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Certifications as A Pathway to Sustainable Festivals and Events

Client: Kilowatt Events & Blue Strike Environmental

#### Abstract

Live music events are growing in terms of popularity and attendance every year. Along with the traditionally produced festival comes social, environmental and economic impacts. Some event and festival management teams focus on "greening" their event, which involves operating sustainably. Many of them seek recognition in the form of certifications to highlight and market these efforts.

There is a disconnect between event and festival management teams and certifications, however. Many management teams do not know which certifications exist, or which to choose based on their sustainability values. To solve this dilemma, I am creating a decision-making tool termed "FestEval" that compares Wiek's sustainability criteria inspired by Gibson's principles to six green certifications. Certifications are ranked using percentages and pie charts to display how well each certification aligns with the principles.

The tool provides event and festival management teams with a method for choosing a certification that promotes their sustainable event and fits their values. It is designed to advance the future of festivals and events in a sustainable direction.

The project identifies gaps in green certifications and suggest strategies for their improvement. It draws connections to Matt Burmeister's Sustainable Sound Guide, designed to help management teams shift from operating at the current standard to operating sustainably.

The three university certifications most heavily involved the first principle, Viability or Integrity of Ecosystems. The three international

certifications included the principles more evenly. The fifth principle of sustainability, Justice for Future Generations, was the least included principle in all of the certifications.

Unfortunately, FestEval was unable to be piloted as planned due to Covid19 and the nation-wide shelter in place orders, however Meghan Tierney of Kilowatt One, the event sustainability division of Kilowatt Events, reviewed the tool and the user guidelines that accompanies it and provided valuable feedback.

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# Introduction and Background

Live music events are the most lucrative and fast-growing segment of the "concerts and events" industry, above nonfranchise sporting events, theater performances, and fairs according to IBIS World industry market research (2019). In total, they generated 8 billion dollars in revenue last year. This industry is growing in popularity and expanding every year.

There are a large number of impacts typically associated with producing music festivals and events. Events compromise the integrity of the local environment and the host sites. These impacts stem from emissions due to attendee travel and transportation of equipment, followed by food and single use product waste from vendors and attendees, as well as energy consumption. Festivals damage the host venues' grounds and disrupt the soil, with the burden of reparations being placed on local taxpayers. Often times, festivals outsource staff and vendors, overlooking the opportunity to contribute to the local economy and incorporate the host community (Mair and Laing 2012). These are some of the most common impacts; there are many more.

Recently the industry has shifted with festivals and events "greening" their operations, however there is a long way to go until we see industry wide reduction of impacts.

The concept of greening a festival through certifications is a relatively recent and developing concept. Mair and Laing (2012) explore the concept of "greening festivals", drawing on similarities from motivations of management in corporate greening. They state that often times ethical festival greening is driven by the motivated management team of the company (2012). For businesses who may have other intentions, they use greening strategies as a competitive advantage and a tool to enhance their image.

Coachella is an example of an established festival that operates quite sustainably relative to others in the industry. By my definition, sustainable operations in the festival and events industry incorporate environmental, social and economically responsible practices, including respecting neighboring communities, with strategies in place for future generations to enjoy the festival.

Coachella operates sustainably by providing on-site donation bins in the campground to encourage reuse instead of discarding unwanted gear ("Sustainability", n.d.). They require their local vendors (locals to Coachella Valley) to minimize single use items, provide seasonal options, serve beverages in biodegradable cups and food on biodegradable plates. They host interactive art displays designed by the surrounding community. Attendees receive a guide to the three-day festival months in advance, with an entire page dedicated to educating attendees on their actions to "gamify" sustainability. Gamifying sustainability is a practical technique to engage attendees in interactive sustainability conversation through fun activities. For Coachella these include bicycle charging stations where attendees can generate their own electricity, a water bottle collection rewards program with opportunities to upgrade an attendee's tickets, and a trash bin design painting contest for artists in the Coachella community. Coachella partners with nonprofit organizations such as Global Inheritance who holds them accountable for operating sustainably long term.

This festival has already earned positive recognition by those who closely follow the events industry and has the opportunity to gain more recognition and attendees by highlighting their efforts with a green certification.

A green certification is a tool that recognizes voluntary sustainability efforts that management has taken to reduce their environmental, social and economic impact. There are many certifications in existence, yet it is time consuming for management to search through green event certifications. Even if they take the time, it may not be apparent which certification best fits them based on their sustainability values. There is no list or guide in existence to assist with this decision. This project investigates how interested event and festival management teams can make an informed decision on which green certification to use.

A decision-making tool was created termed FestEval that compares six certifications using Arnim Wiek's criteria for identifying a sustainability problem (2015) inspired by Gibson's principles (2006). Each criterion contains a percentage to show comparatively which principles are heavily emphasized within a certification, and which are emphasized less. The other intended outcome was to gather recommendations on how to improve green certifications based on identifiable gaps.

#### Literature Review

Music festivals create a wide array of sustainability impacts that are often discussed by the industry (Gibson and Wong 2011). These negative impacts are typically discussed in terms of environmental, social, and economic impacts. Major environmental impacts stem from CO2 emissions linked to attendee and staff travel and single use product waste for catering and camping and recreation. Social impacts include damages to the event site that local taxpayers have the burden of repairing with their tax dollars. There is usually a missed opportunity to contribute to the local economy because events typically outsource their staff and vendors (Mair and Laing 2012).

There has been a shift in the industry towards creating Green Events which operate in a sustainable manner without exacerbating the negative impacts mentioned above. Green events can be defined as, "events that have a sustainability policy or incorporates sustainable practices into its management and operations" (Laing and Frost 2010). Green certifications, also known as green credentials, give credibility to festivals that are voluntarily operating as green events, and are rather marketable for business (Mair and Jago 2012). These credentials are becoming an integral part of the competitive business world for festivals and events and may one day become an industry norm (Mair and Jago 2012). Events that hold a green certification display their commitment to operating sustainably.

Certifications are utilized across the globe, however there is no comprehensive list or chart in existence to bring an organization awareness of these certification's existence. Many event management teams are simply unaware of the certifications that exist. The closest one can get with an online search is lists of primarily green product certifications and building certifications within articles. Even if event management teams are aware of certifications, an organization's management team rarely knows which certification suits them best without spending an exuberant amount of time researching each certification.

FestEval was designed to help event and festival management teams differentiate green certifications so that they may select a certification based on their desires, values and sustainability efforts. Guiding this tool is Arnim Wiek's criteria for identifying a sustainability problem as seen in Table 1 (2015) inspired by Gibson's Principles, which include eight criteria for sustainability assessments (Gibson 2006). These principles are widely accepted in the academic world of sustainability and serve as a guide for the decision-making tool. Each criterion has a percentage to show comparatively which are heavily involved within a certification and which are less involved. Two objective auditors selected from the MSUS cohort based on similar study interests provided independent oversight of the percentages and rankings for the certification elements.

### Table 1: Wiek's principles for identifying a significant sustainability problem

(1) Viability or Integrity of Ecosystems. The problem threatens that sufficient quantity and quality of water, air, climate, and soil ecosystems are maintained not only for their bare viability, but also for their integrity and full functionality. Ecosystems are valuable goods in themselves (bio-centric ethical perspective), and they are indispensable for services ranging from climate regulation, detoxification, and geological stability to services for recreation and tourism.

(2) Human and Social Wellbeing. The problem threatens that sufficient quantity and quality of health, education, safety, and public participation are maintained not only for the survival of a society, but also for people's wellbeing and happiness. Human and social wellbeing is considered a basic human right and the backbone of viable and vital societies (distributional equity).

(3) Equitable Opportunity for Livelihood and Economic Activities. The problem threatens the equitable opportunity for all people to pursue livelihood and economic activities. Those activities are a means to human and social wellbeing, which is considered a basic human right and the backbone of viable and vital societies (distributional equity).

(4) Justice across Societies (Inter-regional Justice). The problem threatens the viability or integrity of ecosystems (Principle 1), human and social wellbeing (Principle 2), or equitable opportunity for livelihood and economic activities (Principle 3) for people living in connected regions that are affected by the society in question.

(5) Justice from one Generation to the Next (Inter-generational Justice). The problem threatens the viability or integrity of ecosystems, human and social wellbeing, or equitable opportunity for livelihood and economic activities for future generations and over the long term. This principle is critical for sustainability and has been a major focal point since the emergence of the concept. The concept of sustainable development was originally conceived in the 18<sup>th</sup> century as a natural resource maintenance problem over the long term – avoiding the overconsumption (collapse and extinction) of natural systems such as forests or watersheds. The key point here is that significant harm might not play out as the *immediate* result of current actions, but might only affect a society one or more generations later. The principle of inter-generational justice points to the obligation to avoid such catastrophic situations that might only occur over the long term.

There are a variety of green certifications in existence; some of which are specifically designed for events and music festivals, and some that apply to other industries as well.

FestEval is designed for use by event and festival management teams or sustainability consultants. It's designed to be used independently, with written guidelines accompanying the tool. The guidelines for using the tool use language and terms that are universally understood, an important consideration for those applying this tool outside of the sustainability community. This project is designed to advance the understanding of green certifications in the event industry, identify the current gaps, recommend solutions, and further sustainability practices in the events and festivals industry.

# **Project Approach and Intervention Methods**

The primary method for analyzing the six certifications was performing a qualitative assessment on the elements and guidelines of each certification's guide or checklist. Each guideline was ranked with one or more of the sustainability principles. For example, one of the guidelines in the Greening Events Guide was, "Educate attendees about sustainable food practices when serving food by appropriate signage, menu notes, or by food servers." The auditors and I assigned principles 1 and 2 to this guideline. We replicated this and assigned principles to hundreds of guidelines for the six certifications.

We agreed to "Key Terms" commonly used in event and festival literature seen in Figure 1 to guide our rankings for consistency. The key terms each correlated with a principle, sometimes more than once.

#### Figure 1 : Key terms in event and festival certifications

- 1. Viability or Integrity of Ecosystems
  - Alternative energy
  - Biking
  - Borrow
  - Carbon offset
  - Carbon footprint
  - Compost
  - Chemical free
  - Encourage public transit, walking, biking, light rail, carpool
  - Energy efficient
  - Energy use
  - Environmental impact
  - Footprint
  - Greywater
  - Infrastructure
  - Interspecies Justice
    Locally grown food
  - Local material
  - Offset travel
  - Promoting public transportation
  - Protect historical artifacts
  - Recycling
  - Resource reduction
  - Reusable
  - Rent
  - Reduce materials
  - Renewable energy
  - Waste diversion
  - Water conservation
  - Wildlife
  - Zero waste
  - Unbleached

- 2. Human and Social Wellbeing
  - Communicating
  - Educating
    - Education plan
      - o Educating participants,
      - stakeholders, vendors
    - Equal access
  - Feedback
  - Inclusivity
  - Improving livelihood
  - Local capacity
  - Local laws and legislation
  - Marketing efforts
  - Participation, Equal participation opportunity
  - Raising awareness
  - Report
  - Respect of local culture
  - Safety plan
  - Security plan
  - Share through signage & media
  - Social impact
  - Sociocultural
  - Training
  - Vegetarian and Vegan options
  - Well-being

- 3. Equitable Opportunity for Livelihood and Economic Opportunity
  - Business operations
  - Economic impacts/benefits
  - Local business
  - Local hiring
  - Local vendors
  - Operations
  - Support local orgs
  - Grassroot orgs

- 4. Justice Across Societies (Inter-regional Justice)
  - Biology
  - Donate
    - o Food
      - o Materials
  - Fairtrade
  - Grassroots
  - Indigenous
  - International orgs/initiatives
  - Interspecies justice
  - International laws/legislation
  - Non-profit
  - Neighboring communities
  - Purchasing
  - Procurement
  - Rainforest Alliance
    - Respect for local:
      - o Animals
      - o Biodiversity
      - CultureCommunities
  - Demont
  - Report
  - Seasonal produce/materials
  - Sustainably sourced
  - Sustainable supply chain
  - Surrounding communitiesTraditional rights
  - Wildlife
  - Wildlife

- 5. Justice from one Generation to the Next (Inter-generational Justice)
  - Emergency plan
  - Future events
  - Integrated development
  - Invest in future
  - Legacy
  - Long-term sustainability
    - o Report
      - o Plan
    - Management
  - Report and track
  - Sustainability report
  - Policies
  - Store for reuse

After ranking the guidelines in the six certifications, we reviewed any discrepancies we had in rankings through a virtual meeting session until coming to agreement on the rankings.

Within a certification, the occurrences of principles were tallied, and percentages calculated as part of the creation of FestEval, seen in Figure 2. Principles are represented by percentages in the decision-making tool to show how involved they are in a given certification. For example, In the Greening Events Guide, there were 135 total guidelines or points identified. There were 75 instances of the first principle, Viability or Integrity of Ecosystems, which can be interpreted that this principle accounted for 55.56% of the certification. The fifth principle of sustainability, "Intergenerational Justice" was less involved in this certification, with 6 instances accounting for only 4.44% of the certification.

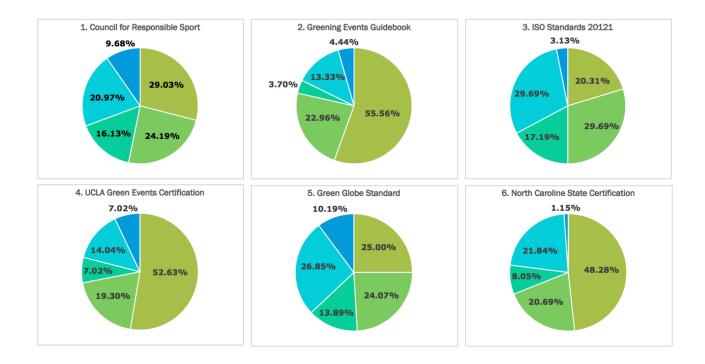
Pie charts showing involvement of principles within each certification accompany FestEval for smoother interpretation.

As a full-service production company with a sustainability division, Kilowatt Events is an ideal user of FestEval. Meghan Tierney of Kilowatt One, Kilowatt Events' sustainability division, reviewed the tool for usability and effectiveness. Her feedback indicated its ability to make sustainability certifications more accessible to the event and festival industry.

### Outcomes

#### Figure 2: FestEval

		Wiek's principles for identifying a significant sustainability problem					
Green Certifications		1. Viabilty or Integrity of Ecosystems	2. Human and Social	3. Equitable opportunity for Livelihood Economic Activities	4. Justice across Societies (Inter-regional Justice)	5. Justice from one generation to the next (Inter-generational justice)	
	1. Council for Responsible Sport	29.03%	24.19%	16.13%	20.97%	9.68%	
	2. Greening Events Guidebook	55.56%	22.96%	3.70%	13.33%	4.44%	
	3. ISO Standards 20121	20.31%	29.69%	17.19%	29.69%	3.13%	
	4. UCLA Green Events Certification	52.63%	19.30%	7.02%	14.04%	7.02%	
	5. Green Golbe Standard	25.00%	24.07%	13.89%	26.85%	10.19%	
	6. North Carolina State Certification	48.28%	20.69%	8.05%	21.84%	1.15%	



Thus far, this investigation has shown that the certifications typically heavily involve principle 1, Viability or Integrity of Ecosystems, an expected outcome.

The three certifications that are mostly heavily involved with this principle are certifications 2, 4 and 6: The Greening Events Guidebook developed by the Sustainable Cities Network at Arizona State University, UCLA Green Events certification, and North Carolina State's Certification. The common factor between the three is they are all associated with a University. In terms of similarities, the second and fourth principles seem to be the next most involved, and the third and fifth principles are the least involved.

The three national and international certifications are certifications 1, 3 and 5: The Council for Responsible Sport, the ISO Standards 2012, and the Green Globe Standard. The five principles are more evenly weighted within these certifications. The first principle isn't as heavily weighted as seen with the university certifications. It is still the most heavily involved, although just by a few percentages with the exception of the ISO Standards 20121. The fifth principle is more heavily involved in these three than in the three university certifications. With the exception of the ISO Standard 20121. Although the ISO 20121 standard doesn't include the principles as equally as the other two national and international standards do in this study, I would still encourage management teams to consider using this certification because it is a highly accredited international certification.

This study paired the guidelines to sustainability principles based on *explicit* mention of the key terms. Outside of the scope of this project was assessing other materials published by certification organizations such as reports or articles, webpages with values and about us sections. If these other materials had been analyzed and included implicit mention of key terms, there may have been more occurrences of the fifth principle of sustainability for example, especially within the ISO 20121 standards.

In order to include the fifth principle of sustainability, the ISO 20121 could for example add long term action strategies, reporting and tracking, sustainability policies, and strategies designed to leave a legacy.

The document accompanying FestEval contains a brief user guide to assist the management team. The user guide contains many visuals and a few simple instructions. First, the user reviews and familiarizes themselves with the 5 principles of sustainability. Then they review the key terms and concepts often used within the events and festival industry that correlate with each of the five principles. Finally, they select a certification that best fits their event or festival using the FestEval accompanied by the pie charts.

When Tierney of Kilowatt One assessed this tool, she responded with positive feedback. Suggestions were made to clarify explanations in the user guide, simplify the tool language and layout, and revise terms in the Key Terms list. FestEval was not applied to an event seeing as events aren't operating due to Covid19. A second version of this tool will be developed to incorporate her recommendations.

#### Recommendations

Event and festival management teams should choose to apply certifications one, three and five to their event: The Council for Responsible Sport certification, the ISO Standard 20121, or the Green Globe standard.

The Council for Responsible Sport certification and Green Globe Standard appear to include the five principles at a fairly even distribution, with the ISO Standards 20121 barely involving the fifth principle, however the ISO Standards 20121 should not be discredited and still serve as a reliable and well-developed certification. The fifth principle isn't explicitly stated often and wasn't counted often due to the defined methods of this study, but with further investigation of ISO 20121 materials outside of the guidelines, this standard does mention future thinking and leaving a legacy, which directly relates to the fifth principle of sustainability.

The ISO Standards 20121 is for any type of festival or event. They state, "If you are involved in the event industry in any way, this standard is for you" (ISO 20121, 2020). This standard is the broadest of the 6, therefore is capable of accepting a variety of events. The Council for Responsible Sport, like the name states, is mostly focused on certifying sporting events. They certify performances as well which include festivals or music events. The Green Globe Standard typically certifies businesses within travel and tourism but offers certification to a variety of industries including events and festivals.

Using a combination of the certifications would be a great way to highlight an event and give the event even more credibility. The ISO Standard 20121 would be a great certification for any event in combination with either the Council for Responsible Sport or the Green Globe Standard based on the nature of the event.

FestEval contains a small number of certifications and could be even more effective if more certifications were added to the tool. The data would be more reliable with additional auditors to review the rankings of the guidelines, especially if the auditors are industry experts.

They should use the other certifications under very specific circumstances, if they are hosting an event or festival through one of the universities. These three certifications were included in this project primarily to draw comparisons between certifications and gather more information on which sustainability principles are commonly included in green certifications generally.

Festival managers should invest time into researching and staying up to date on what others are doing in this in this industry in terms of advancing towards sustainability. They should review their sustainability reports and incorporate similar sustainable operations demonstrated to be effective by other sustainable events. It would be useful to compare other sustainable event's operations to their own, analyze what's missing, and identify gaps. Hiring a professional consultant or an auditor is another method to discovering room for improvement in operations. Management teams should be conscious of emerging certifications as the industry develops and more certifications become available.

### Conclusions

For the scope and time frame of this project, analyzing six certifications was ideal; not too many certifications, not too few. There was sufficient data to draw conclusions and gain an understanding of principles certifications typically included, which was a goal of this project. Had there been more certifications to assess, the project would have had an overwhelming amount of information to analyze. FestEval could have additional certifications included in the future.

FestEval came to be through researching and selecting green event certifications, creating relevant key terms, auditing guidelines and corelating them to sustainability principles. It was envisioned to advance sustainable operations in the event and festival industry.

Tierney of Kilowatt One responded very positively to this project and the decision-making tool. She described FestEval as having the potential to advance sustainability within the industry by making certifications more accessible and she intends to recommend it to clients interested in comparing certification options. This tool simplifies and organizes green certifications and has potential to assist a wide audience in understanding green certifications. Her comments indicate the potential for acceptance and industry-wide adoption by those looking to pursue certification.

Sustainability within the events and festival industry has come a long way since the development of this industry yet has a long way to go. Future thinking and long-term sustainability are still developing concepts. This is reflected within FestEval; there isn't much mention of the fifth principle of sustainability. Certification developers should adjust their guidelines to fill this gap and make their certification holistically sustainable.

This project has the potential to be expanded upon by adding more certifications to the list, or by making an online version of this tool. There could also be a completeness check within each certification to show how balanced the principles are with each certification receiving a completeness score. There is potential for a more in-depth analysis of the certification guidelines to be conducted using other methods. The decision-making tool can also be replicated and tailored to other industries, with the content focusing on green building certifications, clean energy certifications, or sustainable product certifications. This project took hours of individual research, dedication, and selfdiscipline. Hitting roadblocks and experiencing stress were minor setbacks and Covid19 distancing added a new obstacle; lack of face to face peer and faculty support. Even so, the results reflect the original intention of this project; to improve the ability of event management to select a green certification that fits their organization's values.

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