

INTRODUCTION



Dear Sustainability Friends,

We're very excited to bring to you our AGF Annual Festival Sustainability Report. A culmination of months of information gathering, data analysis and number crunching from AGF's assessed festivals in 2023, we analysed over 40 festivals, across 11 countries.

The aim of this report is to inform, inspire, and provide benchmarks by which we as a sector can innovate, as we all work hard together towards helping the live events sector transition to a more sustainable one.

You will find clear sections on travel & transport, food & beverage, water & sanitation, power & fuel use, waste & recycling, and carbon emissions.

There have been some significant areas of improvement in 2023, such

as bans on single use plastic serveware increasing from 54% in 2022 to 75%, a reduction in 0.25kg in average waste per person, and an increase in festivals becoming fully vegan or vegetarian.

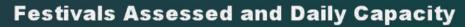
We have also highlighted where there remain challenges, in particular regarding the collection of information on construction and stage materials used, artist travel, and from Sponsor or VIP areas.

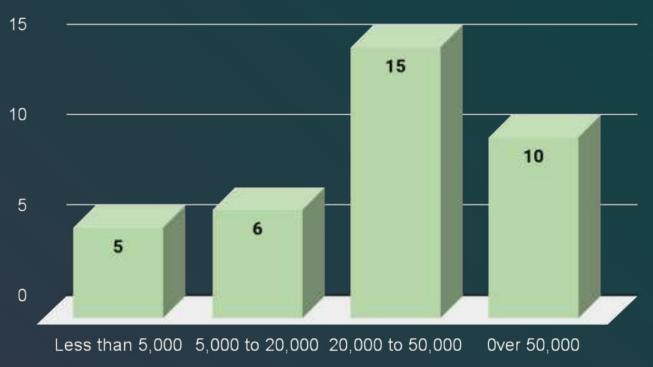
Although there is always lots to do, a big congratulations to all the festivals and their suppliers that demonstrated clear and significant steps forwards - we are proud that AGF can provide a sector-wide measurement, a starting point for discussion, and a benchmark to collaborate towards improving.

So, let's dive right in...

AGF FESTIVALS ASSESSED IN 2023







40 FESTIVALS

11 COUNTRIES

Argentina

Belgium

Germany

Estonia

France

Hungary

Norway

Portugal

Spain

Sweden

UK

AGF 2023 ASSESSMENTS



FESTIVALS ASSESSED



Urban Festivals

Taking place within or close proximity to a city or town, and often benefit from existing infrastructure (power, water, sewage) and transport networks.



Rural Festivals

Taking place outside of urban areas, on greenfield sites or fields.

These are less likely to benefit from existing infrastructure and have more limited access to transport networks.





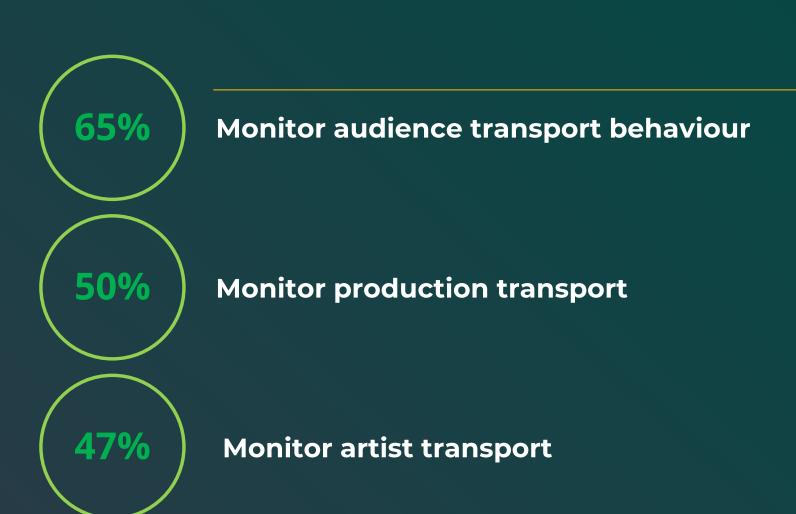


Non-Camping



TRAVEL & TRANSPORT





Monitor either partially or completely via surveys, vehicle counts, entry management systems, etc.

TRAVEL & TRANSPORT



The overall quality of audience travel data continues to improve year on year. Festivals are engaging audiences, and increasingly partnering with low-carbon or public transport providers.

The rise in air travel seen in 2023 relates to a larger number of island-based festivals assessed, as well as several festivals taking place in isolated areas.

Average Audience Mode of Transport 2022- 2023



Average audience transport behaviour across all festivals assessed.

TRAVEL & TRANSPORT





Average Local Audience (within city or region)*

*Among those festivals assessed who collected audience data

of festivals recorded more than 70% local audiences





FOOD & BEVERAGES

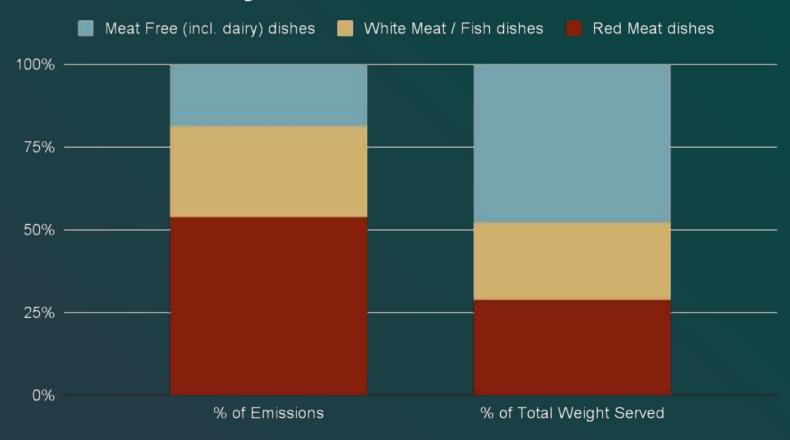




FOOD & BEVERAGES



Analysis of Food Served 2023

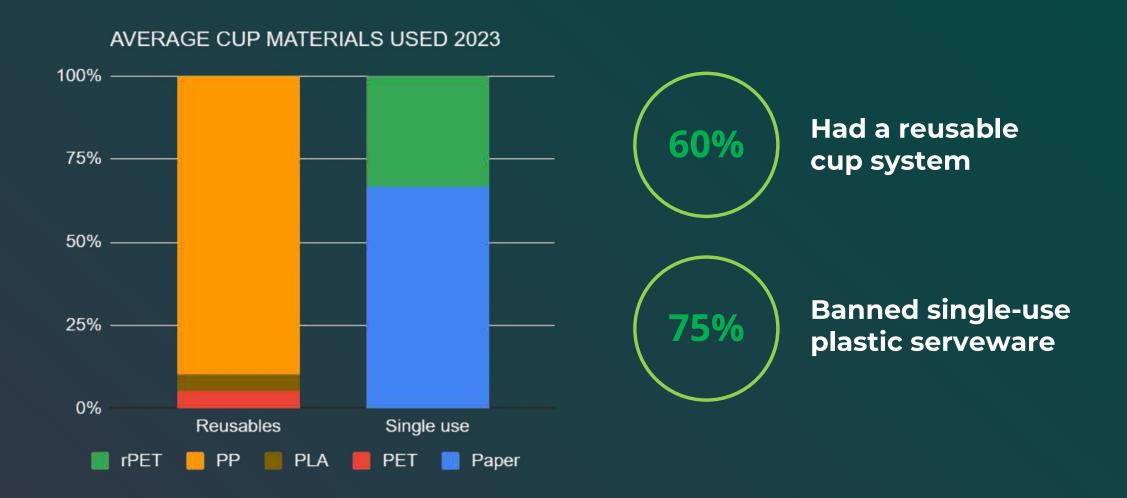


Average based on events where data breakdown of dishes was available.

The emissions are based on emissions per type of dish.

FOOD & BEVERAGES







WATER & SANITATION

WATER USE



Recorded water consumption increased significantly across events this year. The average recorded litres per person per day at camping festivals rose from 19 litres to 26 litres.

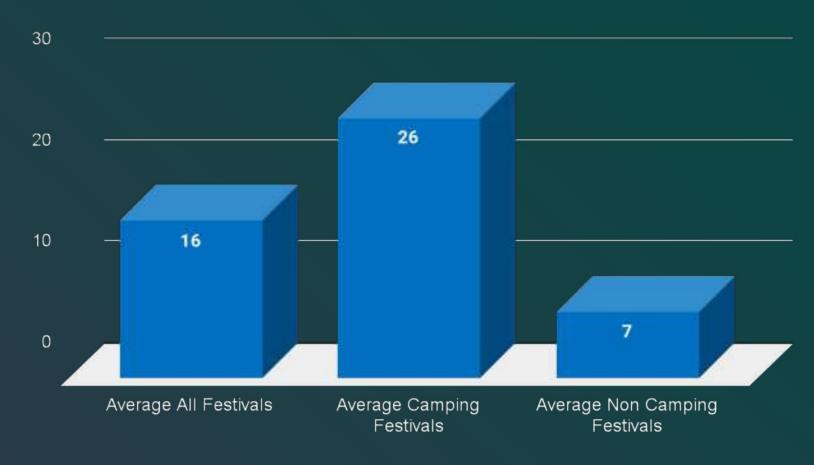
While this can be due to many factors, it aligns with 2023 being the warmest year on record, with some regions of Europe experiencing temperatures above 46°C.

As average temperatures continue to rise over the coming years, it is likely that water consumption will further increase.



WATER USE





Litres of Water Per Person Per Day

SANITATION





Festival used more than 75% compost toilets on site



75%

Were able to use the mains sewage networks

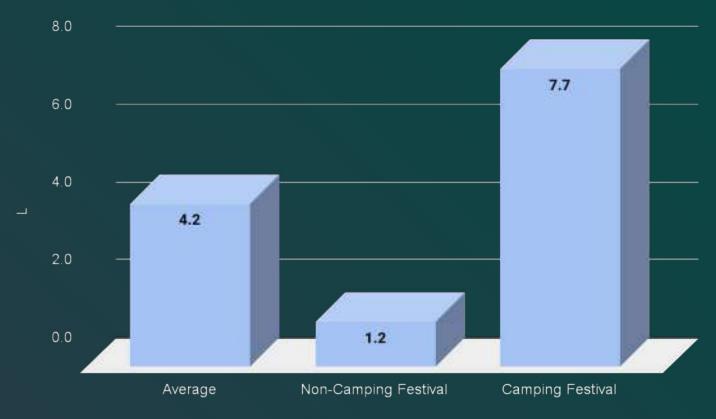
Had portable chemical toilets on site.

SANITATION



Collecting or monitoring wastewater data remains a challenge for urban festivals connected to existing sewage systems or infrastructure.

The averages presented here are based on festivals who are required to transport wastewater offsite, or have provided estimations.



Litres of wastewater per person per day

Does not include compost waste

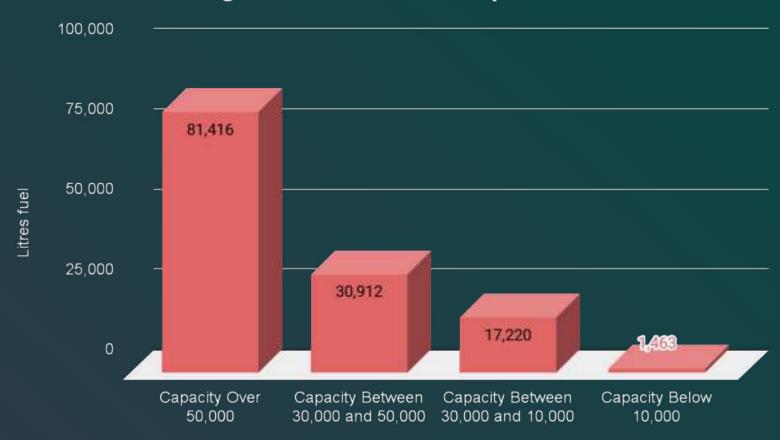


POWER AND FUEL USE

POWER & FUEL USE



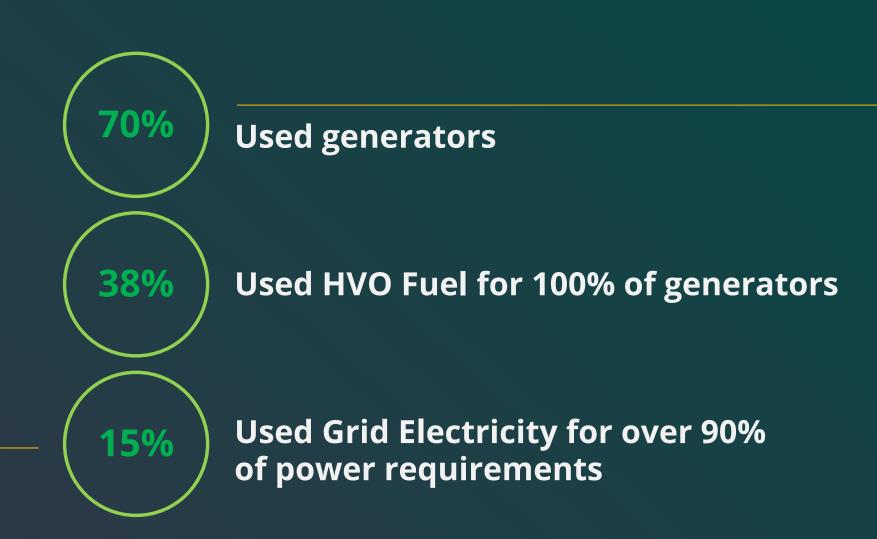




Fuel use includes both diesel or renewable fuels such as HVO

POWER & FUEL USE





POWER & FUEL USE

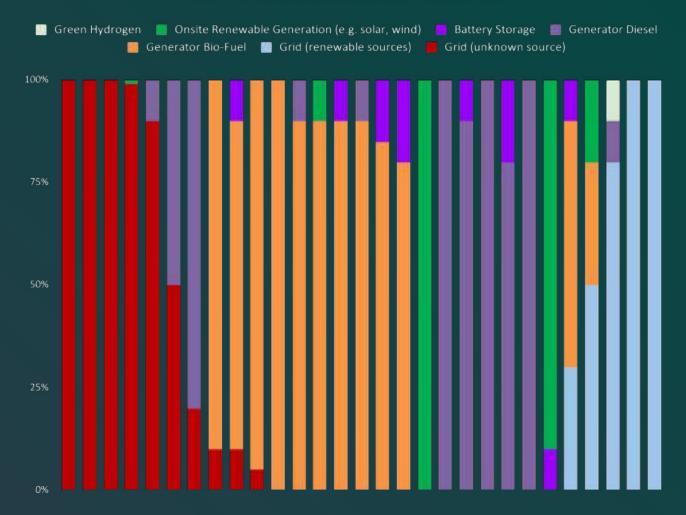


Additional research undertaken by AGF in 2023 for the Low Emission Festival project highlights that while generator power remains used by a majority of festival, the power mix of festivals is shifting away from diesel generators.

Encouragingly, events are increasingly introducing hybrid, renewables, and battery storage systems to reduce fuel use.

Supply chain availability and costs remain the major barriers for faster decarbonisation

LOW EMISSIONS FESTIVAL PROJECT - ENERGY MIX



Each column represents one festival







Site Recycling Separation Rate



Ban on Single Use Plastic Serveware



Average Waste Per Person Per Day (kg)







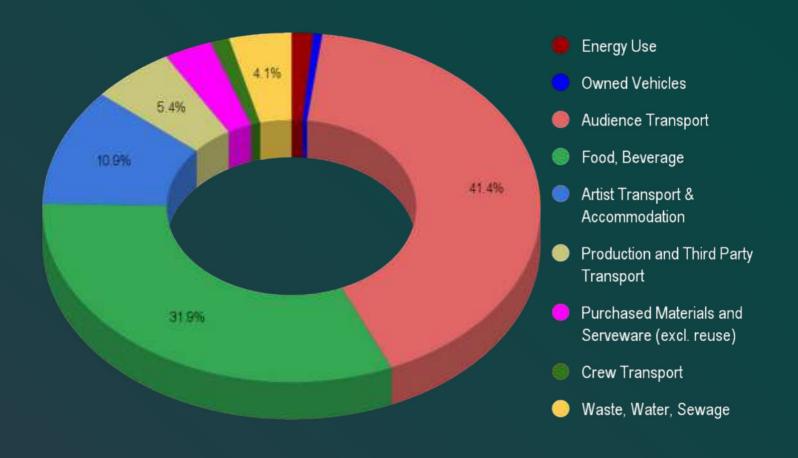






In 2022 AGF released a study showing the average carbon footprint breakdown for festivals.

The study confirmed that audience transport remains the single largest source of emissions for festival, but also highlighted the impact of food and drinks.





Limitations

The 2022 study provided a single average breakdown across a wide range of different festival types. While it highlighted previously under-reported emissions hot-spots, averages are not entirely representative of all festivals.

There remains significant variations in emissions based on:

NATURE OF FESTIVAL

TARGET AUDIENCE

LOCATION

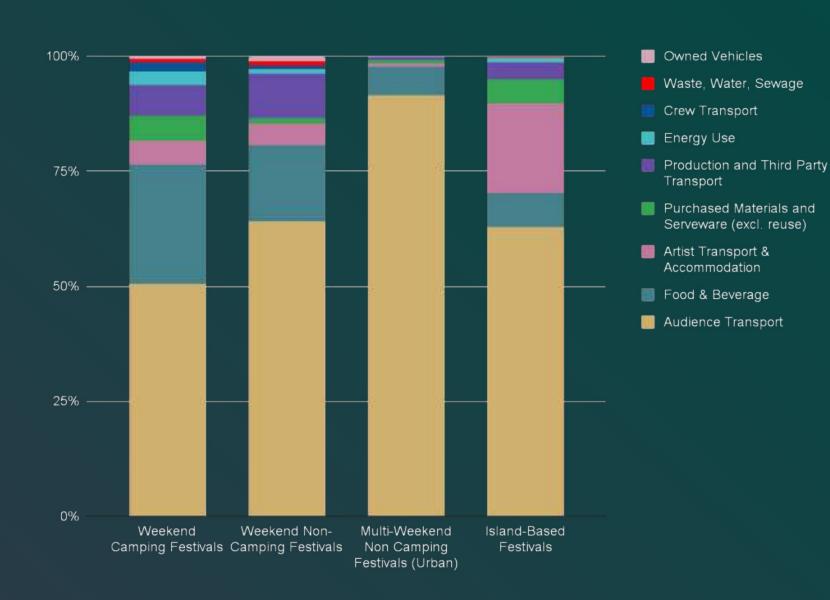
Note: carbon footprints always contain a degree of uncertainty as they often rely on estimates, averages and extrapolations.



In 2023, AGF was able to extend this study and provide a more detailed breakdown of emissions by type of festival.

This update further highlights significant impact of travel and transport, and that food and beverages are often the second largest source of emissions after transport.

These remain averages, and are based only on festivals AGF have worked with.





Food & Beverage Emissions

Festivals which moved to a fully meatfree event reduced their food-related emissions by over 60% on average.

As we see the impact of food reduce, travel and transport are likely to take up a larger share of the overall footprints.



Excluding Island Festivals and Multi-Weekend Festival



Power Emissions

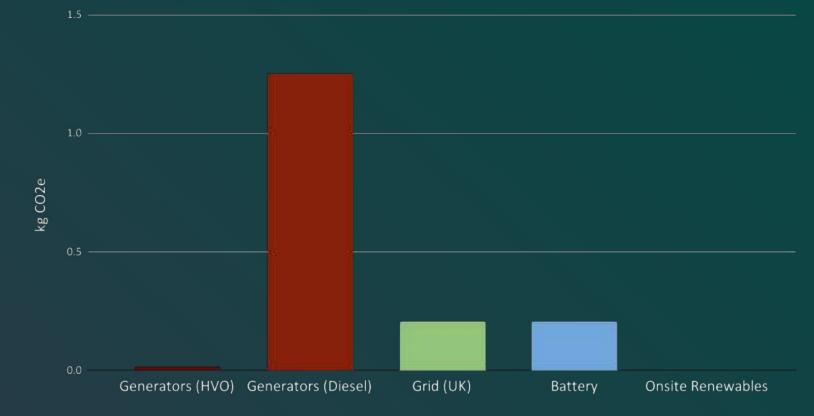
Increasing numbers of festivals are switching to renewable fuels such as HVO.

Made from crops, bio-products and other renewable resources, HVO does not require the extraction of fossil fuels.

The renewable biogenic materials have absorbed carbon during their growth phase, and are considered to "balance out" some of the emissions which are released when they are burnt.

CO2e Emissions per kWh (Accounting for "balanced" HVO emissions)

Assuming Average of 2 kWh per Litre of Fuel





While preferable to fossil fuels, burning any fuel still releases pollutants, particulates, and emissions at the point of combustion.

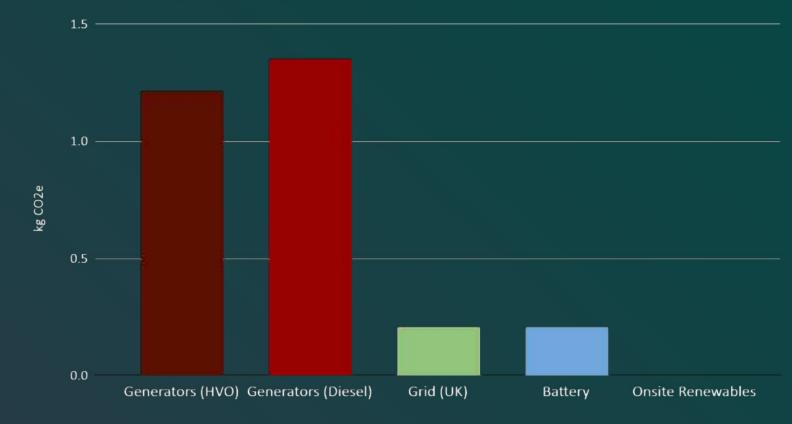
To reduce air pollution and carbon emissions, reducing overall fuel use is key.

Connection to electrical grids, using battery systems, hybrid systems or on-site renewables remain the most sustainable means of generating power.

Where alternatives to fossil fuel generators are not available, accurately specifying equipment and improving its efficiency can help reduce overall fuel use.

CO2e Emissions per kWh (incl. HVO emissions at point of combustion)

Assuming Average of 2 kWh per Litre of Fuel





Areas where festivals have improved their data quality and data capture:

- Waste
- Food & Drink
- Audience travel
- Power and Fuel Use
- Contractors and Supplier Transport
- Water and Wastewater

Areas which remain a significant challenge to collect accurate data:

- Purchased materials (decor, merchandise, construction)
- Artist Travel
- VIPs / Sponsors related data
- Trader transport

The data presented throughout this report is based solely on the festivals assessed by AGF in 2023.

