

# THE MAKING WAVES GUIDE TO PLASTIC- FREE FESTIVALS AND EVENTS



RAW<sup>e</sup>  
foundation



The Making Waves Guide is a free resource published by RAW Foundation, a not-for-profit organisation committed to educating people to move towards sustainable consumption, in partnership with Kambe Events, a sustainable event management consultancy.

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# ① INTRODUCTION

Since the dawn of humanity, people have gathered together to eat and drink, make music and dance, create art and perform rituals, learn and share ideas, trade and become inspired.

Today, the popularity of such gatherings, in the form of festivals, shows no sign of waning. There are now over 500 summer music festivals in the UK alone and it is estimated that one in six adults in the UK have attended a festival or live music event.

Our personal and collective choices have been altering the planet for thousands of years and now our expanding population and the global spread of consumerism mean that our ecological impact has never been more critical than it is today.

Mirroring the proliferation of disposables in society, festivals consume vast amounts of single-use plastics and other materials, such as serveware for drinks and food. Images in the press in recent years have highlighted the shocking sea of litter often left by audiences at events, a metaphor for a global addiction to convenience and a disconnection from the environmental impacts of this throw-away culture.

The unique festival experience offers event organisers the opportunity to make a positive change in society in a way that is unavailable to many other sectors. Festivals can control what comes onsite and into their ecosystem, can choose to take action to limit plastic waste and, by doing so, can positively influence the attitudes and behaviour of their audiences.



# ② ABOUT THIS GUIDE

This guide will be of use for anyone involved in the organisation of festivals, regardless of the size of the event or the nature of the audience.

The guide provides background information on the issues arising from using plastics at events and practical advice for festival organisers on how to implement prevention strategies for positive long-term change. Although the case studies in the guide are drawn primarily from UK festivals, they illustrate examples of good practice relevant to the wider event and international festival community.

## THIS GUIDE OFFERS:

- Clear facts about plastics.
- Information on plastics @ festivals.
- An action plan checklist.
- Inspirational case studies and tips.
- Links to useful resources.

## IT WILL HELP YOU TO:

- Better understand the issues caused by using plastics.
- Make sound decisions about reducing plastics at your event(s)
- Save costs and valuable resources over the short and long term.
- Attract artists and partners that want to support sustainability.
- Be part of a global plastic-free movement for a sustainable future.
- Give you more confidence in communicating your decisions about plastic.



# ③ LET'S MAKE WAVES TOGETHER!

Our aim is to raise awareness of the issues caused by using plastics and inspire action to reduce consumption. So, if you are a festival or event organiser interested in a plastic-free future, or keen to reduce your waste volume, this guide is for you!

## WHY

The plastic pollution crisis has caught the attention of the media and raised the concern of the general public. Reports claim that sea salt has been contaminated by microscopic plastic particles,<sup>1</sup> plastic chunks have been found in Arctic ice,<sup>2</sup> and it is predicted that by 2050 the oceans will contain more plastic (by weight) than fish.<sup>3</sup>

As a response to public concerns some companies have started rethinking their use of plastic products by switching to more sustainable alternatives.<sup>4</sup> Sadly, many others are not changing and are sailing full steam ahead into an unsustainable future.<sup>5</sup>

## TOGETHER WE CAN

RAW Foundation is driving forward the uptake of clean, re-usable, local and circular alternative materials in place of harmful plastics. Championing alternative consumption and fostering collaboration within the events industry are powerful tools for driving change.

By working together and implementing the simple, affordable and effective actions outlined in this guide, your event can play an important part in improving human health, protecting precious marine life and the long-term sustainability of our ecosystems.



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# ④ THE PROBLEM WITH PLASTICS

## WHAT'S THE PROBLEM?

Plastic pollution has reached a crisis point, especially in the ocean. Despite growing awareness of the problem, the flow of plastic waste continues to increase around the world.

The proliferation of single-use plastics encourages a throw-away consumer culture and our inability to deal with it as a waste-product is causing the contamination of our precious water systems, threatening marine life, entering food chains, impacting wildlife and affecting human health.

### QUANTITY

- Vast quantities of long-term plastic debris and particles litter the world's earth and oceans.
- Most of this debris is primary microplastics (such as plastic pellets and microbeads) and secondary microplastics from single-use plastic and packaging, tyres and microfibres.



### TOXICITY

- Plastic contains hundreds of highly toxic persistent chemicals that are damaging to human health and the environment.
- Plastic is made from and transported by non-renewable fossil fuels (oil).
- Many common plastics (e.g. PET water bottles) can leach toxic chemicals from the plastic into the water they contain, especially in the heat but even in normal conditions.
- Many types of plastic are broken down by sunlight into tiny microplastics that are easily dispersed into water.
- Microplastics act like a sponge, attracting other toxins. These extreme toxic levels can pass up the food chain, contaminating entire ecosystems - including our food.





## RECYCLABILITY

- Appropriate clean recycling and recovery systems are not keeping pace with the sheer quantity or mixture of plastic produced. An overwhelming 72% of plastic packaging is not recovered at all. 40% is landfilled and 32% leaks out of collection systems, leaching chemicals into surrounding habitats, fresh water and marine water systems.<sup>6</sup>
- Most recycled plastics are exported, often illegally, from Europe to Africa and Asia where burning waste in the open air is commonplace.
- China's ban on imported plastic from Europe in January 2018, has led to a crisis for UK recycling systems and there is a risk of plastic waste being stockpiled or ending up in landfill.<sup>7</sup>
- The majority of recycling processes release toxic emissions or dust into the air and soil.

## DISPOSABILITY

- Sales of products with a short life span packaged in plastic encourages waste on a vast scale. In addition, plastic packaging is almost exclusively single-use.
- Design for disposability has encouraged a throw-away consumer culture, that is disconnected from the environmental consequences.
- Plastics can take a minimum of 500 years to degrade. Ironically, this means that we are using plastic materials that are designed to last, for short-term use.



**BE PART OF THE SOLUTION... NOT THE POLLUTION!**

# ⑤ KNOW YOUR PLASTICS

If you have to use plastic, be sure you are using a type that is recyclable. Many, but not all, plastics have a code on the back. The two most commonly recycled plastics in the UK are PET (1) and HDPE (2).

Many other plastics are not recycled and the current labelling system has no category for bioplastics.

TYPE	USE	RECYCLED IN THE UK?
 <b>PET/E</b>		✓
 <b>HDPE</b>		✓
 <b>PVC</b>		SOME
 <b>LDPE</b>		✗
 <b>PP</b>		✗
 <b>PS/EPS</b>		✗
 <b>OTHER</b>		✗

# UNDERSTANDING BIOPLASTICS

**Bioplastics** are not the answer – they can confuse audiences (are they plastic or compost?). Even though they may be made from renewable sources, the infrastructure for collecting and reprocessing bioplastics is currently not well established and there are very few facilities that are able to process them. Furthermore, the modern systems for separating plastics by type are not able to detect bioplastics easily, which causes contamination of otherwise good quality recycling.

Bioplastics vary widely in their base material and their ability (or inability) to biodegrade, and questions continue to be raised over the harmful additives, colourants and plasticisers which are used to produce them.

The most common bioplastics include:

- (CA) made from wood or cotton
- (PHB) made from sugar or lipids
- (PHA) made from sugar or lipids
- (PLA) made from corn and plants
- Starch-based polyesters; corn and rice

**Oxo degradable** plastics are not a solution to plastic pollution and they do not fit in a circular economy. These plastics are being produced and sold in many countries, where societies are being led to believe they safely biodegrade. Yet significant evidence suggests oxo degradable plastics fragment into small pieces, contributing to microplastics pollution.<sup>8</sup>

**Bisphenol A (BPA) free plastics** are considered to be the safest plastic option in terms of potential impact on human health. However research raises concerns that BPA-free plastic may also release hazardous compounds after undergoing wear and tear, such as through dishwashing, micro-waving, or exposure to sunlight.<sup>9</sup>

### THE PLASTIC WATER BOTTLE EFFECT

#### ENVIRONMENTAL IMPACTS

6.74 GALLONS of water are used in the production and transportation of a 1-LITER WATER BOTTLE.

90% of all trash on the ocean surface is plastics with **46,000 PIECES** per square mile.\*

#### ANIMAL IMPACTS

1 MILLION seabirds and 100,000 MARINE MAMMALS die from entanglement or ingestion of plastics.

119 BOTTLE CAPS were discovered in the stomach of an albatross that was found dead in Hawaii.

MARINE ANIMALS are susceptible to feeling the negative effects of plastic bottles because of mistaking these products for food.

#### HEALTH IMPACTS

Polyethylene Terephthalate contains hormone-disrupting chemicals that interfere with estrogen and reproductive hormones<sup>11</sup>

Linked to:  
Breast cancer  
Reduced fertility in women  
Premature labor  
Birth defects  
Neurological difficulties  
Enlarged breasts in men  
Dropping sperm counts

In 2011, 96% of women had BPA in their bodies.

FERTILIZER, PHARMACEUTICALS, DISINFECTANTS, and other chemicals have been found in bottled water.<sup>14</sup>

# ⑥ PLASTIC @ FESTIVALS

## WHAT AND WHERE

In the temporary world of festivals, convenience is a crucial factor. Being able to sell large quantities of drinks quickly, in a disposable plastic bottle or cup, has become the norm. It is often perceived as the only practical option for event organisers, and vital for maintaining revenues. However long-lasting, durable, reuse solutions are available and are the most preferred sustainable alternative.

Many of the products and promotional materials used on event sites are also made from plastics, and many waste management approaches use single-use plastics to collect waste.

Plastics use at festivals is fairly obvious. Eating, drinking, fancy dress, personal care and promotional products tend to be most prominent.

## THIS INCLUDES:

- Water and drinks bottles
- Cups, plates, cutlery, food containers
- Straws and stirrers
- Badges and wristbands
- Fancy dress clothing and glitter
- Personal care and travel miniatures
- Signage, stickers and laminating
- Promotional items
- Tents, gazebos and cable ties
- Refuse bags

## THE PROBLEMS

**Litter:** A significant amount of waste thrown on the ground at events tends to be single-use plastic pint cups, water and drinks bottles – all of which create a less desirable environment for the audience and incur cleaning costs.

**Resources:** Most plastic pint cups, water and drinks bottles are manufactured from non-renewable resources derived from oil.

**Low recycling rates:** Confusion about types of plastics and recycling methods, the use of bioplastics in recent years, as well as the shortage of recycling facilities mean that many plastics do not end up being recycled at festivals and events.

**The vibe:** Behavioural studies suggest that the disposability of plastics can promote a lack of individual responsibility for the shared environment, which may have implications for the atmosphere, the potential for damage, and overall costs of managing the event and clean up.

**Image:** Plastics have become a surprisingly hot topic in the media, and audiences may be expecting their festival to act on this issue. After negative national attention on the waste left at the end of events in recent years, and the widespread actions being taken across society on plastics, it may be prudent for festivals not to be left behind.



# ⑦ TAKE ACTION!

How can we eliminate or reduce single-use plastics, keep things practical on the ground, and manage costs?

Whilst there isn't a one-size-fits-all for all types and scale of events, there are a few key things that most events can do to make a significant difference. As a general approach, the best way of dealing with waste is not to create any in the first place! Follow the waste mantra:

## REMOVE & REDUCE REUSE RECYCLE

### ① REMOVE AND REDUCE

REMOVE & REDUCE	HOW?	NOTES & TIPS
Plastic water and drinks bottles*	Ban sales onsite across all concessions. Promote and sell reusable water bottles. Provide more water points.	Audiences respond well to cleaner sites as a result of removing litter, most of which is typically drinks bottles and bar cups.
Single-use plastic bar cups	Consider a reusable cup system or paper cups.	See the Reusable Cup Systems Guide in the <a href="#">Plastic-Free Festivals: Action Pack</a> .
Straws and single-use sauce sachets	Work with your cafes or concessions company to develop a simple policy to avoid single-use plastics.	Do you need straws? If they are must-haves, paper straws are now widely available and of improved quality.  Most caterers are now happy to have bottles of sauces on the counter.
Use only compostable serveware i.e. plates, knives, forks, bowls, boxes, hot drink cup lids etc.	Make it a policy to use only compostable items: this keeps things simple to understand for concessions/cafes and easy to monitor onsite.	Many suppliers now offer compostable options. Avoid 'biodegradable' as this tends not to be 'compostable'.
Accreditation items such as lanyards	Use reusable, rather than event-specific, lanyards, badges, wristbands, signs and display materials, etc.	As a start, what can be reused if you remove the year/date?

\*Note - TetraPak is not a solution: because it is made up of several materials bonded together it cannot be easily recycled.

## 2 PROMOTE REUSE

- Promote the use of reusable bottles and cups to audiences, artists, staff, contractors and volunteers.
- Consider encouraging that sit-down cafes or restaurants onsite use real crockery and eating utensils
- Can crew catering ditch disposables completely?
- Work with RAW to produce your own branded stainless steel reusable water bottle.
- Consider providing core staff/crew and artists with reusable items to inspire others to follow.

## 3 RECYCLE

If there are plastics that cannot be avoided:

- Minimise the number of types of plastic onsite.
- Separate materials effectively.
- Recycle remaining materials.

### MORE IDEAS TO REDUCE PLASTICS

- Use non-PVC banners.
- Replace corex with products like eco-foam board.
- Provide artists with reusable bottles.
- Don't use laminated card or paper – it's plastic. Choose Forest Stewardship Council (FSC) uncoated or starch-based coated papers and cards, unprinted or printed using water-based ink is preferable.
- Ban polystyrene and single-use plastic packaged foods.
- Choose paper bags rather than plastic bags for merchandise packs.
- Encourage staff in onsite offices to minimise the use of lamination and poly-pockets.
- Use reusable rather than event specific, name badges, wristbands, signs, display materials, exhibition stands and flooring, etc.

### RAW'S TOP 3 ACTIONS:

Follow Bestival's lead and ban straws – it's a great first step, and signals a commitment to change.

Ban sales of water and drinks in single-use plastic bottles onsite and promote reusable bottles.

Put in place a strict policy for catering concessions that avoids plastic serveware, single-serving sauce sachets and reduces plastic packaging. See the template Concessions Materials Policy in the [Plastic-Free Festivals: Action Pack](#) for a policy example.

### SERVEWARE FOCUS

Use serveware that is reusable or compostable, made from metal, glass, paper, card or wooden compostables. Wooden serveware from sustainably-managed sources is also suitable. Note that compostable is different to 'biodegradable'. Biodegradable materials break down over longer periods of 3 months to 2 years, which is different to composting. Few waste facilities in the UK can actually process biodegradable materials. Compostable serveware is recommended for use with food, as it can either be composted with the food or in cases where the cardboard is removed by 'depackaging' machinery as part of aerobic digestion (AD) processes, the material has less impact in its manufacture than plastics.

If you have any queries about whether you are using the correct materials contact your supplier and check that what you are buying conforms to EN 13432 or EN 14995 standards at: [www.en-standard.eu/~csn-en-14995-plastics-evaluation-of-compostability-test-scheme-and-specifications/tability-test-scheme-and-specifications/](http://www.en-standard.eu/~csn-en-14995-plastics-evaluation-of-compostability-test-scheme-and-specifications/tability-test-scheme-and-specifications/).



Photo credit: FRANK ReFill Water Stall at Cornbury Festival

## FOCUS: WHAT'S THE BEST TYPE OF REUSABLE BOTTLE?

### PLASTIC (HDPE, LDPE, PP or PC)



### ALUMINIUM



### STAINLESS STEEL



Source: Hammond, G. and Jones, C. (2011), The Inventory of Carbon and Energy (ICE).

## FOCUS: CUPS AT EVENTS

### What kind of cup has the least negative environmental impact?

A recent study conducted in Belgium\* compared the relative impact of many different types of cups at events, using a meta-analysis of life cycle analyses (LCAs)<sup>†</sup>. The results strongly favour reusable cups as an optimum solution, but each event situation is different, and the benefit of reusable cups is dependant on the number of uses: see the table on pg. 15 for a comparison of 'tilt points' – the point at which the each use of a reusable cup causes less environmental impact than a disposable one.

For cases where reusable cups cannot be avoided, using rPet cups and recycling them is shown to be a good option, as long as the vast majority of cups are successfully captured, separated and recycled.

### Why use reusable cups?

Single-use plastic bar cups are often a significant source of litter for events, and audiences generally prefer the experience of drinking from more solid reusable cups.

The majority of the environmental impact, usually around 80% from any type of cup, occurs as a result of manufacturing. This includes raw materials, water, energy and long-distance transportation. Single-use plastic cups are commonly recycled in the UK, however unlike metals which can be recycled infinitely, plastics are often 'down-cycled' into a lesser grade products. Every piece of plastic which has not been incinerated or recycled still exists in the wider environment somewhere because plastic does not decompose.

### How do reusable bar cup systems work?

Festivals usually work with a reusable cup company, and are typically provided with enough cups to serve all drinks throughout their event, with all the dirty cups being taken at the end of the event to be washed offsite. Some very large events, or those near to facilities, may install washing stations onsite or wash daily.

Audiences either pay a deposit or a non-returnable one-off charge for their first cup, and then exchange dirty cups for clean each time they purchase another drink.

## WHAT IS A LIFE CYCLE ANALYSIS?

Life Cycle Analysis is a technique to assess environmental impacts associated with all the stages of a product's life – including raw material extraction, materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling.

In many cases, events choose to brand a percentage of their cups as souvenirs, which can extend their brand-reach and satisfy sponsor requirements. However, this needs to be balanced with the percentage of unbranded/generic cups that can be reused at future events to realise the environmental benefits when comparing to using disposables.

### The bottom line

The business case for using reusable cups varies considerably depending on the scale and type of event, and the service provider, but in most cases there can be costs savings and/or revenue gain. The balance will depend on:

- The savings made from not purchasing reusable cups.
- Reductions in waste management costs.
- Revenue gained from deposits on cups which are not returned.
- The purchase and/or service costs of the cups.

A full factsheet about how to successfully manage reusable cup systems at outdoor events is included in the [Making Waves: Plastic-Free Action Pack](#).

### Using incentives

Many festivals have used incentives to help make initiatives work. It is common place to charge either a non-returnable levy or returnable deposit on cups for reusable bar cups initiatives, to maximise returns. At Reading Festival the younger demographic appears to value being able to return disposable cups for a small reward, helping with site cleanliness and recycling. Other initiatives, such as the Recycling Deposit at Shambala and the Eco Bond at Boomtown Fair, encourage festivalgoers to bring their campsite recycling and rubbish separately to a central point, with high rates of engagement.



## How many times do you have to use a reusable cup for it to be a more environmentally sustainable option than a disposable cup?

The answer to this question depends on what the reusable or disposable cup is made from and the method by which it is disposed. The study conducted in Belgium compared a range of disposable cups types with reusable plastic cups to find how many times they would need to be reused to ensure they had less of an environmental impact. See the table below for the results.

Note that in all the cases included, the disposable cup is incinerated, so the factors would change if recycled.

Comparison of reusable cup vs other materials	Cup uses at which impact is less per use than disposable*
(PP) reusable cup vs. cardboard single-use - incinerated	9 - 14 times
(PP) reusable cup vs. PP single-use - incinerated	7 - 8 times
(PP) reusable cup vs. PS single-use - incinerated	3 - 5 times
(PP) reusable cup vs. PET single-use - incinerated	2.5** - 5 times

\* OVAM analysis uses 18 LCAs.

\*\* Quantis (2013) Screening LCA: Comparison single-use cups and reusable cups

### Port Eliot introduces reusable cups across all bars

Port Eliot started using reusable cups in 2016. They invested a lot of time into communicating the message to their audience, and were pleased by how quickly people connected with the process: "They weren't phased at all by having to pay £1 or carry a cup," commented Poppy, Festival Director, "we quickly saw the benefits: not only in how clean it left the site, but also in the reduction of the amount of waste we sent to landfill."

Auditing of the cups was a challenge in the first year, as they have 11 independent bars rather than a central provider. In their second year, with a more robust and dedicated management team, they were able to audit more accurately which enabled the project to become cost neutral. They are now heading into their third year of using reusable cups and there's no looking back.



## FOCUS: DISPOSABLE CUPS

### If I have no choice but to use disposable cups; which should I use?

If you have no choice but to use disposable plastic cups, PET is the most commonly recycled. Choose rPET - recycled PET - to reduce the impacts associated with the manufacture of the item. The current advice on paper cups is to use items with a polymer coating only if you can secure appropriate recycling, which in the UK is rare. Other options such as compostable cups should be used where there is confidence that they can be separated effectively onsite and composted with the food waste - check with your waste manager what will happen to the waste, or research the local waste facility yourself.

If we must use disposables whilst transitioning to reuse options, we should aim to recycle. In addition to reclaiming materials for another life, it is often forgotten that part of the impact of a material is derived from the disposal method. For example PLA (biodegradable) cups in landfill may create methane emissions. Thus the disposal methods available is crucial to the decision of what type of cup to use. See the table below to help with your decision-making.

### Assessment of disposal options for disposable cup types

It is important to note that the table is not recommending the use of certain materials, rather providing advice on disposal options.

	INCINERATION	LANDFILL	COMPOST	RECYCLING
PLA	Best disposal option.	Worst option as it will decompose anaerobically and produce methane.	Theoretically possible but not done in practice – requires high heat and long residence time (26 weeks) and most waste plants have residence time of 12 weeks.	Not an option.
PET	Emits CO2 from fossil source and is therefore the least favourable option.	Relatively inert so will be fairly benign. It's not known what happens in the long term. Value is effectively lost though.	Not an option.	Commonly recycled in the UK.
PP	Emits CO2 from fossil source and is therefore the least favourable option.	Relatively inert so will be fairly benign. It's not known what happens in the long term.	Not an option.	Commonly recycled in the UK
Cardboard lined with PP	Best option is incineration if specialist recycling not available. Majority of carbon is biogenic.	Worst option as it will decompose anaerobically and produce methane.	Limited examples of this happening.	This is starting to happen now, but there are only two UK plants taking the materials.
Cardboard lined with PLA	Best option as entirely biogenic.	Worst option as it will decompose anaerobically and produce methane.	Unlikely to find a facility that will accept it.	Not an option.

## FOCUS: BEHIND THE SCENES WITH GREENBOX EVENTS

### 10 ways Greenbox are tackling the challenges of managing plastic waste streams at events

Greenbox Events provided waste management services to over 30 festivals and events in 2017, dealing with the waste of around 420,00 visitors, and handling in the region of 2,000 tonnes of waste and recycling. They use a 4 or 6 bin system, which makes it clearer to audiences where to put types of waste, and effectively separates materials.

In addition to the problems and effort of first separating plastics out from other waste streams, and then one type of plastic from another, there is the issue of finding where they will be accepted for recycling. The picture is not the same nationally so working at one location each year is a challenge.

Greenbox face these challenges in ten ways:

1. Where reusable cups are not an option, they direct bars towards the most readily recycled plastics.
2. Insisting all polypropylene cups are prohibited from site.
3. Requesting polypropylene filled bean bags along with glitter are prohibited.
4. Focusing on PET, rPET, HDPE, PP and film for plastic recycling, as these are the most readily accepted by waste and recycling facilities.
5. Encouraging reusable cups where suitable: Although in most cases reusable cups are a positive experience, there are certain situations where the losses, due to breakages, can make their benefits questionable. This can often be addressed by a change in the level of value of cup to the visitor, i.e. increasing the deposit.
6. Providing a good quality product to waste facilities, i.e. single streamed and non-contaminated, gives Greenbox more options and builds the trust of the places to which they deliver.
7. Recovering other single-use high grade plastics such as water piping.
8. Returning bread and milk crates and plastic pallets abandoned on site for reuse.
9. Discouraging plant-based plastics as they contaminate plastic waste streams.
10. Encouraging a ban on gazebos.

With the raised awareness of plastic issues in the environment Greenbox believe there is a real opportunity to use the momentum to educate festival and event audiences on the consequences of disposable plastics and to change the way they use them.

Greenbox are actively encouraging event clients to reduce or phase out the sale of plastic bottles onsite. Many event organisers are taking a staged approach by providing crew and staff with reusable bottles and water supply, before taking the step to remove single-use bottles from public sale. Many events are now using or trialling reusable cups and Greenbox predict that these will be the norm at the festivals they are involved with by 2020. They also believe that plastic straws and cutlery will be a thing of the past at most summer festivals by 2020.



# ⑧ PLASTIC-FREE ACTION PLAN

Use this checklist to help you work through the options and make a plan!



# 9 WHAT RAW CAN DO FOR YOU

RAW Foundation is dedicated to eradicating plastics across the world. As part of this mission we are working with the UK Festival sector to reduce single-use plastics. In addition to this free guide we offer several ways to support plastic reduction in your organisation and event.

## The RAW Super Bottle ©

RAW is the only UK wholesaler of 500ml and 750ml high quality food-grade stainless steel bottles. We developed the design with UK and Chinese manufacturers, and work closely with premium etching and printing companies in the UK. We have supplied to festivals such as Glastonbury, Shambala and Port Eliot, and to NGOs and travel companies. Profits from bottle sales help to support RAW Foundations's plastic campaign and education work.

For a sales brochure contact:  
[sales@rawfoundation.org](mailto:sales@rawfoundation.org)

## Plastic-Free Festivals Action Pack

RAW has developed a pack that includes everything you need to take practical action to reduce plastic in your organisation or event. The pack, produced by RAW Foundation includes:

- A Guide to Using Reusable Cups at Outdoor Events.
- Plastic Free Catering Concessions Policy template
- Social Media Assets for plastic-free events
- Plastic Fact Sheet for communications managers
- A7 festivalgoer Plastic Free Tips
- Festivalgoer Mini-Plastic Free Guide

## Consultancy

RAW can provide expert advice and guidance on the impacts and issues associated with plastics. We offer a range of trainings, workshops, presentations and talks to help identify the best way forward and develop tailor made solutions and strategies.



# 10 INSPIRATION



Back of house waste separation at Latitude Festival



WaterAid kiosk at Glastonbury

## Festival Republic closes the loop on paper cups

In 2017 Festival Republic worked with packaging manufacturer, Huhtamaki; Pronto-Pack, wholesaler of disposables to the events industry, and Simply Cups, a specialist cup recycling company, to 'close the loop' on disposable cups at some of their events.

Festival Republic chose materials for cups (for hot/cold drinks and at bars) based on what recycling process were available. Festivalgoers were encouraged to collect used disposable paper cups from the festival arena and to bring them back to one of three dedicated 'return points'. Once collected, the cups were stacked, bagged and stored, then taken to the Simply Cups recycling facility. In total, 475,000 paper cups, weighing over 6 tonnes, were collected from Leeds and Reading Festivals, and recycled, to be turned into new and functional products. It is an example of a circular economy approach, and shows how partnerships with supply chain and waste management companies can minimise waste and maximise recycling, benefitting audiences, businesses and the environment.

## Water kiosks and bottles at Glastonbury

As the largest festival in Europe, Glastonbury stepped forward in 2014 to take a lead on reducing single-use plastic waste at events by:

- Re-piping the entire site and providing more tap points.
- Providing a reusable, 100% stainless steel water bottle.
- Collaborating with WaterAid and Raw Foundation to provide 'free' water 'Refill' Kiosks.
- Screening videos about the problems of plastic on the Pyramid and Other stage.

## Bestival champions the Final Straw Campaign

The promoters of Bestival have banned plastic straws from all their events, including Bestival, Camp Bestival and Common People. They plan to extend the initiative to include all single-use plastics, including drinks bottles and bar cups. Following a successful trial at Bestival 2017, where biodegradable paper straws replaced single-use plastic versions, promoters are launching 'The Final Straw' campaign to purge plastic straws from the festival landscape.

THE  
FINAL  
STRAW

## The 'Bring a Bottle' initiative at Shambala

In 2014, Shambala festival almost completely eliminated single-use plastics from their event. A cornerstone of this effort was their 'Bring a Bottle' initiative, in partnership with RAW Foundation, in which they encouraged festivalgoers to embrace reusable bottles using the following measures:

- A site-wide ban on the sale of bottled water in plastic (and other drinks) at the festival.
- Asking all festivalgoers, crew and artists to bring a reusable water bottle.
- Making it easier to get fresh clean water by installing more taps across the site.
- Working with charity FRANK Water to provide chilled, filtered water at their water refill points.
- Selling branded stainless steel bottles.

In the 2017 audience survey, 95% of participants said that they brought their own bottle, and annually 1 in 10 have purchased a Shambala branded bottle.

## Fire in the Mountain ditch disposable serveware completely

Fire in the Mountain, a 2000 capacity festival in Wales, became disposables-free in 2017. They purchased enamel camping plates, bowls, cups and cutlery and created a large wash station onsite. Disposable serveware was banned, and caterers were asked to all bring one extra member of staff to wash up in return for the free use of their plates etc., effectively exchanging the savings on disposables for labour. Some traders (e.g. wraps and pizzas) only served on single sheet of paper, but used metal cups for drinks.

Return baskets for 'dirties' were placed on stalls, and extra volunteers were recruited to keep the momentum going for washing up at a central station. Fire in the Mountain organisers found that people responded positively to being given a 'proper' plate, and although there were some losses, most were handed back. They saved time and money on cutting out disposables, waste management and skips, and plans are in place to repeat the initiative in 2018.





MTD's innovative water fountain

cups for drinks. Return baskets for dirty's were placed on stalls, and extra volunteers were recruited to keep momentum with washing at a central station. People responded really positively on being given "proper" plate, and although there were some losses, most were handed back. They saved time and money on disposables, waste management and skips, and plans are afoot to tweak the initiative in 2018.

### MTD provides drinking fountains for Volvo Ocean Race

MTD, a supplier of temporary water facilities, follows the Volvo Ocean Race around the world providing their unique drinking fountains at each of the 13 stopover villages – including stops in Lisbon, Portugal, Beijing, China, Auckland and New Zealand. Working with world-renowned sustainable event expert Meegan Jones, they are preventing tens of thousands of plastic bottles from being used on the tour. Their water fountains are available to UK events in 2018.



### Refresh West provide reusable cup system to Love Saves The Day

Event bar providers, Refresh West managed a full reusable cup system for Love Saves the Day (capacity 20,000). The audience paid a one-off £1 levy for their first cup, and then exchanged dirty cups for fresh throughout the event. Signs were placed at the bars, bar-staff were trained to explain the initiative to customers, and auditing systems were put in place. The result was that many thousands of single-use cups were prevented from being used and discarded, making less waste and a cleaner festival site.

### Green Goblet provide reusable cups to Download Festival

Green Goblet supplied over 425,000 branded and generic reusable cups to Download in reusable, stackable boxes, and installed an experienced team onsite to manage the cups across the nine busy bars. Each customer paid a £2 deposit when buying a drink, and each time they bought a new drink the cup was exchanged for a clean one.

Over the festival more than 500,000 drinks were consumed in reusable cups, preventing the use of 4,500kg of plastic disposable cups! The benefits for Download were:



- The site was cleaner and clean up time was reduced significantly.
- There was no delay in bar service, and attendees enjoyed sturdy, reusable cup.
- £25,000 was directly saved on disposable cups.



# 11 USEFUL LINKS

## VIDEOS

The Story of Bottled Water: The Story of Stuff Project  
[www.storyofstuff.org/movies-all/story-of-bottled-water/](http://www.storyofstuff.org/movies-all/story-of-bottled-water/)

Charles Moore: Seas of plastic  
[www.ted.com/talks/capt\\_charles\\_moore\\_on\\_the\\_seas\\_of\\_plastic](http://www.ted.com/talks/capt_charles_moore_on_the_seas_of_plastic)

Chris Jordan: Pictures some shocking stats  
[http://www.ted.com/talks/chris\\_jordan\\_pictures\\_some\\_shocking\\_stats](http://www.ted.com/talks/chris_jordan_pictures_some_shocking_stats)

Chris Jordan: Midway  
[www.youtube.com/watch?v=PLkTTJW4xZs](http://www.youtube.com/watch?v=PLkTTJW4xZs)

Ellen MacArthur Foundation: The Circular Economy  
[www.youtube.com/watch?v=zCRKvDyyHml](http://www.youtube.com/watch?v=zCRKvDyyHml)

Janine Benyus: Biomimicry in Action  
[www.youtube.com/watch?v=k\\_GFq12w5WU](http://www.youtube.com/watch?v=k_GFq12w5WU)

Sylvia Earle: Protect our oceans  
[www.ted.com/talks/sylvia\\_earle\\_s\\_t-ed\\_prize\\_wish\\_to\\_protect\\_our\\_oceans](http://www.ted.com/talks/sylvia_earle_s_t-ed_prize_wish_to_protect_our_oceans)

City to Sea: Plastic Free Periods  
<https://www.citytosea.org.uk/our-latest-vid-eo-tops-1-4-million-views-in-a-week/>

City to Sea: Switch the Stick  
<https://www.citytosea.org.uk/switch-the-stick-success-film/>

## FILMS

Sir David Attenborough: Blue Planet II

Trashed: An award winning film by Blenheim Films with Jeremy Irons. [www.trashedfilm.com/](http://www.trashedfilm.com/)

A Plastic Ocean: Plastic Oceans founded by Jo Ruxton and Sonja Norman in 2009.  
<http://plasticoceans.uk/>

## BOOKS

Watson, M. (2009), 'Materials Awareness' in A. Stibe (ed) (2009) The Handbook of Sustainability Literacy: skills for a changing world. Totnes: Green Books.  
<http://arts.brighton.ac.uk/stibbe-handbook-of-sustainability/chapters>

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[2] The Telegraph (2018) Plastic waste now polluting Arctic Ocean, scientists find  
[www.telegraph.co.uk/science/2017/09/25/plastic-waste-now-polluting-arctic-ocean-scientists-find/](http://www.telegraph.co.uk/science/2017/09/25/plastic-waste-now-polluting-arctic-ocean-scientists-find/)

[3] World Economic Forum (2016), The New Plastics Economy: Rethinking the future of plastics  
[www3.weforum.org/docs/WEF\\_The\\_New\\_Plastics\\_Economy.pdf](http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf)

[4] Mail Online (2018), The last straw: Wetherspoon to ban single-use plastic  
[www.dailymail.co.uk/news/article-4919604/Wetherspoon-ban-single-use-plastic-straws.html](http://www.dailymail.co.uk/news/article-4919604/Wetherspoon-ban-single-use-plastic-straws.html)

[5] The Guardian (2017), Coca-Cola increased its production of plastic bottles by a billion last year, says Greenpeace  
[www.theguardian.com/environment/2017/oct/02/coca-cola-increased-its-production-of-plastic-bottles-by-a-billion-last-year-say-greenpeace](http://www.theguardian.com/environment/2017/oct/02/coca-cola-increased-its-production-of-plastic-bottles-by-a-billion-last-year-say-greenpeace)

[6] Ellen MacArthur Foundation (2016), The New Plastics Economy: Rethinking the future of plastics and (2017) The New Plastics Economy: Rethinking the future of plastics & catalysing action  
[www.ellenmacarthurfoundation.org/publications](http://www.ellenmacarthurfoundation.org/publications)

[7] The Guardian (2018), Rubbish already building up at UK recycling plants due to China import ban  
[www.theguardian.com/environment/2018/jan/02/rubbish-already-building-up-at-uk-recycling-plants-due-to-china-import-ban](http://www.theguardian.com/environment/2018/jan/02/rubbish-already-building-up-at-uk-recycling-plants-due-to-china-import-ban)

[8] New Plastics Economy (2018), Oxo Statement  
<https://newplasticseconomy.org/publications/oxo-statement>

[9] Chun Z. Yang, C. Z. et al (2011), Most plastic products release estrogenic chemicals: A potential problem that can be solved, Environ Health Perspect., 119 (7): pp 989–996

# 12 SERVICES & SUPPLIERS

Specialist services and products for festivals and events aiming to reduce single-use plastics.

## GREENBOX EVENTS

Specialist waste & recycling services

Greenbox Events offers more than a decade of specialist experience to festivals keen to manage waste streams effectively. They implement initiatives with all stakeholders to reduce waste, improve systems and maximise recycling. They have in-the-field knowledge of plastic reduction and reuse initiatives, and work with some of the UK's leading festivals.

info@greenboxevents.co.uk  
www.greenboxevents.co.uk

## REFRESH WEST

Innovative bar services company with reusable cup systems experience

Sustainability, innovation and professionalism are central to Refresh West's ethos, who provide full bar operation services. They have been at the forefront of reusable cup systems in the UK, providing support and delivery for festivals such as Shambala, Love Saves The Day, Arcadia, Glastonbury, Noisily and Port Eliot Festival. They manage their travel carbon, and specialise in providing stock with ethical provenance.

info@refreshwest.com  
www.refreshwest.com

## GLITTERLUTION

Leading UK supplier of biodegradable glitter (Bio-Glitter®)

Founded in 2015, Glitterlution is a leading global wholesaler and the official supplier to the UK festival, artist & performance industry, stocking 350+ glitter varieties. They supply pre-packaged glitter for resale as well as bulk orders, alongside own-label glitter direct from their website. The glitter is made from cellulose derived from sustainable sources.

shopify-sales@glitterlution.com  
www.glitterlution.com

## MTD (UK & IRELAND)

Temporary and permanent water infrastructure for events

MTD is a full-service supplier of temporary drinking water systems, specialised in events. They have provided water supply and disposal for over 2,000 events, including the temporary water fountains in the Olympic village in Rio de Janeiro in 2016. They have offices in England, Germany, France, Brazil, Russia, the USA, South-Korea and Canada.

hans.verhoeven@mtd.net  
www.mtd.net

## FRANK WATER

Safe Water & Sanitation Charity that provides water refill services for festivals and events

Since 2005 FRANK have provided clean drinking water & sanitation to 386,500 people in 442 villages in India and Nepal. They provide a unique water refill service to events with chilled filtered water stations, and roaming water refills units. 100% of profits go to their projects.

In 2017, FRANK Water took their festival refill service to 11 UK music festivals including; Love Saves The Day, Cornbury, Greenman, Shambala, End of The Road & Bestival, providing almost 100,000 refills to reusable bottles from their marquees and roaming 'FRANK Tanks', saving the equivalent of around 100,000 disposable plastic bottles!

hello@frankwater.com  
www.frankwater.com



## Pronto-Pack Compostable, biodegradable and recyclable serveware

Leading supplier of disposables to bars and caterers at UK festivals and events including Glastonbury. They specialise in biodegradable, compostable and recyclable products. Pronto-Pack are at the forefront of new initiatives and specialise in the supply of bespoke printed cups for large events. They offer distribution and onsite support where required.

sales@pronto-pack.co.uk  
www.pronto-pack.co.uk



## Green Goblet Leading UK provider of reusable cup solutions

Green Goblet produces a wide selection of branded and unbranded reusable cups ideal for stadiums, festivals and sporting arenas. They also offer a full service from start to finish, from a purchase and service option to washing drying and storing the cups. They provide to Kendal Calling, Bluedot, Round the Island, Cowes, Port Eliot, GoldCoast, Oceanfest and many more.

info@green-goblet.com  
www.green-goblet.com



## Ecoffee Cup

Ecoffee Cup is a new generation of reusable cup created with the world's fastest growing, most sustainable crop – bamboo fibre. It is BPA and phthalate free and naturally sterile. The lid and sleeve are made with food-grade silicone. The whole product (cup, lid and sleeve) is dishwasher safe. Ecoffee Cup can be branded and they already provide to numerous UK events.

hello@ecoffeecup.eco  
www.ecoffeecup.eco



## Enviro-Cup An innovative metal cup provided by UK company APS

Manufactured from UK-sourced food-grade recycled stainless steel, the Enviro-Cup is the ultimate solution to reducing plastic drinking cups at festivals and events. It successfully debuted at Glastonbury in 2016 as part of a deposit initiative on selected bars. It is a highly durable option, proving an alternative drinking experience to plastic. Enviro-Cup meets all British Standards, is 100% recyclable, is brandable, and comes with a range of innovative accessories.

enquiries@enviro-cup.co.uk  
www.enviro-cup.co.uk



# GET IN TOUCH

If you are concerned about plastics and ready to take action, please join us. There is no time to waste.

For further information please contact the RAW Foundation team who will be happy to discuss any opportunities with you.

email: [info@rawfoundation.org](mailto:info@rawfoundation.org)



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[www.rawfoundation.org](http://www.rawfoundation.org)

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