

SUSTAINABLE SOUND FESTIVAL GUIDE



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INTRODUCTION

Music festivals are a multi-billion-dollar global industry¹. In 2018, over 32 million people attended at least one of the 800 music festivals that take place in the United States². Millennials comprise 45% of these attendees². Along with their love of music, these younger fans bring with them a concern about sustainability. Recently the music festival industry has faced scrutiny over its lack of sustainable practices. When improperly managed, festivals damage natural systems, miss out on opportunities to support and engage with their attendees, and exclude local businesses.

Sustainable Sound: Festival Guide has been designed to address these negative consequences and satisfy the growing demand for sustainable festivals. Sustainable Sound will address environmental sustainability, how to protect, educate, and inspire attendees, and provide strategies to support local economies and ethical supply chains.

The guide applies the Mair and Jago Green Event Framework, existing green event guides, market-based research, academic articles, interviews with subject matter experts, festival case studies, and firsthand experience working with M3F Fest's sustainability team.

Sustainable Sound has been crafted specifically for small to mid-sized outdoor festivals. However, its general framework applies to festivals and events of various sizes and locations.

1. Festicket Writers. (2018, August 14). Festival Insights 2018: International Festival Experiences On the Up - Festicket Magazine. Nielsen's Audience Insight Report

2. Nielsen . (2018). Nielsen Music: 2018 U.S. Music 360. Nielsen Music: 2018 U.S. Music 360 (pp. 1–10).

FESTIVALS AS A SYSTEM

Sustainable Sound utilizes a systems approach to improve festival sustainability. Each festival component has its own unique set of impacts and solutions. All of these components will be explored throughout the guide.

FESTIVAL COMPONENTS

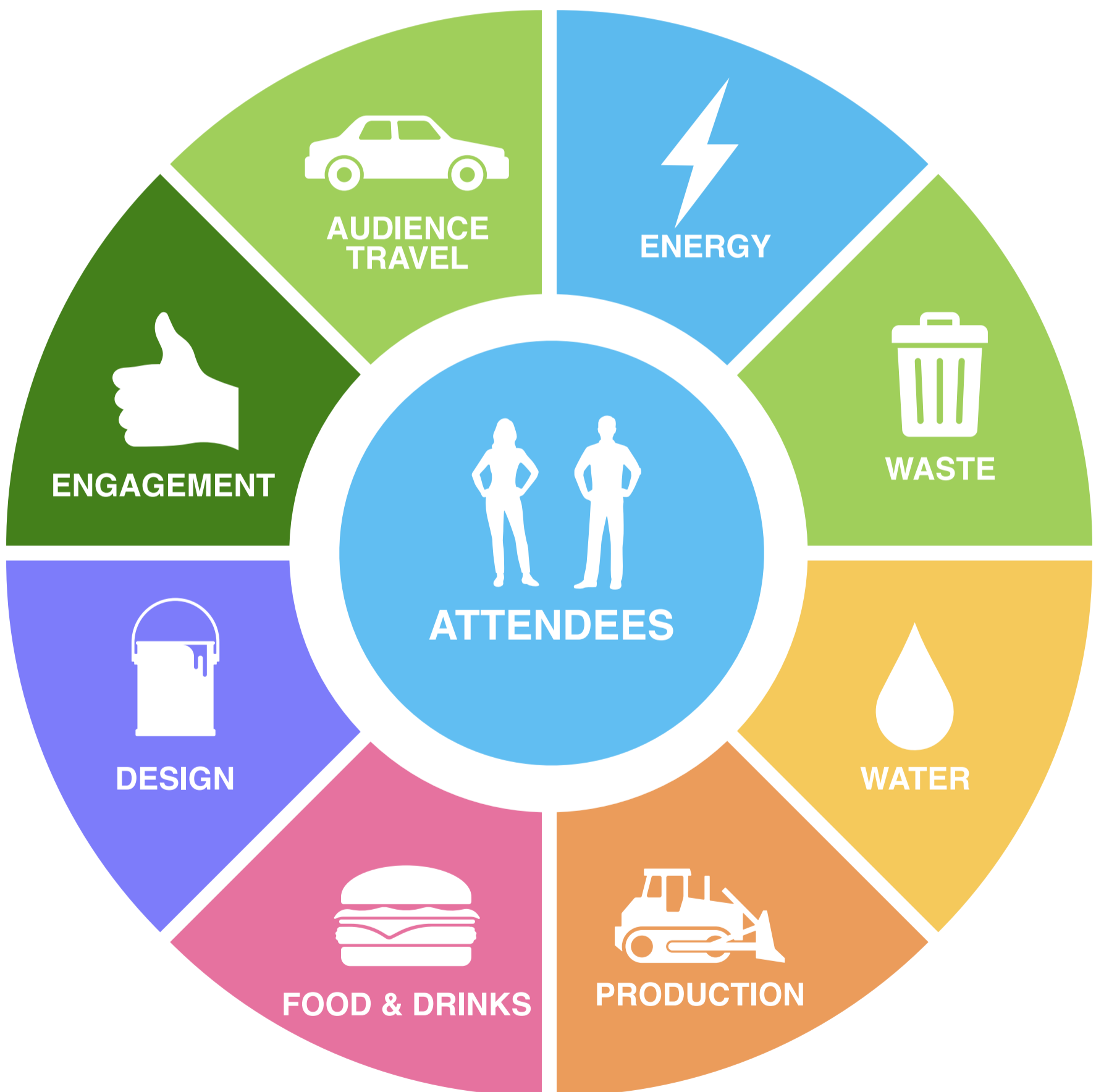


Figure 1: Festival Components

PROCESS

Sustainable Sound utilizes an adapted version of the Mair and Jago Green Event Framework. This adapted framework has five stages: planning, operation changes, attendee engagement, information sharing, and collaboration. Sustainable Sound also includes Information from existing green event guides, market research, academic articles, and some of the world's most sustainable festivals.

ADAPTED MAIR AND JAGO MODEL



PART I: PLANNING FOR SUSTAINABILITY

VISIONING

Creating a vision of the ideal sustainable festival will provide direction and motivation for the transformation ahead.

The vision must align with the five principles of sustainability, meaning that it: protects nature, ensures the wellbeing of people, provides equitable economic opportunities, and does not harm distant communities or future generations. The vision should also align with the festival's mission, not contradict itself, and contain measurable goals. Make sure to keep in mind all of the different components of a festival when creating this vision. It may be useful to look for inspiration from festivals that have already adopted sustainable practices. Shambala and Lightning in a Bottle both publish valuable information about their sustainability efforts online.

It would be beneficial to include team members from all different parts of the festival for the visioning process. Doing so will help to create a shared vision that belongs to the team as a whole.

THE FIVE PRINCIPLES OF SUSTAINABILITY

1. Viability and Integrity of Ecosystems
2. Human and Social Wellbeing
3. Equitable Economic Opportunity
4. Justice Across Societies
5. Justice for Future Generations

GOAL SETTING

Setting specific goals will lay the groundwork for planning the operational changes found in Part II of the guide. Goals should be measurable and have established time frame frames for their completion. Setting clear goals ensures that organizers will be able to evaluate the success of their efforts. For specifics on obtaining useful metrics, please see the "Data Collection" on page 24. Creating specific goals will also allow the allocation of duties to specific organizers or teams. This way, all team members will know their responsibilities. Below are some examples of goals that have already been achieved by various music festivals.

Festival organizers should aim to increase their sustainability goals each year, to encourage constant improvement.

FESTIVAL SUSTAINABILITY GOALS



PART II: OPERATION CHANGES

AUDIENCE TRAVEL

Audience travel accounts for 80% of a festival's carbon footprint³. In the United States, fans travel on average 903 miles a year to attend music festivals⁴. Fortunately, there are several zero to low-cost solutions that festivals can implement to incentivize fans to reduce their travel emissions.

STRATEGIES

1. For urban festivals, partner with cities to provide free public transportation to the event (light-rail, bus, subway, etc.)
2. Before the festival let attendees know how to get to the event
3. Partner with ride-sharing services such as Lyft or Uber to provide discounted rates to attendees
4. Charge a parking fee for those who do not carpool and provide free parking for those who do
5. Provide a bike valet and incentivize its use by offering discounts on merchandise or drinks to those who use it
6. Promote walking to the event if possible
7. For remote events offer shuttle services (this can act as an additional revenue stream)
8. Host carpooling forums on the festival website or social media event pages

LIGHTNING IN A BOTTLE CASE STUDY:

To promote carpooling, Lightning in a Bottle charges a \$30 parking fee to individual driver, but offers free parking to those who carpool.

3. Powerful Thinking 2015, The Show Must Go on Report

4. Nielson's Audience Insight Report ???

ENERGY

The majority of outdoor festivals are not connected to the grid and therefore require portable generators to power their operations. If powered by fossil fuels, these generators emit harmful greenhouse gas emissions, unpleasant odors, and unwanted noise. When managing a festival's energy use, always follow the three steps below in order.

1. REDUCE

Reducing energy loads is the simplest and most cost-effective approach to reduce a festival's energy-related carbon footprint.

Strategies:

1. Invest in energy-efficient LED stage and walkway lighting
2. Use solar lighting
3. Plan the festival to take place during the time of day when less lighting is necessary
4. Improve the accuracy of energy demand calculations to avoid having too many generators

2. SOURCE CLEAN ENERGY

After reducing energy loads as much as possible, look for clean and renewable sources of energy.

Strategies:

1. Solar hybrid generators
2. Efficient waste vegetable oil generators
3. Communicate with power providers to see if it is possible to connect to the grid and purchase sustainably generated power

SHAMBALA CASE STUDY:

Shambala Music Festival is powered entirely by renewable energy and is 5X carbon positive by funding a tree planting non-profit in Africa.

3. OFFSET

After reducing energy loads and sourcing clean power, offsetting a festival's carbon emissions is the final step.

There are multiple companies, such as ClimeCo, that can accurately calculate how much carbon a festival will emit and can provide the offsetting service. The price for offsets can be added to the ticket price, often for as little as an extra dollar per ticket.

Note that the type of offset purchased makes a difference. For example, planting trees to offset carbon creates a more significant environmental benefit than paying for renewable energy credits.

The method chosen to offset a festival's carbon footprint plays a vital role from a brand perspective as well. Opting for less impactful offsetting options may lead some to think the event is using greenwashing, by making the event seem more environmentally friendly than it is. This perception may compromise the festival's brand and make other sustainability efforts less trusted.

Operations to include in offsetting calculations:

1. The average distance of audience travel
2. Production shipping distances
3. Number of stages, lighting, and additional electronics used
4. Number of bands performing
5. Number of vendors, food trucks, production tents

M3F CASE STUDY:

M3F offers a \$3 carbon offsetting option that fans can choose to add on to their ticket purchase.

WASTE

Waste is often the most visible and significant environmental impact on the fan experience. Additionally, disposing of trash can be costly. Minimizing the amount of waste materials that enter the festival beforehand will reduce this expense.

STRATEGIES

1. Aim for all waste generated at the event to be recycled or composted
2. Restrict food and drink vendors only to carry compostable products (sourced from one supplier if possible)
3. Communicate with waste management companies the exact materials that are going to be brought to the event to ensure they can be appropriately disposed of
4. Clearly label waste bins with pictures and words of what belongs in each bin (both public and back of house)
5. Have volunteers monitor the bins to ensure waste streams do not get contaminated
6. Have designated locations for cigarette disposal
7. Have volunteers sort waste after the event to ensure that no waste is contaminated
8. Compact waste on-site to reduce the number of shipments
9. Encourage fans to bring re-usable materials
10. Donate unused materials and food to local charities and food banks

McDowell Mountain Music Festival Waste Bin Signage



WATER

The availability of clean water is critical to the health and safety of fans. Providing free, clean, and easily accessible water should always be a festival's number one priority. However, once this goal has been met, there are steps organizers can take to conserve water and minimize unnecessary waste at the event.

STRATEGIES

1. Provide filtered bulk water taps for both front of house and back of house operations (preferably connected to water mains to reduce materials and shipping)
2. Have volunteers monitor taps or use time-released taps to reduce the likelihood of water being left on
3. Provide signage on taps to educate fans on water conservation and the importance of hydration at festivals
4. Encourage attendees to bring reusable bottles to reduce water bottle waste
5. Restrict the sale of plastic water bottles and require vendors to carry water in cans or boxes (make sure to double-check with the festival's waste management company to ensure this can be processed)
6. If possible use water-efficient or waterless toilets

PRODUCTION

Setting up and operating a festival requires a vast amount of materials, equipment, and contractors. The full life cycle impacts of these products go far beyond their one-time use at the event. Additionally, the practices utilized by contractors can have significant impacts on the environment and the employees who are making the event possible. Below are several tips on how to reduce the environmental damage caused by production as well as how to pick ethical contractors.

STRATEGIES

1. When possible plan the festival around existing infrastructure to reduce construction needs
2. Rent or store infrastructure for future use when possible
3. Use recycled/repurposed material to construct infrastructure
4. Omit materials with harmful chemicals or ones that cannot be recycled
5. Source sustainably managed wood products
6. Build to reuse items
7. Hire companies with sustainable practices (this might require supplier questionnaires)
8. Hire local companies to reduce transportation emission
9. Promote bands to use sustainable rider options
10. Donate or share supplies with other organizations
11. Promote the event electronically to avoid paper flyers
12. Use recycled materials for wristbands
13. Use biodegradable confetti
14. Source organic cotton clothing with environmentally friendly dyes for merchandise
15. Have branded reusable cups at drink stations that fans can put down a deposit on and return or keep

FOOD AND DRINK

The impacts of food and drink vendors extend far beyond the festival's gates. Decisions made throughout the entire food system have consequences on biodiversity, water quality, emissions, nutrition, animal well-fare, and the livelihoods of farmworkers. Additionally, the quality of the food and beverages offered at an event contributes a great deal to the overall fan experience.

It is essential to take a holistic point of view when selecting and regulating vendors. When possible, organizers should contract vendors that already partake in sustainable food system practices, or at the very least, are willing to abide by the guidelines set out for the event. Selecting vendors can be an excellent opportunity to promote and support local businesses that have shared sustainability values as the festival.

Before contracting vendors, it is best to have a list of requirements ready to provide them to ensure that they can meet the festival's needs. An extensive example checklist is available on the following page.

SHAMBALA MUSIC FESTIVAL CASE STUDY:

Shambala is entirely meat and fish free. The estimated impact of this effort is estimated to be 100 tonnes of Co2e emissions. Additionally, they have festival wide requirements on organic dairy and eggs, local produce, and Fair-trade products.

EXAMPLE SUSTAINABLE VENDOR CHECKLIST

1. All single-use service items must be compostable
2. All back of house food waste must be composted
3. Vendors must allow fans to use reusable containers (as long as it is compliant with health code)
4. Back of house waste that is not recyclable or compostable must be carried out by vendors
5. Require/promote vendors to carry:
 1. Vegan/vegetarian options
 2. USDA Certified Organic ingredients
 3. Fairtrade certified ingredients
 4. Locally grown produce
 5. Seasonal produce
6. If serving meat provide:
 1. Sustainably caught seafood
 2. Free-range chicken
 3. Grass-fed beef
7. Require vendors to provide paperless receipts
8. Require vendors to have paperless menus or menus printed on environmentally friendly paper
9. Require vendors to donate leftover food to local food banks or charities

VENDOR ADVICE:

If it is a festival's first year implementing sustainable changes, it may not be the best idea to require all of the items above. This process can take time. It can help to let vendors know why these changes are important. If possible it can be beneficial to incentivize vendors to go above and beyond.

M3F CASE STUDY:

M3F offered a free ticket pack prize to their most sustainable food vendor as an incentive.

PART III: ATTENDEE ENGAGEMENT

Fan behavior is a critical component to the success of a festival's sustainability. As previously mentioned, the choices that fans make can have serious environmental implications. This is why it is so important to make it easy, fun, and simple for fans to engage with the festival in ways that support its sustainability goals.

Additionally, engaging with fans should mean much more than promoting them to behave sustainably at an event. A festival should also set educational goals to inspire its attendees. Fans should leave the festival with new motivational life lessons that they will use to create a positive impact back in their home communities. This may seem like a large task, but the positive environment that festivals generate is the perfect breeding ground to inspire positive change.

Festival organizers have the rare opportunity of having thousands of happy and supported people in a single place. This is the ideal situation to teach positive life lessons. The focus of the lessons provided in this guide are aimed towards cultivating inner sustainability, and general sustainable behavior education. However, organizers can use the following approaches to educate attendees on whatever topics they are interested and passionate about.

GAMIFICATION

People come to music festivals to have fun. To make it enjoyable for fans to become educated and participate in sustainable behavior, organizers can utilize gamification. Gamification is applying game-like methods to a non-game environment. Humans are naturally drawn into game-like activities.

Gamification can serve as a very low-cost option for festival organizers to improve attendee engagement. Modern technology such as festival apps and social media have made it increasingly easy to integrate gamification at events. Additionally, by integrating technology into these activities, organizers can collect useful data on attendee behavior and the effectiveness of activities.

Research shows that behavioral rewards, scavenger hunts, and voting activities are some of the most effective types of gamification methods. Below is a list of potential game-like activities.

EXAMPLE ACTIVITIES

1. Have fans send in/post pictures with a hashtag of them participating in sustainable behavior that the festival promotes to be entered in a prize raffle
2. If fans pick up X amount of pieces of trash and bring them to a green team volunteer they get a raffle token
3. Offer raffle token or drink ticket for using the bike valet/ carpooling/walking etc
4. Post QR codes that fans can scan on educational signage to be entered in a raffle or give them hints about surprise performances etc.
5. Have fans vote on what their favorite sustainability features are through the app

WORKSHOPS

Festivals can serve as a platform to provide fans with more than a space to dance. Engaging workshops, discussions, and classes can enrich the festival experience. These activities can allow the fans to undergo personal growth and transformation and give teachers a space to share their message with others.

These activities can come in all shapes and sizes to fit the particular brand of a festival. Below is an example list of activities that festivals around the world have already incorporated.

EXAMPLE ACTIVITIES

1. Yoga Classes
2. Personal Growth Workshops
3. Sound Healing
4. Guided Meditation
5. Food and Wellness classes
6. Cultural Offerings
7. Art Classes
8. Collective Art Projects

Lightning in a Bottle's Learning Kitchen



LIGHTNING IN A BOTTLE CASE STUDY:

Lightning in a Bottle is a world leader in positive festival-goer engagement. They offer: hundreds of talks and discussions from world-renowned visionaries and thought leaders, hands-on workshops, health and healing sessions, cultural offerings, and learning kitchen classes.

DESIGN

Similarly to the event production section, when planning a festival's design, it is best to use repurposed/recycled sustainably managed materials that are intended to be used again in the future. However, the impact of a festival's design can go much deeper than material selection.

Beautiful, interactive, and unique design elements at a festival can serve as a powerful tool to educate and engage with festival-goers about sustainability. Aligning a festival's design with its sustainability message makes it quick and enjoyable for fans to understand a festival's ethos. Below is a list of example design strategies that can add to a festival's aesthetic and capture the attention of attendees.

EXAMPLE DESIGN ELEMENTS

1. Interactive art pieces on chalkboards that let fans answer a question such as: "What do you love most about the world?"
2. Feature art displays made from repurposed materials (reach out to local artists or school art programs for help)
3. Live art performances featuring local artists
4. Educational signage about sustainability in general and the festival's efforts (possibly put on stage screens in-between sets)
5. Add educational signage to all sustainability features (waste bins, solar trailers, reusable cups, water refill stations, etc)

For the Billabong Pipe Masters Surf Competition, the Kokua Hawai'i Foundation, Sustainable Coastlines Hawaii, and WSL partnered with artist Ethan Estes to create the Plastic Free Pipeline piece made of: marine debris, used fishing nets, and reclaimed lumber⁵. This piece was meant to educate and inspire attendees to tackle the issues of plastic pollution.



HEALTH

Fan safety should always be a festival's number one priority. Having a qualified team of security and medical personnel on sight is a requirement for most outdoor music festivals. Beyond these requirements, there are steps that festivals can take to create an even safer space for their attendees.

DRUGS AND ALCOHOL

Regardless of how strict a festival's security is, drugs and alcohol will usually find their way into the event. The aforementioned free water is a powerful tool to reduce the associated risks of drugs and alcohol. However, there is a more focused approach that organizers can utilize to increase fan safety. Depending on the prevalence of substance use at a festival, it may or may not make sense to use these organizations.

DANCESAFE

“DanceSafe is a 501(c)(3) public health organization promoting health and safety within the nightlife and electronic music community. DanceSafe has two fundamental operating principles: harm reduction and peer-based, popular education. Combining these two principles has enabled them to create successful, peer-based educational programs to reduce drug misuse and empower young people to make healthy, informed lifestyle choices. Dance Safe is known for bringing adulterant screening (a.k.a., “pill testing,” “drug checking”) to the rave and nightlife community in the U.S., and for distributing unbiased educational literature describing the effects and risks associated with the use of various drugs.”

For a full list of DanceSafe's Services: <https://dancesafe.org/about-us/>

PART IV: INFORMATION SHARING

A festival's operations can be the most sustainable in the world, but if it does not share what it is doing, it may miss out on valuable brand benefits. Being known as a reputable green event has been proven to help festivals positively differentiate themselves, acquire sponsors, book talent, maintain positive stakeholder relations, and improve fans' perception of the festival³. A recent survey of festival attendees found that 62% of fans considered the incorporation of sustainable practices to be their top priority regarding festivals⁴.

MARKETING

A festival's sustainability marketing should bring to life all of the positive steps the festival is taking. It may require a bit of creativity to make waste management and energy efficiency exciting topics, but in general, this is information that fans like to know.

A good trick is to make the efforts of the festival tangible. For example, organizers could convert the amount of CO₂ offset to an equivalent amount of cars taken off the road. This method means more to people than saying the festival is offsetting 500 tonnes of CO₂. Additionally, it can be powerful to provide a narrative about why the festival has decided to embrace sustainability.

These marketing efforts should be made through social media platforms, the festival's website, blogs, and press releases. A list of example marketing topics based on the recommendations from this guide is located on the following page.

6. Mair and Lang 2012

7. Ticketmaster 2018

MARKETING TOPIC OUTLINE

1. Festival's Sustainability Mission
2. Waste Reduction Goals
3. Carbon Reduction Goals
4. Water Refill Stations
5. Local Vendor Highlights
6. Green Team Highlights
7. Workshops
8. Harm Reduction Efforts
9. Sustainable Art Pieces
10. How fans can be more sustainable
 - I. Use public transportation
 - II. Bike/walk
 - III. Carpool
 - IV. Bring reusable bottles/cups
 - V. Shop local/second hand for festival clothes
 - VI. Eat vegetarian/vegan food options
 - VII. Support local businesses while in town

ANNUAL REPORT

The annual report is where organizers can document the overall performance of the festival, including its sustainability efforts. The report is a great place to restate the festival's overall mission and commitment to sustainability. Items covered in the annual report related to sustainability should include:

- Percentage breakdown of fans' transportation methods
- Number of volunteers
- Waste diversion breakdown
- Energy savings
- Carbon reductions/offsetting
- Charitable donations
- Sustainability sponsors
- Number of local vendors and contractors
- Workshop attendance

Sustainability reporting can create both internal and external benefits for a festival. Tracking the performance of different sustainability efforts can provide insight on which areas are succeeding and which areas require improvement. It can also set a benchmark for future festivals. In terms of external benefits, publishing a sustainability report can benefit the reputation of the festival by highlighting its values. Publishing this report can also help influence other festivals to follow suit.

DATA COLLECTION

Evaluating the success of a festival's ability to reach its sustainability goals will require some data collection. Below are some metrics that can inform the success of their efforts. There are various ways to collect this data. These methods include post-festival surveys, information collected through ticket sales, supplier questionnaires, on-site surveying, festival apps, mathematic estimates, or by having people count and record the number of witnessed behaviors at the event.

Sustainability Metrics:

1. Area code of attendee and transportation method (to calculate audience miles traveled)
2. Amount of energy used at the festival and how much of that was produced through renewables or offset (can be calculated from the number of generators, by asking utility company, and offsetting organization)
3. Percentage of waste diverted (may require on-site sorting and weighing, or ask if the waste management company can provide this information)
4. Number of local vendor participants (vendor surveys)
5. Percentage of sustainable/reused production materials (supplier questionnaire)
6. Workshop attendance numbers
7. Fan perception of sustainability (attendee surveys)
8. Did fans learn anything about sustainability (attendee survey)

PART V: COLLABORATION

Collaboration goes hand in hand with information sharing but yields a different range of positive outcomes. In this context, collaboration means that festival organizers should reach out and connect with local communities and external organizations to create mutually beneficial relationships.

MUNICIPALITIES

Organizers should meet with city officials to go over their sustainability goals, and see if there is anything the city can do to help the festival achieve them. Some municipalities may offer discounted permitting rates, reductions in waste disposal fees, free publicity, deals on public transportation, or even free equipment rentals. Additionally, certain cities have their own green event certificates. If organizers follow the recommendations of Sustainable Sound, they will more than likely exceed the certification requirements.

UNDERSERVED COMMUNITIES

Music festivals often require volunteers to help with promotion, set-up, ticketing, green team operations, clean-up, and tear down. Organizers should reach out to find volunteers from underserved communities to give these individuals the opportunity to experience a music festival.

GREEN FESTIVAL ORGANIZATIONS

There are organizations around the world that exist to help festivals achieve their sustainability goals. They can provide knowledge, equipment, and human resources. A few of these organizations include Clean Vibes, Zerohero, the Trash Pirates & Waste Naughts, and KiloWatt Events.

OTHER FESTIVALS

Organizers from different festivals should share their experience of integrating sustainable practices at their events. This collaboration will accelerate the movement of sustainable festivals and decrease uncertainties in the planning process. Additionally, as more entities become involved in sustainable event management, the price of the necessary products such as solar hybrid generators and compostable service items will drop due to the law of demand.

SCHOOLS

Collaborating with students not only provides festivals with useful assistance but can also offer students real-world project or internship experience. There are passionate students around the world who specialize in sustainability. Many of these students would be grateful for the opportunity to help a festival implement sustainable solutions. Organizers should contact these sustainability programs to procure extra help in managing their sustainability efforts.

ADDITIONAL RESOURCES

Green Event Guides:

Bristol Green Event Guide

https://www.kambe-events.co.uk/wp-content/uploads/2017/05/Bristol-2015-EVENT-GUIDE_Outdoor-Events-and-Festivals.pdf

Greening Events Implementation Guide

<https://sustainability.asu.edu/sustainable-cities/resources/greening-events-implementation-guide/>

Green Festival Organizations:

Clean Vibes

<https://www.cleanvibes.com/>

KiloWatt Events

<http://www.kilowattevents.com/>

A Greener Festival

<https://www.agreenerfestival.com/>

Blue Strike Environmental

<http://www.bluestrikeenvironmental.com/>

Zerohero

<https://www.zerohero.org/>

Miscellaneous:

BYOBottle

<https://byobottle.org/>

ClimeCo Carbon Offsetting

<https://climeco.com/>

DanceSafe

<https://dancesafe.org/>

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DanceSafe for information related to harm reduction.

ABOUT THE AUTHOR

Matthew Burmeister is a masters student at Arizona State University's School of Sustainability and an avid festival goer. To integrate his love of music and sustainability, he has created this guide to help organizers implement more holistically sustainable events. He can be contacted at mattburmeis@gmail.com.

