

---

# Music Festivals And Environmental Sustainability

## Introduction

Studying environmentally responsible behaviours at outdoor music events on site is important due to the negative environmental damage that can be triggered when these events are hosted. Given the increasing interest by event managers in developing strategies to promote environmentally friendly behaviours of attendees, this task remains a challenge as attendees' may be disinterested in behaving in the context of music festivals in a pro-environmental manner. In view of this, event planners need to find new ways of motivating participants to engage more responsibly on site. Until now, what is known about environmentally friendly behaviours and attitudes in events has been largely derived from the perspectives of the managers rather than the perspective of the attendees' (Henderson, 2011; Laing & Frost, 2010; Mair & Jago, 2010). As most environmental impacts are created by attendees, there is a need to encourage them to engage in or escalate their on-site environmentally responsible behaviours (Harvey, 2009). These findings will help event organisers develop innovative approaches that positively impact the pro-environmental behaviours of event attendees.

## Climate Change

The International Panel on Climate Change (2014) noted that "Climate change is any change over time, whether due to natural variability or human activity". However, there has been a scientific consensus that in recent years human activities are now the main and potentially decisive cause of present atmospheric changes driving climate change (IPCC, 2014; Steffen et al., 2011). It is one of the greatest challenges of the 21st century (Howard-Grenville et al., 2014). Environmental sustainability has been at the forefront of public debate and discussion due to the growing awareness of climate change globally.

According to Boggia et al., (2018), there has been a major increase in the market demand for sustainable goods and services. Such demand is largely attributed to increased public awareness of harmful effects such as climate change and deforestation caused by modern-day consumption patterns.

## Events and Sustainability

Events contribute significantly as tourist attractions, renewal of destinations and stimulants for development (Getz, 2008) but also have extensive environmental impacts (Collins et al., 2009; Dickson and Arcodia, 2010). There has been a major shift towards environmentally sustainable events in the last two decades due to the growing awareness of climate change (Boo and Park, 2013; Chirieleison et al., 2019; Wong et al., 2014) but also to gain competitive advantage (Whitfield & Dioko, 2012, Ottman 1993) especially in the bidding process of hallmark events (Frost & Laing, 2010). The event industry has a responsibility in improving its environmental performance (Dickson and Arcodia, 2010). The United Nation Environment Programme (2012) highlights the need for sustainable event organizers to plan and execute events "in a way that minimises potential negative impacts and leaves a beneficial legacy for the host community and

---

all involved”.

Collins et al., (2009) proposed that quantifying the environmental impact of an event would positively influence the management strategies and operations. This can be measured through the ecological footprint (Collins et al., 2009; Collins and Cooper, 2017), carbon footprint (Gössling et al., 2011), measuring environmental emissions (Ghei and Sane 2018; Wang et al., 2007) and carrying out environmental impact assessments (Ahmed et al., 2008; Anderson and Lundberg, 2013). It is important that the event organisers understand the extent to which they impact the environment and their reach beyond the event itself, such as visitor travel (Collins & Cooper, 2017). However, Collins et al., (2009) highlight the multiple difficulties faced when measuring the environmental impact of an event due to the complex nature and brief timeframe of an event.

## **EXPAND measuring environmental impact?**

### **Event Greening**

The term ‘green event’ refers to an event that has a sustainability policy or delivers sustainable practices through its operations and management (Laing & Frost, 2010).

Mair and Jago (2010) explore corporate event greening. The model of greening, a conceptual framework, was created to understand the development of corporate greening and to determine the strategies present in event greening. It identifies the powerful motivators of event greening to be image enhancement, consumer demand, competitive advantage, supply chain/customer corporate social responsibility policies (Mair and Jago 2010; Whitfield and Dioko, 2012). Whilst lack of time, knowledge, cost and resources were identified as barriers (Mair and Jago 2010). Mair and Laing (2012) applied this framework to music festivals to understand the barriers and motivators for event organisers in a festival context. Organisational values were the main driver in greening, specifically, the values and beliefs of the festival director or founder was related to the levels of sustainability. Sustainability appeared to be embedded in the ethos of the festivals (Mair and Laing 2012). Both studies represent similar barriers and motivators. Cost appears to be a barrier across the literature (Mair and Laing, 2012; Claver et al., 2007; Henderson, 2011; McNamara and Gibson, 2008). Although Wang et al., (2015) found that individuals perceived value of an event increased with their awareness and green involvement, therefore be willing to spend more money overriding the barrier that implementing green practices is costly.

In event greening, it is important for all stakeholders to be supportive and cooperate in order to achieve best practices towards environmental sustainability (Laing and Frost, 2010).

Responsibility must be shared amongst all relevant stakeholders. Smith-Christensen (2009) believed the event organisers, the attendees, the host destination and the community all had a duty to collaborate collectively to reduce the adverse effects on the environment. However, stakeholders may not always be supportive. In hosting a green event Larson and Wilstrom (2009) consider how different stakeholders may have conflicting and diverse goals. It is imperative the organisers are equipped with the correct knowledge and ability to persuade the various stakeholders of the benefits of greening an event.

## **Music Festivals and Environmental Sustainability**

---

Every year millions of people attend music festivals (Richter, 2019). Music festivals impact the environment in a multitude of ways. They bear large ecological footprints by their vast use of energy, food, water and natural resources whilst generating significant waste and car emissions (David, 2009; Collins and Cooper, 2017; Powerful Thinking, 2015; Mair and Laing 2012). There is also the risk of soil damage and pollution due to waste and residual chemical spillage when temporary infrastructure is built on-site to stage the festival (Diederichs and Roberts, 2016). Music festivals have a responsibility to therefore mitigate their impact on the environment. Environmental sustainability has become an important criterion for festival planning (Wong et al., 2014). Music festivals are striving to be 'greener'. They are incorporating environmentally sustainable practices and initiatives into their events. Appropriate waste management, conscious power usage, recycling and encouragement of more environmentally friendly travel such as public transport are examples of how festivals are trying move towards environmentally responsible practices (Keane, 2019; AIF, 2019; Frost and Laing, 2010).

In the early 1990's Glastonbury Music Festival (the largest greenfield music and arts festival in the world) made partnerships with two well recognized, multinational non-profit organizations Greenpeace and Oxfam to monitor their environmental impact as much as possible and to promote sustainable behaviours among festival attendees (Glastonbury Festival, 2020). Despite their efforts to promote pro-environmental behaviour (via their website) they still urge for attendees to engage in environmentally friendly practices (Glastonbury Festival, 2020).

## **Waste**

Music festivals generate mass amounts of waste globally. The UK produces 23,500 kilo tonnes annually (Powerful Thinking, 2015). Ireland's most popular festival Electric Picnic (IFA, 2017) generates an average of ten kilos of waste per person (Irish Times, 2018). Major festivals in the USA such as Coachella and Stage Coach require the waste management of about one hundred kilo tonnes each day (BBC, 2019).

The most common waste at music festivals includes food, organic materials and plastic bottles (Barber et al., 2014). The use of single-use plastic has been a key concern and has given great attention across the media (Earth Day, 2020; Savage, 2019; Forbes, 2019). This era has been referred to as the 'Plastic Age' (Thompson et al., 2009). Current evidence suggests that the current use and disposal of plastic lead to detrimental consequences for both land and aquatic ecosystems (Bläsing and Amelung, 2018; Horton et al., 2017). The issue of single-use plastic and litter is often raised regarding music festivals therefore it is imperative they become part of the solution (The Journal, 2018; BBC, 2018). This has encouraged some large festivals to go plastic-free (Savage, 2019; Gray, 2019). In 2017 Glastonbury sold over one million plastic bottles, since then they have banned the sale of them at their site (The Guardian, 2019). Electric Picnic offers a zero-waste campsite and only allows attendees to sleep there if they correctly dispose of their waste (Electric Picnic, 2020).

Unrecycled waste is a huge contributor to a festivals ecological footprint (Andersson & Lundberg, 2013). In the UK only one-third of music festivals waste is recycled and the rest goes to landfills (Powerful Thinking, 2015).

Waste management is directly influenced by attendee behaviour (Bjorseth, 2008; Brooks et al., 2009). Music festivals may implement recycling systems however they are irrelevant if they are

---

not utilised correctly. Event organisers are often left to dispose of the waste as visitors do not take responsibility for their own waste (Barber et al., 2014)

## **Location/Travel**

The location of an event plays a role on the environmental impact of an event. The location influences waste management, transport options and availability of green power (Frost and Laing, 2010).

Visitor travel significantly influences the overall environmental performance of an event (Collins and Roberts, 2018; Dolf and Teehan, 2015). Attendees' may travel far distances to an event. The car is the most popular mode of transport (Powerful Thinking, 2015). Transportation is a significant contributor to the production of greenhouse gases (US EPA, 2017) and negatively impacts local communities with noise pollution, congestion and visual intrusion, making travel a major consideration for events management (Robbins et al, 2007; Menezes and Souza, 2014). Strategies have been implemented by event organisers such as free shuttle services, economic incentives to try and minimise the problems associated (Chirieleison and Scrucca, 2017 ). Glastonbury provides benefits and discounts to ticket holders who arrive by public transport or bicycle (Glastonbury Green Traveller, 2011). Electric Picnic offers a 'Tour De Picnic' scheme. It allows participants the opportunity to minimize their carbon footprint and raise funds for a chosen charity by cycling eight Kilometres to the festival in return for a free festival ticket (Electric Picnic, 2020).

A study of UK summer music festivals found that whilst 70% encouraged sustainable travel and 78% had an environmental policy, attendees' travel was the most significant single source of carbon emissions attributable to the event industry (AIF and AFO, 2015). The festival industry produces an estimated 100 kilotonnes of CO2 emissions annually. Attendees' travel accounts for 80% of this (Powerful Thinking, 2015). Similarly, in 2007 a study found attendees' travel to music events was responsible for two-thirds of the festival industries generated CO2 emissions (Bottrill, Papageorgiou, & Jones, 2009).

## **Water and Energy**

While water and energy consumption initiatives rely mainly on the organizers, it is critical event participants participate in order to reduce potential water and energy waste (Bjorseth, 2009)

## **Expand**

### **Pro Environmental Behaviours**

Pro environmental behaviour means the conscious behaviour to minimize one's negative impact on the natural and built world e.g. Reduce resource and energy consumption, minimise waste production and limit use of non-toxic substances (Kollmuss and Agyeman 2002).

In an environmentally conscious society, pro-environmental attitudes do not always translate into practice (Kollmuss and Agyeman 2002) and environmentally friendly behaviours at home do not always transfer to external environments. In a tourism context pro-environmental behaviour has been found to be more prominent in daily life context (Dolnicar and Grun, 2009; Han et al.,

---

2015; Miao and Wei, 2013). Although individuals may have strong environmental beliefs it may not transcribe into their actions when on holidays or away from the home. Therefore it is important to consider consumer behaviour in a tourism context to gather related material. Han et al., (2015) found that the destinations environmental responsibility was a key determinant in one's level of environmental behaviour. Does the perceived environmental responsibility of a festival influence one's behaviour. The literature in events suggests that an individual's behaviour may differ in a festival setting (Green and Chalip, 1998; Kim and Jamal, 2007).

Alonso-Vazquez et al., (2018) found that individuals who are more attached to the location where a festival is held (place attachment) are more likely to demonstrate pro-environmental behaviours on site.

## **Expand**

### **Co-Creation**

Werner et al, (2017) found that ongoing co-creation processed between the participant themselves as well as amongst participants, organisers and other stakeholders have increased an events sustainability performance over time.

## **Expand**

### **Festivals as a Platform**

Festivals and events are an opportunity to promote sustainable behaviour and awareness. They may be an opportunity to communicate these messages in a positive non-threatening environment (Sharpe, 2008). Music festivals reach a variety of people and are not explicitly one group. Generally, music festivals include activities and other cultural focuses extending beyond the music itself (Bowen and Daniels 2005) representing a unique opportunity to reach a diverse crowd. Green events may be used to educate attendees on sustainability and behavioural change presenting them with the relevant facts and knowledge to adopt those behaviours in their daily lives (Tölkes and Butzmann, 2018). Mair and Laing (2012) found a significant driver of event greening was an ambition to educate. Suggesting that music festivals may be a valuable tool in marketing and encouraging sustainability practices. As a result, attendees can learn from peripheral engagement and incorporate the festival's eco-friendly behaviour into their everyday lives (Mair and Laing, 2012).

## **Conclusion**

Whilst music festivals are increasingly incorporating environmentally sustainable initiatives and behaviours on-site to their events, green events are still developing and evolving. Thus, more research is needed to explore the awareness and attitudes of attendees to pro-environmental behaviours that will subsequently result in their own environmentally responsible behaviour (Henderson, 2011; Laing and Frost, 2010). This information can contribute to the development of management strategies and initiatives to move towards best practices at music festivals.