ATELIER FOR FESTIVAL MANAGERS

TOOLKIT

Festivals, Climate Change and Environmental Sustainability

Compiled by Samantha Nampuntha and Lily Hughes
About our Toolkits Series

Since September 2019, The Festival Academy and its community have been developing the series of toolkits of which this volume is part within the framework of the **Act for Global Change: A Global Conversation from the Arts to the World (ACT)** project supported by **Creative Europe** *(Cooperation Projects 2019-21)*.

The aim of this series is to **provide festival experts and sector practitioners with information on current trends and inspiring examples** from the industry, as well as relevant contextual information on their specific issues. With this, the toolkits are developed with the intention of enabling readers to get insights and inspiration for current and future challenges in their own practice. They include **knowledge gathered in the series of activities (Ateliers, keynotes and working sessions) promoted by The Festival Academy** since September 2019, as well as information from a variety of existing research resources and sources produced and brought by our community of Alumni, mentors, experts, speakers and festival practitioners.

The series covers **six topics**, within the scope of their relevance to festival and cultural practitioners:

1. Digital Technology
2. Programming and Curating a Festival
3. Caring for Artists and Technical Crew
4. Sustainable Business Practices
5. Audience Development and Retention
6. Festivals, Climate Change and Environmental Sustainability

The content of each topic-based toolkit includes theoretical knowledge and relevant case studies that can be used as reference and as a basis for the practice of festival making. For such, each toolkit is divided into **two parts**: the first one compiling the **pertinent theoretical background** on its specific topic and the respective links and sources for additional information; and the second part gathering **best practices and examples** related to the specific Toolkit theme which can serve as inspirational guides for festival-makers worldwide.

These Toolkits are not meant to provide ‘one-size-fits-all’ templates as conditions in which festivals take place vary substantially across the globe depending on political and social contexts, access to resources, and a range of other factors. We have attempted to glean case studies from as many different contexts as possible. It is up to readers and festival managers to interpret and apply the principles contained in the Toolkits to their respective conditions.

Readers are welcome to **navigate these toolkits by clicking through their interactive summaries** and being redirected thus to the parts that most interest them.

These toolkits were developed by teams of alumni with The Festival Academy staff and Atelier facilitator also contributing. The alumni team comprised:

- **Adel Abdelwahab** (artistic director of Hewar Theater Group, theater and performing arts curator – Egypt)
- **Ángela Delgado Valdivia** (director of Hay Festival Arequipa – Peru)
Koe Gaik Cheng (art administrator, manager of Little Door Festival, Malaysia)
Glyn Roberts (festival director and CEO of Castlemaine State Festival – Australia)
Lily Hughes (UK/Australia season programme manager at Australian Department of Foreign Affairs and Trade, Scotland)
Mauricio Lomelin (former producer at the Lincoln Centre New York, associate producer at Por Piedad Teatro – USA/Mexico)
Samantha Nampuntha (event producer, public relations and communications expert – Malawi)

Please refer to each toolkit for the names of its specific authors.

Anaïz Dessartre Mendonça, Inge Ceustermans and Mike van Graan of The Festival Academy contributed too.

The toolkits are open-sourced, continuously developed tools. Therefore, festival and cultural practitioners from all backgrounds and levels of experience are invited to expand these materials by adding their own contributions, building on the gathering of knowledge and insights shared with the whole festival-making community worldwide.
### Contents

1. **Introduction** ........................................................................................................................................... 6
   1.1 *Why this toolkit* .................................................................................................................................. 6
   1.2 *History* ................................................................................................................................................ 7
   1.3 *Who is this toolkit for?* ..................................................................................................................... 8
   1.4 *How to use this toolkit* ....................................................................................................................... 8
   1.5 *How to provide feedback, amendments and additions* ..................................................................... 8

2. **What is “climate change”?** .......................................................................................................................... 10
   2.1 *Definitions* .......................................................................................................................................... 10
   2.2 *Impact of climate changes globally and regionally* .......................................................................... 13

3. **What is “environmental sustainability” and why is it important?** ............................................................ 19

4. **Case studies of how climate change has impacted festivals globally** ...................................................... 21

5. **How do Festivals contribute to climate change and environmental degradation?** .............................. 25

6. **Arguments in favor of more ecologically sound festivals** ........................................................................ 29
   6.1 6.1 *Moral/principled arguments* ........................................................................................................... 29
   6.2 6.2 *Strategic arguments* ....................................................................................................................... 30
   6.3 6.3 *Solidarity arguments* ....................................................................................................................... 30
   6.4 6.4 *Other arguments* ............................................................................................................................ 31

   7.1 *Make a comprehensive list of all the challenges encountered by Festivals in a time of COVID-19* .... 32
   7.2 *How may festivals deal with restrictions caused by the existential threats posed by COVID-19?* (Provide case studies where festivals have responded) ......................................................... 32
   7.3 *Which learnings and strategies undertaken by Festivals during the COVID-19 era may be taken forward beyond these times, and be integrated into Festivals in the future in mitigating climate change?* ..................................................................................... 33

8. **Case studies of how festivals have sought to address climate change and environmental degradation** ...................................................................................................................................................... 35

9. **Impacts of mitigation strategies on festivals** ............................................................................................ 39

10. **Further ideas for festivals to consider** .................................................................................................... 40
    10.1 *Generally* ........................................................................................................................................... 40
10.2 Region-specific ................................................................. 41

11 Conclusion ........................................................................... 42

12 Appendix: Resources ............................................................. 43
1 Introduction

We often think of festivals as ephemeral—a moment, distinct and different from ordinary life—events that happen then vanish. Of course, those in the festival world know this to be a half-truth; community engagement continues, core staff remain in place, perhaps venues continue to operate. There is the memory of the experience, the awards, and accolades (or the bad reviews), people have met, connections have been made, minds opened, stories shared. Festivals may be ephemeral, but their impact is lasting.

This toolkit examines the lasting ecological impact of festivals and investigates what festival managers can do to minimize climate change and damage to the environment.

The toolkit is based on information gathered from a series of Ateliers and activities promoted by The Festival Academy, existing resources and knowledge produced by our alumni, mentors, experts & festival practitioners network. This toolkit is a work in progress, which is why it is intended that it will be developed and updated over time to build on experience and insights generated through future activities.

The aim of this toolkit is to provide festival experts and sector practitioners access to information on current trends of Climate Change and Environmental sustainability, as well as relevant contextual information on the topic. This toolkit should enable readers to get insights and inspiration for addressing challenges of Climate Change and Environmental sustainability.

The toolkit provides the reader with a set of issues and relevant examples that can guide future Festivals. The first part compiles relevant information about Climate Change and Environmental sustainability and their respective links and sources for additional information. The second part gathers best practices and examples related to the topic of this toolkit which can serve as inspirational guides for festival-makers worldwide.

1.1 Why this toolkit

“A company that is not environmentally sustainable has no future.”

— Richard Ashton, Opera North

The climate crisis is a cultural crisis and culture must be pre-eminent in the response. Culture must work with other disciplines to inform, educate, and innovate for a better world. In 2020, we were

---

forced to reinvent our normal lives, perhaps this can be an opportunity to look back on the day and take the lessons and learnings from it to imagine a new world.

The climate crisis is not a simple problem. It connects personal and institutional behaviours, individual and collective actions, the global system, and the local network, with large and small actions all contributing to the problem. For cultural practitioners, it presents different challenges and obstructions; how do we share art sustainably? What impact will climate change have on festival stakeholders—audiences, artists, and funders?

1.2 History

Humans have always come to the fireside. We have always needed gathering places, opportunities to come together to share and celebrate. Rituals, celebration, festivals, art, and culture are part of our humanity.

Festivals attract large numbers of visitors across the globe, serving as a motivation for travel and tourism. Travel to attend religious festivals or events is a common trend as different types of religious celebrations attract pilgrims annually.

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

![Figure 1: Waste left at Glastonbury, 2019 – BBC News](image-url)
However, Festivals are also unique spaces for innovation and opportunity, a chance to listen and learn from others and share and brainstorm ideas. Festivals and creative gatherings have always had the power to make a positive change in society in a way that is unavailable to many other sectors. Further still, the ephemeral nature of festivals means organizers can design and build their vision for the world, controlling what comes onsite and into their ecosystem, choosing to take action to limit plastic waste and, in doing so, organizers are able to positively influence the attitudes and behaviours of participants.

For instance, the Glastonbury Festival stepped forward in 2014 to take a lead on reducing single-use plastic waste at events by: Re-piping the entire site and providing more tap points, providing a reusable, 100% stainless steel water bottle, collaborating with WaterAid and Raw Foundation to provide ‘free’ water ‘Refill’ Kiosks, screening videos about the problems of plastic on the Pyramid and Other stage.  

1.3 Who is this toolkit for?
This toolkit is for all events and festival producers and managers. We hope to inspire new ways of thinking, help organizers understand their work’s impact on the environment and learn about incentives for mitigating climate change.

1.4 How to use this toolkit
Take the time to understand climate change, environmental sustainability, and their linkages to culture. Then look at the practical ways your festival can start and continue to contribute towards the fight against climate change.

This is a living toolkit, and we hope it continues to expand and improve as we learn more about climate change and how festivals across the globe are adapting to become more environmentally sustainable. We hope to add case studies and further resources and welcome edits and contributions from our users.

1.5 How to provide feedback, amendments, and additions
We are always looking for ways to improve and always open to new ideas. Please email: info@festivalacademy.eu for feedback, amendments, and additions especially if you want to

---

highlight how climate change has affected your festival or incentives you have done to mitigate environmental damage.
2 What is “climate change”?

“Climate change is global-scale violence, against places and species as well as against human beings. Once we call it by name, we can start having a real conversation about our priorities and values. Because the revolt against brutality begins with a revolt against the language that hides that brutality.”
— Rebecca Solnit, Guardian US columnist

Without relativising the urgency of climate change, we can observe there are different understandings of climate change all around the world. It’s both an individual and a cultural issue. The climate is perceived differently and consequently thoughts about causes, solutions, and the impact on one’s immediate environment are immensely diverse.

2.1 Definitions

Climate change is the long-term shift in average weather patterns across the world. Since the mid-1800s, humans have contributed to the release of carbon dioxide and other greenhouse gases into the air. This causes global temperatures to rise, resulting in long-term changes to the climate. Below is an explanation of climate change from the US National Aeronautics and Space Administration (NASA) and artistic interpretations of climate change from the artist Jill Pelto.

NASA:

The Earth’s climate has changed throughout history. Just in the last 650,000 years there have been seven cycles of glacial advance and retreat, with the abrupt end of the last ice age about 11,700 years ago marking the beginning of the modern climate era — and of human civilization. Most of these climate changes are attributed to very small variations in Earth’s orbit that change the amount of solar energy our planet receives.

The current warming trend is of particular significance because most of it is extremely likely (more than a 95 percent probability) to be the result of human activity since the mid-20th century and it is proceeding at a rate that is unprecedented.

---

Scientists attribute the global warming trend observed since the mid-20th century to the human expansion of the "greenhouse effect", a warming that results when the atmosphere traps heat radiating from Earth toward space. Certain gases in the atmosphere block heat from escaping. Long-lived gases that remain semi-permanently in the atmosphere and do not respond physically or chemically to changes in temperature are described as "forcing" climate change.

“Climate change” encompasses global warming but refers to the broader range of changes that are happening to our planet. These include rising sea levels; shrinking mountain glaciers; accelerating ice melt in Greenland, Antarctica, and the Arctic; and shifts in flower and plant blooming times. These are all consequences of the warming, which is caused mainly by people burning fossil fuels and putting out heat-trapping gases into the air. The terms “global warming” and “climate change” are sometimes used interchangeably, but strictly they refer to slightly different things.\(^5\)

---

**Jill Pelto:**

*Figure 2: Dwindling Migration, Watercolor and Pencil (2016)*

*Dwindling Migration* uses data that documents the dramatic decline in caribou population herds, focusing on the George River Caribou Herd from 1980 to the present day. Unfortunately, this trend is seen in most caribou herds globally.\(^6\)

---


Landscape of Change uses data about sea level rise, glacier volume decline, increasing global temperatures, and the increasing use of fossil fuels. These data lines compose a landscape shaped by the changing climate, a world in which we are now living.\(^7\)

Proxies for the Past is inspired by the universal unknowns, which humans try to solve by using materials such as ice cores, tree rings, and lichens to date past climate events. Nature reveals some of its secrets in these concentric forms, allowing us to determine information such as the data depicted: the average global temperature of Earth from 11,000 years ago to present. Thus, natural materials help us to understand a small portion of Earth’s history.\(^8\)

### 2.2 Impact of climate changes globally and regionally

The [Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming](https://www.ipcc.ch) highlights climate impacts at the current ~1°C global warming as well as the risks of reaching a 1.5°C and the irreversible losses that would take place should global warming reach 2°C or more. We need political leadership to immediately cut emissions across all sectors of the economy, in order to limit warming to 1.5°C.

Global warming is likely to be the greatest cause of species extinctions this century. The IPCC says a 1.5°C average rise may put 20-30% of species at risk of extinction. If the planet warms by more than 2°C, most ecosystems will struggle. Many of the world’s threatened species live in areas that will be severely affected by climate change. And climate change is happening too quickly for many species to adapt.\(^9\)

Global climate change has already had observable effects on the environment. Glaciers have shrunk, ice on rivers and lakes is breaking up earlier, plant and animal ranges have shifted, and trees are flowering sooner.

Effects that scientists had predicted in the past would result from global climate change are now occurring: loss of sea ice, accelerated sea level rise and longer, more intense heat waves.

Scientists have high confidence that global temperatures will continue to rise for decades to come, largely due to greenhouse gases produced by human activities. The Intergovernmental Panel on Climate Change (IPCC), which includes more than 1,300 scientists from the United States and other countries, forecasts a temperature rise of 2.5 to 10 degrees Fahrenheit over the next century.

---

\(^8\) [https://www.jillpelto.com/proxies](https://www.jillpelto.com/proxies)

According to the IPCC, the extent of climate change effects on individual regions will vary over time and with the ability of different societal and environmental systems to mitigate or adapt to change.10

Global effects of climate change include:

- Global Temperature Rise
- Warming Oceans
- Shrinking Ice Sheets
- Glacial Retreat
- Decreased Snow Cover
- Sea Level Rise
- Declining Artic Sea Ice
- Extreme Weather
- Change in precipitation patterns
- More Droughts and Heat Waves
- Ocean Acidification
- Mass Migration
- Species Extinction

Resources on impact of climate change:

10 NASA, ‘Climate Change.’
Figure 5: Social and Economic Impact of Climate Change

---

The Impacts of Climate Change on Human Health

Figure 7: Accelerating Climate Change Impacts

---

Figure 8: Climate Change and the Ocean\textsuperscript{14}

3 What is “environmental sustainability” and why is it important?

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

UN World Commission on Environment and Development

Let’s say that Timmy wants to pick the apples from his apple tree. As Timmy sees it, he has two options. He can grab a stepladder and go up to where the apples are, or he can grab an axe and cut down the apple tree. Timmy thinks the second option is a great idea because, instead of bothering with a cumbersome ladder, he can just chop down the tree and bring the apples to ground level, where he can easily pick them up. Timmy is pretty proud of himself for coming up with a solution, but I bet you can see a problem here.

Timmy did not sustain his natural resource and it will no longer be available to him. By chopping down the apple tree, Timmy overlooked the importance of environmental sustainability.

Environmental sustainability is defined as responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality. The practice of environmental sustainability helps to ensure that the needs of today's population are met without jeopardizing the ability of future generations to meet their needs.

Another approach might be to think of environmental sustainability as the study of how natural systems function, remain diverse and produce everything it needs for the ecology to remain in balance. This approach acknowledges that human civilization takes resources to sustain our modern way of life and takes into account how we might live in harmony with the natural world around us, protecting it from damage and destruction.

Environmental sustainability often refers to:

- Air quality
- Water quality
- Soil quality
- Plant life
- Animals and wildlife habitats
- Hazardous waste
- Greenhouse gas emissions

---

We live a modern, consumerist, capitalist and largely urban existence throughout the developed world and consume a lot of natural resources every day. Sustainability and sustainable development focuses on balancing that fine line between competing needs - our need to move forward technologically and economically, and the needs to protect the environments in which we and others live. However, sustainability is not just about the environment. It is also about our health as a society in ensuring that no people or areas of life suffer as a result of environmental legislation, about examining the longer term effects of the actions humanity takes and asking questions about how it may be improved.  

Since ecological conditions and economic and social systems differ from country to country, there is no single blueprint for how sustainability practices are to be carried out. Each country has to work on its own concrete policy to ensure that sustainable development is carried out as a global objective. International cooperation and action, however, is also essential.

---

4 Case studies of how climate change has impacted festivals globally

We’re looking for case studies!

Has your festival been impacted by climate change? Please get in touch—we would love to feature your festival in this toolkit.

4.1 Lugo Music Festival (Italy)

According to people's needs, I have interviews and informal chats with people from the institutions, with the representatives of the small, rural and central communities of my town and curate in a way that our people would best connect. Beyond the contents, I try to build up a network of corporates, schools and organizations with whom the festival, which is about performing arts and music especially, can cooperate. This first step defines the length of the festival (it could be 1 or 5 months), the specific contents and places where the programme takes place.

Corporates in my town are following the green wave of getting more environmentally sustainable. The European Union, Italy, my region, and my local institutions themselves are transforming their environmental policies. As a festival, I obtained the green certificate by the foundation "My Climate", compensating all of our carbon footprint. This had a huge impact on our image and communication. I curated the programme locating the different events in 7 parks in and out of my town. This caused huge amazement to people who seemed to play "hunting treasure" and were looking forward to the next event. This also shaped a new target of people who are sensitive to nature and leading a more sustainable life, families, and music fans.

4.2 Festivals & The Climate crisis – Working session

The climate crisis drastically alters our ways of living and consuming. Consequently, it also changes the ways in which we experience and organize cultural projects such as festivals. It does so from multiple angles: Fluctuating weather conditions or changed modes of mobility affect the festivals themselves. Festivals as ephemeral projects can, in turn, have an outsized impact on the environment. Yet, they're also uniquely positioned to start and change conversations on a local and global scale by injecting impulses into the cultural and political sphere. With this in mind, we aimed to explore the climate crisis as a context. Global warming doesn’t affect everyone similarly and thus deepens already existing economic inequalities. How can international festivals foster a connected arts scene, and thus pay artists from different areas, while reducing travel? What forms of artistic responses to climate change already exist and which ones do we
need to create? In a second step, we discussed the specifics of sustainable festival production by engaging with different best practice cases. Different approaches might focus on the behavior of the individual festival attendee or look at the festival as a whole; they might emphasize topics such as renewable energies, waste reduction or green mobility.

For more content: Link 1 | Link 2

4.3 Julie’s Bicycle

Julie’s Bicycle is a pioneering not-for-profit mobilising the arts and culture to take action on the climate and ecological crisis. Founded by the music industry in 2007 and now working across the arts and culture, JB has partnered with over 2000 organisations in the UK and internationally. Combining cultural and environmental expertise, Julie’s Bicycle focuses on high-impact programmes and policy change to meet the climate crisis head-on.

4.4 Sziget Festival

The first Sziget Festival as organized back in 1993 as a small gathering and has since evolved into one of Europe’s largest music festivals. Each year we strive to bring Szitizens some of the biggest names out there, and host over 1,000 shows across 60 stages, for 6 days straight. While music is an important part of Sziget, art is also a core element. There are multiple venues including circus, theatre, museum quarter and much more. Artists and performers come from all over the world to display their talents. There are also opportunities for Szitizens and artists to work together in order to create memorable and meaningful artwork.

4.5 Timber Festival (UK)

Sounds of the Forest - We are collecting the sounds of woodlands and forests from all around the world, creating a growing soundmap bringing together aural tones and textures from the world’s woodlands. The sounds form an open source library, to be used by anyone to listen to and create from. Selected artists will be responding to the sounds that are gathered, creating music, audio, artwork or something else incredible, to be presented at Timber Festival 2021.

4.6 A Greener Festival
Greener Festival is a not-for-profit company, committed to helping events, festivals and venues around the world to become more sustainable and to reduce environmental impacts. As pioneers in event sustainability since the first research in 2005, AGF provide certification, training, expertise, and facilitate the exchange of best practice.

4.7 Santander Festival (Spain)

The Festival, due to its history, trajectory, present and future, is undoubtedly one of the cultural references of the summer in Santander and a large part of the towns of Cantabria, and it also has an important projection outside the region. It is one of the leading festivals in the summer programme in Spain.

4.8 Hay Festival Foundation

For over 30 years Hay has brought readers and writers together to share stories and ideas in live sustainable events around the world, from the beaches of Cartagena de Indias to the cities of Beirut and Mumbai, reaching more than five million people across five continents. Our festivals inspire, examine and entertain.

The Hay Festival Foundation is a registered charity which supports the aims of the Festival in the UK and internationally, bringing people of all ages together. We are committed to access and inclusion and to the pursuit of excellence.

4.9 Wonderfeel Festival

Wonderfeel Festival is the biggest outdoor festival for classical music of Europe, with over 100 performances by more than 500 musicians, playing for almost 10,000 visitors over the course of 3 days. The 60-acre nature reserve in ’s-Graveland that is our home hosts seven Wonderfeel stages, all at a short walk’s distance. The diverse stages will satisfy your musical desires, from baroque to minimal, from classical hits to new and unique sounds, solo or symphonic, with touches of jazz, pop, and non-Western music. All of this played by world-class international musicians, whether new talents or old hands. Wonderfeel also hosts art disciplines that are part of the same world as (classical) music, such as dance, musical theatre, poetry, literature, and musical documentaries. Walks through nature, yoga, and various activities for children make the program complete. Wonderfeel feels like a pop festival, thanks to its parallel programming, rolling kitchens, the sale of day tickets, and its camping site within walking distance of the festival grounds. This means the festival has a unique place among classical music festivals, and brings a new experience of classical music to the table.

4.10 WOMADelaide

The world turns... and WOMADelaide returns to its spiritual home in Botanic Park / Tainmuntilla! Join us among the Moreton Bay Fig trees for a cultural adventure for all ages, with a captivating program of more
than 100 performances across seven stages, the Planet Talks forum, KidZone, art and cooking workshops, the global village & so much more. Together we've grown up over 30 joyous years sharing the very best music, arts and dance from this diverse, eclectic and fascinating world of ours. Come and celebrate our 30th with the birthday party to end all parties - we've certainly all earned it!
5 How do Festivals contribute to climate change and environmental degradation?

Festivals contribute to climate change and environmental degradation in a number of ways. Below we have outlines five key areas: waste, plastic, travel, sponsorships and infrastructure.

5.1 Waste management

All events generate waste, litter and trash both on the venue and its surrounding environments; events attract food vendors, exhibitors and other vendors who wish to attract visitors’ spending. Waste generated at events impact negatively on the events as well as the environment.

Waste management during events requires careful planning to get it right. It also requires a forecast of the waste need of the event so as to put in the necessary measures and provide the equipment needed to control waste. Waste need is a prediction of the quantity of waste likely to be generated and the measures to be put in place to reduce those waste. The waste need is determined through an assessment of the environment, the vendors the event is likely to attract, realistic forecast of attendees and the type of waste most likely to be generated.

Events, and especially festivals lasting for a number of days, use considerable amounts of potable water. This is partially used to supply showers, toilets, drinking taps and wash basins, but also to facilitate on-site catering. Festivals affect the environment because of their (often excessive) use of potable water and their poor facilities for proper disposal of wastewater.

In today’s globalized economy, the production, distribution, and consumption of food has a huge environmental impact. There’s a lot to gain when events switch their food & drinks menu towards plant-based, local, and organic ingredients and eliminate waste in the process. Not only can the event decrease its direct environmental footprint and increase biodiversity, healthy soil, and local economies. It may also inspire alternatives to the daily consumption habits that its audience takes home with them, as food and drinks are a fundamental part of their experience.

Most events use a lot of Earth’s finite resources, often in a way that can be described as: Take, Make & Dispose. This way of organising events leads to emissions, pollution, land depletion, waste of raw materials and other environmental effects across the entire lifecycle of the products involved in the events. We need to redesign our way of working, striving for a circular resource flow around the principles of Reduce, Reuse and Recycle.

- Reduce what you Take
- Reuse what you Make
• Recycle what you Dispose

5.2 Plastic

In the temporary world of festivals, convenience is a crucial factor. Being able to sell large quantities of drinks quickly, in a disposable plastic bottle or cup, has become the norm. However long-lasting, durable, reusable solutions are available and are the most preferred sustainable alternatives. Many of the products and promotional materials used on event sites are also made from plastics, and many waste management approaches use single-use plastics to collect waste. Plastics use at festivals is fairly obvious. Eating, drinking, fancy dress, personal care and promotional products tend to be the most prominent examples when it comes to the occurrence of plastic.

Plastics at festivals might include:

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

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

Appropriate clean recycling and recovery systems are not keeping pace with the sheer quantity or mixture of plastic produced. An overwhelming 72% of plastic packaging is not recovered at all. 40% is landfilled and 32% leaks out of collection systems, leaching chemicals into surrounding habitats, fresh water and marine water systems. Plastics can take a minimum of 500 years to degrade. Ironically, this means that we are using plastic materials that are designed to last, for short-term use.

BE PART OF THE SOLUTION... NOT THE POLLUTION

21 Watson, ’Plastic-Free Festivals and Events.’
5.3 Travel

Festivals have increasingly become inseparable from the tourism industry. In the 21st century, tourists have shown less interest in traditional sight-seeing experiences and are instead seeking opportunities to participate in the local “experiences.” Events such as festivals provide the opportunity for tourists to participate in the rituals and activities of the destination region. Events are therefore increasingly becoming a preferred attraction for tourists who desire participatory experiences.

In addition, transport is responsible for a quarter of global emissions. The way we travel and move our productions around the globe is leaving a huge footprint behind. However, if the arts wish to address climate change in a fair way, there is a need for travel. Many exchanges can be done digitally, but the effect of artworks and artistic collaborations depend for a significant part on physical interactions.

This forces us to reinterpret what it is that is being transferred by cultural exchange and what is needed to do so effectively. Especially when traveling is part of the collaboration a right balance should be found between physical contact and virtual presence. Some modes of cultural exchange might be feasible digitally or with local minorities from the diaspora, eliminating the need for travel. Others might want to change mode of transport, extend the time spent abroad in the form of slow travel or incorporate foreign networks of knowledge and production, such as slow art, that could increase the qualitative impact of travel.

Some suggestions for travel management in festival making:

- Implement a sustainable travel policy.
- Travel less and be sure you know why. If you do travel ask yourself: are there other ways of getting to your destination?
- Rethink mobility in terms of time. For instance, encourage longer stays and consider issues arising from a lengthier engagement.
- Push for longer and more impactful projects.
- Promote walking art practices: a sustainable practice and methodology.
- Encouraging audiences to reduce travel with incentives. For instance: a prize or award for the fullest car or the person or group with the least carbon emissions.

5.4 Sponsorships

What happens when money is not aligned with mission? Sponsorships from environmentally damaging companies which result in the promotion of those companies at a festival can have a negative environmental (and potentially economic) impact. As cultural organizations and artists we strive to work together yet we sometimes have different missions and needs. Individual moral obligations raise ethical questions about the people and institutions we work with. We need personal values and collective norms to address these issues—can a festival justify being funded by a climate polluter even if this allows for continued pro-climate practice?
We need to continuously research and share our doubts, thoughts, and learnings. This helps to navigate our practice through the challenges and helps others to change their practice as well. By doing so we create a global community with understanding and educational frameworks, as a result, in the process.

**Some food for thought:**

- Weigh the moral implications of financial incentives and reporting regulations in grant applications, sponsorship deals, private gifts, and corporate funders.
- Accounting needs to be sustainable.

### 5.5 Infrastructure

Infrastructure includes amongst others the building(s) or site(s) where your festival takes place. Consider whether these are built for your festival or if they exist year-round? What are the benefits and downsides of using found spaces, reusing existing sites or building new permanent or temporary venues? What footprint does your infrastructure have — in construction and after the festival is over?

Cultural or social infrastructure might also refer to the unseen systems of operation behind the running of a festival. These may or may not have an impact on a festival’s footprint or ability to intact change. Does your festival have an environmental officer, for example, or is sustainability a collective responsibility? Are the environmental requirements in vendor contracts? How does the festival office recycle? How easy or difficult is it to implement change?

- Discuss environmental issues and the ways of reporting at the start of the project.
- Produce art that is recyclable, create something that afterwards can just go into nature and be taken into the ecosystem, for instance, reusable costumes or scenery.
- Use used products and make your own space eco-friendly.
- Blend online and offline options in cooperations, formats and artworks.
- Create multipliers: more focus on the process, instead of the outcome.
- Be aware of new spaces that emerge, both physical and non-physical, where future narratives might grow.
- Think in terms of ‘holistic’ methodologies: people-oriented, local-oriented, resource networks that are not exceptionally for arts and culture.
6 Arguments in favour of more ecologically sound festivals

6.1 Moral/principled arguments

“Humanity’s 21st century challenge is to meet the needs of all within the means of the planet. In other words, to ensure that no one falls short on life’s essentials (from food and housing to healthcare and political voice), while ensuring that collectively we do not overshoot our pressure on Earth’s life-supporting systems, on which we fundamentally depend – such as a stable climate, fertile soils, and a protective ozone layer. The Doughnut of social and planetary boundaries is a playfully serious approach to framing that challenge, and it acts as a compass for human progress this century.”

– Kate Raworth, The Doughnut Economy

---

6.2 Strategic arguments

We believe the arts can be a vanguard to public opinion and other sectors, it can be an actor of change. We feel the urgency of climate change gives the arts a certain responsibility to use its influence for sustainability purposes. Climate change issues addressed through the arts can be an emotional plea, parallel to the rational plea by science, changing the behaviours of society. There could even be financial incentives linked to this.

What are the opportunities and challenges in your organisation, your funding systems, with partners and with audiences of a climate-oriented practice? Which tools or mechanisms could we develop that aim for fairness and what are the best cases we can refer to?

6.3 Solidarity arguments

The recent focus on climate change by Western organisations has a direct effect on the funding and practices of international cultural practitioners, who might have other priorities like emancipation or inequality.

Climate change issues need to be understood and addressed through open conversations about the perspectives, priorities and scenarios by all regions involved. No one is in the lead or is excused from changing one’s paradigms.

The climate crisis is inextricably linked to issues of inequality and social justice.

- Use the discursive powers of the arts to rethink the dominant norms or frames of reference.
- Evoke a mindset change and create awareness through action.
- Make reciprocity a core value.
- Find models of cooperation that are beneficial for the local community.
- Educate yourself.
- Think about the potential of different ideas of community coming from rural places, urban cities and in-between spaces.
- Keep working inclusively, with a more diverse range of people, to get a holistic view.
- Think in terms of cooperation and collaboration instead of competition.
- Operate in an intersectional manner and get out of the art-bubble.
- Exchange with the scientific field both in form and the content.
- Be agents of change by reflecting on the system and flagging issues/voicing concerns.
- Regulate your own practice and processes.
- Inspire others to work in the same way.24

---

6.4 Other arguments

When events are held in natural areas, they can have an explicit and long-term environmental impact. Thousands of people, loud noise, pollution, and the transport of heavy materials tend to take their toll on the used land, the surrounding waterways, and the local ecosystem, but the impact doesn’t have to be all negative. By proceeding with land restoration after the clean-up, you can leave the land in a better state than you found it and leave a positive footprint, bringing back biodiversity and wildlife.

- Execute a flora and fauna assessment.
- Make a noise and lightning plan, and take into account the habitat of bats, birds and animals.
- Protect vulnerable vegetation and trees.
- Prevent leakage of liquids such as fuels and chemicals.
- Install drainage systems to protect soil.
- Protect biodiversity.
7 COVID-19 and its existential impacts on festivals: the learnings for climate change

7.1 Comprehensive list of all the challenges encountered by festivals in a time of COVID-19

- Time to reframe and rework festivals
- Loss and/or reduction of income
- Unknown future (a new normal)
- Loss, cancellation or postponement of events
- Less gatherings of people
- Events venues closed
- New conversations about human rights
- Audience number restrictions
- Social gathering anxiety
- Travel restrictions
- Tourism industry overall greatly affected
- Arts and culture not prioritised during pandemic
- Psychosocial effects on cultural workers
- Artists not in the digital world are invisible now
- Difficult to plan for future events as things are uncertain
- Effects of the economy during and after covid
- Pandemic exposed lack of protection for the cultural and artistic sector
- Varying times of lockdown from country to country
- Distribution of free art during Covid-19 times, will the audience expect the same after the pandemic?
- Access to internet for arts and cultural professionals

7.2 How may festivals deal with restrictions caused by the existential threats posed by COVID-19? (Provide case studies where festivals have responded)

Reykjavik Festival published the whole programme without dates and will present each project when it becomes possible.

The city of Vienna created a “cultural summer” in 2021 to make paid work for 2,000 local artists. Curators from outside the mainstream were given an opportunity to present work on five outdoor stages throughout July and August.
Munich Volkstheater sent the ensemble on summer holidays early, so they can present work in alternative spaces during the summer, rethinking the length of shows, where they take place etc.

Parallel Cities - project by Stefan Kaegi and Lola Arias where international theatre artists created concepts that could be realised locally with local performers, in locations that could be found in any city.

Other ideas:

- Performances that take place very far away from the audience
- Using audio to present work in public spaces
- Mini concerts in people’s homes

### 7.3 Which learnings and strategies undertaken by Festivals during the COVID-19 era may be taken forward beyond these times, and be integrated into Festivals in the future in mitigating climate change?

COVID-19 has shown that global shifts in human behaviour are possible—even if they are temporary, even if they are not perfect - as a species we are capable of change and that is what the climate movement needs us to do, change. Festivals and arts industries across the world have been devastated by the pandemic but have also show remarkable resilience. The unusual circumstances have required festivals and artists to collaborate and experiment in ways many previously thought impossible—moving festivals online, rehearsing from home, digital residencies, socially distanced and outdoor performances.

For instance, garden allotment is something which we can refer to as a sharing model within the community. A comparison between big events which create different experiences both where audiences can live at a venue whilst a range of activities take place and others which cater for audiences who are required to travel back and forth to the different venues.

**Practical techniques to mitigate climate change**

- A **measuring technique** is something which festivals can implement in between editions and setting forecasts of waste and energy required in the organisation of the festival.
- **Interpreting data** in an approachable way is also something which festivals can work on.
- Audience engagement in terms of **knowledge development of the audience**, which requires an introduction from the content to approach and ways of the festival content and its sustainability.
- Developing a **festival community** around the festival culture which goes beyond the duration of the festival and has the possibility of recruiting volunteers during the production of the festival.
- **Gradual communication with participants**: audience and performers are something which festival organisations require to do to ensure that we attract the right type of engagement for our festival.
- Can we ask audiences to get their **own utensils** for the event so that we save the discussion and issues which arise around food consumption and waste during the festival?
• **Sustainable marketing strategy:** What type of marketing does our event require to attract the right type and amount of audience required for our event? To develop ways in marketing strategies on how the audience and community comes into the action in sustainable ways or with resources to be reused.

• **Educational programmes** that can provide a platform for students to showcase their work. Transversal work where an education for various generations is hand in hand with festival mission, action and aiming impact.

• As festivals we can **engage in discussion** not only with our audiences but **with policy makers** which can really facilitate the change we advocate for. (Such as the production of Single-Use Plastics).

• The festival platform can act as an **awareness motivator** on various issues experienced at a local and global level, such as engaging with discussions with ‘denialists’ of climate change.

What will be the measured carbon footprint from these productions? And how will these practices impact our work moving forward?

Do you have learnings from the pandemic? Please get in touch with us at info@thefestivalacademy.eu.
8 Case studies: Festivals that address climate change and environmental degradation

8.1 Burning Man

Despite the name, the iconic Burning Man event actually operates with the aim of “leaving no trace”. Instead, the organisers encourage festivalgoers to work on ‘greening your burn’ and they aim to be carbon negative, ecologically regenerative and sustainably manage their waste by 2030. Every year, they create Black Rock City in the middle of the Nevada desert, and every year they take it down, pack up and leave the area without a trace. The week-long event (they don’t like the word festival) is dedicated to art and community.25

8.2 Coachella’s energy playground

Held in the US each year, Coachella offers a series of eco-friendly activities and sustainable initiatives to help reduce its impact on the Colorado Desert in which it takes place. Coachella is working with Global Inheritance, a non-profit organisation that specialises in various eco-friendly initiatives such as the pros and cons of energy sources. Some of the initiatives Coachella has in place include:

- Brightly coloured bins designed to increase recycling throughout the festival site.
- An “Energy Playground” complete with “Energy SeeSaws”, designed to allow Coachella attendees to power their own energy sources, such as phone charging stations, while they play.
- VIP ticket competitions for those who car share on the way to the festival.26

8.3 DGTL

With its edgy line-up and ambitious environmental goals, this innovative electronic music festival in Holland is truly cutting-edge. DGTL intends to become the world’s first circular festival by 2020 and is constantly redesigning and evolving the event to meet this dream. For example, at this year’s festival instead of basing the menu at the food court on what their customers would likely want, they designed it to use up food waste and imperfect produce from local suppliers. In addition to this, they installed compostable toilets, only serve drinks in reusable cups and have chosen to host their performers in Jakarta, Amsterdam’s circular hotel.27

---

27 Wootton, ‘Sustainable Festivals in the World.’
8.4 Glasgow Commonwealth Games 2014

The Glasgow Commonwealth Games 2014 were the first Commonwealth Games to secure the ISO 20121 sustainability standard, which was brought in alongside the London 2012 Olympics as a measure of sustainability. This voluntary standard ensures that the event leaves behind a “positive legacy”. This includes reducing impact on the environment and also the local community. For Glasgow 2014 this included:

- Ensuring all competition venues were car-free.
- Use of a modern and locally based company (Aggreko) to provide clean and efficient energy.
- Ensuring that the Games HQ was on a Green Tariff energy supply.\(^{28}\)

8.5 Glastonbury

Festivals are often renowned for being the most damaging to the local environment, which is why the UK’s Glastonbury music festival is a good example of a more environmentally sustainable event. In 2017, Aggreko helped Glastonbury to measure its machines and determine how much energy and fuel could be saved. Glastonbury also implemented other environmentally sustainable measures including:

- Only using bio-diesel generators since 2014, to ensure the use of renewable energy.
- Providing a reusable, 100% stainless steel water bottle for visitors and multiple water refill points.
- Encouraging volunteers to help pick up rubbish and recyclable materials to return the site to its normal state as a working farm.\(^{29}\)

8.5.1 ICCA Congress

At the 2016 ICCA congress in Malaysia, instead of handing out speaker gifts (which often contain plastic or other non-biodegradable materials), a charity donation was made. Delegates were also able to adopt an Orangutan to contribute to the sustainable development of the region. This project was presented beforehand using a hand puppet and a booth at the show where visitors could find out more information.\(^{30}\)

8.6 MLB All-Star Games

Major League Baseball is the first professional sports league to ensure that its members are part of the Green Sports Alliance, which provides environmentally sustainable guidelines for the games. Some of the highlights include:

- Green Teams that collect recyclables throughout the games.

---


\(^{29}\) Cook, ‘Make an Event Sustainable.’

\(^{30}\) Cook, ‘Make an Event Sustainable.’
• Solar panel installations to provide a renewable energy source – previously game events such as Fan Fest have been powered by energy obtained from 100% renewable wind power.
• Red Carpets that are created as “green” carpets using recycled content.
• Working with “Rock and Wrap it Up” to ensure that any food which is prepared but untouched, is recovered for donation to those in need.31

8.7 NorthSide

Based in Aarhus – a university city on Denmark’s east coast – this three-day music festival has a strong line-up and an even stronger sustainability agenda. Rather than making money or being successful, the ultimate goal of the organisers has always been to create a sustainable festival. And for the past ten years, they’ve been working hard to reduce NorthSide’s waste, cut down its carbon footprint and find a solution to an eco-food supply during the three-day event. Behind the scenes, no decisions are made without the environmental aspects being considered first. One of our favourite aspects of their sustainability initiative is the ‘trash butlers’ and ‘trash maids’ – individuals dressed in stylish service outfits, wandering around the festivals handing out bags for rubbish and pocket ashtrays for cigarette butts. They also run a scheme where individuals can bag themselves a free beer after collecting a set amount of discarded cigarette butts. Whilst being unconventional, these initiatives are definitely working, with NorthSide being known as one of the cleanest festivals around.32

8.8 Pohoda

The biggest music event in Slovakia, the word ‘pohoda’ actually means ‘peace/calm/satisfaction’ in Slovakian and this is exactly what this lovely festival will leave you with a sense of (both on a personal and environmental level). Set in Trincin Airport (why may seem odd but actually works really well), the capacity of the festival is capped at a really comfortable figure, ensuring that the area feels spacious and there’s not too much pressure on facilities. A deep respect for the environment runs through the lifeblood of Pohoda, a fact which has led to it winning numerous green awards in recent years.33

8.9 Secret Solstice

Secret Solstice is set in the legendary land of ice and fire, during the haze of their magical dreamlike summer months – through which day blends into night and night back into day and the ‘midnight sun’ shines bright in the sky at all times. During the festival weekend, the sun literally doesn’t set – forget what you learnt in Game of Thrones, summers in Iceland are the complete antithesis of those dark and brooding winters. Crazy natural phenomenons aside, Reykjavik’s Secret Solstice is a festival you really don’t want to miss. Touted as ‘one of the most unique festivals in the world’, the line-up offers a mind-blowing range of weird and wonderful experiences – here you can party inside a glacier or enjoy a DJ set from the comfort of a toasty

31 Cook, ‘Make an Event Sustainable.’
32 Wootton, ‘Sustainable Festivals in the World.’
33 Wootton, ‘Sustainable Festivals in the World.’
geothermal pool. In true Icelandic style, the festival is powered by 100% geothermal energy, making it one of the only ‘carbon-neutral’ festivals in Europe.  

8.10 Splendour in the Grass

This annual Aussie festival is held in North Byron Parklands in Yelgun, New South Wales, and always features an exciting line-up, spanning a range of genres. As well as great music, Splendour in the Grass also has a pretty great attitude when it comes to the environment, doing its best to protect the local area and encouraging festivalgoers to do the same. It even went one step further this year and appointed Damon Gameau (world-renowned filmmaker and environmental activist) as their first Eco Ambassador which is pretty cool. Most of all, we love the fact that there is a tree planting session on the Saturday of the festival in case anyone wants to branch out with their festival activities (sorry, couldn’t resist).  

8.11 Terraforma

This ‘experimental and sustainable’ music festival is set in the picturesque grounds of Villa Arconati, just outside of Milan. Running for five years now, this forward-thinking festival champions eco-mindfulness and low impact living. Consequently, every element of Terraforma has been carefully considered, from the architecture of the different areas and facilities to the energy supply and waste products, with improvements being made every year to reduce its environmental footprint. One of their key projects over the years has been to restore the ancient labyrinth which would once have been at the heart of the villa’s grounds. This was completed in 2018 and boasts over 500 trees – which is obviously great for the atmosphere (both at the festival and world in general…).  

8.12 We Love Green

As the name suggests, We Love Green is a festival where the environment is taken very seriously indeed. As well as an eclectic and exciting music line-up, the 2-day event is also packed with talks, workshops and discussions on sustainable living. From installing eco-toilets and using 100% renewable energy to encouraging festivalgoers to travel by public transport (76% actually did so in 2018 which is a fantastic figure, but negated somewhat by the fact that the festival is in Paris and is accessible by bus and the Metro…) We Love Green is making a great effort to live up to its name. It has also managed to plant 80,000 trees in partnership with Ecosia.  

---

34 Wootton, ‘Sustainable Festivals in the World.’
35 Wootton, ‘Sustainable Festivals in the World.’
36 Wootton, ‘Sustainable Festivals in the World.’
37 Wootton, ‘Sustainable Festivals in the World.’
9 Impacts of mitigation strategies on festivals

Many arts and cultural organisations report that they generate financial benefits as a direct result of environmental initiatives. For example, in the last six years, organisations in the UK saved £16.5 million in energy costs.

These figures only scratch the surface. Organisations can demonstrate significant benefits by embedding environmental sustainability into their business practice. These include improving staff engagement and motivation, encouraging more consistent building management and enhancing reputation in the eyes of audiences and stakeholders.

“Carbon literacy across a rich cultural community can yield so much more than carbon reductions.” Starting from the basics – carbon footprints – this deceptively simple policy is demonstrating how a sustainable cultural sector might actually work; inspiring deeper exploration and connections between climate and social justice, investment and innovation, clean energy and new materials, empathy and biodiversity. Some may argue that focusing on impacts is missing the point, that environmental action across the arts is best served by focusing on artists and content. This is a misconception: we need both.

Inevitably, action is changing the way the creative sector goes about its business. New priorities, practices, skills and investment are kick-starting a new creative ecology, which is generating jobs and driving demand for greener products and services. New skills, roles and knowledge are supporting clean technologies, sustainable goods and services, waste solutions and the emergent circular economy.

---


10 Further ideas for festivals to consider

10.1 General guidelines

Starter steps for more sustainable events are:
1. Know your impact
2. Make a plan
3. Consult contractors and stakeholders
4. Organize waste management

Work out your impact

- Before you try and improve things, you need to know what impact your event is already having on the environment. Start measuring your carbon footprint (e.g. with tools provided by Julie’s Bicycle). Be able to clearly justify this footprint in discussions with colleagues.
- Compare carbon footprint with collaborators and discuss goals and tactics.

Make a plan

- As with everything in event management, if you don’t plan properly it will either go wrong or possibly not happen at all. Choose which environmental impacts you’re going to focus on and set some realistic goals which you can improve on each year.
- Adopt both top-down and bottom-up approaches. (Use bottom-up to get sufficient support and ideas from the general population. Use top-down approaches to use the power to change by the elites and policy makers).
- Update the mission of your organization to incorporate fair and ecological practices. Set goals and guidelines to reduce your ecological impact.
- Make sure you choose the right person to see through your plans. (Giving the responsibility to someone too senior may mean that things don’t get done and someone too junior might not have enough influence to encourage other stakeholders to get involved).
- Think about when you’re going to get everything done. This is not just about planning when you’re going to implement your project but when you’re going to achieve the targets you’ve set. Create milestones and stick to them.
- Instead of focusing on fast growth, slow down the pace.

Involve your contractors and stakeholders

---

43 Cook 2019.
44 Cook 2019.
• The best time to get input from contractors is when they’re bidding for the job, make sure you stipulate that you want their help with reducing environmental impacts.
• A good example if you’re running an outdoor event is to get your power contractor to start measuring power usage using remote monitoring systems. These systems can tell you how much power is actually being used by your generators in different parts of the show.
• Make sure you involve contractors early so that they have plenty of time to prepare.
• Involve your stakeholders by including communicative strategies (e.g. ‘The climate was not hurt by creating this project’).

Organise essential waste management

• Choosing the right bin is important. Signage should be clear and bold and state exactly what needs to go in each bin. Avoid long lists of dos and don’ts which will confuse people. Restricting the aperture is also a good plan.
• Make sure that your contractor is being honest about what happens to your waste too. Make it part of their contract to tell you where the rubbish and recycling has gone.
• It shouldn’t stop in the front house areas. Providing recycling services for your catering units can really bump up your recycling figures. Food waste is one of the biggest problems in landfill because it breaks down without air and creates methane gas.\textsuperscript{45}

10.2 Region-specific

We’re looking for region-specific ideas for festivals to consider! Please get in touch—we would love to feature your festival in this toolkit.

\textsuperscript{45} Julie’s Bicycle, ‘Sustaining Great Art and Culture.’
11 Conclusion

Climate change is one the most complex and pressing issues that permeate all realms of human life – and Festivals are no exception to this. The 26th UN Climate Change Conference of the Parties (COP26), that took place in November 2021 in Glasgow, UK, showed that there is still a lot to be done towards achieving concrete results for de-accelerating climate change and reach the sustainable goals set by the Paris agreement.

Festival managers can and should work towards contributing for diminishing festivals’ lasting ecological impacts and minimizing climate change and damages to the environment. Furthermore, they can also be platforms for discussions and co-creation of sustainable solutions, as well as examples of practices that consider climate change issues. In this context, festivals can work towards being part of a sustainable systemic change that goes from the idealization of a festival to its post-production.

We trust that some of the ideas in this Toolkit and the experience of other festivals with regard to climate change and environmental practices will resonate with readers and will encourage and inspire them for future editions of their festivals.
12 Appendix: Resources

12.1 Cited Works


12.2 Additional resources for Climate change and environmental sustainability

Check out our other toolkits here, reports and resources on festivals and climate change.

Register to get a green certificate here.
Find more tools for holding sustainable festivals here.
Calculate your effects on climate change here.