

S U S T A I N A B I L I T Y

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# **A Report as to why it Matters for Large Events to Operate Sustainably**

An example of Austria's leadership commissioning reports to understand gaps in initiatives to create a sustainable event industry.

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# 1. Context

For this report a questionnaire (see appendix) was created for the 11 interviews conducted to address the key goals of this piece of research. The key goals of this research and the questions used to investigate them are outlined below:

1. Provide an overview and empirical arguments as to why it matters to focus on the sustainability of big/"global" events (Question 8, 9, 10, 11, 24, and 30).
2. Provide an estimate on how many events of that size/magnitude in the culture, sports and business categories are being held in Europe (EU-MS) each year (Question 25,30 and research).
3. Compile existing evidence as regards the environmental and - if feasible- also the socio-economic footprint that comes along with these events (Question 12,13,14,15,16,17,18, 29, 30).
4. Compile existing evidence on the financial challenges and opportunities aligned with the efforts to make events greener and more sustainable (Question 19,20,21,22,23,24,26,27,28,30).

This report was providing for feedback from the commissioning team on 9<sup>th</sup> October.

## 2. Introduction and Context

The event industry can be split into three broad types of events:

- Business events (including meetings and exhibitions)
- Cultural events (including concerts and festivals)
- Sport events

There is cross over within the types of events, for example when planning the Olympic Games there are a significant amount of meetings that will take place before, during and after the event.

To gather information for this report over 11 interviews were undertaken with a selection of global business, cultural and sport events (see the appendix for events interviewed). These events were at differing stages of their sustainability journey and event planning process so their response represents a broad cross section of the event industry's relationship with sustainability. It is important to note that each of the events interviewed were in action on sustainability initiatives so had unique expertise to share and could be described as leaders in the field of sustainable events. In addition to this we reviewed over 15 event industry reports which provided further context and information (see the appendix for reports reviewed).

The global event industry is a significant size (potentially the 17th biggest global industry, based on Meeting Professional International's UK Economic impact study which has the meetings industry be the 17th largest industry in the UK, the same as agriculture).

Since 2008 the team at Sustainable Events Ltd has worked with the global event industry on the creation of sustainability standards, most notably the Global Reporting Event Organiser Sector Supplement and ISO 20121. Our Managing Director was the chair of ISO 20121 and led over 30 countries to create a management system framework for sustainable events. Since 2005 the team at not for profit Positive Impact have provided education and collaboration opportunities around the world to create a sustainable event industry based on the globally recognised frameworks of ISO 20121 and GRI EOSS. The unique context these businesses provide for this report and the research undertaken for both the creation of ISO 20121 and GRI EOSS clearly demonstrated that while there may be different types of events (e.g. exhibitions, festivals and sports) every event is similar in that: a location is used for an event, a supply chain is required to provide the materials for the

event, an audience will attend, an activity will happen and clean up is required post event.

Therefore, while reading this report and findings, we advise the reader to hear the responses provided as relevant for any type of event.

### 3. Why it Matters to Focus on the Sustainability of Large Events

#### 3.1 Qualitative response

The qualitative response gathered made it clear that all aspects of sustainability: environmental, social and economical are equally important.

Traditionally governments have requested events report on their economic impact however as legacy impacts of events have become increasingly important, the industry is now being challenged with reporting on their social and environmental impacts too.

A statement in February 2014 by the World Tourism Organisation (UNWTO), the World Travel and Trade Council (WTTC) and the Joint Meetings Industry Council agreed to pursue objectives that supported research into the value and benefits of events beyond economic and including professional and academic advancement (i.e. social impacts). The same statement also included an objective to ‘encourage all public and private sector organisations in the meetings industry to commit to the principles of sustainable development’

From this statement it is clear that data gathering and consideration of principles of sustainability is a relatively new issue for the event sector so that provides context for the varied and limited quantitative data and explains the fact that more qualitative data was gathered in this research.

“Events have the potential to be model examples of a harmonious balance between human activity, resource use and minimal environmental impact.”

- Meegan Jones

From detailed responses gathered from the interviews we have chosen the following selection to provide a summary of representative and insightful answers:

## **Brazil FIFA World Cup 2014**

“Sustainability should not be considered as just an add on for large events. Considering the sustainability of large events can be seen as a matter of risk management.”

“If you analyse the whole event and the risks associated, economic, social and environmental, as part of the risk management system you see that there is no other way than to run the event by adopting sustainability measures despite the challenges that may be faced.”

## **Yokohama Triathlon**

“It is important for events to operate sustainably to reduce the negative impact on the community and surrounding areas.”

## **34th America’s World Cup**

“It is important that large events are sustainable so that negative impacts in the host community and beyond are minimized, such as emissions from spectator travel.”

“In trying to reduce such negative impacts, sustainable events can create benefits so that there is a lasting positive impact in the community that holds the event.”

## **Waste Management Phoenix Open 2014**

“Large events attract a diverse range of visitors from many different locations. They are able to unite people across boundaries and socio-economic statuses. Integrated with this are environmental factors and social and economic factors all overlapping.”

“There is no community in the world that couldn’t benefit from the initiatives used at sustainable events.”

## **Hay Festival**

“When asking as to why it matters to focus on the sustainability of large events, one reason is that it makes sense! It makes sense environmentally, socially and economically.”

“As well as being environmentally sound, it makes sense financially, as operating sustainably can both save and generate you money. And socially it forces you to look at your impact in terms of the legacy the event leaves.

Through operating in a way that benefits the host community, in return the benefits on the host community will benefit you.

### **Manchester International Festival**

“The sustainability of large event’s matter because they are having a massive impact on everybody on the planet and we all need to do something about it.”

“You can’t not do something, that’s the point. But you look at how you’re doing them, where you’re doing them and why you’re doing them.”

### **Goldcoast Commonwealth Games**

“Big events have a massive impact on the host area. They can raise awareness and be a good example of how things can be done more efficiently and more responsibly. It’s important that we’re wise about how we run events. We can produce an efficient model that others can follow.

“As the extent of the difficulties of climate change become more apparent, people are starting to realise what we’re up against. Therefore every person involved needs to be conscious as to be responsible for the way they run their lives and this transfers to major events. Through doing the work you realise the extent of the resources that are used to deliver large events, so it is important to have a conscience about what we use and how we use it.”

### **IMEX International Exhibition**

“It is every event organiser’s responsibility to take into account the impact they have on a destination where they hold an event. Our natural resources are not endless and we therefore are all individually tasked to try and minimise the impact we have when placing an event.”

“Focusing on sustainability of at the event also] boosts delegate engagement, fosters goodwill with the host destination, as well as providing PR and marketing opportunities to help spread the word!”

## **50<sup>th</sup> Super Bowl**

“Being an event with a purpose has made a huge impact. As part of this we adopted social, environmental and economic sustainability as a core driver of our event’s strategy and it proved to be a smart decision. Operating sustainably has provided us with numerous opportunities that would not have otherwise existed: It has enhanced our value proposition, has been a key driver in fundraising, has helped us to manage business risks better, improved stakeholder relations, improved efficiencies and provided us with additional opportunities for fan engagement and partner activation.”

“As an organisation that is committed to going good and doing well it is just makes good business sense to embrace a higher purpose and operate sustainably.”

## **Olympics 2016**

“It is fundamental for large-scale events to be sustainable. Hosting a large event is about creating a positive impact not just in the short term but in the long term too, such as a creating a legacy for the local area.”

## **Goodwood**

“Sustainability is important for the cycle of the events and for them to continue in the future.”

“Sustainability is a tool that business ideally should adopt to use as their business method. It makes sense! It will provide financial rewards on different levels and can help to ensure that their teams are working as efficiently and effectively as they can”

“It would be really great for everyone to see Sustainability as part of their business and not an accreditation that businesses can achieve. It should be a way of working and a culture that we create.”

In summary, event professionals understand that sustainability at an event is important for, at least the following reasons:

1. It is everyone's responsibility to make a difference, events have the potential to have a significant negative impact and many events use our natural environment as part of their event so they should show leadership.
2. Money can be saved or generated, through decreasing overheads (eg energy costs) or increasing sponsorship revenue
3. People expect this and to have an event industry in the future this is required.
4. This is now a risk management conversation and the event brand is at risk if sustainability is not implemented.
5. There is a huge opportunity to increase the potential positive impact events have by considering and taking action on sustainability.
6. Events have the potential to educate and inspire participants and attendees and create behaviour change around sustainability practices.

### 3.2. Quantitative Response

The quantitative response we researched demonstrates that events have significant impacts.

It is a challenge to compare the data between events as different events report on their impacts in a different ways (an increase uptake of the Global Reporting Initiative Event Organiser Sector Supplement could change this over the next 5 years).

To understand the broad range of indicators which the event industry should be addressing it makes sense to refer to the Global Reporting Initiative Event Organiser Sector Supplement (Can be found at <http://bit.ly/1jOlu1e>).

This reporting framework was developed in 2011 following the consultation and input from a number of NGO's, leaders in sustainability, event bodies and major global events.

The event industry is a global industry so it is not realistic that there would be the same measurement goal for each sustainability issue around the world. For example each city in the world has a different waste infrastructure so the measurement goal of 'zero waste to landfill' would be easier to implement in certain cities than others.

Due to the lack of a consistent global approach to reporting the quantitative data is important to tell the story of the measurements using qualitative data (Section 3.1.).

The negative impacts that were focused on (due to data available) are:

**carbon**

**food waste**

**materials waste**

The positive impacts that were focused on (due to data available) are:

**economic impact**

**educational impact**

**local community engagement**

### 3.2.1. Carbon

#### Brazil FIFA World Cup 2014

The overall carbon footprint of the 2014 FIFA World Cup was estimated to be just over 2.7 million tonnes of CO<sub>2</sub> (tCO<sub>2</sub>e). That's enough to power 135,000 UK homes for a year.

“FIFA World Cups, like other large-scale events, transport of spectators attending the event is the most significant contributor, in particular by air (50.6% of the overall emissions of the 2014 FIFA World Cup).”

#### Yokohama Triathlon

The carbon footprint of the triathlon was measured. Data on the carbon footprint measurements have not yet been released.

#### 34th America's World Cup

The final owned carbon footprint was 9,226 tCO<sub>2</sub>e. That's the equivalent to over 9,000 Boeing 747-400 international flights. Event activities in 2013 resulted in an estimated 9,040,388 MJ of direct energy consumption by primary energy sources, and 5,056,045 MJ of indirect consumption by primary sources.

#### Waste Management Phoenix Open 2014

The spectator air travel generated from the event totalled to approximately 35,885 metric tons of carbon dioxide equivalent MTCO<sub>2</sub>e. Spectator auto travel generated approximately 12,948 MTCO<sub>2</sub>e. Vendor air travel generated approximately 69 MTCO<sub>2</sub>e. Vendor auto travel generated approximately 413 MTCO<sub>2</sub>e. The total green house gas emissions released from the event reached 79 MTCO<sub>2</sub>e.

#### Hay Festival

The main contributor to the ecological footprint of Hay Festival was from visitor travel (59% of the total footprint). 2% of visitors travelled from outside of the UK, the majority of which travelled by air, and this accounted for 34% of the transport footprint. 7.8 gigawatt hours of energy were used by visitors staying in overnight accommodation. Overnight accommodation as a result of the festival created an ecological footprint 33% of the total footprint.

Approximately 600/700 tonnes CO<sub>2</sub> produced by festival and those who travelled to Hay generated approximately 600-700,000 tonnes of CO<sub>2</sub>.

### Manchester International Festival

Only the carbon footprint of Albert Square was measured as it was the only venue that the festival fully ran and controlled. The festival ran for 18 days across the city of Manchester and so will have produced a lot of CO<sub>2</sub> emissions. Due to the nature of the festival being international, a lot of these emissions are likely to be from travel from artists, staff and attendees to the festival. Without measuring however, the exact figure cannot be known.

### Goldcoast Commonwealth Games

“We engaged with carbon management consultant to calculate carbon footprint of game and look at strategies to mitigate some of our emissions.” The event has not yet occurred, so the carbon footprint is not yet known.

### IMEX International Exhibition

Total event carbon emissions of the exhibition was 7387.5 Metric Tonnes, this is the equivalent to enough energy to power 674 houses for 1 year.

“Attendee travel emissions have increased 8.1% from 2013. Because IMEX America attendees come from over 150 countries, the average distance travelled fluctuates significantly from year to year.”

### 50<sup>th</sup> Super Bowl

A brief example of the importance of implementing sustainability at large events is that through sustainability programmes in action the 2012 Super Bowl, the event was able to reduce CO<sub>2</sub> emissions by 1,402,681. Without implementing sustainability this would not have been possible.

### Olympics 2016

The London 2012 Carbon Footprint study looked at footprint of spectators, venue, operations and transport infrastructure. London 2012 reference footprint (including pre-games) is estimated to be 3.4 million tonnes of carbon dioxide equivalents (3.4MtCO<sub>2</sub>e) from 2007 to 2012. That’s equivalent to running approximately over 700,000 cars over one year. From travel approximately 498,507tCO<sub>2</sub>e was produced.

## Goodwood

No data was collected concerning the carbon footprint of the event.

### Carbon Summary:

In summary, very large events can produce millions of tonnes of carbon emissions over their duration.

A recurring theme from our interview responses is that the travel associated with events is the main contribution to the event's carbon footprint.

Travel is an obvious carbon impact for an event and addressing this impact (through measurement or mitigation efforts) is a risk management issue. In other words the event owners recognise that sponsors and attendees are conscious of an event's carbon footprint caused by travel.

It should be noted that additional areas of carbon impact such as energy usage and supply chain contribution may be greater than travel but they are not regularly or consistently measured.

Due to the nature of many large events attracting international participants and acts/athletes, travel carbon emissions is a factor that can be very difficult to control/reduce. Though, many events have initiatives in place or in planning which aim to help reduce travel emissions as exemplified in later interview answers.

In conclusion carbon is a commonly recognised and measured impact. The approach to measurement and actions being taken to mitigate and offset the impact is varied.

### 3.2.2. Food Waste

WRAP, a UK government body has confirmed that over 1/3 of food purchased in the UK is wasted. WRAP recognises the event industry as a contributor to this and in 2011 they worked with Positive Impact to create a UK event industry roadmap to zero waste.

Food waste and ways to mitigate food waste is an important factor that should be considered for by large events.

#### Brazil FIFA World Cup 2014

The venues at the World Cup had a two way bin system of recyclable and non-recyclable waste. Food waste was classed as non-recyclable waste, of which would end up in landfill.

#### Yokohama Triathlon

No research was gathered on food waste at the Triathlon.

#### 34th America's World Cup

The event operated under a Zero Waste policy in which food waste was composted, diverting it from landfill.

#### Waste Management Phoenix Open

Surplus food at the Open was donated local charities. Due to the event's location in Arizona however, trying to find outlets for food waste as a challenge. One option was to send the food waste to a digester, but the

location of the digester was far away so transportation emission may have offset the benefits of not land filling the waste.

### Hay Festival

Instead of land filling the food waste produced at the festival, 4.8 tonnes was sent to be composted.

### Manchester International Festival

A company was hired to take all the waste away and give a full report on it. 425 kg of food waste was collected from the Albert Square which was the only location where waste was measured, 95% of the food waste was diverted from landfill.

### Goldcoast Commonwealth Games

“We are looking at waste streams available in the city with potential to develop another waste stream for organics infrastructure.”

One of the sustainability goals is to reduce food waste.

### IMEX International Exhibition

Total food waste produced at the 2014 exhibition was 29970 lbs. The amount of food waste produced at the 2013 event decreased by 56%.

### 50<sup>th</sup> Super Bowl

46,000 pounds of food prepared for the 2012 Super Bowl went uneaten at the event, that's the equivalent of over 9000 whole chickens (This food was later donated). This demonstrates the sheer scale of food that can potentially be wasted at large events.

### 2016 Olympics

Food waste and packaging in the catering operations typically account for more than 80 per cent of event waste.

### Goodwood

No data on food was produced unfortunately due to mistakes made by the contractors with the data. But the event is working closely with the suppliers and areas throughout the event to try and ensure that accurate information is gathered.

#### Food Waste Summary:

For large events looking to operate sustainably, the measurement and efficient management of food waste presents a massive opportunity to deliver a positive impact. There are two clear opportunities to create social and environmental benefits: firstly for food waste to be disposed of optimally and secondly for food to be donated post event.

At a time when countries across the world are dealing with food poverty and event industry best practice continues to be having more food than is required there is an opportunity to create a solution with a social positive impact.

In the United States there is a law known as the Good Samaritan law which enables people to donate food post event without risk of being sued for food related illness post donation.

Similar initiatives across the world would provide a solution for food waste in addition to the potential cost savings which could be achieved by providing a limited amount of food to an event, the opportunity for local employment to deliver effective waste management, the benefit of food waste being used as local composting and the reduction of the negative impact that delivering waste food to landfill.

#### 3.2.3. Materials Waste

The concept of material waste is vast in relation to the event industry. There are materials used for logistic event production (from carpet to temporary structures), for event attendees requirements (from cutlery to hotel amenities) and for promotional purposes (from leaflets to give aways).

Understanding optimal sourcing, material type and reuse opportunities is as essential as putting a waste management infrastructure in place.

#### Brazil FIFA World Cup 2014

Despite recycling initiatives being in place at many venues, non-recyclable waste was still produced with over 1,500 tonnes being produced from all

venues and events including food waste. That's the equivalent to the weight of over 800 cars.

### Yokohama Triathlon

No measurements were taken on material waste of the event.

### 34th America's World Cup

15% of the total waste produced at the event went to landfill which was 33 tonnes.

### Waste Management Phoenix Open

In order to make a zero waste event, the event had to make it a contractual obligation for vendors to serve in recyclable/compostable materials. IN order to do this it was needed to give vendors ample time so that this was possible.

“The Waste Management Phoenix Open (WMPO) is among the longest-running events on the PGA tour, attracting more visitors — more than 500,000 in one week — than any other. In 2013, the 78-year-old golf tournament set a sustainability milestone, becoming the first sporting event of its kind to attain “zero waste” status. In 2014, we repeated this zero waste status, diverting 100 percent of waste away from landfills. Put in simple terms: seven days, 563,000 fans, zero waste.”

“In total, the combined recycling, composting and waste-to-energy efforts from the 2014 event avoided 345 metric tons of greenhouse gas emissions. This equates to saving: 632 mature trees 369K gallons of water 471K kilowatt-hours of electricity 969 cubic yards of landfill space.”

### Hay Festival

25% of waste produced from the festival went to landfill.

### Manchester International Festival

Only 1% of the waste that was measured went to landfill.

### Goldcoast Commonwealth Games

The event has not yet occurred. But waste has been recognised as a “key operational area” for the event and “will have a major impact on the sustainability performance” of the event. And in doing this a goal is to reduce waste, “reusing where possible, and ultimately sending zero waste to landfill”.

### IMEX International Exhibition

The total amount of waste produced at the exhibition totalled to 73.3 metric tonnes (down 20% over 2013). On average across all venues, 28% of waste went to landfill.

### 50<sup>th</sup> Super Bowl

“144 tons of recyclable materials were collected from Super Bowl venues including Lucas Oil Stadium, the NFL Experience, and the Super Bowl Village and more than five miles of decorative materials were recovered and donated.” Without sustainable initiatives being in place most of this material would have likely ended up in land fill.

### Olympics

At the Vancouver 2010 Olympics, 23% of waste ended up in landfill and at the London 2012 Olympics, 10% construction waste went to landfill.

### Goodwood

No data on materials waste has been produced for this event.

### Material Waste Summary

Based on the scope of materials used within an event it is likely that material waste will be one of the most significant, negative impacts caused by an event. Taking a proactive approach and identifying potential material waste before the event and putting the right waste management infrastructure in place would address this.

From interviews undertaken it is clear that currently, even if a recycling programme is in place, a significant amount of waste still goes to landfill. If large events promote operating sustainably and sharing waste management practice and measurements, then events can lead by best practice and influence others on how to improve and implement best levels of sustainability. Later on the answers given by large events in the interviews name some ways in which waste production can be reduced or prevented.

### 3.2.4 Economic impact on event destination

The concept of an event creating a positive economic impact on an event destination is the prime rationale, understood by governments and communities, for destinations to host large scale events.

“We know from experience that governments are highly interested in the ways our industry can be used to advance their economic and community development agendas, but we have been slow to come up with the kinds of defensible measures for these benefits that can be used to support the required investment” said JMIC President and IAPCO Past-President Philippe Fournier. Source Joint Meetings Industry Council Press Release Feb 2015

When interviewing people about an event’s economic impact, socio economic impacts will also be mentioned. For example training of local industry is both an economic impact (in that those people are now in paid work) and a socio economic impact (in that they received training to be skilled to do paid work)

#### Brazil FIFA World Cup 2014

800 local people were trained to collect and separate recyclable waste, given a salary and uniforms and protective gear, strengthening the local communities capacity to offer waste services for other events. Through the preparations for the event there was over USD 700 million invested by FIFA, the Brazilian government and other stakeholders into the Brazilian economy. The results of FIFA’s market research programme carried out in the host countries revealed that 80% of people believed that Brazil will benefit from a long-term increase in tourism.

#### Yokohama Triathlon

People who attend the event stay for longer in the local area, visiting the local and near-by areas, they then are more likely to buy the products and therefore generate income for the local area that otherwise would not have been generated if not for the event.

## 34th America's World Cup

"The 34th America's Cup Sustainable Food Framework provided guidelines for catering partners for the selection, procurement, preparation, and service of local... food and beverages." Approximately 85 percent of the food and beverages supplied at the event were from San Francisco, the Bay Area, or Northern California" (See the 34th America's Cup Sustainability Report). Hosting the 34th America's Cup brought significant spending and economic activity to the City of San Francisco with a direct spending of \$440,706,693 .

## Waste Management Phoenix Open

Surplus unused food was donated to local charities, food products that would otherwise not have been available for free without the event and so helping local charities help the local community. The Thunderbirds, the charity working with the event raised millions for local charities. The total economic impact from the 2014 event was estimated to be over \$268 million.

## Hay Festival

The festival developed with along with their partner Sky, a series of minibuses that linked Festival-goers with local B&Bs and the surrounding villages and towns. Increasing the number of local buses running from 2 return trips a day to 10, the profits made from these are shared with the local bus company (First Midland).

The festival bought a thermal imaging camera as part of their carbon offset campaign and used this within the local communities to survey their own buildings to help prevent heat loss.

"It's important to be seen to be helping and important to do it any way so the community benefits all year round instead of arriving at a place for the event and just leaving."

Hay Festival used local suppliers as much as possible and left the running of car parks and campsites to the local community which put money into the local economy. The fact that there is all year round publicity and marketing for

the festival means that it keeps Hay in the public eye and delivers a sense that the festival brings people to Hay to spend money all year round. Also, Hay library was facing closure, the festival found money to keep it open through its contacts and profile to keep services and businesses going.

### Manchester International Festival

251 suppliers were sourced from the Greater Manchester area and about £38 million economic impact was brought into the city of Manchester.

### Goldcoast Commonwealth Games 2018

“We tried to give a focus to local suppliers, so part of the policy was to use local suppliers and in conjunction with that to support local suppliers to know how to work with large events.”

The economic footprint will be measured by government and so such information will be available after the event. They will also be measuring amount of contracts going to suppliers as well as measuring how many people will be trained because of the event. The event will also be implementing ISO20121 and so economic impacts will be considered in the planning, delivery and post-event processes.

The event hopes to bring “significant business and tourism opportunities to the region”.

### IMEX International Exhibition

IMEX ran a number of events and initiatives to give back to the local community such as The “Charity Cooking” event where international meetings industry colleagues cooked in a shelter for homeless. Exhibitors further donated almost 16,000 lbs. of reusable materials to The Teacher’s Exchange, Sunrise Children’s Hospital and others. Meetings industry volunteers also worked to revive and improve a healing garden as well as organise thousands of donated items at a shelter for Las Vegas women, children and their pets and raise \$14,600 for the charity.

## 50<sup>th</sup> Super Bowl

Nine days before the Super Bowl day the Fan Village is open to showcase what the Bay area has to offer which means visitors can visit and spend in the local area. Through Business Connect which is a programme to make possible for marginalised minority owned businesses to participate, we built up database of qualified companies and NFL/sponsors are encouraged to go to the database first to look for companies to use before going anywhere else, this results in an economic benefit for region.

## Olympics

The event will be involved in the local community through working with a firm in Brazil called Collective helping people in favellas to develop skill sets and learn how to do skilled jobs.

## Goodwood

“Festival of Speed and Revival combined generate £37million for the local economy annually (based on 2012 Revival and 2014 Festival of Speed surveys on an area up to 20km from Goodwood. The Festival of Speed and Revival combined generated 49,000 person nights of accommodation for local hotels and guest houses”

### Economic Impact Summary

There have been many studies done on the economic impact of an event and it is clear that large events are significant potential sources of positive economic income for the local area. This can be immediate positive economic impact through new jobs and increased visitors to the area and long term positive economic impact through repeat visitors and visitors inspired to travel to the destination after experiencing the event remotely.

If the event is a regular event then the event will benefit from money being brought into the local area because a healthy local economic area is more likely to be better equipped to help an event be successful through mutual support.

Best practice sustainability implementation being demonstrated by events is also showing financial benefits of implementing a sustainability strategy. For example the use of local suppliers.

### 3.2.5 Educational impact on the supply chain and employees being trained in sustainability

It would be easy to overlook the impact on the supply chain (local or otherwise) and employees (local or otherwise) of being educated in sustainability.

The impact of the education has significant potential legacy. For example the individuals behaviour in their daily life may change and they may review the running of their business’.

#### Brazil FIFA World Cup 2014

“24% of fuel used in the official vehicle fleet was ethanol, all 2683 drivers received training on sustainable driving”.

800 waste collectors were recruited and trained by FIFA Partner Coca-Cola to collect and separate recyclable waste.

One future goal is to influence or change how the supply chain for FIFA operates. Raising awareness levels among fans on waste and what is recyclable, was undertaken with the help of the appeal of Fuleco, the official mascot of the FIFA World Cup. Between March and July 2014, 13 posts about avoiding, reducing and recycling waste were delivered to Fuleco’s fans on Facebook and Twitter platforms. In all stadiums, Fuleco was used to provide spectators with information and instructions on what type of waste could be recycled in the appropriate bins via signage, posters, LED boards and giant screens, thereby contributing to a successful outcome of the recycling programme.

#### Yokohama Triathlon

There was no training programme for staff but volunteers were involved with cleaning up the town.

#### 34th America’s World Cup

Official Partners of the 34th America’s Cup were encouraged to adopt sustainable behaviours and engage with spectators. Also, Vendors were required to provide sourcing data on fresh produce, meat, poultry, fish, eggs, seafood, bread and dairy products. Food vendors had to submit sourcing data along with invoices, sales reports, or by other means deemed appropriate by the Event Authority.

Food vendors had to quantify the value of the food items purchased for the event that met sustainably certified and locally sourced product standards compared to the total value of food items purchased. Targets were agreed prior to the event for sustainably certified and locally sourced product standards.

“Engagement strategies (for event staff, media, athletes and the general public) were created to promote sustainability awareness and to foster pro-environmental behaviour in a variety of areas, including travel, marine protection, and zero waste. Moreover, the event organisers worked hard to make learning about sustainability a positive experience, providing educational materials in a variety of interactive formats and challenging everyone to see how sustainability fits into their own lives.”

As part of the sustainability programme staff were trained over a two week period and every volunteer, sponsor and vendor knew what we were doing and could support what we were doing.

### Waste Management Phoenix Open

Through guidelines created, the vendors could make sure that they were using acceptable materials that could be disposed of sustainably, according to the events needs. For attendees there was an interactive game at the zero waste stations to try to get them come up and spin the wheel. An arrow would land on a material in use at the Open and the attendee would have to guess how to dispose correctly of it and win a prize.

### Hay Festival

For the attendees and others (including the interns) at the event there is an opportunity to see a series of events/speakers talk about issues to do with sustainability.

### Manchester International Festival

The festival put domestic timers on all coolers and fridges so that they were not on overnight as to save electricity.

They gave reusable metal water bottles to crew and volunteers so they could use tap water and then they can take that bottle to their next production.

“We have a mission statement; all employees get a contract that has a sustainability clause at the very end of it. “

“All of our volunteers have full inductions and training which includes a sustainability section. Part of this year’s KPI was that 90% of volunteers would know that we are trying to be a sustainable festival as what we learnt was that last year we thought they had learnt it but a lot of the said that they didn’t know they were.”

### Goldcoast Commonwealth Games

“Through ISO work we will be reaching out to local experts and local NGOs about local issues such as plastics in water ways.” Employees will be trained and figures measured.

### IMEX International Exhibition

“Carina Bauer, CEO of the IMEX Group comments: “IMEX has always been committed to supporting sustainable and socially responsible practices within the meetings industry. Having set up the first green awards in the industry in 2003, we were inspired by our award winners to develop our own programmes and are proud of our sustainability record at our shows, as well as our strong support for the local communities in which we work – in Frankfurt, Las Vegas and Brighton. We will continue to provide education and awareness to suppliers and buyers within the industry on this key issue, to support the ongoing development of best practice.”

IMEX implements a complete management approach by working with vendors such as hotels, caterers, venues, and transportation companies to address sustainability issues.

One of the main objectives at IMEX to “help guide sustainability actions and initiatives” is to educate; “educate visitors and hosted buyers on issues and solutions related to sustainability practices, and support local non-profit organizations through donations, volunteer participation and materials donation.”

“Exhibitors were asked to complete questionnaires to assess their performance against a variety of sustainability criteria. Their responses revealed the need to focus more attention on the areas of booth construction, transportation of booth materials, and printed collateral. In 2015, communication should focus more heavily on these specific areas. Exhibitor sustainability also affects APEX scoring in the exhibitor category and could be

improved significantly with the introduction of a sustainability clause in exhibitor contracts.”

## 50<sup>th</sup> Super Bowl

Due to the location of the 50th Super Bowl being in San Francisco, where sustainability is already a big part of the areas operations, sustainability is something many local businesses already know about and action. Every employee at the event is trained in sustainability as it is vital to the success of the event as they need to understand why they are doing what they are doing and how they can be sustainable in their behaviour.

## Olympics

The Olympics practiced the transfer of sustainable knowledge and educational resources to employees as so they can deliver the right expertise.

## Goodwood

“A huge number of our suppliers, contractors, sponsors, exhibitors all employ local staff”

## Other Examples:

### Democratic Convention Greening Case Study 2008

All contractors and subcontractors took part in the carbon tracking programme ensuring that they learned about their impact at the event.

## Wembley Stadium

“Thousands of staff work in the Stadium on events days. To ensure that all event day staff are aware of the back-of-house recycling system, a five-minute training video has been produced to be shown on all screens in the Stadium an hour before doors open for an event. All contractors on site are requested to ensure that the video is included in their staff briefings on the day. It shows

which bins should be used for event-day packaging and waste produced at the Stadium, and also explains what happens to the waste to help staff understand why it needs to be separated. The video was filmed and produced on site which only uses actual members of staff. After the video was launched, event-day diversion rates reached 86%.”

Also, “For 2014, we continued the tradition of organising a Green Week to engage as many staff as possible, and to increase awareness of the Green Team activities taking place across the Stadium. Green Week 2014 was the biggest one yet. Each day focussed on a different key impact area, and we decided to involve local schools in a competition to re-create the three lions from models made out of 100% recycled materials. The four office quads were set against each other in various competitions, culminating in a penalty shoot-out at the end of the week. Appropriately enough the "Green Quad" emerged victorious, and received the honour of donating £500 to their chosen charity.”

## Eurovision Song Contest

“All Green Event partners participated intensively in the communications campaign. With the BMLFUW campaign “Turn Your Life into a Green Event”, every Song Contest fan was motivated to build the sustainability notion into their own lives. From deliberate shopping to urban gardening and power saving at home, the campaign offered many different tips to turn their lives into a Green Event. For that purpose a video with the Makemakes was produced and then shown at the information booth of the BMLFUW in the Stadthalle.”

## Summary of Educational Impact on Supply Chain and Local Employees

Education for the supply chain and local employees can be delivered through a number of initiatives, from contractual obligations for the supply chain, to training for employees and interactive and engaging initiatives for attendees.

The supply chain and local employees are not the only groups who will benefit from education on sustainability. Other groups with the potential to benefit are the event attendees, local community and sponsors.

An event may have limited control and influence over attendees, community and sponsor but the potential impact of educating, sharing and encouraging sustainability behaviour should not be overlooked. One significant growing best practice is to use sponsor activation at the event to educate attendees. This aligns the sponsor with the event’s sustainability credentials and creates an opportunity for brand enhancement for the event and sponsor.

Events bring people together and when this happens they collaborate,

innovate and are inspired to change, this is what is needed to create a sustainable world that works for everyone and the role the event plays is educating attendees on sustainability and creating positive change should not be overlooked.

### 3.2.6 Local Community Engagement

Engaging with the local community is essential to ensure a successful event with long term legacy. The local community have the potential to be the workforce, advocates for the event, attendees and protestors against the event. The type and frequency of engagement undertaken with the local community will determine how positive or negative the outputs are.

ISO 20121 includes a requirement for engagement with interested parties, one of whom is the local community.

#### Brazil FIFA World Cup 2014

“FIFA believe that football has the power to reach and transform lives for the better.”

“FIFA Invested in Brazilian community projects in 12 host cities and organized the football for Hope Forum and Festival... to help foster social development”.

#### Yokohama Triathlon

“Citizens of Yokohama are involved as volunteers to help with things such as pre-event clean up as they recognize the importance of the event’s sustainability.”

#### 34th America’s World Cup

San Francisco Bay Area residents experienced Cupdates – a Speaker’s Bureau sending America’s Cup speakers to public events and meetings in and around San Francisco to raise awareness of the 34th America’s Cup and also communicate the importance of delivering a sustainable event. Cupdates reached an estimated 13,000 people, with 50 people on average at each event.

“The America’s Cup event provided ample opportunities to involve the City’s children, youth and families. In consultation with the City’s Department of

Children, Youth and Their Families (DCYF), ACEA created a Youth Involvement Plan that outlined activities aimed at incorporating and supporting sailing related programs, and provided outreach through the School District and the City's existing programs. Activities also included internships for young people”

### Waste Management Phoenix Open

WMPO had a number of community engagement programs and events designed to engage the local community such as CBS Outdoor Special Olympics Open, Youth Engagement with First Tee Dream Day & Standard Bearer programs.

### Hay Festival

In partnership with local company Caplor Energy, in 2011 a solar water-heating system on the staff catering unit was trialled. An infrared camera was purchased in 2010 and continues to be popular and used by the local community. The festival work with the local Transition Town group to help survey the heat loss from homes, businesses and schools. The festival worked with local schools through initiatives such as The Scribblers and offering local internships.

### Manchester International Festival

The festival made local community engagement “part of our ethos. It's not just about sustainability, we are trying to build a creative hub within the city. The more local people we use, the more they learn things, the more we learn about them, the more local companies we use, the more money comes into the area, the more they can buy new equipment etc. That is part of sustainability, about getting local people to do local things for themselves.”

Out of the 70 of the festival's performances some include powerful creative contributions from local people and 268 of the festival's suppliers were from the Manchester city region.

One of MIF's objectives was to help build the creative potential of Manchester's different communities and artists through community-based

commissions and creative development programmes. Such as bringing leading artists and thinkers together with local people to create extraordinary experiences during the Festival.

“Its long term aim is to engage with Mancunians of all ages and backgrounds to unlock their talent and ensure that MIF leaves a lasting local legacy.”

MIF also helped create The Biospheric Project which is a “legacy project for MIF Creative, which took an abandoned three-storey mill in Salford and transformed into an urban farm, research centre and community food hub. Through collaborating with young researchers and volunteers to create new experiments into sustainable city living “– developing their ideas and organisational skills, capacity and networks to continue running the project well after the end of MIF 2013 and into the future.”

“A new initiative for the 2013 Festival saw 5% of tickets for all events being made available to Greater Manchester residents on lower incomes at £12 each, helping to make the full range of MIF events accessible to all members of local communities.”

### Goldcoast Commonwealth Games

Though Goldcoast’s ISO work they reached out to local experts and local NGOs about local issues that could be addressed such as plastics in the water ways.

### IMEX International Exhibition

“The IMEX Challenge is a humanitarian effort for the meetings industry that creates a positive and long-lasting legacy in a community. This year, the IMEX Challenge focused its efforts on the Shade Tree, a local Las Vegas shelter for women, children, and their pets. During the two day event, 46 volunteers assisted the shelter in revitalizing a healing garden and helped to organize thousands of donated items received by the shelter throughout the year.”

### 50<sup>th</sup> Super Bowl

One decision made early on was to try and be as open as possible with trying to share what they doing as much as possible, such as do interviews.

“The 2012 Super Bowl Host Committee’s focus was to not only serve as the city’s ambassador to incoming Super Bowl fans, guests, and corporations, but to create projects that would continue to have a long-lasting positive environmental impact in Indiana. To assist in accomplishing this goal, the committee engaged communities, including schools, non-profit organizations, local businesses and units of government, to participate in and lead an array of sustainable environmental initiatives.” Such as:

“2,012 Trees by 2012” which was a program that was developed with the goal of planting 2,012 trees on the Near Eastside of Indianapolis by the 2012 Super Bowl.

“Each school district in Indiana was invited to nominate one student from their Class of 2012. This student was defined as an individual with an interest in the environment, who was active in his or her school and community, to represent the community as a Green Corps member.”

## Olympics

The event got involved in the local community through a firm in Brazil called Collective, helping people in favellas to develop skill sets and learn jobs. As you need “a healthy community to do good business”.

## Goodwood

“A huge number of our suppliers, contractors, sponsors, exhibitors all employ local staff”

## Other Examples:

### Democratic Convention Greening Case Study 2008

The ‘DNCC Service Days’ campaign focused on three areas of importance to the Denver area community: youth, environmental projects and the combined issues of homelessness and hunger. Local river cleanups, tree planting and tree care events were part of how the DNCC created an environmental legacy in Denver and the surrounding communities.

## Wembley Stadium

Green week 2014 was where each day focussed on a different key impact area, and we decided to involve local schools in a competition to re-create the three lions from models made out of 100% recycled materials.

#### Local Community Engagement Summary

Local community engagement is a major source of socio-economical sustainability as it promotes the inclusivity and integration of the event into the community. An event can be used to reach local community goals and a successful event will require community support.

An event can not avoid creating impacts that could negatively affect the local community (for example noise and light pollution, increased traffic or road closures) however the potential positive benefits will offset this.

Engaging with the local community can only help events thrive in the long-term as both event and community can mutually support each other.

## 4. An Estimate on How Many Large Events Occur in Europe (EU-MS) Each Year

There is very little data across the entire event industry to answer the question of how many large events occur in Europe each year accurately. We asked each interview respondent and no one could provide a response or direct to existing data.

A common theme through interviews and analysis of sustainability reports, is that there is no general knowledge of how many large events occur in Europe or any continent/country each year. This demonstrates a lack of understanding of the sustainability impacts of the event industry.

If governments understood that events were their access to addressing local economic and socio economic challenges or to reducing their negative environmental impacts much more attention would be paid to the number of and impacts of events.

Based on our research the question: 'how many large scale events are held each year and what is their impact' is not a question that has been measured and any data gathering done has not been shared within the industry appropriately.

Feedback from our interviewers reiterated this theme.

Large events feel that there is not enough comparable information about sustainability between large events and if there is it is not well shared.

The following information is information gathered in the attempt to create a broad estimate as to the number of large events that occur throughout Europe each year.

Firstly the event industry can be split into 3 types of events: Culture, Sport and Business

### Culture

Festivals referenced by our interviewers:

Glastonbury, Open'er Festival, Tomorrowland, Sonar, Roskilde, Sziget Festival, Oya Festival, Lowlands, Primavera Sound Porto, Exit festival, Werchter, T in the Park, Rock Werchter, Reading, Leeds, Pukkelpop, Pinkpop, Hurricane, Download, Benicassim, Wireless, all with 15,000 or more attendees per day at the festival, so there will be many more.

<http://festivalmap.eu/>: Shows festivals in Europe, so an estimate would say number of large festivals range from at least 50+ if not in the 100s.

### Julie's Bicycle Report

“Culture can refer to the arts and heritage: buildings, pieces of art and artefacts, historical sites, and occasionally protected landscapes.”

Arts Council England now requires its 700 National Portfolio Organisations, Major Partner Museums and Bridge Organisations to report on their energy and water usage and to have an environmental policy and action plan. It was estimated that the total carbon footprint of these 704 organisations was 121,000 tonnes<sup>27</sup>. This represents a total spend of ~£26 million, just from energy and water.

### Manchester International Festival

As an estimate of those in the UK that are non-site specific festivals “probably 15”.

### Sport

#### Sport referenced by our interviewers:

As an example of the extent of large sporting events:

- The Premier League in the UK, the average attendance for each match is 35,903, with an average of 380 matches per season.
- For Germany the Bundesliga has an average attendance of 45,914 with 306 games in a season.
- In Spain there is La Liga with an average attendance of 25,464 380 games in a season
- In Italy there is the Serie A with average attendance of 23,300 380 games in a season

- Ligue 1 in France, average attendance 20,988, 380 matches in a season.

As well as: FA cup final, Football league championship playoff, Copa del Ray Final, League Cup Final, all-Ireland Hurling championship Final, all-Ireland Football Championship Final, Aviva Premiership Final, FA Community Shield, Top 14 Final, Challenge Cup Final, Coupe de la Ligue final, Coupe de la France Final, DFB-Pokal Final, Super League Grand Final, Coppa Italia Final, Scottish cup final, Swedish Brandy Championship Final, Dansish handball league playoff final, Norwegian cup final, Dels final game 7, British Basketball league playoff final game 5, Euroleague final, Copa del Rey de Baloncensto final. These all are large sporting events with at least 10,000 attendees. So in total 23 finals + 380+380+380++380+306 = at least 1849 games, so approx 1800 large sport event finals happen over Europe each year.

### Goldcoast Commonwealth Games 2018

“There is an inconsistency in the info available across different events and lack of info. There is a need to get more info to make it easier for other events.”

### Brazil FIFA World Cup 2014

“In Germany there are over 60000 football matches per week.”

### Yokohama Triathlon

“ In Japan there is a sport event that uses the roads every month. If we do not limit the event to sports than that number would double.”

### Business

Meeting Professionals International UK Economic Impact study states:

That over 1.3 million meetings were held in the UK in 2011 in more than 10,000 venues (of all sizes, 60% 100 attendees or less). So 40% of meetings have 101 attendees or more i.e 520,000 meetings. Within this report we are only concerned with meetings of 10000 or more attendees and so there will be much less than 520,000 large business events in UK each year.

Attendees spent just under £40 billion attending UK meetings.

The meeting industry rated 17th among more than 100 industries in the UK, generating more than £20.6 billion in gross value added (GVA) (the contribution of the sector to the economy), which is 1.6% of the UK's total GVA ranking it in the top 20 of industries and £58.4 billion in gross domestic product (GDP) (GDP equals GVA plus tax and minus subsidies on products) in 2011. The total GDP generated by meetings accounts for about 2.9% of the UK GDP.

The meeting industry is a significant employer; results reveal that the sector directly generated 423,500 full-time equivalent jobs across a wide range of industries, and when considering the direct, indirect and induced jobs supported by the meeting industry, this number rises to more than one million in the UK.

Other event industry data points include:

Number of meeting events in Denmark (Denmark study) = 187.9K.

Direct contribution to employment = 25.8K.

In the UK "7,000 major outdoor events held each year". (HBAA report)

Based on existing research of how much money the event industry generates annually there is a clear indicator of economic importance of the industry throughout Europe. Events take place around the world so the existing research points to the economic impact of events around the world and the significant potential impact a sustainable event industry would have.

Due to a lack of data about how many large events occur in Europe each year we have to draw estimates from the data that is available. Events can be separated into 3 broad categories: cultural events, sport events and business events.

From MPI report we know that the meetings industry which we will class as the business section of the events industry accounts for 2.9% of the UK's total GDP. If we assume that the cultural events industry and sport event industry occur and contribute equally to the business event industry then the events industry as a total contributes to approximately 8.7% of the UK's GDP (£175.2 billion).

100% UK GDP 2014 = \$2.94 trillion (16% EU GDP) (World Bank Data)

Therefore:

1% UK GDP 2014= \$29.4 billion

Therefore: if UK events industry is still approx 8.7% of UKs GDP then:

UK Event industry 2014 worth approx \$255.95 billion

Using existing data a basic calculation can be made:

\$255.95 billion = 16% of EU GDP

So: 1% = 255bill/16 = 15.9billion

So: 100% = 1.59 trillion = Event industry worth in EU.

As no other data exists this is a basic calculation which would need a significant amount of research to develop further.

Overall, there is likely to be over 10,000 large events across Europe each year, thousands per country.

# 1. The Environmental Footprint of Large Events

The data for this part of the report was compiled from over 11 interviews with global events of over 10,000. See the appendix for events interviewed. The following section is a summary of practical examples of the positive and negative event environmental footprint.

## 4.1. Positive Environmental Footprint

### Brazil FIFA World Cup 2014

Through a programme to raise awareness of the environmental impact of ticket holder's trips and how to mitigate it, FIFA offered ticket holders the opportunity to offset their emissions. More than 17,000 ticket holders signed up registering 40,885 journeys amounting to a total 119,563 tonnes of CO<sub>2</sub>. 251,000 tonnes of CO<sub>2</sub>e was compensated to offset all emissions under the operational control of FIFA and the Local Organising Committee.

A number of low-carbon projects in Brazil were selected to off-set the emissions such as the Surui Project, Purus Project, Ceramic project and Itacoatiara Project, to help offset emissions produced from areas such as transportation.

39% more waste was recycled in the stadiums than had been estimated.

### Yokohama Triathlon

A number of volunteers were involved to do a pre-event clean up as well as post event.

### 34th America's World Cup

85% of waste at the Cup was diverted from landfill.

The use of a hybrid-electric vehicle fleet saved an estimated 72 tonnes of GHG emissions.

Solar security lights were used at America's Cup Village, which saved an estimated 12 tonnes of GHG emissions.

Conservation and efficiency improvements resulted in a savings of 5,630,493 MJ. Initiatives to reduce greenhouse gas emissions and reductions achieved estimated at 1375 tCO<sub>2</sub>e. Energy saved due to conservation and efficiency improvements estimated at 8,132 tCO<sub>2</sub>e.

### Waste Management Phoenix Open

The event used 100% renewable energy.

100% of waste was diverted from land fill.

4645 gallons of gray water from cooking and cleaning was reused in portable toilets.

The event occurs in a desert so water conservation is important, conservation measures such as using hand sanitizer instead of water to save water are implemented.

The event purchased Bonneville Environmental Foundation's (BEF) Water Restoration Certificates (WRC) for the 95,380 gallons of metered fresh water consumed at the 2014 WMPO. Ninety-six credits were purchased, each credit representing 1,000 gallons of water that is restored to a critically dewatered river, stream or wetland during vital times of the year.

### Hay Festival

75% of waste was recycled and so prevented from going to land fill.

The festival conducted a 'Green Dragon's Den' in which the most voted project was given £10,000 by Welsh government as part of their sustainable development program, these included: Dung beetles direct which helps to restore vitality to degraded farm soil and Low carbon cook off, new ways of communicating the impacts of our food.

The festival is committed to auditing its impact every 5 years – 'Hay on Earth' program.

### Manchester International Festival

In 2013 Biospheric Project was set up in Salford in an urban environment, trying to work with universities as partners to try to prove that you can create food within an urban environment to be sustainable and sufficient to feed everybody.

In 2011, a company was sourced who could compost food waste and further reduce waste produced from the festival.

95% of set props were recycled in 2013

## Goldcoast Commonwealth Games

At the Games they engaged with a carbon management consultant to calculate the carbon footprint and look at strategies to mitigate emissions. Data was gathered on energy used as an organisation and measures were taken to try and reduce energy usage.

Targets were set public transport use and looking at the capacity of the market for low emissions vehicles. A procurement strategy was put in place and currently they are looking to develop guidelines around procurement such as for materials use.

Through ISO 20121 implementation they are reaching out to local experts and local NGOs about local issues such as plastics in water ways. In terms of waste management, they are looking at waste streams available in the city with potential to develop another waste stream for organics infrastructure.

## IMEX International Exhibition

At IMEX in Frankfurt they are able to readily source local produce.

They have also considered the existing water restrictions in Las Vegas and so have implemented 'Water Wise Wednesday' at IMEX America this year (October, 2015) where they used foods that need less water to produce/process.

Over the 2013 Exhibition, total waste was down by 20%, food waste was down by 56%, use of locally sourced foods was up 150% and total electricity use was down 10% on 2013. Contributing to these results were factors like providing 100% compostable service ware at concession and snack areas, and more efficient lighting & HVAC, master room switches and huge rooftop solar-thermal systems at The Venetian®| The Palazzo®.

## 50<sup>th</sup> Super Bowl

"65 environmental projects completed by Green Corps members throughout Indiana. 49,185 pounds of electronics collected for recycling by RecycleForce.

15,000 megawatt hours of renewable energy were donated by Green Mountain Energy to offset the energy usage at Lucas Oil Stadium and other Super Bowl venues.”

Super Bowl programs reduced greenhouse gases by 642 metric tonnes “through avenues including: 500 metric tons from Super Bowl venue recycling ,57 metric tons from the three electronics recycling drives, 85 metric tons from 2,012 Trees by 2012 tree plantings (over the next 5 years)”

## Olympics

One of the venues in Rio has been built so that afterwards the equipment can be deployed and used by three different schools. They have also invested in biodiesel or hybrid fuelled cars.

## Goodwood

There is no data pertaining to the environmental footprint of this event.

## Eurovision Song Contest

Around 85 % of all visitors arrived by one form of public transport and through using renewable energy and not running diesel units, the event saved more than 440.000 litres of diesel – this equates to more than 1.000 tons of CO 2 .

“Because of the separated collection and recycling of secondary materials and waste, around 203 tons of CO 2 emissions was avoided. This equates to around 1.400.000 automobile kilometres.”

“Viennese water was offered in reusable cups.” This prevented the use of at least 30, 000 disposable water bottles.

## Summary of Positive Environmental Footprint

There are numerous initiatives that can be put in place to create a positive environmental impact, currently the main areas of focus are reduction in carbon emissions, food waste and water use. All research communicates that the issues addressed and results achieved will vary depending on location and local facilities. A key part of ISO 20121 is the identification of issues which

are relevant for your event, at your location, at the time of your event. In other words a framework to address the fact every event will have different impacts. The diversity in locations that large events occur in provides opportunities for innovation in the creation of ways of achieving a sustainable events industry.

### 1.1. Negative Environmental Footprint

#### Brazil FIFA World Cup 2014

The overall carbon footprint of the 2014 FIFA World Cup was estimated to be just over 2.7 million tonnes of CO<sub>2</sub> (tCO<sub>2</sub>e).

The FIFA world cup fleet consumed 379,140 litres of diesel and 211,280 litres of petrol.

In Brazil there is still open air land fill which contaminates the soil and ground leading to environmental problems. Despite large efforts to minimise waste that went to land fill, over 1,594.9 tonnes of non-recyclable waste from all venues and events was sent to landfill.

#### Yokohama Triathlon

No data has been published as to the negative environmental footprint of this event.

#### 34th America's World Cup

25% of waste ended up in landfill the carbon footprint was therefore 9,226 tCO<sub>2</sub>e.

9,040,388 MJ of direct energy consumption by primary energy sources. The total direct and indirect greenhouse gas emissions by weight estimated at 1,094 tCO<sub>2</sub>e.

#### Waste Management Phoenix Open

95,380 gallons of fresh water was consumed due to the event.

Spectator air travel generated approximately 35,885 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e).

## Hay Festival

The festival generated up to 700 tonnes CO<sub>2</sub> and those who traveled to the festival generated up to 700000 tonnes of CO<sub>2</sub>.

25% of waste was not recycled.

The ecological footprint (area of land and water required to support the resource demands and consumption patterns) “of the average visitor was almost two times greater than if they had not attended the festival”.

## Manchester International Festival

Due to the nature of the event being international, people have to be flown in to the event.

The environmental footprint was only measured at one venue, The Albert Square; as a consequence, we are unable to know the impact of the rest of the venues across the total event.

Of the waste that was collected and measured, 9% still ended up in land fill (1814kg).

## Goldcoast Commonwealth Games

From the interview, it was made clear that they are aware that “big events have a massive impact on the (host) city and with massive events can come massive wastage.” Locally there is a large issue with plastics in the waterways, with the event, this may also add to this existing environmental problem, so ways to mitigate this are being looked at.

One environmental issue is that “Because Australia is isolated with a small population which needs to have some things imported from other countries so would have travel and logistical problem in terms of sustainability. Australia doesn’t have a lot of the things that we need here because don’t hold a lot of such events so don’t have the stock to support them.” And so through transporting stock this creates a much larger environmental footprint than there would otherwise be.

## IMEX International Exhibition 2014

The exhibition per participant used 112.7 gallons of water, 37.7 kWh per participant, 15.1 lbs of waste. 15% of the waste went to land fill, the equivalent of 11.0 MT of waste.

A total 7,388MT of carbon produced by event. This is equivalent to running 64 houses for 1 year.

### 50<sup>th</sup> Super Bowl

In total the event emitted 3.8 million tonnes of CO<sub>2</sub>.

### Olympics

In the 2012 Olympics, most of the carbon emissions came from Pre-game with around 2.3MtCO<sub>2</sub>e being emitted. During the game a major contributor to emissions produced was due to the travel of the spectators estimated to be 670 ktCO<sub>2</sub>e, the largest contributor (52%) of this was through air travel,

### Goodwood

No data concerning the environmental footprint of the event has been published.

### Other Examples:

#### Democratic Convention Greening Case Study 2008

8,857 tonnes CO<sub>2</sub> produced due to the event in total.

#### Eurovision Song Contest

26 tons of waste ended up in landfill.

A major contributor to the negative footprint of this international event is that 47 % of visitors travelled to Vienna by plane, which will have produced many tonnes of CO<sub>2</sub> that would otherwise not have occurred.

#### Summary of Negative Environmental Footprint

There are two common negative impacts experienced by large events : carbon emissions and waste that can go to land fill despite efforts to prevent this.

Research shows that large scale events are measuring their negative environmental footprint though they may not want to share it. There is a danger that the general public, sponsors or governments may start to think of the event industry in terms of negative impacts only. Due to the size of large scale events and the international nature of events there will always be negative carbon and waste impacts (until there is an infrastructure to provide otherwise) therefore it is essential that events report on and communicate their positive impacts.

## **5. The Socio-Economic Footprint of Large Events**

The data for this part of the report was compiled from over 11 interviews with global events of over 10,000. See the appendix for events interviewed  
The following section is a summary of practical examples of the positive and negative socio economic footprint.

### 5.1. Positive Socio-Economic Footprint

#### Brazil FIFA World Cup 2014

Together with dozens of local cooperatives over 800 waste collectors were recruited and trained by FIFA Partner Coca-Cola to collect and separate recyclable waste in the 12 stadiums. In an effort to formalise their work, improve their working conditions and use their existing capacity better, the Brazilian Government policy established incentives to integrate the local cooperatives in municipal waste management programmes. In return, they received a salary as well as official uniforms and protective gear. This ensured successful waste management during the 2014 FIFA World Cup and strengthened the cooperatives' capacity to offer services at other events.

#### Yokohama Triathlon

The event worked with local areas near the park so that more people can attend the event and visit surrounding areas.

#### 34th America's World Cup

The master caterers worked with a local volunteer organization, to donate surplus food products from the events and delivered it directly to local shelters and neighborhood programs that feed those in need.

There was a big focus on the use of local businesses and local volunteers with a website put in place so that companies could register and respond. Also, engagement strategies were created to promote sustainability awareness and to foster pro-environmental behavior in a variety of areas,

including travel, marine protection, and zero waste. The event directly and indirectly generated over 3,800 new 1-year jobs.

### Waste Management Phoenix Open

The event supported the charity the Thunderbirds and together raised millions for local charities. The event tried to improve on the inclusivity of the event by creating initiatives for those less represented in golf such as the young and those on lower incomes. The total economic impact from the 2014 event was estimated to be over \$268 million.

### Hay Festival

The event ran a number of campaigns in 2012 such as 'save our libraries' due to Hay library facing closure, 'Freedom of Speech' and for mental health 'Talking about it'. The event also supports young writers through programmes such as The Scribblers. Furthermore, local young people were hired as interns at the festival.

"There is year round publicity and marketing that keeps Hay in public eye, which in turn brings people to Hay to spend money every month. Because is not a closed site, everyone can come in, so the local areas is likely to benefit more. We don't run car parks or campsites ourselves, that further puts money into local economy."

### Manchester International Festival

About £39 million of economic impact was brought into the city of Manchester. Additionally, 50 educational partners, working with some of the world's leading artists resulting in over 70 of the festival's performances, including powerful creative contributions from local people.

The festival also worked with a lot of student groups such as Backstage academy as to integrate those students to work with certain professionals so that they can see how a modern day production goes on.

### Goldcoast Commonwealth Games

The event strived to give a focus to local suppliers, so part of policy is to use local suppliers and in conjunction with that to support local suppliers to know how to work with large events.

The economic footprint will be measured by government and so there will be further information available after the event including the number of contracts going out to suppliers and the number of people trained.

### IMEX International Exhibition

The exhibition offered a number of socio-economic initiatives including The IMEX Challenge which was a “humanitarian effort for the meetings industry that creates a positive and long-lasting legacy in a community. This year, the IMEX Challenge focused its efforts on the Shade Tree, a local Las Vegas shelter for women, children, and their pets. During the two day event, 46 volunteers assisted the shelter in revitalizing a healing garden and helped to organize thousands of donated items received by the shelter throughout the year.”

There also operated a donation programme where a number of materials were donated to “various Las Vegas community organizations such as The Teachers Exchange (office and school supplies) and Sunrise Children’s Hospital (floral)”

Through careful planning and local food sourcing IMEX was able to use a lot of local companies for food and so 50% of the exhibitor menu was locally sourced.

### 50<sup>th</sup> Super Bowl

“The Green Corps was created and coordinated by the 2012 Indianapolis Super Bowl Host Committee to involve high school students from the Class of 2012 in environmental projects throughout the state of Indiana.” “Each group had the opportunity to apply to the Host Committee for a mini-grant of up to \$500 to carry out the project. The groups had the option of focusing on one project for their area, or they could individually create a project to carry out at their school or in their community.”” Green Corps members carried out a total of 65 projects” including “Installing recycling bins at Indianapolis Metropolitan High School, South Putnam High School, Blue River Valley High School, Columbia City High School, Seymour High School and Shoals High School.” Organizing a soil remediation project. Planting organic gardens. White River clean-up projects” Without this money none of these projects would have been able to be carried out in the local area.

Another initiative was The NFL's Super Kids-Super Sharing program which encouraged "young people to donate their gently used and new sporting equipment, books, and school supplies to children in need."

## Olympics

The Olympics aims to improve socio-economic conditions through "promoting values of Olympism and its action on behalf of sustainable development, fostering stronger international cooperation for sustainable development, combating exclusion." This can be achieved through Olympic legacy. For example New York City in a bid to host the 2012 games catalysed the development of facilities and infrastructure of seven underdeveloped areas with major rezoning and affordable housing constructed and improvement to the local public transport.

## Goodwood

"Festival of Speed and Revival combined generate £37million for the local economy annually (based on 2012 Revival and 2014 Festival of Speed surveys on an area up to 20km from Goodwood. Festival of Speed and Revival combined generate £105million for the UK economy and £12million for the exchequer in VAT. The Festival of Speed and Revival combined generate direct temporary employment for over 950 people. The Festival of Speed and Revival combined generated 49,000 person nights of accommodation for local hotels and guest houses"

## Other Examples:

### Democratic Convention Greening Case Study 2008

Due to the central location of head offices in the city centre, 65% of employees either walked or took public transport to work. The 'DNCC Service Days' campaign focused on three areas of importance to the Denver area community: youth, environmental projects and the combined issues of homelessness and hunger.

### Eurovision song contest

In a bid to incorporate value of social inclusion at the event, the final and semi final were sub-titled in the song's original language and broadcast in international sign language.

## Summary of Positive Social Economic Impact

Large events can raise significant amounts of money and have the influence to reach out to many different organizations and communities. These two factors combined provide a very powerful platform with which to create a positive socio-economic footprint; such as working with charities to develop and fund local projects. It also means many local people can be trained in transferable skills. It would be beneficial if it was made standard in sustainability reports of large events to publish how many people were employed because of the event and how much money was spent in the host area as a tangible measure of the economic impact that the event had.

Many sustainability reports did specify these factors, demonstrating the lack of consistency of reporting sustainability amongst large events.

Such consistency in reporting can be achieved, for example “Arts Council England now requires its 700 National Portfolio Organisations, Major Partner Museums and Bridge Organisations to report on their energy and water usage and to have an environmental policy and action plan.” Due to the enforcement of such action and reporting we know that the estimated “total carbon footprint of these 704 organisations was 121,000 tonnes<sup>27</sup>. This represents a total spend of ~£26 million, just from energy and water.” (Julie’s Bicycle IFACCA Report).

If the global events sector operated consistently in way where measurements were gathered, using the ISO 20121 and GRI EOSS frameworks, this would create a large data base of consistent information which would be very powerful in helping the events industry operate more sustainably as well as demonstrating to other sectors what is possible.

An important and valuable way of having a positive socio-economic impact is through engaging those in the local area to achieve sustainability as recognised by the Yokohama Triathlon when their “First sustainability experience was when the citizens of Yokohama realised the importance of sustainability and working as a volunteer to be part of the event and to participate in the event was important.” Similarly the Triathlon recognised that “There is a responsibility for the large scale event to think about sustainability due to the number of people who are involved and the impact it has on society, economy and the environment”.

It is clear that the public expect events to have a positive socio economic footprint.

## 1.2. Negative Socio-Economic Footprint

### Brazil FIFA World Cup 2014

None mentioned

### Yokohama Triathlon

None mentioned

### 34th America's World Cup

The Cup recognized that "Large events can very negatively impact a host community."

### Waste Management Phoenix Open

None mentioned

### Hay Festival

"Hay festival is not a closed site, so people can go into the local area and so it is likely to everyone benefit more. Conversely, if an event is closed (once you are in you are in) this may have a negative or non-beneficial effect on the area as the attendees are only contributing to the event and not the local area."

### Manchester International Festival

None mentioned

### Goldcoast Commonwealth Games

"In implementing sustainability at an event it can be difficult to educate and help people understand something especially if they have to change their habits, or they need to make extra efforts to act in a more sustainable way can all be challenging."

## IMEX International Exhibition

None mentioned.

## 50<sup>th</sup> Super Bowl

A study was conducted in to how local residents felt about the being the host city for the super bowl and found no significant negative views overall about being the host area.

## Olympics

None mentioned.

## Goodwood

None mentioned.

## Summary of Negative Social Economic Impact

All respondents were clear that events with sustainable initiatives will ensure negative impacts are reduced. Currently, it is uncommon for sustainability reports of large events to record negative socio-economic impacts, this may be because if they do some may see such records as only proving what is bad about the event.

It may be useful for events to record their negative socio-economic impacts so that they and other events can be aware of the negative impacts that they can have and then decide on how they can act in the future in order to mitigate any negative impact.



## **2. The Financial Challenges and Opportunities Aligned with the Efforts to make Events more Sustainable.**

The data for this part of the report was compiled from over 11 interviews with global events of over 10,000 people attending. See the appendix for events interviewed

“In 2006 the UK government commissioned a study to consider the external costs of climate change. The resulting Stern Review was the first attempt by any Government to understand the scale of the global economic impact of climate change. In 2007 Stern reported that if warming of 5°C occurred, the costs of adaption to developed countries would be 5-10% of GDP as compared to a ‘no climate change’ world, and that developing countries would suffer costs above 10% of GDP. The Stern Review estimated that the costs of avoiding this scale of climate change through mitigation of emissions represented 1% of GDP, ergo climate change avoidance is cost effective.”

This comparison is likely to represent a similar impact that ignoring sustainability could have on the event industry as well.

Over 50% of the events interviewed stated that they believed sustainability did cost more. When questioned further it was the cost of providing education and change management to facilitate a new approach to events that required financial investment. As the importance of sustainability increases and more event industry suppliers change their way of working to understand their social, economic and environmental impacts this cost is likely to decrease.

As more suppliers enter the market to provide waste management, sustainable materials options and more sponsors demand sustainability overheads will decrease and the potential to generate income from sustainability will increase.

While there may be a cost of implementing sustainability now (for education, new initiatives such as waste management infrastructure or choosing unique sustainable materials) in the long term, it will cost a lot more to operate an unsustainable events industry.

Events also have an opportunity to generate income (or materials) that have a positive socio economic impact. This financial benefit may not be tracked by the event but will be a legacy benefit for the event and the destination hosting the event (ie how much the local community would have had to pay for the materials/value)

### Brazil FIFA World Cup 2014

The World Cup did not generate any money from the implementation of socio-economic initiatives; they were seen more as an opportunity to invest in tackling the social issues of Brazil. It cost money to take action on sustainability as it takes a strong investment to integrate sustainability into all aspects of the sport event industry and in doing so show best practice for other events.

“Implementing environmental initiatives has both saved and generated money through financial opportunities occurring with getting new sponsors/potential sponsors linked with sustainability that would not otherwise have.”

### Yokohama Triathlon

Financial opportunities arose through saving money by reducing the level of waste which occurred through measuring waste (in other words what you measure you monitor and you reduce). As a consequence this money saved was able to be spent elsewhere in the event.

Money was also saved through reducing the amount of paper used. Implementing sustainability attracted sponsors to the event that would otherwise not have been possible.

“One of the financial challenges was that when initially implementing sustainability the cost went up, but eventually this cost decreased as less waste was produced due to the classification of different waste bins. One way in which financial challenges were avoided was to start with sustainability actions that do not cost huge amounts of money.”

### 34th America's World Cup

One financial opportunity that occurred through implementing sustainability was an over 50% saving on fuel from previous events due to analyzing how much energy was needed. New sponsors and new categories of sponsors

were possible due to sustainability initiatives such as Texan Automotive company which provided hybrid vehicles, Clean Canteen sponsored the hydration stations and Offsetters was the carbon credit sponsor. There was also a zero waste partner and partnerships around certain materials.

"The event organizers were able to secure new types of partnerships due to the sustainability strategy, for example a Carbon Offset Supplier and a Hydration Station Supplier. Typically, events sell single use water bottles as a means to generate revenue. Revenue generating opportunities became available, such as selling reusable water bottles instead of single use bottles."

A financial challenge was the cost of sourcing more sustainable food. Typically sustainability is not a budget item for any event so even hiring a consultant on the topic can be a large expense.

"Sustainability can bring new types of sponsorship categories, such as partnerships around zero-waste, water stations, certain materials like compostable service ware, etc.; these are all new revenue generators and marketing opportunities."

### Waste Management Phoenix Open

Through water initiatives money was raised for Change the Course and through other socio-economic initiatives money was raised for charities. It costs more to buy renewable energy for the energy initiatives from the local utility.

There is an additional cost of labour to sort the waste from the Zero Waste initiatives.

### Hay Festival

Taking action on sustainability can both cost and save money.

"Implementing sustainability is always a bit of a gamble. For example the bus initiative so far has always generated more money than it costs but there is no guarantee."

“Through spending less on resources, we directly saved money. This then means that this saved money can be spent on other things. One financial opportunity that arose was through organizing and encouraging festival goers to take the bus to the festival, there was a profit made for the event as they shared the profits with the bus company.”

Money was saved through waste being sorted in terms of less going to landfill. A financial challenge of implementing sustainability arises from waste collection. It costs more to staff the sorting of waste.

### Manchester International Festival

“It’s a challenge of spending a bit more to leave a legacy. At the end of the day it actually just costs more.” However “If you are a venue based event you can save money”

“Our sponsors really like the idea that they are sponsoring an event that promotes sustainability.”

### Goldcoast Commonwealth Games

“Some material choices are becoming stock standard but are still niche market and more expensive. For example, overlay, when they’ve looked at more sustainable materials to use they tend to be more expensive.”

“You have the opportunity to save money through reducing printing, energy use of the organisation through general office ways of reducing energy”

### IMEX International Exhibition

Trying to implement more sustainable ways of doing things such as replacing the communication of printed material through other ways such as electronically, can cost more initially as you are looking for new ways of doing things, to replace an old system.

“Due to many energy efficiency initiatives, the energy consumption dropped 10% per participant over 2013.” This reduction in energy use means a reduction in the cost of running the event due to less energy being used.

And per participant waste produced was down 25% to 15.1lbs per person. This reduction also reduces running cost. The money saved means that there is money available to invest in other sustainability related operations.

## 50<sup>th</sup> Super Bowl

It requires a lot of initial investment as a decision to be a sustainable event especially as it is a major challenge to overcome traditional inertia, as it requires a lot of effort sometimes to get people to change how they have been doing things for a long time, a large investment for example needs to go into planning. But over all we have gained more that spent.

Due to the fact that socio-economic sustainability initiatives were integrated into the event it was a major driver for partners to get involved. Through implementing sustainability we also generated new sponsorship revenue, generated new ticket revenue and reduced costs through transport by providing more sustainable transport means.

## Olympics

There is initial cost in investing in a sustainable large event and you need to make sure people understand the importance of approaching sustainability the right way.

Financial opportunities that arose from implementing sustainability is attracting sponsors and new partners such as to help with carbon offsetting, all wanting to help bring solutions such as organisers to help build the event.

“Sustainability has changed the agenda and the way we look at recruiting partners. We now have partners involved specifically in association with the sustainability of the event”

## Goodwood

“The major financial challenge is about prioritising where you spend your money/investment and what is important to the events year on year. If we have unlimited funds we could do it all, but unfortunately we don’t so it is about breaking each of the areas down and putting a plan into place.”

“We hope that the big financial opportunity will be a sponsorship deal because of our ISO20121 accreditation and the way that we have implemented it at Goodwood. To date we haven’t achieved this but we are still working on it.”

### Other Examples:

#### Democratic Convention Greening Case Study 2008

“Funding for environmental programs was not in the original contract/budget and the Greening Initiative was not allowed to compete with the Host Committee for funds”

“While all sponsors supported the green philosophy, the cost of green products and practices was often higher and, for some companies, prohibitive.”

#### Manchester Arts Sustainability Team

An example of implementing consistent sustainability measures and reporting is the Manchester Arts Sustainability Team (MAST); an art network that provides support and joint projects for the participating organisations which brings together multiple groups including civic bodies across Manchester “in a shared commitment to developing a sustainable and equitable future”. Seven organisations working with MAST made carbon reductions equivalent to saving £65,000. £10,000 was also shared with a number of organisations to start “joint procurement and stage engagement activities.” This demonstrates how the events industry could possibly work together to achieve consistent reporting resulting in money savings and financial opportunities.

#### Summary

In summary, a large financial opportunity or area for potential new revenue is through sponsors who want to be aligned with sustainability.

Another common financial benefit associated with sustainability is money saved through using fewer materials, by planning ahead to understand what will be needed. Money is also saved through reduced usage eg less waste going to landfill or less energy being used at an event.

The only financial challenge with implementing sustainability in large events is the requirement for initial investment into implementing education and creation

of sustainable initiatives. The general consensus from the research is that this investment will pay off in the long run and provide additional economic and socio-economic benefits for the event and the community impacted by the event.

The final point to note is that an event which moves location annually will have a different perspective compared to an event which is in the same place every year. The conversation about event legacy is therefore essential for the event to be encouraged to invest in a location they will not be returning to again.

### 3. Conclusion

The power of events is significant for two reasons. Firstly the global economic size of the event industry is large so their social and environmental footprint will also be significant. Secondly events bring people together to collaborate inspire and innovate, this makes the change required to create a sustainable future possible.

There are a number of observations that can be made from the content of the interviews and the report research about the challenges for a large event to operate sustainably:

1- Data for the event industry is limited.

Whether this is data about the number of events which take place or the social- economic or environmental impacts of events. The supply chain are still learning about the importance of sharing data and there is little evidence of reliable, regular and accurate data gathering within the event industry.

2-Data gathering is inconsistent, despite the existence of two global frameworks (ISO 20121 and Global Reporting Initiative Event Organiser Sector Supplement) which could provide a consistent process for understanding what to measure and how.

The Gold Coast Commonwealth Games is a global leading example in following the two internationally recognised frameworks.

3-Local initiatives including measurement approaches mean there is not a global approach to implementing and measuring a sustainable event.

As more major events implement ISO 20121 and GRI EOSS it will be possible to compare events, until then local approaches are too confusing to be compared.

4- Every event will have different issues to address.

Therefore a checklist of must take actions or must achieve measurements is not likely to create the culture needed for a sustainable event.

5- The majority of interview respondents answered 'yes' when asked if a sustainable event costs more.

This could change as supply increases, awareness grows and the industry becomes more educated.

6-An event is dependent on the supply chain which can be a large number of stakeholders to control, influence, inspire and encourage.

The Yokohama Triathlon commented "Due to the large scale of events, organizers may struggle to control all the supply chain, therefore seeking

already sustainable supply chains help such events carry out and promote a sustainable vision”.

8- Achieving sustainable results requires changing the behaviour of others (including suppliers, attendees, participants)

The America’s Cup commented “[you need] to build trust, get people to think slightly differently and give them all the tools they might need, but ultimately they themselves have to make changes and that’s the hardest and biggest challenge”.

9- Awareness and understanding of sustainability is limited within the industry. A conclusion from the Zen report is ““Zero-impact” is seldom meaningful to key stakeholders. Negative environmental impacts ... are often not considered to be of high priority by policy makers. On the other hand, the positive impacts of events... [such as] legacy, place branding, economic development, social [and] cohesion/participation tend to be more relevant to stakeholders. It is as a result of this, that it is important for perspectives on sustainability to be broadened.”

10- Comparing event data is challenging

As highlighted by FIFA this is likely to be a problem experienced by many events.

“It’s difficult to transfer lessons learned from one event to another, similarly it is difficult to transfer experiences from one FIFA world cup to another as the countries are so different.”

“Perhaps there could be a body whereby events (large or small) register and from that point take part in a recognised sustainability measuring and reporting strategy that is then part of such a body’s database that can be referenced to in the future by other events etc.”

Despite the current challenges for a large event to operate sustainably there is clear global government and event industry strategy pointing to the fact that there is a future expectation for large events to operate sustainably:

In 2014 the World Travel and Tourism Council (WTTTC) and World Travel Organisation (UNWTO) and Joint Meetings Industry Council (JMIC) statement proposed 3 objectives for the growth of the travel and tourism sector (which includes meetings and events)

1. To coordinate research efforts in order to produce rigorous and consistent information and measurement of the value and benefits associated with the meetings industry that can guide the policies necessary to support its growth;
2. To align advocacy and messaging both promoting the direct benefits of the meetings industry to the tourism and travel sector and acknowledging that its primary purpose is to contribute to economic, professional and academic advancement;
3. To encourage all public and private sector organisations in the meetings industry to commit to the principles of sustainable development.

The 12th UN Sustainable Development Goals 2015 is to ensure sustainable consumption and production patterns. Two of their targets for this goal relevant to the event industry are:

1. Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
2. Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

Beyond the above mentioned future strategic requirement for sustainable events there are a number of observations that can be made from the content of the interviews and the report research about the opportunities for a large event to operate sustainably:

1-The impact of an event is significant and influential, as an example the largest global association for the business meetings and events industry had a campaign titled “When we meet we change the world”

A further example is the Waste Management Phoenix Open commented on the fact that there is a diverse group of people who attend the event (although are not necessarily interested in golf).

“Large cultural/sport events through their nature attract many different types of people, this can be seen as an opportunity to spread ideas and educate about sustainability to a diverse range of a population who may not have had access to such information before.”

2-Sustainability is an opportunity for an event to innovate

Factors including geography, weather, content and size mean no two events will be identical. Creating a culture to identify sustainability issues unique to the event will create an opportunity for innovation with stakeholders.

For example the Hay Festival commented that different ways of operating a sustainable event will work differently for different events.

“Solar powered generators for a festival are a great idea in areas with high sunshine levels and they have been demonstrated to work for shorter Festivals in the UK where the energy loading is low but for us, as we operate over 11 days and can't guarantee sufficient sunshine to keep the batteries topped up, we would have to find power from elsewhere to ensure we could deliver the Festival which would negate any benefit from having the solar generators on site”.

3- Stakeholders (including corporate sponsors and event attendees) expect sustainability.

4- Implementing a sustainability strategy can reduce overheads as what gets monitored, gets measured and will reduce

5-100% of respondents were able to articulate the importance of implementing a sustainability strategy and their answers varied from risk management to attracting sponsors, demonstrating that there are a number of business drivers for a sustainable event.

6-Large scale events need to demonstrate legacy from day one of bidding for the event to 10 years post event in order to secure local stakeholder support required to fund and host the event.

Delivering a sustainability strategy throughout the event will provide an ongoing event legacy.

Taking into account the research gathered, likely future government strategy, challenges and opportunities identified, the following is our recommendation of a 6 step strategy for the creation of a sustainable event industry (ie where events of any size and in any location are delivered sustainably). Inspired by this report over 2016 Positive Impact will provide content and proactively share industry best practice to inspire action in the following areas:

#### 1- Telling the Story

An increase in the number of events who share the steps they are taking will lead to a greater number of events being inspired into action.

#### 2- Educating

An increase in understanding and awareness of sustainability within the event industry supply chain will lead to decrease in costs as the market grows and an increase in social and environmental positive impacts.

#### 3- Measuring

An increase in the measurements gathered would provide the industry with a greater understanding of their economic, environmental and social impacts. A consistent approach to measurement is also essential (see point 5)

#### 4-Regulating

An increase in governments or even influential clients requesting sustainability is the quickest route to changing the market place.

#### 5-Using existing international frameworks

ISO 20121 and GRIEOSS are internationally recognised frameworks that can be used together to achieve a comparable sustainability result.

#### 6-Using stakeholders to understand local opportunities

An increase in stakeholder engagement will create an increase in potential solutions and ensure legacy is delivered.

In conclusion the event industry has the frameworks required for a culture change to deliver sustainable events. Pressure from governments, clients and customers (ie the people who provide the funding for events) is starting to build so the event supply chain is starting to understand action for sustainability is required. The business case as to why it matters for large scale events to be sustainable is clear and being demonstrated by the leaders interviewed in this report. The next step for the industry is for sustainability within events to become the new normal, rather than the best practice of industry leaders.



## 4. Appendix

Interviews Undertaken:

Name	Event	Event Type
Federico Addiechi	Brazil FIFA World Cup 2014	Sport/Cultural
Koshikawa	Yokohama Triathlon	Sport
Jill Savery	34rd America's World Cup	Sport
Michele Grossman	Waste Management Phoenix Open	Sport
Andy Fryers	Hay Festival	Cultural
Jack Thompson	Manchester International Festival	Cultural
Chelli Easson	Goldcoast Commonwealth Games	Sport/Cultural
Dale Hudson	IMEX	Business
Theirry Borra	Coca Cola Olympics	Sport/Cultural/Business
Neill Duffy	50 <sup>th</sup> Super Bowl	Sport/Cultural
Claire Mannion	Goodwood	Sport

Documents Researched:

UFI Sustainability report

MPI economic impact UK and US report

UNWTO Global Report on the Meetings Industry

IFCAA D'art report <http://www.juliesbicycle.com/files/IFACCA-Report-Ecutive-Summary.pdf>

2014 WMPO Sustainability Report

34<sup>th</sup> America's Cup Sustainability Report

FIFA 2014 Sustainability Report

Hay Festival 2012 Report

The Environmental Impacts of Festivals: Reflections on the 2012 Hay  
Literature Festival, Wales

Denver Impact Report

Meegan Jones, Sustainable Event Management A Practical Guide, 2010  
Zen Positioning Paper  
Manchester International Festival 2013 Report  
IMEX America 2014 Sustainability Report  
Eurovision song contest 2015 Sustainability report  
Julie's Bicycle report Part 1: Audience travel emissions from festivals  
London 2012 Carbon footprint study  
SuperBowl XLVI Sustainability Report  
Measuring the social impacts associated with Super Bowl XLIII: Preliminary development of a psychic income scale, Sport Management Review  
MAST Membership Invitation  
Global Sustainable Development Report 2015  
Report of the Open Working Group of the General Assembly on Sustainable Development Goals  
<http://www.agreenerfestival.com/wp-content/uploads/pdfs/Reusable%20Pint%20Cups.pdf>  
Julie's Bicycle Case Study Wembley Stadium Team Engagement

## 5. Interview transcript

1. Can you tell me the event that you represent?
2. How big is the event?
3. How many people attend the event?
4. What location is the event at?
5. When does the event take place?
6. How regularly does the event take place?
7. Is there anything else that we should know about the context of your event?
8. Do you have any ideas or general data points relevant as to why it matters to focus on the sustainability of large-scale events?
9. What's the first thing that you think of when I tell you that the aim of this report is to provide an overview and data on the argument as to why it matters to focus on the sustainability of big events?
10. Based on your experience why does sustainability matter within big-scale events?
11. What is your experience with sustainability and big-scale events?
12. What environmental initiatives have you put in place at your event?
13. What difference did they make? Especially did these initiatives save you any money or generate any money?
14. What was the environmental footprint of your event? So for example do you know how much food waste you created; do you know how much energy you used; do you know what your carbon footprint was?
15. Are you doing anything to find out your environmental footprint?
16. What socio-economic initiatives did you put in place at your event?

17. What difference did they make? Did you save or generate any money from using them?
18. What is the socio-economic footprint of your event? So, how much income is generated from the event for the local community? And how many people are trained because of your event?
19. When you were considering taking action on sustainability in your event did it cost you more: Yes or No? And why? And can you share some practical examples of this?
20. What have been the financial challenges that you faced with implementing sustainability within your event?
21. What have been the financial opportunities that you have faced with implementing sustainability within your event?
22. What were the challenges of implementing good environmental practice?
23. What were the challenges of implementing good socio-economic practice?
24. What would you say is the one reason why large-scale events should focus on sustainability?
25. How many of the events of your size are rolled out in Europe every year?
26. Did the location of your event affect how sustainable your event could be: Yes or No? And why? And can you share some practical examples of this?
27. Did the type of event affect how sustainable your event could be: Yes or No? And why? And can you share some practical examples of this?
28. Did the supply chain for the event affect how sustainable your event could be: Yes or No? And why? And can you share some practical examples of this?
29. Through initiatives used, was there an educational impact on the supply chain and/or employees and/or local community being trained in sustainability?

30. Do you have anything else that you want to contribute to this interview?

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