Towards Zero Waste Festivals

Overcoming current challenges in sustainable waste management at UK greenfield events







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Executive summary – project overview

Resource Futures was commissioned by Vision:2025 and Julie's Bicycles to better understand the challenges and opportunities for waste management at UK greenfield festivals.

As a solutions-based project the key challenges of festival waste management were investigated to provide suggested actions.

Methodology

- Industry working group: an industry working group was set up to create the project brief, review the draft report, provide insight and feedback on research recommendations
- Literature review: desk-based research on industry key challenges was conducted
- Survey: information on festival waste management was gathered from industry stakeholders. The survey was completed by festival directors, sustainability professionals and event assistants
- Interviews: detail of the experiences of festival waste management was gained. Interviews were held with festival waste contractors, festival organisers and a litter picking organisation

Impact review

An impact review assessing the scale of environmental benefits that could be delivered to address key challenges in waste management was delivered at the Showman Show 2022.

This interim review explored research findings and identified areas where there were opportunities for reducing the environmental impact of festivals.

It also sought to identify knowledge gaps, and areas of action or inaction, to identify opportunities that would deliver the biggest impact at festivals.

Three tier approach

Within the analysis of each key research theme, we adopted is a three-tiered approach

- 1. Challenge: establishing the key challenges for festival waste management
- **2. Action**: offering suggested recommendations to resolve the problems faced by the industry
- **3. Impact:** highlighting the gains from implementing the recommendations

Next steps

- Establish a standard model for waste data reporting at UK outdoor events
- Expand the industry working group by engaging other stakeholders, such as waste companies, litter picking organisations and waste brokers, to explore manageable solutions
- Capitalise on the festival event season to gather data to enrich research initiatives and share experiences
- Explore the benefits of standardised approach and methodology to such challenges as bin labelling and assessing the most effective onsite systems (based on onsite and off-site factors)
- Carry out regular information sharing events amongst Vision:2025, engaging waste and resources experts to troubleshoot common themes



Executive summary – key findings

Festival waste management

UK festivals produce around 25,800 tonnes of waste annually and how to reduce and manage it poses a serious problem for the industry.

Insight from the research project identified five key themes central to the improvement of festival waste management. These were:

Waste reduction

- Many items being used at festivals are single-use and therefore contribute to high waste production levels.
- **Banning problem materials** or having **deposit return schemes** could reduce volumes of waste being generated.
- Food serve ware is not currently being widely considered or adopted for deposit return or reuse at festivals due to logistical challenges
- Given the recent announcement of the introduction of a DRS scheme for plastic bottles (PET, 50ml-3L) and cans by October 2025, this will lead to a change in behaviour in capturing these materials on site.

Contamination

- There is a lack of standardised bin labelling and signage across the industry which can cause confusion and lead to contamination.
- Festivals have short time scales to set up sorting areas and have limited time onsite, impacting the ability to manage waste.
- Keeping materials separate will ensure their recyclability and improve the environmental impact of festivals.
- Composting food waste can save hundreds of carbon equivalent but is not commonly recovered by festivals.

Knowledge sharing

- **Multiple tool-kits** exist from various agencies over the years, so it can be unclear which are still relevant.
- Case studies offer real-life insight into tried and tested actions which can then be repeated or avoided.
- Industry surveys show festival organisers are motivated to prioritise waste management and reduction.

Dealing with waste contractors

- Festival organisers highlighted a knowledge gap regarding knowing what to ask contractors, what waste data should be expected, and what to do with it.
- Data received by waste contractors is often late and of poor quality, which makes it hard to monitor and evaluate waste management.
- Using standardised requirements for tenders and contracts could improve understanding for event organisers and contractors

Material management

- Knowing what materials to allow on site and what the best waste management solution is for them is complex and requires partnership working with traders and waste contractors.
- Encouraging hard plastic cup reuse is crucial the best reusable cup only compares favourably to single use when used 5+ times.





Introduction and methodology



Introduction



Background

Camping music festivals in the UK are reported to be responsible for 20,000+ tonnes of CO2e emissions and generate in excess of 23,500 tonnes of waste each year, with 68% of waste going directly to landfill¹. This waste is comprised of food and drinks packaging including single use plastics such as bottles, bags and food trays, bulky production waste, wood and set waste, tents and camping equipment, and microplastic pollution from glitter and toiletries.

Vision 2025 and Julie's Bicycle are leading an industry group working to identify the challenges and solutions for **reducing the environmental impact** of managing materials and waste at greenfield festivals, focusing specifically on what materials enter sites, how those materials are managed, and what happens to them at end of life.

Scope

The research conducted in this report assessed available resources, consulted industry stakeholders, and analysed the impact of potential actions in order to offer clear and significant information to festival managers. Human waste, reusable cups, and tent waste were out of scope of this project.

Aims

This research is part of the journey towards net zero emissions and circularity for festival waste management. The project aims to help set the industry on a course to overall waste reduction, zero waste to landfill, and increased recycling rates by:

- Consolidating information: gaining a better understanding of waste management and associated challenges.
- Recommending solutions: analysing the landscape and offering practical solutions and digestible information.
- **Starting a conversation**: offering an entry point for festival organisers

Themes

Key factors for festival managers were considered within the methodology:

- Knowledge and confidence
- Successes and failures
- Barriers to change
- Relationships with waste contractors



Methodology

Step one: literature review

Desk-based research explored the wider waste context, surveyed current understanding and identified gaps in knowledge by reviewing resources focused on festival waste management. The findings from the literature review informed the survey design and interview questions.

Sources and evaluation

We conducted the literature review by evaluating reports, case studies and news articles from the UK and Europe from the last 14 years. There was a focus on assessing the landscape upon eight specific challenges identified by Vision:2025:

- 1. Campsite waste
- 2. The appropriate number of waste streams on site and differences between the campsites and arenas
- 3. Waste contractor reporting
- 4. Waste contamination
- 5. Concerns from local recycling facilities due to perceived issues of recycling quality due to the temporary nature of festivals
- 6. Knowledge of the most sustainable materials used at the event and processing methods
- 7. The consistency of bin infrastructure and labelling across festivals
- 8. Access to knowledge of offsite processing and destination of recyclable materials

Step two: survey

This step gathered qualitative and quantitative data from industry stakeholders to understand what are considered key problem areas and greatest needs in managing materials and waste at festivals.

The survey identified: areas of waste management that pose the **biggest challenges**; where **confidence** already exists; what survey participants are **already doing** to reduce their environmental impact; and what their **support needs** are. Baseline information such as longevity, festival capacity, and size of sustainability teams and waste collection teams was gathered. It also enquired about priorities, obstacles, necessary support, actions taken, and relationships with waste contractors.

The survey was created and published using the online platform Survey Monkey and was dispersed through Vision:2025 network groups. It was completed by festival directors, production managers and sustainability coordinators. A full list of survey questions can be found in the appendix.



Methodology

Step three: interviews

Interviews offered the opportunity to delve further into the experience of managing waste at festivals from different stakeholders. The interviews provided rich qualitative detail adding context, nuanced insights, and an enhanced understanding of the challenges in the festival world. Interviewees included:

- Waste management company
- Festival organisers
- Festival attendee recycling engagement and salvage organisation

Focus was paid to a waste management company rather than a waste broker in order to gain perspective from parties who directly collect and handle waste. Waste brokers may not source the best fit and will likely increase overall management costs.

We carried out six semi-structured interviews with stakeholders to understand:

- 1. What action have they taken; or seen to be taken, to deal with waste issues at festivals
- 2. Where they had taken action directly, seen action being taken, or seen the biggest improvements across the following known problem areas:
 - Bin signage
 - Waste reduction
 - Recycling rates
 - Remedies with contractors
 - Avoiding cross-contamination
 - Food waste

3. What was their overall experience of their relationship with the waste contractor like and in particular, getting waste data from them.

Stakeholder support

An industry working group was created to support the project and acted as an integral part of the research process. The group of experts created the research brief detailing what the festival industry would benefit most from and how the report should function.

A summary of the Impact Review was presented to members of the working group at the Showman Show 2022 followed by questions and answers. The event included round table discussions trouble shooting ideas concerning the future of waste management within the festival circuit, the findings of which informed this document.

The working group reviewed the report and offered critical feedback which shaped the development of the recommendations. This ensured the research project is most profitable to festival organisers and industry.

The recommended next steps of this research will be implemented by the working group as they continue pursuing momentum on sustainable waste practices within the industry and lead by example.





Key findings and themes



Literature review

UK policy landscape

Amidst delays in DEFRA consultations due to the Covid-19 pandemic and political uncertainly, there have been some significant policy developments over the past year, which may impact on the events industry. The extended producer responsibility (EPR) policy will make producers liable for the expenses associated with managing their products after the end of their useful lives. Full implementation of EPR is planned for 2025, based on modulated fees for different material types connected to their recyclability.²

January 2023 saw the release of a deposit return schemes (DRS) consultation response for England, Wales and Northern Ireland. It confirmed that it will be implementing a DRS on drinks containers by October 2025 (not including Scotland – Aug 2023).³ It will charge consumers a deposit on drinks containers such as bottles and cans, intended to promote recycling. Glass will be included in Wales and Scotland. The impact of DRS and EPR within a festival environment remains uncertain. Under EPR, producers with significant items in circulation will need to support the collection of material; as a result festivals may see more value in collecting certain materials. Under DRS, how festival goers will redeem their deposits will depend on the nature of the roll out (e.g. digital, vending machines), which may impact on required infrastructure.

The recently released Environment Improvement Plan 2023, contained 10 goal areas, with Goal 5 specifically focusing on maximising our resources, minimise our waste. This included a plan to eliminate biodegradable waste to landfill, DRS, EPR and a consistent recycling collection for businesses and householders. It also included a target on banning more single use plastics, including plates, trays, bowls, cutlery, and food containers, from October 2023.⁴

Figure 1: The waste hierarchy



Figure 1 reproduced from DEFRA (2011) Guidance on Applying the Waste Hierarchy p.3



Literature review

The market

There is a growing market for recyclable materials, and separately collected materials tend to be of higher quality and therefore generate a higher level of income. Future trends estimate that these materials will have significantly more value in the future due to the increasing demand for materials and the pressures of policy to transition towards a closed loop recycling system.⁵

Rethinking resources

There is a growing focus on circular economy principles, on a global scale. It can also be seen in a commitment by the UK government, to move to a truly circular and sustainable economy, as covered in the Environment Plan 2023. A circular economy is a framework of production and consumption which aims to eliminate waste through better design and reuse of resources.⁶ This model relies on 'closed-loops', where resources are either shared, repaired, reused or recycled.

Recycling rates

Most of the nations within the UK are failing to currently meet the minimum 65% recycling target set by the EU with the exception of Wales, demonstrated in Figure 2.

The recycling landscape is markedly different in an urban context, with London having a recycling rate of 34% of waste, making it the worst region in England for recycling. Whilst more data is required to ascertain up to date festival recycling rates, in 2015 average rates were anticipated to be 32%.⁷

Figure 2: UK recycling rates

Country	Recycling Rate (%) for 2021/22	
England	44.0*	
Scotland	42.7	
Wales	65.2	
Northern Ireland	49.7	
* 2019/20 figure		

Figure 2 reproduced from DEFRA (2022) UK statistics on waste



Literature review

Areas of action

Within the festival industry, action has been focused on improving bin signage and labelling as well as reducing littering and plastic cup usage. Less action has been taken on composting food waste.

Examples of actions being carried out by festivals are shown in the table below.

Waste Reduction	Audience Engagement	Waste Contamination	Waste Streams
Deposit return initiatives such as reusable cups	Campaigns such as 'Zero Waste Festival Goer' ⁸ and 'Love Your Tent' ⁹	Secondary sorting of waste onsite	Colour-coded bins with prominent signage
Reuse camping stores with rentable equipment	Individuals engaging with festival audiences to encourage recycling behaviours ¹⁰	Surplus food redistribution to local charities ¹²	Providing attendees with general waste and recycling bags
Banning problem materials such as glitter, confetti, glass and single-use plastics	The 'Say No to Single Use' initiative ¹¹	Traders using reusable serve ware	Financial incentives such as recycling bonds for attendees to collect and recycle their waste

Key findings

- Industry motivations and agreement on problem areas: Festival organisers want to be more sustainable and improve their waste management. The industry agrees on necessary actions, going as far back as 2008¹³, suggesting a consensus on a broad approach to solutions is there but achieving the aims is proving difficult.
- **Confusion where to find best practice**: There are various toolkits and 'best practice guides' available it can be unclear to know where they are located and which ones are offering the best or most up-to-date advice.
- Laborious certification schemes: There are different event sustainability credentials available such as the British Standard for Sustainable Event Management (ISO20121), the International Standard for Sustainable Event Management ISO1400) and current industry voluntary assessment certification schemes. However many festivals are not using them due to the effort and time required.
- Varying attention on challenges: There is a heavy focus in the media on abandoned tents, single-use plastics and compostable cups. However, collaboration with Local Authorities and waste contractors receives a weaker focus.

Case study

DGTL festival in Holland has become the **world's first circular festival**.¹⁴ They have achieved this through efficient resource management by **closing their material loops**, by creating ways to convert all their **waste into valuable resources**. The festival have initiated a return scheme for their hard cups, only offer a low impact plant-based menu, use reusable serve ware, and have a 24hour composting machine in the food court.



ESTABLISHED INDUSTRY CHALLENGES

The literature review highlighted established challenges in the industry.

We used these to model our survey and interview questions to gain further insight on the significance they play in waste management at festivals. **EVENT INFRASTRUCTURE** will be temporary but needs to function as if permanent

WASTE REDUCTION

from attendees, traders and back of house is critical to reducing CO2 footprint of waste

MATERIALS

The recyclability of different material is not widely understood or communicated from waste contractors

regarding waste management

both nationally and within the

festival industry

WASTE CONTRACTORS

Lack of quality and detail of waste data being provided

CONTAMINATION

of recyclate is a persistent problem for festivals

STANDARDISATIONWORKING WITH MULTIPLELack of standardisationSTAKEHOLDERS

such as caterers, audience and build crews in a temporary setting

ADDITIONAL CHALLENGES

Further challenges identified

Insight from this research project revealed additional challenges experienced within festival waste management.

Related to waste contractors:

MATERIAL RECOVERY FACILITY (MRF)

Waste contractors send the majority of materials to a MRF for separation leading to higher costs and comingled data. This results in the MRF recycling rate, not the festival one

FEAR OF REJECTED LOADS

For non compostable serve ware and Dry Mixed Recycling (DMR) due to contamination from PLA cups etc

CONTRACTOR RELUCTANCE

to work with festivals and collect organic material. They expect high levels of contamination and may want to avoid the low value recycling from contaminated material

CONTRACTOR SCARCITY

There is a shortage of contractors that will submit quotes, less competition exists as short-term festivals accounts are not viewed desirable

TIME ON SITE

With a limited time, waste contractors often offer the quickest solution – not necessarily the best one to maximise recycling

ADDITIONAL CHALLENGES

Related to logistics and on site management:

SPACE for bins and sorting back of house

MANAGING TRADERS

Ensuring traders are using the waste hierarchy, contracts often lack waste reduction or recyclability clauses

FOOD WASTE

There are few onsite food waste systems, due to issues with space, equipment and contamination

MATERIALS ON SITE

Confusion amongst festival organisers over what materials are best to use

Related to planning and capacity:

Summary of themes



Summary of themes

Applying learnings from the literature review, survey and interviews, we identified five key themes central to improvement of festival waste management. These were:

Waste reduction

Waste reduction needs to be tackled first to improve waste management. There is a general trend that festivals have increased in size and therefore waste has increased. There has been consideration for the waste hierarchy in reducing waste from single use plastic cups, reusable ones are increasingly the preferred option.

Material management

The two most common material types found in festival waste streams are plastic and paper/cardboard (from food/drink serve ware) and it is these materials that are most commonly being replaced with bio-based materials. Much of the focus of material management has gone into plastic cup choice, however, compostable or bio-based materials are causing confusion due to the conflicting guidance being given by producers, waste contractors and the government. In 2021 the UK government issued a response to the issues being faced by use of compostable materials in their report on "Standards for bio-based, biodegradable, and compostable plastics".¹⁵ The government ruled that there is a lack of evidence and industry consensus on the recyclability of this material, that it cannot be labelled as "recyclable".

Contamination

Improving the quality of recycling by reducing contamination will impact on the recycling rate. A higher quality of recycling should encourage more waste contractors to see festival waste and resources as a more attractive contract. Reducing contamination requires good partnership working from the waste contractor and engagement from waste generators.

Dealing with waste contractors

Findings showed that this was a primary area where managers are seeking support and guidance.

Knowledge sharing

There is a desire to see more knowledge sharing and best practice guidance, this will be key in addressing knowledge gaps and improving waste management practices.

Spotlight on themes

We then explored these themes in more detail, considering the challenges, solutions and the potential impacts that would result from implementing these solutions.





Waste reduction



Waste reduction



Challenges

- **Control**: of volumes of materials coming into the event.
- **Single-use function**: due to the **temporary nature** of festival infrastructure a lot of materials are designed for single use.
- **Reuse serve ware**: most food serve ware is not being considered for deposit return or reuse at festivals due to the difficulty to **wash at scale**. Developing and supporting the infrastructure for on-site washing and adhering to environmental health obligations and health and safety standards.
- Knowing **what to reduce** from a waste audit: understanding what is necessary or what can be replaced with an item that can be used and removed from festival.
- Logistics: particular challenge for larger events.

Solutions



Step 1: Speak to waste contractors to identify what waste streams they accept. If washing facilities are not possible, speak to waste contractor about destination of compostable material to ensure the best material is being used for food serve ware recyclability.



Step 3: Conduct a duration test by questioning with traders, vendors and production team "can you use this item for the duration of the festival and remove from site?". If not, seek to eradicate/replace with an item that passes the duration test.



Step 2: Set-up a reuse discount and/or Deposit Return Scheme (DRS) for all reusable cups. Important factors to consider are return rates, appropriate sanitisation, and the transport to be reused again.



Step 4: Communicate with traders what materials are permitted on site and which reuse schemes will be in place. Instruct festival attendees what materials not to bring.





Material management



Material management



Challenges

- **Understanding materials:** knowing the environmental impacts, keeping up to date with the latest Life Cycle Analysis (LCA), and communicating this to the traders.
- **Lack of control:** over what materials traders are bringing on site. The high occurrence of single-use items and non-recyclable serve ware is the norm.
- Greenwashing: uncertainty from the packaging industry about the level of recyclability of materials, including
 available processing facilities for compostable materials. Some clean-up companies do not report on the end
 destination of materials collected for recycling and are using comingled waste for energy.
- **Collection of reusable cups:** a loophole means that reusable cup providers are often willing to sell cups but can be reluctant to collect them back as they can count lost cups as a sale.
- **Licensing requirements:** local controls can set requirements for compostable serve ware. Some materials are limited by licensing e.g. cans not being permitted at some events. Deposit repayments for reusable cups can be complicated between the cup sponsors and the festival bars that issue them.

Solutions



Step 1: Work with Local Authorities or waste processing facilities to establish available treatment options to inform approach.



Step 2: Avoid greenwashing of compostable materials. Consider appointing a materials co-ordinator or seek advice from your waste contractor to understand what materials are acceptable for recycling.



Step 3: Set-up supplier contracts which stipulate materials traders can bring on site. This can be informed by waste contractor guidance and processing capacity to prevent nonapproved material being used, minimising waste disposal and management costs.



Step 4: Encourage reuse. It is not only the material that is key but how it is how it is treated at the end of life. Installing cup washers at drinks vendors area.

Impacts

Only allow compostable material when mixed with food and avoid if not approved by waste contractor for composting

Avoid PLA (Polylactic Acid) plastic cups (known as plant-based plastic) It is important to understand if composting facilities being used by the contractor can process the materials

All PLA based materials require separate processing to their plastic base equivalent. PLA doesn't recycle like PET plastic, it cannot be recycled with it and should be avoided

Controlling material on site and making sure the waste contractor can take the materials is essential

Focus on hiring in cups so that they can be reused at other events and meet the minimum usage of 5 times to have a lower LCA By managing the materials on site and working within the waste contractors' guidance, a closed loop recycling process will be more likely

Can reduce Global Warming Potential by 33% (when used over 5+ times vs rPET <u>cup²⁰</u>)



Contamination



Contamination



Challenges

- Bin labelling and signage: there is a need for consistency in bin labelling in the UK festival scene as festival goers
 receive different messages at each festival.
- Bin engagement: it is known to work but is resource heavy and requires 24 hour policing if to be used to full effect.
- Littering: once littering begins it is difficult to reduce. There is a need to integrate this in to expected behaviour.
- Short time scales: to set up sorting areas as festivals have limited time. Repeat festivals have more opportunity to
 install repeatably used sorting area. Ensuring enough time and space to allow for separation of materials in order to
 reduce contamination is a key challenge.
- **Source segregation**: waste contracts can advice against segregating materials due to the **extra transportation costs** of sending materials to different facilities. However transporting separated materials will be necessary at some stage of the management process either from the festival site or the transfer station.

Solutions





Step 1: Standardise and simplify bin labelling throughout the festival network. Work with contractor to identify number of bins per area and distances (e.g. food vendors)

Step 3: Communication with attendees. Offer a "recycling deposit" refund on ticket when the attendee returns bags of recycling. Direct rewards for behaviour can positively influence changes



Step 2: Get the right bins in the right place. Thoroughfares are perfect for linear recycling centres and repeat bin patterns if setting up in long lines. Ensure visibility from many angles e.g. high flags/signage.

Step 4: Give the time and space to sort out materials and reduce contamination. Transfer stations require room and resources to set up skip.

Impacts

Standardise - create a bin system that matches what is being sold at the festival – keep colours and lids consistent

Clear bin signage that is aligned with the material on site ensure will minimise contamination. Use iconography of materials

The right bins, in the right place will increase recycling. Calculate sufficient quantity of bins based on distance to travel to them and areas of generation

Recycling dry materials in a closed loop avoids 425kg CO2e per tonne in comparison to landfilling²¹

Capture food waste and compostables with bin design – reduces contamination of dry recyclables

By composting 1 tonne of food waste you avoid 618kg CO2e more than <u>landfilling²²</u>

Ensuring people resource, time and space for a waste sorting area or "boneyard"

If materials are separated and free from contamination they generate a higher value as a resource



Dealing with waste contractors



Dealing with waste contractors



Challenges

- Knowing what to ask for from waste contractors as well as speaking their language and terminology.
- Working with the contactors on an output-based requirement as opposed to the quickest and easiest solution. Understanding the time limit for waste contactors being on site as waste contractors often offer the quickest solution but not necessarily the best one for maximum recycling.
- Knowing what waste data to expect depending on the method of collection e.g. co-mingling (mixed recycling) will
 not enable you to receive separate weights for material types, only a general output from the processing site that will
 not be specific to your waste.
- Getting waste data is seen as challenging, it **can take months** if it arrives at all and can **be poor in detail** if you want this level of detail you will have to set this out clearly at the beginning of the procurement process.
- **Contractor scarcity** there is a reluctance for some waste contractors to work with festivals and/or collect organic material. They expect high levels of contamination and may want to avoid the low value and quality of recycling.

Solutions





Step 1: Use a standardised quotation request form. Stipulating what waste streams will be collected, asking where the material goes and when and how to receive data. Standardised quotes will ensure a fairness in comparing costs.

Step 3: Set out plan for 'boneyard' sorting area on map planning stage and ask contractor and waste team how much space and time they will need to successfully sort recycling streams.



Step 2: Make capturing and reporting the waste data a condition of final payment of the contract. Ensuring it is not being chased and it is expected.



Step 4: Submitting invitation to tender out to "multiple bidders" to ensure competition. Make bin set-up part of the service to ensure "the right bin is in the right place".

Impacts

Ensuring standardised messages and asks on bins and the materials collected by the contractor

Working with the waste contractors and festival staff to pre plan the space available for waste management Increased source separation will ensure material control can take place to limit potential for contamination

By effective pre-planning space and time this can be best used to achieve higher recycling rates with less contamination

Tracked onsite waste data will be improved and better utilised

Communication is key - establish a collaborative relationship between yourselves and the waste contractors By understanding what waste is on site and how much is generated of each stream, improved focus on which material to reduce further becomes more efficient

By working together both parties can benefit from high quality materials that has a value and demonstrates best practice



Knowledge sharing at industry level



Knowledge sharing at industry level



Challenges

- There are **various festival event tool-kits** online but as they are authored from differing agencies and held in disparate locations it can be **unclear which to choose** or difficult to find them.
- As licences, commitments and legislation change, existing tool kits can become **out of date or irrelevant.**
- Greenwashing poses an issue to knowing what's the right and wrong advice.
- Industry stakeholders may see each other as **competition** and be hesitant to share their challenges openly.
- Festival organisers may fear that their problems or lack of progress as a source of contention or **bad publicity**.

Solutions



Step 1: Centralise user-friendly tool kits. It will be essential to rate, review, and revise them as waste management industry guidance changes.



Step 2: Compile a library which is easy to navigate and holds case studies of both successful and failed actions attempted by festivals.



Step 3: Event organisers, service providers and contractors should collaborate to develop solutions and induce change.



Step 4: Facilitate training sessions and peer learning with workshops and skill-sharing events for industry members and stakeholders.

Impacts

Transparent and honest reporting and discussions

Create a 'Green Guide' – a sustainability version of the 'Purple Guide' for festivals

A coordinated effort to trial approaches and report case studies to the industry to assist learning from successes and failures

Deliver knowledge sharing and training sessions

Create a culture of openness between festivals which will lead to realistic targets, managed expectations and develop a shared learning practice

Sustainable information can be consolidated into one place, creating a manual trusted by festival organisers

Mistakes can be avoided and efficiencies adopted by learning from tried and tested actions within the industry

By engaging waste industry experts in knowledge sharing, the sector will be better informed and able to implement change



Quick wins



Quick wins

Festival organisers have limited time and resources to devote to managing environmental impacts. The following measures represent some quick and low-costs wins.

Compulsory waste data reporting

Include the capture and provision of waste data within waste contractor agreement. With this data, reduction strategies can be implemented the following year, as a result of being able to identity the quantity of different materials.

Materials policy

Create a simple materials policy (i.e. a list of materials permitted and not permitted) based on what can be managed and recycled, and share with all stakeholders to help avoid the use of problem materials.

Increased bag searches

More bag searches for both attendees and back of house can avoid problem materials, such as glass, entering the festival site.



Strategic placement and emptying of bins

Bins placed in areas where they are needed such as food zones and regular throughfares will make it easier for waste to be captured with less contamination. Festival management have more oversight of the frequency of bin emptying and specifying that they are emptied at peak-use to ensure they are never over capacity.

Attendee communications

Sending out sustainability messages to attendees prepares them for the ethos of the festival. Encourage reusable items and reassure attendees that infrastructure is in place to support reuse e.g. refill stations for water bottles.





Conclusion and next steps



Conclusion

Summary

This report has used evidence gained from industry engagement to inform the steps required to improve waste management at festivals in the UK.

The literature review, survey and in-depth interviews highlighted the waste-related challenges facing festival organisers. We focused on five key areas where challenges are experienced by all stakeholders. This report recommends specific action points to address challenges, and demonstrate impact.

Key takeaways

- Festival organisers want to perform better and have made efforts to reduce single-use plastic cups at festivals.
- There is a lack of data; improvements are needed in waste contractor reporting and there is a need for consentient waste composition data from festivals.
- Lack of standardisation: Inconsistencies within the industry, such as on bin labelling, waste contract quoting, language and terminology all cause undue confusion and frustration.

- Greenwashing is prevalent: From deposit cup providers not wanting to collect their cups and counting it as a sale, to misinformation on materials. This makes it hard for industry members to know what is best practice, what and whom to trust.
- Untapped potential of food waste: composting has the potential to avoid significant greenhouse gasses but is captured less often by festivals, as compost loads can be rejected due to compostable packaging, cups and other food packaging in the waste stream.
- There is a need to stay ahead of key policy changes which may impact the events industry (including EPR and DRS).

Research highlighted confusion around materials. This indicated a need for the festival industry to engage with waste contractors and reprocessing facilities, to identify proper treatment of new materials when they become available on the market.

Despite their vital role, a key theme running through the research was the challenge of engaging with waste contractors.





Recommendations



To fully realise where festivals can increase sustainability of waste management, there needs to be increased festival–to-festival partnership working.

- Multiple stakeholders need to be involved in the conversation to gain an informed picture
- More collaboration is needed between event organisers and service providers/contractors to develop solutions and make changes



In order to better understand the opportunities for waste reduction and related emissions savings we need more data and understanding than we currently have. We can achieve this by:

- Improving waste contractor data capture, liaising with waste contractors and providing templates to festival organisers
- Supporting events to carry out their own waste audits, to better inform waste management systems



Standardisation of how waste is managed and reported across the events industry is required.

- Bin symbology and colours need to be standardised so that audiences and all stakeholders understand systems and use them correctly.
- Standard waste contractor terms and reporting templates would support event organisers and bring unification
- Consistency within the business and household environments will simplify the message for attendees

Separating and composting food waste at events is a significant opportunity to reduce the environmental impact of the event

- Troubleshoot barriers and share best practice regarding composting
- Support festivals to engage with waste processors and contractors around food

Festivals need to be supported to develop closed loop and circular systems, with 'reduce' and 'reuse' at their core.

- In order to achieve this, event organisers need clear information about best practice circular waste management, including clarity around 'biodegradable' materials and how best to capture and manage them if used
- The need to be circular encourages the development of partnerships between organisations, which festivals can capitalise on

In order to achieve shared goals of reduced contamination and increased recycling rates, a key area of focus needs to be partnership working with waste contractors. Effective engagement between the events industry and the waste contractor industry will lead to more profitability for the waste managers and reduced costs for festival managers.



Next steps

In order to achieve the recommendation outlined in this report, this report recommends the following next steps:

- Expand the industry working group in order to explore effective solutions, engaging stakeholders such as waste companies, litter picking organisations and waste brokers.
- Capitalise on the next festival event season to improve data capture, delivering a targeted waste management evaluation project with specific festivals.
- > Establish a standard model for waste data reporting at UK outdoor events.
- Centralise all tools and guidance on festival waste management and create a sustainable waste management guide. It needs to be up-to-date, easily accessible and cover waste contractor liaison, standard data collection sheets for reporting and information on key issues such as greenwashing.
- Carry out regular information sharing events and webinars amongst industry stakeholders, engaging waste and resources experts to troubleshoot common themes.

Looking forward

There is significant appetite amongst the festival sector to address waste management issues. This research generated specific and detailed questions from event organisers about waste that cannot be answered in this report due to scope, indicating a need for further research and exploration. There is a clear opportunity to progress this agenda alongside Future Festival Tools.

Waste management and wider circular economy principles need to be addressed holistically, encompassing festival attendees, arts and performance, site management, infrastructure and ultimately management principles.

Festivals create unique and powerful environments which generate new ideas and challenge old ones. Maintaining circular economy principles should be at a festival's core as promoting reuse and eliminating waste will improve sustainability and generate positive social impacts.





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Appendix



Appendix: survey questions

- 1. Your job/role
- 2. Name of organisation or festival
- 3. How many years have you been running?
- 4. What is the capacity of your festival (including staff)?
- 5. How many festivals does your organisation run per year?
- 6. Do you have a dedicated person/team that manages waste or sustainability issues?
- 7. What size is your festival waste collection team?
- 8. What aspect of festival waste management do you feel most confident in?
- 9. Where do you consider there are gaps in your knowledge that you would welcome help and advice on?
- 10. What opportunities and/or changes are you currently exploring?
- 11. What specific actions have you taken to increase recycling rates?
- 12. What happens to abandoned tents, gazebos and camping chairs?
- 13. Have you introduced composting of food waste on site?
- 14. What challenges have you faced with

composting of food waste on site?

- 15. Please rate the following statement on a scale of 1 to 10, where 1 means you completely disagree with the statement and 10 means you totally agree: "Our festival has been successful in reducing cross contamination."
- 16. How do you try to deal with cross contamination of waste streams?
- 17. What challenges to do with waste contractors do you regularly or sometimes face?
- 18. What actions if any have you taken to remedy these?
- 19. Please rate the following statements on a scale of 1 to 10 of confidence you have, where 10 means you have full confidence and 1 means you have no confidence that the following is happening:
- 20. If a standardised method / tool / template is developed for use with contractors, what aspects would interest you?
- 21. Have you worked alongside a local authority waste department?
- 22. Please rate the recycling performance of the following groups on a scale of 1 to 10, where 1 means you completely disagree with the statement and 10 means you totally

agree: Festival attendees in campsites, Festival attendees in arenas and market areas, Traders on site

- 23. Do you carry out a waste audit of your festival?
- 24. Do you receive waste reports form waste management companies which demonstrate recycling rates and final destination of materials i.e landfill or composting station?
- 25. Are you happy to share your waste and recycling data with others?
- 26. In what areas do you think there is scope to set up standardised practices across festivals in the UK?
- 27. What has been your biggest success in improving recycling and or waste reduction at your festival(s) within the last 5 years?
- 28. The Golden Question! If you had a magic wand, what big fix would greatly improve waste operations at your festival(s)?
- 29. Would you mind if we kept your details on record for any future related research in the scope of this study?
- 30. Any other comments?



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Towards Zero Waste Festivals: Overcoming current challenges in sustainable waste management at UK greenfield events (February 2023)

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Limitations

This report has been produced by Resource Futures on behalf of Julie's Bicycles and Vision 2025. Whilst Resource Futures has taken all due care to interpret and collate the information presented within the report, any third party relying on the results of the analysis shall do so at their own risk and neither Resource Futures nor [client] shall be liable for any loss or damages arising there from.











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