (1.5 million USD). Residents in areas without collection were left to manage their own waste, which they did either by open dumping or open burning, both of which are against the law.

As a response, Tacloban City partnered with Mother Earth Foundation, a Philippine-based non-profit organization that has been helping cities and communities reduce their waste and better manage it. Under the guidance of Mother Earth Foundation, the city implemented a Zero Waste program. They started by trying to understand the waste problem of the city by conducting surveys, baseline studies, and household waste assessment and brand audits (WABAs). From the results of these assessments, the city developed strategies that would allow it to properly implement Zero Waste.

The city launched an intensive houseto-house information, education, and communication (IEC) campaign to educate the people about the importance of segregating their waste. Households were also taught about the various categories



into which they needed to segregate their waste. To prime the barangays (villages) with the important task of implementing the program, barangay officials were capacitated and empowered to implement door-to-door collection and enforce the no-segregation, no-collection policy.

At first, households did not readily embrace the segregation policy, thinking it was too complicated and time consuming. But through continued education and the waste collectors' resolve to strictly implement the 'no-segregation, no-collection' policy, the compliance level is now high. Currently, every barangay has a materials recovery facility, in accordance with the law. Collected biodegradable wastes are composted, and recyclable wastes and residuals are temporarily stored here until they are either sold or collected by the city

Thanks to the city's Zero Waste program, waste collection significantly rose, from a dismal 30% to 100%.

Through the program, the amount of waste prevented from going to the landfill increased from 10% in 2017 to 55% by 2018. The city has recovered 384 tons of organic wastes and 23 tons of recyclables from the 64 barangays that have started implementing Zero Waste. Without a Zero Waste program, all these wastes would have gone to the dumpsite. The waste generation by the city likewise dropped by 31%, from 175 tons to 121 tons per day.



But as much as the city of Tacloban has progressed towards a zero waste system through waste reduction, recycling and composting, there is still a part of the waste stream leftover that the city is stuck with getting rid of: single-use plastic trash.

Cities and municipalities all over Asia and the developing world are struggling against this common enemy, much of which is produced by multinational corporations in the Global North, like Coca Cola, Nestlé, and PepsiCo. Despite firm efforts on the part of many local government authorities to institute Zero Waste programs, these materials remain huge obstacles to achieving Zero Waste. Governments can take steps to reduce plastic pollution by enacting waste reduction policies like bans and fees, and holding producers accountable.

Plastic is not just a litter problem; it is a pernicious pollution problem that starts as soon as the plastic is made. Faced with no choice but plastic packaging, people are forced to be complicit in the plastic pollution crisis. The huge amount of plastics in Philippine waste streams is a reflection of the reality that when buying necessities in the supermarket, single-use plastic is unavoidable for the consumer. As the brand audits in this report show, plastic is a global problem with local repercussions, and it

is the cities, municipalities, and people in these localities who bear the brunt of this problem. But cities and municipalities can fight back and start confronting the plastic challenge by using WABAs (waste and brand audits) as a tool.

For more stories of Zero Waste Cities around the world, please visit <a href="https://www.zerowasteworld.org">www.zerowasteworld.org</a>

For more information on waste and brand audits in the Philippines, you can find the full report at www.no-burn.org/waba2019/



Plastic is not a litter problem, it is a pollution problem, and it starts as soon as the plastic is made.

Faced with no choice but plastic packaging, people are forced to be complicit in the plastic pollution crisis.

The huge amount of plastics in Philippine waste streams is a reflection of the reality that when buying necessities in the supermarket, single-use plastic is unavoidable for the consumer.

But local cities can fight back & start confronting the plastic challenge by using waste and brand audits as a tool

### EUROPE LJUBJLANA, THE FIRST EU CAPITAL TO GO ZERO WASTE

Contributing Author: Jack McQuibban and Agnese Marcon, Zero Waste Europe

Slovenia might just be one of the greenest countries in Europe, especially when it comes to waste management. Despite having only joined the European Union in 2004, Slovenia met the EU 2020 recycling targets 4 years early. Its capital, Ljubjlana, even exceeded the EU 2020 targets

— requiring that at least 50% of municipal waste be recycled or reused — beginning in 2014, when it separately collected 61% of the city's municipal waste. Since then, Ljubjlana has committed to halving the amount of residuals and increasing separate collection to 78% by 2025. This

Slovenian Zero Waste City is currently the best performing capital in Europe, earning it the title of **European Green Capital** winner in 2016. But how did they get here, when only years ago Ljubljana's had barely begun separate waste collection?

Ljubljana owes much of its success to Voka Snaga, the publicly owned company that provides waste management to the city and 9 suburban municipalities (nearly 400,000 residents). Voka Snaga committed to help build a Zero Waste City by implementing a door-to-door collection system combined with a strong communications strategy focused on prevention and reuse to engage citizens. Within 10 years, the total waste generation decreased by 15%, the recycled or composted waste average went up to 61%, and the amount of waste sent to landfill decreased by 59%.





**ZERO WASTE CITY SOLUTIONS** Separate collection in action, Ljubljana

But here's the real key to Ljubljana's success: they know that Zero Waste goes beyond mere waste management. The city enhanced its waste prevention activities and set the ambitious target of halving its residual waste by 2025. In 2013, Voka Snaga launched a campaign called "Get Used to Reusing," encouraging residents to reuse instead of buying throwaway products. Together with multiple government agencies, Voka Snaga opened a Reuse Center in Ljubljana, one of only 8 in the country. These centers are a place for donating everything from high heeled shoes to salt and pepper shakers, and they provide a place of employment for disadvantaged populations like the elderly and disabled. The buildings also include a workshop where people mend items so that

they are ready to hit the shelves again to be reused. One of the most popular treasures of the Reuse Center is a packaging free vending machine, where people can bring reusable containers to fill up on their favorite products, plastic-free! Surveys show that thanks to the city's focus on reuse, almost 70% of residents make sure donate their belongings for reuse instead of throwing them away. Ljubljana is an excellent example of a meaningful collaboration between local government and its community to jointly commit to a long-term, sustainable change.

To learn more, check out the Ljubljana case study at Zero Waste Europe



# SOUTH ASIA DATA-DRIVEN DEMANDS FOR CORPORATE ACCOUNTABILITY

Contributing Authors: Miko Aliño and Sherma Benosa, GAIA

In May 2018, over 15,000 volunteers conducted waste and brand audits in 250 sites across India to "Beat Plastic Pollution" for World Environment Day. With India as the global host, 10 GAIA member organizations coordinated brand audits in 15 different Indian cities to identify the top corporate polluters using Break Free From Plastic methodology.

In Thiruvananthapuram, the capital of Kerala, one brand audit in particular led to some exciting solutions. Local NGO Thanal audited 75 households for three

weeks, and then presented the data results to the municipal authorities to demand the top polluting brands set up alternative delivery systems. And they listened. Thanks to pressure from Thanal, these brands are exploring possibilities to develop alternative delivery systems.

"We will directly contact the brands to see possibilities of EPR (extended producer responsibility) linkages..."

-Mayor V. K. Prasanth

Following the brand audit,
Thiruvananthapuram Municipal Corporation
(TMC) committed to approach the 20
brands producing 75% of the total plastic
waste in the city. While local brand

Milma was found to be the top polluter in this audit, other major waste producers included international corporations such as PepsiCo, Unilever, Colgate Palmolive, Nestlé, and Coca Cola.

Thiruvananthapuram is a success story that stands out for its municipality's commitment to demand corporate accountability for waste.

With no centralised solid waste management system or landfill, TMC instead requires that bulk waste producers take responsibility for the waste they generate by making this a criterion for licensing. As a result, the city generates 350 tonnes of waste per day—nearly ten times less than any other capital city in the country.

# NORTH AMERICA THE APP TO TRACK CORPORATE POLLUTERS

Contributing Authors: Melissa Aguayo, Marina Ivlev and Anna Cummins, The 5 Gyres Institute

The 5 Gyres Institute is a Los Angeles based non-profit with a global mission to empower action against the global crisis of plastic pollution through science, education, and adventure. 5 Gyres began in 2009 to investigate a set of key unanswered questions about plastic pollution, conducting a series of scientific expeditions across all 5 subtropical gyres, as well as the Great Lakes. These findings resulted in the first global estimate on plastics in the world's oceans, a veritable



"smog" of plastics across 20% of the planets surface, as well as the discovery of <u>plastic</u> microbeads in Lake Michigan.

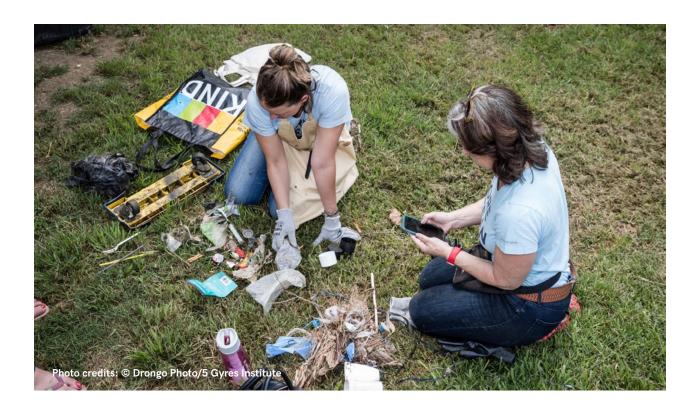
The microbeads findings provided the momentum for a collaborative National campaign to ban plastic microbeads, culminating in a victory when President Obama signed the Microbeads Free Waters Act.

While this research has been crucial to engage policymakers, corporations, and the general public in the devastating downstream impacts of plastics on aquatic ecosystems, 5 Gyres is now joining our movement partners in looking further upstream. There is a great need to better understand the sources and key products that contribute to plastic pollution closer to the source, so we can better intervene on solutions.

This led us to develop TrashBlitz, a citizen science program and web app that allows communities to easily catalogue trash in local neighborhoods by capturing information on the material, item, quantity, and brand.

While it's important to get data on problem products and materials, engaging community members in capturing information on brands also empowers people to challenge the narrative that individuals alone are responsible for pollution and to encourage corporate accountability.

Break Free From Plastic teamed up with TrashBlitz as the primary method of data cataloguing and reporting for the 2019 Brand Audits. The robust dataset captured from people all over the world can be used to further campaigns, strengthen legislation, and foster better community through environmental stewardship.



There is a great need to better understand the sources and priority products that contribute to plastic pollution closer to the source, so we can better intervene on solutions.

# The Solutions

### III Legal Solutions



### LATIN AMERICA PROTECTING THE ATITLÁN LAKE WITH A PLASTIC BAN

Contributing Authors: Cecilia Allen, GAIA

San Pedro La Laguna is one of the 14 municipalities located in the basin of the world-famous Atitlán Lake in Guatemala. Home to an almost entirely indigenous population -Tz'utujil- this city of 18,500 people is situated in a region that is a world-tourist attraction. And just like in many other touristic destinations, single-use plastics has become an environmental nightmare.

In 2016, a university student designed a communications project to protect the basin, working together with the local Basin Management Authority (AMSCLAE). While consulting with the local community about strategies to better protect the lake, one of the main proposals raised was to ban

plastic straws. When presenting her project to the municipalities of the basin, the newly elected Mayor of San Pedro La Laguna promised to turn the project into a public policy. He not only fulfilled his promise but extended its scope, promoting a ban on the sale and use of straws, plastic bags and polystyrene products. The law was passed in September that year.

After setting the policy, the municipality started promoting the use of traditional packaging materials such as maxan leaves, sugarcane baskets and reusable dishware and utensils. It also provided 3,000 cloth bags to households, paper bags to the municipal market vendors in exchange for the plastic bags they had. In addition, most restaurants and hotels stopped using straws and polystyrene utensils. The ban sets fines to businesses and people who use or sell the ban products.

While the ban had the endorsement of a large part of the community, the plastic industry—through the Guatemalan Plastic Commission and the Industry Chamber—sued the Mayor, but the legal action was finally ruled out by the Constitutional Court of Guatemala.

The ban is currently upheld through the work of groups of volunteers and students who go door-to-door reinforcing the ban and organizing clean ups to raise awareness. Thanks to these efforts, the presence of plastics in the environment has decreased. The municipality estimates that 80% of the population supports the ban. The local community believes that things have changed—and the change is for good. Inspired by the action of San Pedro La Laguna and at least 17 other municipalities in the country, in September 2019 the Government of Guatemala issued a national ban on single use plastic bags, straws, cups, plates and stirrers as well as food containers made of polystyrene or other single-use plastic, with the exception of compostable ones, to enter into force in 2021.

### **AFRICA**

PLASTIC BAG BANS IN TANZANIA, KENYA, RWANDA

Contributing Authors: Niven Reddy, GAIA

The African continent is currently the global leader in plastic bag regulations with 34 countries that have adopted nationwide taxes or bans on single-use plastic bags. In particular, East Africa has given hope to many when it comes to effectively restricting the production, distribution and consumption of single-use plastic products. Rwanda, Kenya and most recently Tanzania have been strongly enforcing their bans on plastic bags.



Ever since Rwanda banned plastic bags over 10 years ago, the capital city of Kigali is considered by many to be the cleanest city in Africa.

But while these countries are on the right track, their efforts continue to be challenged by the relentless production of other singleuse plastic products sold across Africa.

The continued production of this packaging designed to be thrown away completely undermines the effective laws and the role that waste pickers play in African cities and has been driving the threat of incineration in the region. Organizations in Africa for the second year running are working to challenge these corporate powerhouses by using Break Free From Plastic brand audits as a data collection tool to show who is really to blame for this single-use plastic mess.

The Solutions

IV Business Redesign Solutions



# EUROPE AND AFRICA REVOLUTIONIZING COFFEE-TO-GO WITH RECUP

Contributing Authors: Meadhbh Bolger, Friends of the Earth Europe

RECUP is a German country-wide deposit system working to "make disposable cups disappear" with coffee-to-go reusable cups. This Deposit Return Scheme (DRS) system now collaborates with over 3,200 partner vendors in over 450 cities across Germany. Here's how it works: Customers pay a €1 deposit for a reusable cup available in three sizes: 200ml, 300ml or 400ml. Non-returnable, reusable lids are also available to purchase separately. This €1 deposit is reimbursed once the customer returns their cup to a partner vendor to wash and

reuse. Everything needed to participate is organized on their app and website.

RECUP has been so successful that they've started to go international. Through a partnership with South Africa's Cultivar Coffee, 10 cafes in the coastal city of Durban are using RECUPs as an initial pilot project. Check out their website to learn more and join the #coffeetogorevolution!



# SOUTH ASIA AND EUROPE INDIA'S TIFFIN BOXES SPREAD TO EUROPE

Contributing Author: Meadhbh Bolger, Friends of the Earth Europe

"Tiffin boxes" are stainless steel reusable food containers. They first started being used as the incredible "Dabbawala" lunch delivery/ return system in Mumbai, India — which delivers 200,000 meals in reusable tiffin tins each day. It has now expanded to the UK and Belgium. In the UK, Dabbadrop uses a Deposit Return Scheme (DRS) service in London, where customers pay a subscription fee depending on how many meals are purchased per month, plus an initial €17

deposit for the Tiffin box container. Set menu meals are delivered, and the empty tiffin box collected, washed and reused. In Belgium, there are more than 1,000 members using "Tiffin", saving 1.5 tons of food packaging waste per year and €20,000 in the purchase of disposable containers. India's Tiffin boxes are spreading fast — where will be next?

For more information, <u>visit their website</u> to learn more and become a partner.







### **GLOBAL**

PUSHING CORPORATES TO
JOIN THE #REUSEREVOLUTION

Contributing Author: Graham Forbes, Greenpeace USA

In response to the global plastic pollution crisis, a growing movement—the Reuse Revolution—is already finding real and innovative solutions focused on reusing sustainable materials instead of throwaway plastics. Communities, progressive businesses, and local governments around the world are stepping up with inspiring changes centered around the one true solution: reduction and reuse. There are zero-waste cities, water refill stations at airports and other public places, and even discounts at some businesses for bringing your own bags or reusable coffee cups. There are markets full of plastic-free fruits, vegetables and grains, and new zero-waste shops popping up around the world. The Reuse Revolution is underway.

To date, over 4 million people around the world have signed Greenpeace petitions demanding that companies focus on reduction and reuse. In October 2019 Greenpeace USA published *Throwing Away the Future: How Companies Still Have It Wrong on Plastic Pollution "Solutions,"* which warned consumers to be skeptical of the so-called solutions announced by multinational corporations to tackle the plastic pollution crisis. These false solutions, such as switching to paper or 'bioplastics' or embracing chemical recycling, are failing to move society away from single-use packaging and only continue to perpetuate the throwaway culture.

This is a transformative moment for our society. The world's largest companies should not remain stuck in the past by promoting false solutions but instead should urgently reprioritize corporate business models, and follow the lead of people all over the world by kicking off a just transition away from a throwaway economy.

And until they do, all our local and individual actions focused on replacing throwaway packaging with reusable solutions—the Reuse Revolution—gathered up and multiplied, are providing the counter power to the corporate controlled system built on throwaway packaging.

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but instead should urgently reprioritize corporate business models, and follow the lead of people all over the world by kicking off a just transition away from a throwaway economy.

CONCLUSION

# Existing Company Commitments Aren't Enough

People all over the world are rejecting single-use plastic and consumer goods companies are feeling the pressure. So much so that many of them have made commitments that they claim will make their products more sustainable, but largely protect the outdated throwaway business model that got us into this mess in the first place. Efforts by this year's top 3 polluters underscore how far the consumer goods sector has to go.

Nestlé for example has committed to making all of its packaging recyclable or reusable by 2025, but has no clear plans for reducing the total amount of single-use plastic it puts into the world, and the company sells over a billion products a day in single-use packaging. Coca Cola has recently unveiled a single-use plastic bottle using plastic collected from the oceans, and in 2009 they promoted a plastic bottle made from plants. None of these products will stop or reduce Coke's growing plastic

pollution, and reinforce the myth that single-use plastic can be sustainable. And finally, PepsiCo has joined the Alliance to End Plastic Waste that brings together plastic producers, oil companies and other consumer goods companies to promote beach cleanups and improving recycling as a way to ensure future demand for petrochemicals to make more plastic.

Efforts like these, and others focused on making packaging recyclable or compostable, do not get to the heart of the problem and all but guarantee the plastic pollution crisis will grow worse.



And while we are seeing some signs that companies are beginning to take the issue seriously, including <u>Uniliever's recent</u> <u>commitment</u> which incorporates reduction and investment in reuse, more companies need to step up and more detail is needed on how it will deliver these promises. For example, it is unclear what Uniliever's latest commitment will mean for the company's reliance on the most damaging type of plastic packaging, single-serve multilayered sachets. Sachets pollute Southeast Asia in the millions and while <u>Unilever has promised</u> to 'solve' the problem by using chemical

recycling, this technology is unproven, extremely energy intensive and a massive step in the wrong direction. It would be impossible to collect all the single-use packaging being produced and get it to one of these plants, and the approach ignores the need to move beyond throwaway packaging altogether.

As companies continue to profit by pumping out excessive single-use plastic, communities all over the world are being forced to shoulder the burden. These companies reap billions of dollars while



avoiding paying the full cost of their design and production choices. It is unacceptable that communities all over the world - as well as future generations - shoulder the burden that is not theirs to pay.

It is no longer acceptable for companies to continue making a profit by pumping out toxic single-use plastic and expecting communities and local governments to shoulder the burden. Until consumer goods companies like Coca-Cola, Nestlé and PepsiCo embrace the real solution—reusable packaging—we will continue to find their plastic polluting oceans, waterways and communities around the world for generations to come. The time to act is now. Companies must take immediate and ambitious action to eliminate single-use plastic packaging through investment in reuse and refill models.

Join us in demanding that corporations act to **REVEAL** their plastic footprint, **REDUCE** the plastic they produce, and **REINVENT** their packaging to be reusable!

- Spread the word to your networks with our #BrandAudit2019 Social Media Toolkit
- Join us in our <u>Global Week of Action</u> starting November 6!



# Appendix

### A WORD FROM OUR DATA ANALYST

### Methodology

With most data visualization projects, a large bulk of the work falls in data consolidation and cleaning. In this case, I would say roughly 95% of the work fell under these tasks. Given the gravity of this information, the data was handled very strictly to reduce exposure to human errors. For the consolidation process, we had 3 different submission platforms/ sources of the data: excel files, online web form, online document. I used Power Query as much as possible to avoid any manual intervention and errors that could possibly occur. This allows me to consolidate information at scale. The only barrier would be consolidating files that do not conform to the structure of the file that I initially

submitted which was only present in the excel files. Once consolidated, the more tedious portion is with the data cleaning. We created a mapping database that contains the different brands that fall under a parent company as well as variations of spelling the products (includes typos as well). Given the volume of submissions and time constraints, we prioritized items/ products with a higher quantity. Next, we also prioritized submissions from top polluting countries. Overall, we were able to map 93% (quantity of plastics) of the brands to the parent company covering 549,962 plastics collected. Once everything was mapped, we loaded it back into PowerBI to visualize the charts and reports.

### Limitations

- 1. The goal is to produce reports on top polluting brands. Given this, most of the Extract, Transform, Load (ETL) process was based on this objective.
- 2. The data is limited to the submissions from the audit events.
- 3. We did not include submissions that were in formats outside of the 3 channels such as photos, word documents with only summarized totals, etc.
- 4. Some languages may not be perfectly mapped if there were issues with translations and typos.

- 5. Certain parent companies were already assigned in the submissions. In those cases, we've retained them since they have greater familiarity with the local producers.
- 6. There may be certain parent companies that are written out differently but were not collapsed into a single company. This is likely to occur for local companies i.e., Lorem Ipsum Company and LIC are considered two different companies.
- 7. Fuzzy matching was explored using the Github library did not show favorable results (capturing only 300 entries out of 5500) and was therefore scrapped.

The following pages show the audit results on the Top 30 brands. View the full list here.

### AUDIT RESULTS BY TYPE OF PLASTIC COLLECTED

Parent Co. Final	EMPTY	HDPE	LDPE	0	PET	PP	PS	PVC	ps	GRAND T
Grand Total		9,388	39,589	285,254	117,724	17,986	6,002	477		476,423
1. Unbranded		4,025	16,208	219,943	17,111	10,054	4,467	186		271,994
2. La Doo					28,742					28,742
3. Barna					13,430					13,430
4. The Coca-Cola Company		876		964	9,284	454	44	51		11,732
5. Assorted				2,601	3,500					6,101
6. Pure Water, Inc.			321		4,989					5,310
7. Nestle		177	803	2,408	1,111	192	84			4,851
8. PepsiCo			27	906	2070					3,362
9. Unilever		62	945	1,956	120	200				3,284
			2,000	254	602	113	27			2,996
11. Master Chef				24,88						2,488
12. OK Food, Inc.			94	2,303						2,397
13. Universal Robina			178	1,584	420	48	13			2,243
14. Philip Morris		13	47	2,174						2,239
15. Friesland Campina			137	2,010						2,147
16. Sweetco Foods Ltd				1,840						1,840
17. Reckitt Benckiser		1,050		631		12				1,710
18. Sahakari Jal					563	975				1,548
19. Indofood			537	94	636		77			1,443
20. Niger Biscuit Company Ltd				1,438						1,438
21. Bakhresa Group					1311					1,346
22. Liwayway Holdings Company Ltd.			539	584						1,173
23. P&G		12	156	897	47			19		1,160
24. SUZA Group of Companies					1125					1,125
25. Perfetti van Melle			282							1,090
26. PT Mayora Indah Tbk				749	203	27				1,089
27. Mondelez Intl			342	407		324				1,083
28. Max				1,011						1,011
29. McDonald's Corporation		13	24	591		143	182			962
30. Arrow					327	609				936

# **Appendix**

## AUDIT RESULTS BY COUNTRY

rent Co. Final			Benin			Bulgaria	Burkina Fasc							EMPTY											
and Total	2,668	16	4,988	3,500	4,734		5,818	8,595	3,459	856	53	24	12,715	61,835	15	281	578	3,708	2,066	13,309	690	84	9,494	2,623	
Unbranded	1,838				2,112			342					11,109	33,648				646	515	6,298	673	36	1,948	2,244	
La Doo																									
Barna																									
The Coca-Cola Company	257				12		132	225	181					1,707				434	62				112		
Assorted				3,500	1,745					856															
Pure Water, Inc.			4,988																						
Nestle					30		70	126					44	895				27		138					
PepsiCo	27								14					1,037				24	120						
Unilever								12					144	234				12		81			12		
							2,996																		
. Master Chef																									
. OK Food, Inc.																									
. Universal Robina														573											
Philip Morris														1,635						25					
. Friesland Campina																									
. Sweetco Foods Ltd																									
. Reckitt Benckiser														17											
. Sahakari Jal														1,538											
. Indofood																				654					
. Niger Biscuit Company Ltd																									
. Bakhresa Group								621																	
. Liwayway Holdings Company Ltd.									12					500											
. P&G								47						365					19	12					
. SUZA Group of Companies																									
. Perfetti van Melle								52						429					96						
. PT Mayora Indah Tbk														73					11	488					
. Mondelez Intl					36			255					275	124											
. Max														1,011											
. McDonald's rporation																									
. Arrow														026											

# **Appendix**

## AUDIT RESULTS BY COUNTRY

arent Co. Final		Montenegro									Sri Lanka										GRAND TO
Grand Total	638	4,642	47,192	5,067	37,016	1,004	413	914	905	1,991	3,871	7,501	120,646	1,263	369	178	4,838		4,314	10,887	476,423
. Unbranded	106		21,238		17,502	1,000	78	355	900	1,731	1,717	6,492	120,632		361		1,618		3,349	3,661	271,994
2. La Doo			13,521																		28,742
3. Barna			7,205																		13,430
l. The Coca-Cola Company		1,443	37		2,804			14		52	232	63					123		36	1,288	11,732
5. Assorted																					6,101
. Pure Water, Inc.																					5,310
7. Nestle				60	1,755					14	197					174	21		29	262	4,851
3. PepsiCo			24	147	123												111		104		3,362
2. Unilever			253	13	1,299						203								15	192	3,284
																					2,996
1. Master Chef			1,229																		2,488
2. OK Food, Inc.			1,321																		2,397
3. Universal Robina					1,607															62	2,243
4. Philip Morris				270	90			62				44							47		2,239
5. Friesland Campina			962																		2,147
6. Sweetco Foods Ltd			865																		1,840
7. Reckitt Benckiser								12													1,710
8. Sahakari Jal																					1,538
9. Indofood																					1,443
0. Niger Biscuit Company Ltd																					1,438
1. Bakhresa Group							64							661							1,346
22. Liwayway Holdings Company Ltd.					603																1,173
3. P&G			79		488															29	1,160
4. SUZA Group of Companies		1,125																			1,125
5. Perfetti van Melle					247						144										1,090
6. PT Mayora Indah Tbk					517																1,089
7. Mondelez Intl				41	145																1,083
8. Max																					1,011
19. McDonald's Corporation				254	32			31													962
0. Arrow																		0			936

