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# Sustainable Management for Maritime Events and Festivals

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## ABSTRACT



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The number and diversity of events and festivals has grown tremendously over recent years reflecting a societal wish of individuals to partake in a wide range of socio-cultural and sporting activities; with marine and coastal events being no exception. This has led to a growing recognition of associated environmental impacts, and as such explains the conceptual development of sustainable event management (SEM). Sustainability, though still contested in theory, is the key paradigm in which all resource use and development decisions are taken. This includes relevant authorities, and organizations involved in governance, as well as businesses and commercial enterprises, many of which report on their corporate social and environmental responsibilities. In the UK, this has led to the development of a British Standard for sustainable event management (BS89011:2007).

The organization and management of marine and coastal events and festivals should in theory be no different. One of the ways in which this can be assessed, and sustainable practice be 'measured' and 'monitored', is by the generation of a number of key indicators, whereby data is gathered to help establish whether environmental and sustainability goals are being met. As such, this research aims to develop and test a robust and useable suite of indicators which can be used by the events management industry to describe their sustainable practice.

The research has three distinct phases. Firstly, views are sought from a broad range of event organisers as to how best achieve sustainability, identifying present practice, intended developments, and organisers' values. Secondly, data is interpreted using NVIVO in order to establish a core set of indicators that the industry identifies as central to its monitoring of sustainable practice; and thirdly this set will be applied to the Isle of Wight Festival, as an example of a coastal and island event.

**ADDITIONAL INDEX WORDS:** *events, festivals, sustainability, indicators.*

## INTRODUCTION

Festivals and public celebrations are found in all societies, dating back throughout history, reflecting the needs and aspirations of individuals to partake in a wide range of socio-cultural and sporting activities. The number and diversity of these events has grown tremendously over recent years, partly as a result of increasing demand but also as a result of strategic initiatives instigated by governments to enhance economic and regional development, with such events increasingly seen as unique and defining tourist attractions. The nature and form of these events range from small community fairs to festivals that last for a multitude of days, and involve populations the size of regional cities.

Marine and coastal events bear no exception to this diversity.

In many ways festivals represent a microcosm of the global issues relating to environmental resource use and management since they consume resources, generate waste and lead to concomitant discharges and emissions into the environment. A growing recognition of these associated environmental impacts has led to the conceptualization of sustainable event management (SEM).

Sustainability as the dominant paradigm in all resource use and development decisions, impacts upon and influences organizations involved in all scales of governance, as well as businesses and commercial enterprises, many of which report on their corporate social and environmental responsibilities. The organization and management of marine and coastal events and festivals should in theory be no different, though in reality there is a wide variance in the application of

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sustainability based on the informality and ephemeral nature of many festivals.

One of the ways in which this can be assessed and sustainable practice be 'measured' and 'monitored', is by the generation of a number of key indicators, whereby data is gathered to help analyze whether environmental and sustainability goals are being met. This research aims to develop and test a robust and flexible suite of indicators which can be used by the events management industry in order to describe their sustainable practice. Though the research is ongoing, this paper will outline the conceptual development of these indicators and their application to one small island based case study event, the Isle of Wight Festival.

### MARINE AND COASTAL FESTIVALS AND SUSTAINABILITY

The term 'festival' is one that has been used for hundreds of years and can be defined in its simplest form as "a public, themed celebration" (Getz, 2005, p. 21). This covers a wide range of enormously diverse events, from single-day functions to extended season long activities. With regard to the marine and coastal environments these may have a specific maritime focus such as the annual UK National Boat Show, held in Southampton or the Cowes Sailing Regatta, held on the Isle of Wight. Alternatively they may simply be events located on the coast, but without any particular maritime theme, examples of which include music and cultural festivals such as the Isle of Wight Festival situated on the Medina Estuary, or the week long Sidmouth Folk Festival in Dorset.

The British music festival market is both broad and large, with over 600 events held annually, 25% of which comprise the outdoor rock and pop music sector. Within this sector, festivals can be classified according to their attendance capacity, ranging from "boutique" festivals such as the Larmer Tree Festival with audience capacities of less than 10,000; midscale events such as Bestival with attendances of 10,000 to 50,000; to large-scale events with attendances in excess of 50,000 such as the Isle of Wight Festival, and Glastonbury. This outdoor rock and pop sector has seen huge growth over recent years, with an increase of 71% in the overall numbers of such events since 2003 (Anderton, 2009). The figure however, obscures considerable volatility in the market, as relatively few events achieve sustainable long-term success. For example, of the 160 new events established since 2003, nearly a quarter were no longer held in 2007 with common reasons being either economic in nature, due poor ticket sales, sponsorship problems or increased costs in an increasingly crowded and competitive market; adverse weather conditions; and / or difficulties in obtaining a public entertainment license (*ibid.*).

Irrespective of what the focus of the event is however, there will inevitably be a range of associated impacts, both positive and negative, that affects the host communities and stakeholders in that environs; and in the contested

geographical space of the coastal zone this represents an additional pressure and source of potential conflict. In this sense there is no difference between a festival and any other coastal resource use in that, as with other such coastal users, it is in the festival organizers to minimize potential conflicts with fellow stakeholders. Dependent on the size and nature of the festival of course the extent of the impacts will vary. However, it is inevitable that the impacts will affect social wellbeing, economic growth and environmental quality, which in terms of business relates to what is known as the 'triple bottom line'. Taken together these impacts might include the effects on local inhabitants, employment levels and cultural heritage; it might include the degree of financial leakage into the local community or the effects on local or regional transport systems; it might include the degree of environmental contamination or pollution associated with festival operations and the amount of waste generated; it might include the degree of education and awareness raising implemented by the event; and it might include a range of ethical concerns relating to festival associated procurement. Furthermore, it might include the cultural significance of the event and the happiness and positivity generated by its very being.

The phrase 'triple bottom line' is one that was coined by Elkington (1994) to reflect an expanded spectrum of values and criteria for measuring organizational and business success, and as a means of taking a deliberative inclusion of ethical standards in the business model, with public interest at the forefront of decision-making. It means taking a broader view of business behaviour, from one concerned solely with profit to one that includes people and planet as well. In essence therefore it reflects what is arguably the dominant paradigm in which resource use and development decisions have been taken over the last twenty years, i.e. sustainable development.

Sustainable development is now a widely acknowledged term used by organizations at all scales of management: local, regional, national and international, and represents a much-espoused, aspirational notion open to a wide range of philosophical definitions. Reflecting different worldviews, it has now progressed to one where there are a number of interpretations and conceptualizations relating the promotion of environmentally sound approaches to economic development (Pezzoli, 1997). The most widely cited definition of the concept is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p.43); a definition that was formalised on an ideological and political level during the United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, Brazil in 1992. The centerpiece of this conference was an agreement to a comprehensive plan of action designed to achieve a global pattern of sustainable development known as 'Agenda 21'. Chapter 17 of this 'Agenda for the Twenty-First Century' outlines its intent in relation to marine and coastal areas, as well

as making specific reference to small islands, as areas of particular vulnerability.

Small islands can be seen to be vulnerable from a range of natural hazards including those complex hazards associated with climate change such as sea level rise, coastal erosion, and changes in meteorological conditions leading to, for example, increased storminess and enhanced rainfall. Small islands, though often characterized by having relatively high levels of renewable energy potential such as wind and wave, are also characterized by limited resources such as land and water, and therefore have limited space for either resource use or waste disposal. In this sense, both islands and festivals can be seen as microcosms of the issues relating to global environmental resource use. At the same time, small islands are also characterized by small and independent minded populations with strong cultures and strong senses of equity and justice. Given their nature they also often have an outward looking and maritime focus making them ideal for coastal festivals and events, but also enhancing the potential for conflicts with other island stakeholders.

Since UNCED, there has been a raft of related UN conferences and conventions, known collectively known as the 'Rio Cluster' (Pezzoli, 1997), which have further developed the imperative of enabling sustainability both in these vulnerable areas and society as a whole. The most significant of these being the World Summit on Sustainable Development (WSSD), Johannesburg, South Africa, 2002, "which reviewed the progress made with regard sustainability since the Rio conference, and began that evolution to sustainability in more earnest" (O'Riordan, 2003, p. 5).

In order to manage sustainably, there is recognition that greater care is needed in decision-making and that this must be based on sound information. This has been reflected in the development of sustainability indicators as a means of utilising information and helping to monitor progress (Bell and Morse, 1999), for which they have received a considerable amount of attention both politically and from the scientific community. Sustainability indicators work by comparing a quantity to a pre-specified baseline, in the form of either a scientific or arbitrary standard, and are intended to measure the extent to which any action is sustainable, and consequently, the likely effects of any change in that action. The Organisation for Economic Co-operation and Development defined an indicator as "a parameter or value derived from parameters, which points to, provides information about or describes the state of a phenomenon/environment/area. "An indicator has a meaning extending beyond the properties directly associated with the parameter value" (OECD, 2003, p. 5).

Morse *et al.* (2001, p. 1) stated that "sustainability indicators are increasingly seen as important tools in the implementation of sustainable development", with advocates stressing that they can distil and simplify complex phenomena, thereby enabling information regarding real world situations to become more accessible and more readily communicated. As such, indicators may enable a redefinition of values and be

used to track whether or not we are imposing our redefined values towards sustainability. In this sense "indicator approaches ... have been the most influential catalysts in advancing the debate on our future priorities" (Chambers *et al.*, 2000)

Whilst there has been considerable work to develop indicators in many areas of study such as integrated coastal zone management (Burbridge 1997; Henocque 2003; Olsen 2003; Pickaver *et al.* 2004; and Gallagher, 2010) there has been little in terms of events and festivals. In the UK however, this has been the subject of increasing interest over recent years, encompassing both academic and industrial participants. 'Julie's Bicycle' for example is a think-tank and coalition of music, theatre and scientists established in 2007 that focuses on the UK music industry's carbon emissions baseline and which has developed a not for profit certification program known as 'Industry Green', as part of an initiative to support the continual improvement of environmental sustainability for the creative industries. At the same time, and in part as a result of the forthcoming 2012 Olympics to be held in London, there has also been the development of a British Standard for sustainable event management (BS89011) in 2007, which itself has informed the development of an international standard, ISO 20121. These on-going initiatives are simply part of a wider movement to integrate sustainability into the planning and operation of festivals and events.

## METHODOLOGY

### **The research is grounded and has three distinct phases.**

Firstly, interviews were carried out with a broad range of event and festival organisers in order to seek their views as to their environmental footprint, with a view to identifying a set of robust and useful sustainability indicators. It was not an assessment of their current environmental impact, but instead a mechanism for understanding where sustainable event management was in relation to festivals and how it might progress. The interviews were based on a series of questions that were largely qualitative in nature and covered the following areas:

- The environmental ethos and sustainability values of the festival;
- The governance of the festival with regard to the control of environmental impacts, monitoring and communication;
- Views as to the current regulatory regime, as well as the existing environmental and sustainability support mechanisms and appraisal systems;
- To what extent festival organizers were willing and able to embrace or adopt further environmental management techniques including an identification of specific support that might prove useful

At the same time an online survey focusing on specific festival data collection was developed and made available to festival organizers via 'A Greener Festival' website. The results of which, together with the interviews, was input into a project database using NVivo 8, which is a qualitative computer software package aimed at enabling the organization and analysis of complex and unstructured data. The flexibility of this computational tool meant that it was possible to align the data and consider not only that which is currently collected by festivals, but also the perceived relevance and usefulness of the data collected; the difficulty in collecting such data; and the likelihood of implementing procedures by which such data could be collected in the 'foreseeable' future, i.e. over the next 3 years. Having carried out the analysis and interpretation, the third phase of the research was to revisit a festival as a case study in order to apply the indicators and carry out a sustainability assessment of its operation.

For this purpose the Isle of Wight Festival was selected as an example of a coastal and island based event, and one which was willing to participate in this research. The data evidence cited largely relates to the 2009 Festival where, for example, students were used to collect the post codes and modes of travel of 1250 ticket holders.

#### **SUSTAINABILITY INDICATORS FOR FESTIVALS**

On the basis of both the on-line survey and interviews with 10 UK festivals including Blissfields, the Secret Garden Party and the Hay Festival of Literature and Arts, a range of indicators were identified using NVivo. These indicators reflect the environmental, socio-cultural, and economic aspects of sustainability and are detailed in Table 1.

#### **CASE STUDY: ISLE OF WIGHT FESTIVAL**

The Isle of Wight Festival takes place at Seaclose Park, on the banks of the Medina Estuary, the Isle of Wight. Having first taken place in 1968, it initially ran until 1970, when it became the largest live music festival of its time (IOW, 2010). It was then revived in 2002 since when it has become firmly established as part of the UK summer festival scene. Having grown progressively, the festival currently has a capacity of 55,000 ticket holders, with approximately 2000 crew; numbers which clearly have a significant social, economic and environmental impact on the local area and the island community as a whole.

The Festival is currently held on green-field site playing fields, owned by the Isle of Wight Council. As such the area is strictly controlled which places tight restrictions on the festival's operations, rigorous measures in returning the area back to its original state following the festival. Additionally the festival site is adjacent to some highly protected areas including the Medina Special Site of Scientific Interest comprising of part of the Solent European Marine Site, as well

as the Solent and Southampton Water Ramsar designation which already have an annual protection strategy in place for mitigation during the planning and operation of the festival (Ecoactionpartnership, 2009a. p.3).

The Festival is run by John and Caroline Giddings of Solo Promoters, part of the Live Nations group, and in 2007 they employed Eco Action Partnership (EAP), a sustainable event's management team (Ecoactionpartnership, 2009b) to help the festival achieve more sustainable operational methods throughout the festival life-cycle. It is the stated wish of the organizers to achieve a carbon neutral festival.

The IOW Festival, through EAP, promote the use of sustainable practices to and within the festival site through the following documents which are distributed as appropriate, and published on the EAP and IOW Festival website. The documents include their Ecological Management Plan (EAP, 2009a); a Carbon Footprint report (EAP, 2009c); Travel Policy (EAP, 2010b); Trader's Agreement (EAP, 2010c); and Environmental Policy (EAP, 2010d). The following will detail the Festival in light of the sustainability indicators:

#### **Environmental indicators**

Information for the energy indicators was collected and considered highly relevant to the Festival as the data is essential for recording its carbon footprint, and relevant to obtaining both the BS89011 and the Industry Green award. Apart from the total festival energy figure, energy data is considered relatively easy to collect though assumptions are made in generating the final figures. For example, the on-grid energy consumption for the 2009 Festival was derived from a 24 hour energy meter reading for the Medina Quay, the main hospitality building on site. The energy consumption recorded was 1068 KWh which was then multiplied by 4 to cover the four days of the Festival in total (4272 KWh) and then divided by the CO<sup>2</sup> per unit energy as given by The Low Carbon Diet (0.43 Kg CO<sup>2</sup> per KWh) giving a final figure of 1837 Kg CO<sup>2</sup> (EAP, 2009c), as shown in Figure 1.

The on-site power generation was based on fuel deliveries obtained from source, including concession stands, fairground and plant generators and came to 445372.4 L of diesel, which on the basis of 2.62 Kg CO<sup>2</sup> per litre (The Low Carbon Diet) resulted in a final figure of 170562 Kg CO<sup>2</sup> (*ibid.*).

The materials and waste information, including water and sewage, was largely collected and considered highly relevant and easy to use with the exception of the grey water recycled figure and the sewage treatment figure. However it was felt that data on grey recycled water was likely to be collected in the foreseeable future, and therefore assigned a score of 3 on the likelihood of data collection scoring system.

Table1: *Sustainability indicators for festivals*

Sustainability aspect	Performance area	Indicator	
<b>Environmental indicators</b>	Energy	Total festival energy consumption (excluding transport)	
		Grid (mains) electricity consumption	
		Grid (mains) 'green' electricity consumption	
		Site generated renewable energy consumption	
		Site generator energy consumption	
		Mains gas consumption	
		Bottled gas consumption	
	Materials and waste	Total waste generation and disposal	
		Landfill disposal	
		Incineration disposal	
		Recycling	
	Water and sewage	Re-use	
		Water	
		Grey water	
	Sewage treatment		
	Transport	Audience: Cars and car share	
		Audience: Coaches	
		Audience: Shuttle bus	
		Audience: Train travel	
		Audience: Ferry	
		Festival logistics transport	
Artist / entourage travel			
Environmental actions	Carbon offsetting initiatives		
	Environmental conservation and protection initiatives		
<b>Socio-cultural indicators</b>	Community engagement and participation	Levels of community conflict with the Festival	
		Number of complaints from the community	
		Levels of community engagement and participation	
		Activity of stakeholder review and feedback process	
		Percentage of attendees that are from the local community	
		Event accessibility for special needs and or disabled people	
	Exchange of best practice with other Festivals		
	Education and awareness	Engagement with educational initiatives relating to sustainability	
		On-site communication	
		Fund raising for sustainability initiatives	
		Generation of sustainability news and promotional activities	
		Indicators used to present information on sustainability	
		Level of staff training with regard to sustainability	
	Procurement and employment	Tracking of product supply chains	
		Level of Fair Trade agreements	
		Sourcing of goods and services locally	
		Sourcing of Fair Trade goods and services	
		Sourcing of organic goods and services	
		Sourcing of reusable and renewable goods and services	
		Sourcing of environmentally benign goods and services	
		Employment levels from the local community	
	Significance and recognition	Number of repeat attendees	
		Cultural significance of the festival to the community	
		Number of 'friends' on social networking sites	
		Certification through Ecolabelling	
	<b>Economic indicators</b>	Supporting sustainability	Google 'hits'
			Expenditure (and ration thereof) spent on local goods and services
			Ratio of income spent on investing in the future to income spent on operational costs
			Employment levels from the local community
			Ratio of income spent on environmental management
Percentage of suppliers with a commitment to becoming more sustainable			

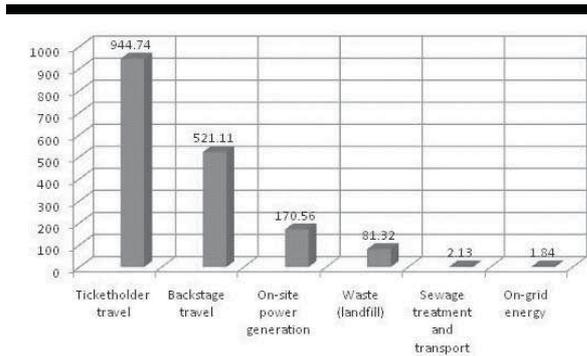


Figure 1. Total Kg CO<sub>2</sub>e per area of the Festival.

The indicators in the materials and waste section were considered easy to use, except for composting, which more difficult as it relies on the concession stands knowing the correct bins to put everything in and therefore not contaminating the waste streams. There is no compost toilets on-site due to the planning restrictions laid down by the Isle of Wight Council.

With regard waste, tonnage data was collected from the waste contractor (Biffa Waste) from weighbridge figures given at the landfill site and hence does not include recyclables. This came to a total figure of 74.5 tonnes which based on a probable methane output of 1090 Kg per tonne CO<sub>2</sub> (The Low Carbon Diet) gives a waste disposal carbon output of 81325 Kg CO<sub>2</sub>. In terms of sewerage disposal, 331858 litres of sewage were taken from the Festival site according to the contractor, Southern Water Ltd, from which could be derived a carbon figure of 2128 KgCO<sub>2</sub>e (*ibid.*).

Of all the different areas of the Festival, transport is by far the most energy intensive where ticket holder travel accounted for 944740 KgCO<sub>2</sub> or 55.2% of the Festival total. This represents 17.2 Kg CO<sub>2</sub> per person. Interestingly from a coastal perspective the need to take a ferry (both car and passenger), whilst accounting for 79% of festival goers accounted for a total of 98625 Kg CO<sub>2</sub> or approximately 10% of total ticket holder travel. Whilst this is by far the largest average Kg CO<sub>2</sub> /Km it is clearly not the principal impact. In addition to ticket holder travel, backstage travel accounted for 521112 KgCO<sub>2</sub>e or 30.45% of the Festival total (*ibid.*).

In relation to these figures, EAP stated that it is “essential for any event to gather [transport data] as it is by far the greatest impact”. As such, to help improve on the transport impact they have adopted a ‘lift share’ scheme through the ‘festival budi’ website (FestivalBudi.com, 2010) for ticket holders.

Areas for improvement show that to date the transport figures do not include audience shuttle bus and artist / entourage travel, despite these being considered highly relevant to the festival organisers. It is considered likely that data for artist / entourage travel will be collected in the foreseeable future as this was assigned a likelihood rating of 3.

Data was collected for the two environmental action indicators, the carbon offsetting initiatives and environmental conservation and protection initiatives, and were considered highly relevant. For example, the Festival has progressively generated support for various initiatives, most notably the ‘Let it Bee’ campaign which was endorsed by Sir Paul McCartney. At the 2010 IOW festival the British Council sponsored their first solar stage which was set up in the eco area called the arboretum.

### Society and cultural indicators

Data was collected for all the community engagement and participation set of indicators and they were considered highly relevant to the festival organisers. The information was mainly considered easy to collect, and assigned a score in the range of one to three. With respect to the ‘exchange of best practice with other festivals’ indicator, the festival aims to share information informally with other events and festivals. However it was commented that “the general feeling is that we all do our own thing, however some of the more enlightened events understand it is not really a competition, and as such we have very good ties with a couple of events and festivals.” It was felt that this is an area that could be improved upon in general, which also confirmed interview findings with other festivals as well as the businesses operating at them. Only information for the ‘level of staff training with regards to sustainability’ was not collected from the education and awareness set of indicators, despite it being assigned a relevancy of five. This is because they “don’t actively preach to people about it, but [their] continued presence and inclusion has shown that staff now have an awareness of the importance of sustainability and environmental importance that simply wasn’t thought about before.” With regards to the indicator ‘engagement with educational initiatives relating to sustainability’, the Festival’s conservation partners, ‘Gift to Nature’, were given as an example who were “excellent at communicating the message of local projects and the whole issue surrounding the Bee campaign” (EAP, 2010a).

In relation to fund raising for sustainability initiatives, the festival has tried various approaches over the last three years, with moderate success. They feel more could be done in this regard and aim to implement a new approach in 2011 which they hope will be more cost-effective and raise more revenue. The majority of data in the ‘procurement and employment’ set of indicators was not collected, including the ‘tracking of product supply chains’ the ‘level of Fair Trade agreements’, ‘sourcing of Fair Trade goods and services’, ‘sourcing of organic goods and services’, and ‘sourcing of environmentally benign goods and services’, despite most of these being considered of high relevance to the festival organisers. Currently EAP do not get involved in the concession side of the festival, although the company running this does have strict environmental policies.

They “*are hoping to have discussions for 2011 that involve [them] more closely, purely in an advisory capacity, with these decisions in procurement*”. Only two out of the four ‘significance and recognition’ indicators were collected, including the ‘certification through eco-labelling’, which related to the information required for the BS89011 certification and ‘Julie’s Bicycle’ Industry Green mark. The number of Google hits on their web site, the number of ‘friends’ on social networking sites in relation to the festival and the number of repeat attendees were not recorded by the festival.

### **Economic indicators**

Data was only collected for one of the ‘supporting sustainability’ indicator set, which was the percentage of suppliers with a commitment to becoming more sustainable. It was commented that “*all of the people we bring to the event have environmental and eco- credentials and provide such a service to the festival.*” The other indicators did not have information recorded for them despite again being regarded as highly relevant. It was felt that because the Isle of Wight Festival is such a massive undertaking not every aspect of the event can be covered. However it is acknowledged that the data collection provides information crucial to the overall environmental accounting and in facilitating increased sustainability of the festival year after year.

### **EVALUATION**

Such a large scale recreational event as the IOW festival, held on a small island, clearly has significant implications for the environment, local economy and community, which are further impacted by its coastal location. Of greatest significance is the travel to and from the festival and the strain this places on local public transport links, general congestion and the issue of increased CO<sub>2</sub> emissions. Apart from helicopter the only way to reach the IOW is access via the water which is predominantly facilitated by ferry and hovercraft services to and from the Island. These services are increased during the festival but still struggle to cope with the sheer numbers of people attending, with many hour long queues before and after the event to board the vessels. This disruption to services would have an obvious impact to the local people who use them to commute to the main land and their general day to day travel arrangements over the duration of the festival. Other implications of coastal festivals include the noise of the music traveling further distances across water. The IOW festival noise can be heard on the immediate mainland if the prevailing south westerly winds blow in that direction, although the impact is not extreme. Additionally there are also increased costs bringing food and other supplies across from the mainland due to the transport to and from the Island.

The Isle of Wight Festival has attempted to deal with these impacts by evolving from one that has until recently been focused solely on a bottom line of profit, generating substantial revenue and acting as a positive multiplier for the local economy, to one that has been going through a gradual but significant re-alignment to address sustainability and environmental issues. Evidence of this has been the appointment of the Eco Action Partnership and the Festivals success in achieving the BS89011 certification and ‘Julie’s Bicycle’ Industry Green mark. It is acknowledged however that there is still much to be done in order to achieve their ideal of a carbon neutral festival, not least of which is constant improvement of data collection. For example, rather than using students to generate data it might be more efficient and verifiable to incorporate data collection into the management model of the business, such as through ticket sales for example. Factors identified in achieving this progression included additional finances, remaining flexible in their operations and being constantly open to new ideas.

That said, though not all indicators are fulfilled, a significant amount of relevant data is collected and allows the festival to set targets to reduce the figures for the following year. The use of indicators does not necessarily ensure that any festival can be termed sustainable of course, nor does it represent an end point in sustainable best practice but it does allow for the identification of priorities and enable the most effective management options to be selected in order to enable continual improvements. For example, this may take the form of the Festival encouraging change through its actions as a supply chain driver; through the introduction and practice of new and innovative ideas; through better communication with the public and other shareholders; and the enhanced exchange of best practice with other festivals. All of these relate directly, at least in part, to the collection of data and the use of indicators.

### **CONCLUSIONS**

Festivals and events are a key socio-cultural component of all societies, as well as often representing an important economic driver for many areas. Given the ephemeral nature of festivals and events, it is perhaps not surprising that many do not routinely gather or use information in order to manage sustainably. However businesses in other areas are more widely adopting sustainable practices. Similarly, since stakeholders based on the coast are subject to competition for those contested areas, it is incumbent on the resource users to communicate effectively in order to enable their long-term prosperity. Such issues are only enhanced when given an island setting.

One mechanism by which sustainability can be enabled is through the identification of relevant indicators such that information can be collected and communicated. This has the benefits of being transparent whilst allowing for participation.

It also enables the management to prioritise and introduce appropriate controls, processes and actions.

This research focused on the identification of sustainability indicators for festivals, as well as their application to a case study coastal festival, the Isle of Wight Festival. That the indicators proposed by the research are not only being used but considered highly relevant by the Festival shows the degree of efficacy that they have. It also gives a good example to other coastal festivals and events as to the way forward in introducing sustainable practices for coastal resource users.

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