World Cleanup Day 2018 Waste Report

For further information regarding the report, please contact info@letsdoitworld.org

General overview

Initiated by the civic movement Let's Do It!, 157 countries and territories joined the green wave of World Cleanup Day on 15 September 2018, bringing out **17.8 million people** for a day of action. The series of cleanups began on the small island nation of Fiji and swept across the planet to finish in American Samoa. The biggest cleanup was organised in Indonesia, in which 7.6 million people took part (almost 3% of the population), and the biggest proportion of the population getting involved was in Kosovo, where more than 10% of the country participated around World Cleanup Day.

All together 82 280 tonnes of waste was reported as collected, by 119 country teams. The average amount of waste picked up per participant across the world was 5 kg. Although this may not seem like much, it should be noted 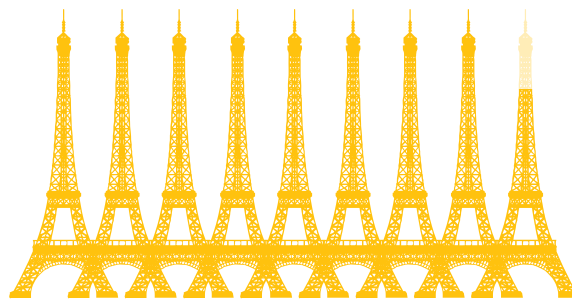that much of the trash was scattered sparsely across wide areas (e.g. across beaches and shorelines). This reduces the amount removed per person, while the effect of cleaning up landscapes was larger than just the weight. Another factor for consideration is that much of the collected waste was plastic, which is light in weight.

Reports on quantities collected were not received from 37 participating country teams. However, based on the reported waste and average per person from other countries, we estimate that the total amount of waste collected during World Cleanup Day 2018 was **at least 88 500 tonnes**. As many countries had either no or insufficient access to weighing scales or other means for making estimates, they often adopted conservative numbers in their reports. We can therefore assume that in reality the total amount was larger.
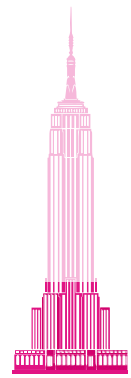
The total weight of collected waste was at least 88 500 tonnes, or as much as...
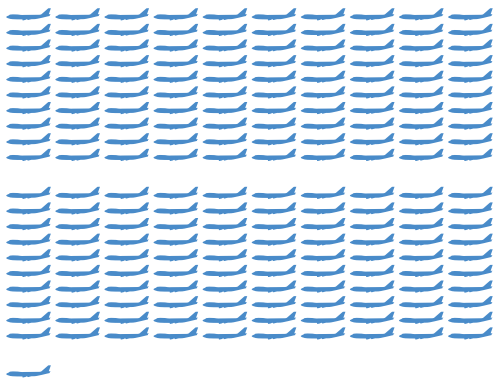
201 fully loaded Boeing 747s, or... ... **8.8** Eiffel Towers, or... ... **1/4** Empire State Building

We are aware of the importance of cleanups not only to remove waste from the environment, but also to collect valuable information (through a process which is known as citizen science). This is why Let's Do It World wanted to dig a bit deeper into the data provided by country teams, so as to not only assess the global benefits of the cleanups, but to also have a better global picture of waste pollution and the materials most frequently littered, the possibilities for having them recovered (e.g. reused or recycled), etc.

How the information was collected and analysed

In order to address the different organisational conditions and various operational patterns in the best way, two types of **waste reporting forms** (which can be found as annexes to this document) were distributed to World Cleanup Day national leaders, as possible tools to assist with reporting the data. The final decision on how to report data on collected waste was left to the leaders. Our expectation was for one report per country.

After the cleanup day, an additional reminder was sent to national leaders by e-mail, with a request to report:

▶ *The **total amount of waste** collected in your country (tonnes or liters or m³)*

▶ *If you collected separate waste types, how much of that waste was recyclable, **what different waste types** did you have and how much were they of the total amount*

(e.g. 3000 tonnes waste in total, from which 50 tonnes plastic, 70 tonnes metal, 45 tonnes glass, 20 tonnes flips flops)

▶ *What was the **method you used to get the amount of waste** (did you have someone weigh it, did you count the bags or truckloads, measure the size of the piles, or something else?)*

As a result, the Let's Do It Headquarters collected information from national leaders over the phone, and via e-mails, social media messages and the waste report forms. We converted the reported waste amounts (kilograms, trucks, bags, cubic meters) into tonnes, attempting to gain as much information from countries as possible. When waste quantities were not reported, we used an average of the reported data to fill in the gaps. We also used a similar approach for when data about waste type was missing.

From the 119 teams who reported waste, these were the methods of collecting the waste data at the country level:

Method of collecting waste data
Percent of countries

Estimated	58.8 %
Mixture	14.3 %
Counted	12.6 %
Weighed	11.8 %
Waste audit	2.5 %
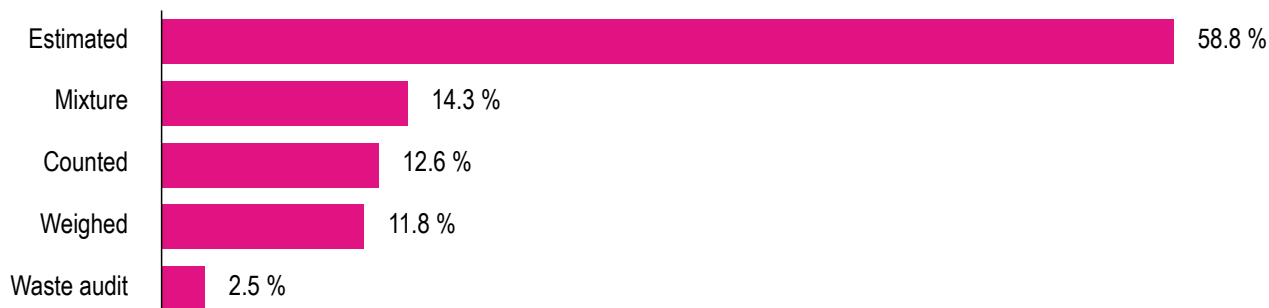
Notes:

► **"Estimated"** means that the country either specified that they estimated their data, or did not specify their method of collecting waste data at all.

► **"Mixture"** means that data was collected in different ways (e.g. counting bags, weighing, estimating).

► **"Counted"** means waste was reported either in number of bags, trucks, or other units of volume.

► **"Waste audit"** is shown for countries that only collected data through waste audits and/or brand audits. Some countries who did waste audits as part of the general cleanup, are included in the "mixture".

Brand Audit

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

Globally, cleanups are being used more and more to also collect detailed data about the waste items found. Usually, the waste is documented based on item type and material (e.g. metal cans, plastic cups, plastic straws, etc). These are called **waste audits**. A step further is a **brand audit**, in which items are also documented based on the brands they were produced by (separating similar packaging produced by different companies). The aim of a brand audit is to show companies that their products end up in nature, make them aware of the issue, and encourage them to take responsibility for it. The end goal is that better products and packaging can then be designed, marketing and distribution practices improved, and better information provided to customers.

During World Cleanup Day, the Break Free From Plastic movement coordinated a global brand audit campaign, in which 239 teams from 42 countries took part (as did some Let's Do It World organisers as well). The brand audit report can be found here.

Waste info

In addition to the countries who did waste audits, 18 countries managed to collect different materials separately. Different countries have different waste grouping and recycling practices, therefore it was challenging to group waste by material type. The materials most commonly collected separately were plastic, glass and metal.

It was reported that **at least 6600 tonnes of collected waste was sent to recycling facilities**. Taking an average from all groups that reported their recycling percentage, we estimate that 15% of all collected waste was recycled. Needless to say, we would like to encourage our partners to increase the recycling rate in future cleanups, as this a great additional benefit to simply removing the litter. We are aware, though, that actual local recycling possibilities may be widely different and constrained by organisational issues, non-existent or poorly established formal waste management schemes, and (lack of) infrastructure.

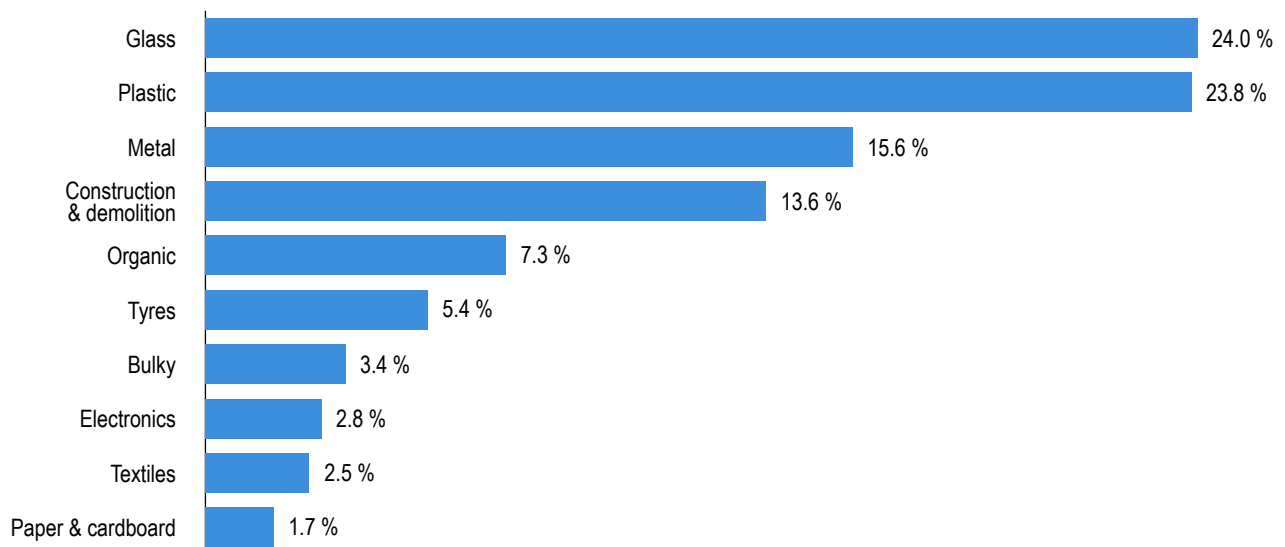weight of **1** glass bottle = weight of **35** plastic bottles
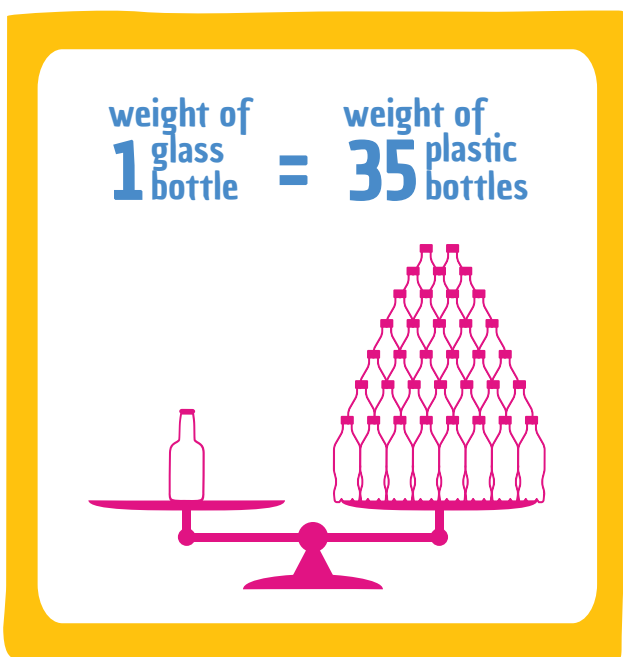
Percentage of waste types observed

As shown in the figure below, **plastic and glass were the most abundant materials by weight**. By volume, however, plastic was the largest waste component (for comparison: one 0.5 l glass bottle is 350 grams, while a plastic bottle is 10 grams).

Excluding the 'mixed waste'' fraction which has unknown content, the material-wise composition by weight was as follows:

Material types in the collected waste
Percent of total weight of reported waste, excluding the "mixed waste" fraction

| Material	Percent
Glass	24.0 %
Plastic	23.8 %
Metal	15.6 %
Construction & demolition	13.6 %
Organic	7.3 %
Tyres	5.4 %
Bulky	3.4 %
Electronics	2.8 %
Textiles	2.5 %
Paper & cardboard	1.7 %

Weird findings

During cleanups, many strange things can often be found. For example, during the French World Cleanup Day action these unusual items were reported, among others:
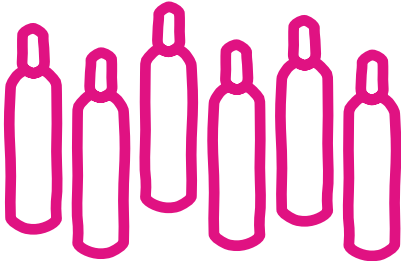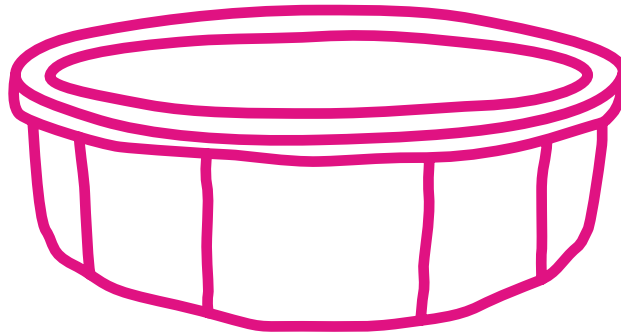
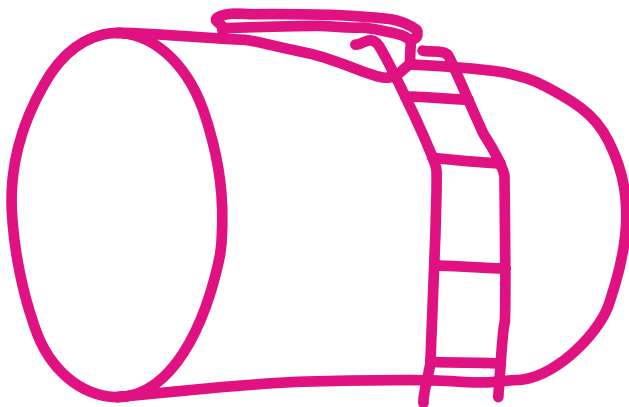**6 bottles of laughing gas (nitrous oxide)**

A dental plate
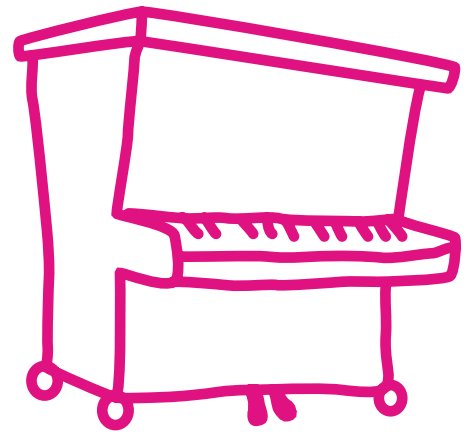
A piano

A gun

A swimming pool

Credit cards

In Norway, they found explosive cables used in construction… in fjords. In Lithuania, a fuel tank was found in a river. In Estonia, several shopping carts were found in lakes.

The French team also calculated that the **10 million cigarette butts** they collected is equivalent to **saving 4 million m³ of water from contamination** (1 cigarette butt can contaminate 500 litres of water)!

A fuel tank
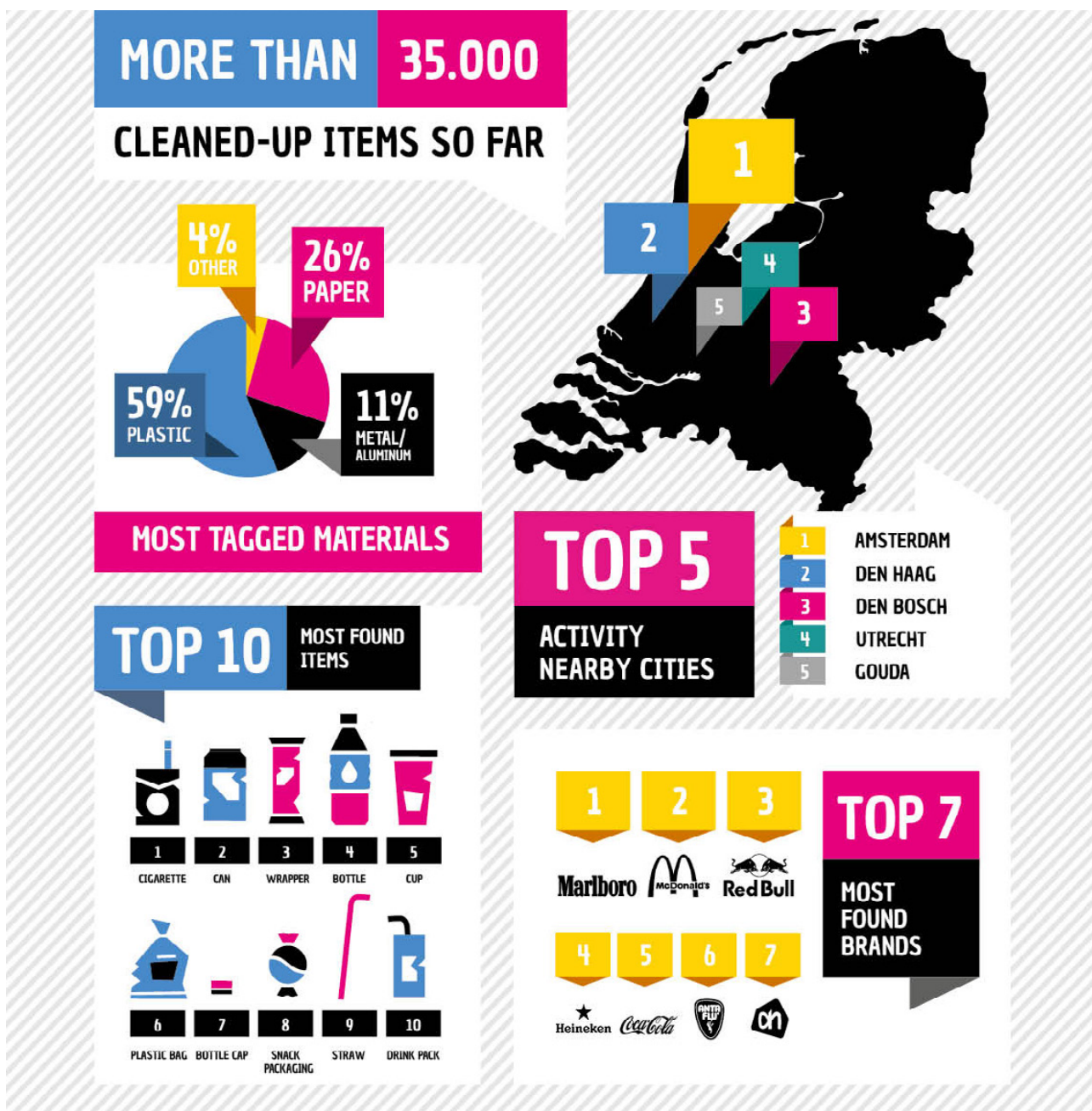
Shopping carts

Some examples from reports

Below, we have selected a few good examples on how waste data can be collected and visually reported. We hope this may also give inspiration to future cleanup organisers.

The Netherlands

Since The Netherlands is generally a clean country with a well established waste collection system and no waste dumps, they decided to focus on litter – the small pieces of waste that often go unnoticed. They teamed up with Litterati and did brand audits all over the country. This infographic shows the data collected through the app.

MORE THAN **35.000**

CLEANED-UP ITEMS SO FAR

4% OTHER
26% PAPER
59% PLASTIC
11% METAL/ALUMINUM

MOST TAGGED MATERIALS

TOP 10 MOST FOUND ITEMS

1 CIGARETTE
2 CAN
3 WRAPPER
4 BOTTLE
5 CUP
6 PLASTIC BAG
7 BOTTLE CAP
8 SNACK PACKAGING
9 STRAW
10 DRINK PACK

TOP 5 ACTIVITY NEARBY CITIES

1 AMSTERDAM
2 DEN HAAG
3 DEN BOSCH
4 UTRECHT
5 GOUDA

TOP 7 MOST FOUND BRANDS

1 Marlboro
2 McDonald's
3 Red Bull
4 Heineken
5 Coca-Cola
6 ANTI FLU
7 ah

WORLD CLEANUP DAY NL IS POWERED BY nudge · PLASTIC SOUP FOUNDATION

Sri Lanka

The Sri Lankan team was able to cooperate with waste recycling facilities and send most of the collected waste to be recycled. They held cleanups in five locations, and for each location recorded the number of participants, participating partners, waste amounts by type and where the materials were sent:
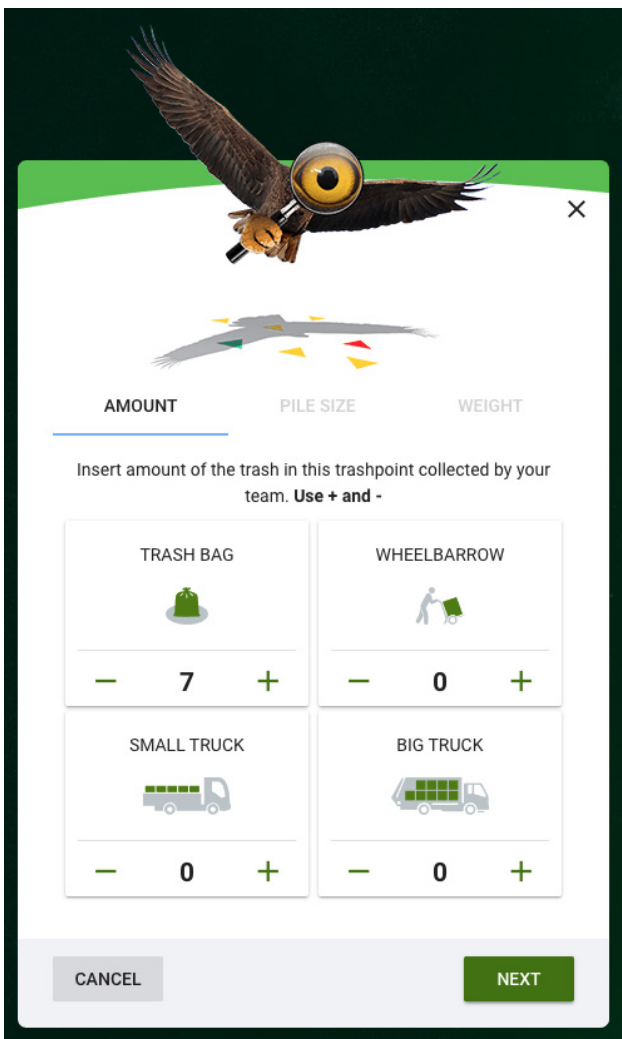
► *PET bottles and plastic – to yarn recycling plant*
► *Glass bottles – to recycling plant*
► *Metal – to recycling plant*
► *Polyethylene and other – to multiple council garbage sorting plants*

Estonia

In Estonia all site coordinators were encouraged to use the Pointerplanner online tool, which was developed especially for the cleanup day. The national leader estimated that around ⅓ of all cleanups in Estonia were reported through this app. The tool allowed reporting in both volume and percentage of material composition, as shown in the image. The only feedback was that people prefer to report in more visually understandable units (2 sofas, 13 tyres, 50 bags of waste).

Tanzania

The Tanzanian team reported their whole process very thoroughly, including how they started with the mapping campaign, carried out a brand audit on the cleanup day, and what their next plans entail. This shows very clearly how each stage of the campaign is connected with the others. Here are some snapshots from their report:

Findings: Mapping (20,500 trash points)

Waste Audit
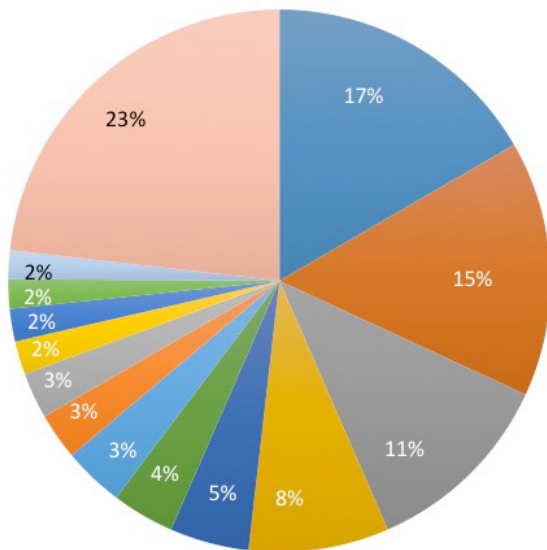
- Plastic bags (grocery, etc)
- Plastic bottle caps
- Newspaper
- Glass beverage bottles, e.g. beer, wine, soda
- Aluminium beverage cans, e.g. beer, soda
- Aluminium food cans, e.g. coffee, canned fruit
- Polystyrene/foam pieces and packaging
- Clothing items
- Plastic sachets (konyagi, tomato paste, etc)
- Car parts
- Shoes
- Toothbrushes
- Flip flops
- Other

Moving Forward

Work with private sector on extended producer responsibility

Work with communities on a continuous basis

Work with government on policies and plastic bag ban

Some recommendations for organising cleanups and collecting waste data

Why collecting waste data is so important

► Cleanups are a great way to **improve places, landscapes and the environment**. They are not the solution in themselves, but they bring with them several remarkable benefits which contribute to more long-term, permanent solutions:

- They fight **"trash blindness"** through the active involvement of ordinary people.

- They provide input to **citizen science**, the effect of which is maximised when cleanups are held on a global scale (as is the case with World Cleanup Day).

- They highlight the **most pressing issues** in need of tackling through political, regulatory, organisational, and operational actions.

► The beneficial effects are maximised when **data from cleanups** is collected, to the best possible standards given local conditions and constraints (which may vary significantly in a global initiative).

► Cleanups can be a good tool for **creating pressure for change in society**, and using the waste composition and quantity as illustration or evidence can be very helpful in this.

► While planning cleanups, it is best to already begin considering if there is a **specific change** you are asking for. For example, cleanups often focus on plastic bottles or packaging or cigarette butts, to influence companies and policy around those particular items. This can make your work more targeted.

► Gathering info on the different materials collected during cleanups helps to highlight **how many resources we are wasting**, which could otherwise have been sent for reuse or recycling.

Example

In 2018, EU institutions prepared and finally signed the Deal on the Single Use Plastic Directive, targeting the 10 single-use plastic items most often found on Europe's beaches and seas. The data to identify these items was mostly gathered at cleanups!

► Collecting different waste materials separately during cleanups also educates the participants on how to sort waste correctly, and that **waste is actually a resource** that can have value!

How to collect data

► Always try to be clear **what units are being used** (e.g. kg, tonnes, m^3, etc.). Formal units are preferable over informal units.

► Adapt to pragmatism whenever necessary. People on the field usually tend to report what they see (e.g. number of big items, trash bags, etc.), so there needs to be an **easy process to convert this data into weight**. For example, weighing one item/bag/heap and adding it to the report.

► Create **one standard method** and train groups to follow the method before the cleanup day.

► **Everything needs to be reported** for a report to be complete, otherwise the data is challenging to analyze.

► When collecting data on different waste types, try to **report the waste types separately**. For example, reporting "5 tonnes of paper and glass' makes it still difficult to understand how much of each material there was.

► **Be clear in your wording**. For example "10 bags, 2 tonnes" could mean either "10 bags = 2 tonnes" or "10 bags + 2 tonnes", which gives a different end result.

► **Report anything you deem worthwhile, curious or remarkable**, even briefly. Big changes often start from small, very specific local observations. And sometimes, local specificities match each other across the global picture.
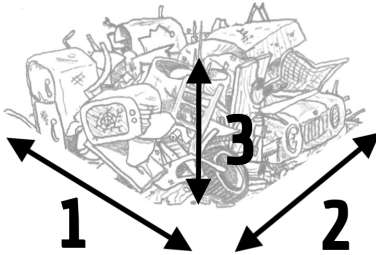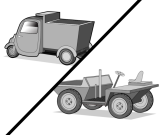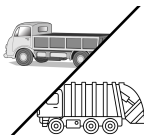
Feel free to **add your own hints and recommendations**!

OVERALL CLEANUP INFO	DATE	
	CLEANUP TYPE - *Circle all that apply*	Land Beach Urban Sea/Lake/River Valley
	CLOSEST VILLAGE, TOWN, CITY	
	COUNTRY	
COORDINATOR'S CONTACT INFO	NAME SURNAME	
	E-MAIL	
	PHONE NUMBER	(+) ( ) ( )
PARTICIPANT INFO	TOTAL NUMBER OF PEOPLE	
	No. of Adults	
	No. of Children	
	No. of NGOs, Companies, etc.	
	Names of NGOs, Companies, etc.	

AMOUNT OF COLLECTED WASTE

Choose option 1, 2 or 3. Indicate separate collection by underlining specific values.

Option 1	Option 2	Option 3 - How many of each?
TOTAL MASS (kg) [] measured / [] estimated	Pile (indicate size). [] metres / [] feet	**Bags/Boxes (10-100 L)**
TOTAL Volume (m³) [] measured / [] estimated		**Wheelbarrows (100-1000 L)**
Other notes and thoughts	Pile 1 1) 2) 3) / Pile 2 1) 2) 3) / Pile 3 1) 2) 3)	**Small Trucks (1,000+ L)**
	Pile 4 1) 2) 3) / Pile 5 1) 2) 3) / Pile 6 1) 2) 3)	**Big Trucks (10,000+ L)** [] Not / [] Compressed
	Pile 7 1) 2) 3) / Pile 8 1) 2) 3) / Pile 9 1) 2) 3)	

Space for logos of sponsors/partners of national team.

WORLD CLEANUP DAY 2018 15 SEPT

FLAGSTATION / SITE COORDINATOR - REPORTING FORM
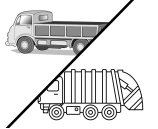
www.worldcleanupday.org
BITLY DIGITAL FORM LINK
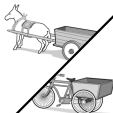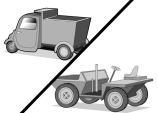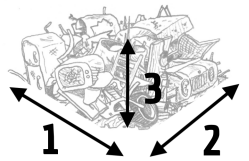
PLEASE WRITE IN CAPITAL LETTERS			
DATE		NAME	
CLOSEST VILLAGE, TOWN, CITY		E-MAIL	
GPS - (if available)		PHONE NUMBER	(+) ( ) ( )
COUNTRY		TOTAL NUMBER OF PEOPLE	

FOR EACH MATERIAL FILL IN OPTION 1 ONLY IF WEIGHED EXACTLY, OTHERWISE FILL IN OPTION 2 - BOTH ARE NOT NEEDED

THE SAME WASTE SHOULD ONLY BE LISTED IN ONE BOX	OPTION 1	OPTION 2					
A BAG OF GLASS MAY BE AS PART OF THE TOTAL MASS, OR AS A BAG, OR ONCE IN A TRUCK. AVOID DUPLICATION, ONLY LIST IT UNDER ONE!	TOTAL MASS (kg)	BAGS	WHEELBARROW	SMALL TRUCK	BIG TRUCK		PILE MARK UNITS [] METRES / [] YARDS
MATERIAL COLLECTED	WEIGHED AND EXACT						
EXAMPLE MATERIAL 1	45 kg					1)	2) 3)
EXAMPLE MATERIAL 2						1) 2.5 m	2) 25 m 3) 1.4 m
EXAMPLE MATERIAL 3		35		2	3	1) 31 yards	2) 2 ft 3) 12 yards
A - Mixed Waste						1)	2) 3)
B - Plastic						1)	2) 3)
C - Glass						1)	2) 3)
D - Metal						1)	2) 3)
E - Biological						1)	2) 3)
F - Textiles and Clothes						1)	2) 3)
G - Electronics						1)	2) 3)
H - Tyres						1)	2) 3)
I - Construction and Demolition						1)	2) 3)
J - Bulky Waste						1)	2) 3)