Safeguarding the natural environment in event management

Chris Chard[a], Matt Dolf[b], and Greg Dingle[c]

[a] Department of Sport Management, Brock University, Saint Catharines, Ontario, Canada

[b] Centre for Sport and Sustainability, University of British Columbia, Vancouver, British Columbia, Canada

[c] Department of Management, Sport and Tourism, La Trobe University, Bundoora, Vic, Australia

This chapter focuses on the roles and responsibilities of event managers to produce a quality event while simultaneously considering the impacts of events on the environment. The call to manage events in a more environmentally sustainable manner will surely be amplified as there is increasing pressure to (a) reduce direct harm caused to the environment, (b) satisfy ethical interests of stakeholders (both internal and external), (c) integrate risk management, (d) communicate in a credible manner, (e) ensure events can operate in a safe and healthy environment, (f) meet new legal requirements.

In the following chapter we will look at sustainability, specifically we will focus on environmental sustainability (ES) and consider why ES is important in event management. Next we will outline the various roles and responsibilities for event managers to design events in a

more sustainable way. Finally, we will introduce environmental impact assessment methods for

events and specifically outline three approaches: Life Cycle Assessment (LCA), carbon

footprints and ecological footprints.

"There is no business to be done on a dead planet" (Hollender and Breen, 2010, p. 114).

‹ B› What is environmental sustainability (ES)? ‹ B›

ES in this manuscript follows the well established definition by the United Nations (UN)

Brundtland Report (1987). This report sets out ES as the capacity of an organization to safeguard

the natural environment by "meeting the needs of the present generation without compromising

the ability of future generations to meet their own needs" (p. 1). Clearly, this definition offers

elements of choice as both the present and the future must be considered in any organizational

decision-making. Entwined in these "now" or "later" considerations, sustainability requires that

organizations evolve and broaden the metrics to assess long-term success. However, we also note

that estimates of the number of definitions of sustainability vary between 100 and 200 (Moscardo

et al., 2013; Parkin, 2000), so this plurality of views offers the opportunity for a nuanced

understanding of this concept. For example, Parkin (2000) argues that sustainable means that:

> "…something has the 'capacity for continuance'. Sustainability is therefore a quality.
> It is an objective not a process. Something either has or has not got the quality of
> sustainability—the intrinsic capacity to keep itself going more or less indefinitely.
> We want the environment to have it, so it can support life. It is the growing number
> of indications that it has not got it (most worryingly manifest in climate change) that
> have prompted current concern."

These contrasting definitions nevertheless illustrate the degree of consensus around the critical

importance of ensuring that the natural environment is at the heart of sustainability efforts.

The terminology is evolving, too. Robinson (2004) argues that while "sustainable development" is more commonly used by private sector and government organizations, the term "sustainability" is gaining widespread use among Non-government Organizations (NGOs) and academics. This is because the word "development" is tied to growth, whereas sustainability refers to the concept of preservation, or absolute limits. Robinson suggests that sustainability is seen more as a 'value change' and sustainable development as a 'technical fix'. Although the terms sustainability and sustainable development are often used synonymously in practice, along with other common references such as "corporate social responsibility" and "triple bottom line", the philosophical distinctions are important. There is a growing consensus that achieving GDP growth while at the same time shrinking resource use is extremely difficult (UNEP, 2011). Interestingly, Jackson (2009) proposes that prosperity can be achieved without GDP growth; however, this type of progress needs to be vetted. In the meantime, event managers need to be cognizant of the challenge to, on the one hand achieve financial growth, and on the other to improve quality of life through lower resource use and lower environmental impacts.

‹ B› Environmental change, vulnerability, and the need for resilience and adaptation for sport, recreation and tourism events ‹ B›

Whilst the sustainability of the natural environment is of critical importance in broader sustainability discourse, it is also clear that the sustainability of humans, and our various institutions – including those in sport, recreation and tourism – are of equal importance. Indeed, these industrial sectors are as fundamentally dependent on natural resources as others (e.g. finance, retail, manufacturing), and in some ways directly – or indirectly – dependent in ways

that other industries are not. Specifically, much sport, recreation and tourism depends on natural resources for the basic elements of their success. For example, it is clear that sport depends indirectly on natural resources to design, build and operate the facilities in which it is staged (Kellison, 2015; Mallen and Chard, 2012; Nguyen et al., 2014).

However, it is also clear that much of the sport, recreation and tourism sectors depend directly on eco-systems to provide the right environmental conditions that make them both possible and popular. In this way, sport, recreation and tourism are similar to other nature-dependent industries such as agriculture, aquaculture and forestry (Amelung and Moreno, 2012; Linnenluecke et al., 2013). For example, outdoor sports such as downhill skiing, snowboarding and a variety of football codes – including soccer, rugby union and American football – all depend on the global climate system to provide the stable and sufficiently cold local climates for their success. Equally, sports such as tennis, golf, baseball and cricket depend on stable warm climates that are essential for their success, while sailing sports are dependent on nature for the winds that enable competition. Similarly, recreation and tourism activities (e.g. aquatic activities, visits to national parks) are also dependent on nature to provide either the natural attractions for such activities, and/or the stable environmental conditions that enable these. This fundamental nature-dependence – which includes climate-dependence (Packard and Reinhardt, 2000; Scott, Gössling and Hall, 2012) – underpins significant elements of the sport, recreation and tourism sectors. Yet, it also highlights the potential for significant vulnerability of these sectors to changes in the natural environment, and the need for building resilience for their physical sites, and adaptive capacity for the organizations that manage them.

Global environmental change (GEC) is a phenomenon supported by a vast body of scientific

evidence (Rockström et al., 2009; Steffen et al., 2015; UNEP, 2005, 2007, 2012), and consistent

with this, it is now recognized that the concepts of *vulnerability*, *resilience* and *adaptation* are

important to understanding the human dimensions of this change (Janssen and Ostrom, 2006).

While vulnerability (Füssel, 2007b; Gallopín, 2006; Smit and Wandel, 2006) has a number of

definitions within GEC literature, Adger's (2006) is perhaps the most appealing: "the state of

susceptibility to harm from exposure to stresses associated with environmental and social change

and from the absence of capacity to adapt". Such harms may be either direct and short-term ones,

or long-term ones (Winn et al., 2011). In the context of GEC, vulnerability for sport, recreation

and tourism may also be direct and short-term harm (e.g. natural disasters: damage to sport

facilities; national parks or tourist precincts from hurricanes or forest fires), or longer-term

and/or indirect (e.g. higher insurance premiums; operating costs; adaptation costs from changed

regulatory or market conditions).

Resilience (Füssel, 2007b; Gallopín, 2006; Janssen and Ostrom, 2006) has been defined as the:

"the ability to absorb shocks and still maintain function" (Folke, 2006). When applied to

organizations, resilience has been described as a "sufficiently wide coping range" (Linnenluecke

and Griffiths, 2015). In the context of present global environmental changes, resilience in sport,

recreation and tourism is a quality that has already been demonstrated (e.g. New Orleans tourist

operators recovering from Hurricane Katrina in 2005; National Parks in California recovering

from forest fires; Suncorp Stadium recovering from the 2011 Brisbane floods). In contrast,

adaptation (Füssel, 2007a; Gallopín, 2006; Linnenluecke and Griffiths, 2015) – which has also

been defined in various ways – has been described as: "an adjustment in social–ecological

systems in response to actual, perceived, or expected environmental changes and their impacts"
(Janssen and Ostrom, 2006, p. 237). In essence, such adjustments are aimed at enabling such a
system (e.g. a household, group, organization or country) to "better cope with" changed
conditions, hazards or risks (Smit and Wandel, 2006, p. 282). For sport, recreation and tourism,
adaptation may eventuate in different ways (e.g. outdoor sports introducing new playing surfaces
in response to climate change; recreation centres or tourism operators reducing energy use in
response to a carbon pricing regulatory regime).

Overall, sport, recreation and tourism providers have varying levels of vulnerability, need to
develop resilience – and where they are not – adapt to changed natural, regulatory and market
environments.

‹ B› Assignment A: Event decision-making for environmental sustainability ‹ B›

Suppose you are a manager of an annual golf event that is the cornerstone fundraising vehicle for
your charitable organization. The tournament has been held at the same nearby golf course for
the past 6 years. While no contracts exist, there is a "general understanding" that the tournament
will be held at the same golf course for the coming year; your volunteers and staff have operated
under this assumption in all planning. Two months before the event, however, you are
approached by the General Manager of a new private course located 50 minutes north of your
town. The GM offers financial incentives to move the event to their course; the proposal would
increase net revenues from the event by 50%. As you contemplate the change of venue, other
considerations spring to mind such as the increased travel for volunteers, staff and participants to
attend the event, the longer hours for volunteers, the impact that the loss of the event could have
on the local golf course, and negative image issues arising from deserting the local golf course at

the last minute. Lastly, the GM tells you the new club is experiencing a host of environmental

challenges with pesticide use and water run-off to the local pond.

Clearly, the financial benefit of changing golf courses is evident, but how will you weigh these

against the other social and environmental issues?

As can be seen from the scenario above, decision-making frameworks based entirely on the

"bottom line" only account for the financial consequences of actions and are insufficient for

contextualizing social and environmental considerations. Fundamentally, sustainability is about

managing 3 Ps: people, planet and profit! Figure 9.0 provides a visual representation of

sustainability in action; here, understanding the interactions between economic, social and

environmental contexts forces managers to recalibrate their thinking, managerial decisions and

organizational assessment.

Place Figure 9.0: The three overlapping spheres of sustainability approx. here

‹ B› The triple top line and the triple bottom line ‹ B›

The "Triple Top Line" and "Triple Bottom Line" are each examples of paradigms that embrace

this wider scope to organizational management and assessment. In traditional business

accounting, the top line relates to incoming revenue for an organization while the bottom line is

what is left of this revenue after expenses have been accounted for. Similarly, the Triple Top

Line moves "accountability to the beginning of the design process" (McDonough and Braungart, 2002, p. 252), by encompassing financial, social and environmental concerns. Essentially, the Triple Top Line focuses the event manager's lens on every aspect of planning for an event. For example, knowing there will be $150,000 in revenue for a youth soccer tournament is not enough, we should know "how" the $150,000 is generated, socially and environmentally. Likewise, the Triple Bottom Line assesses the "bottom line" results of an event; how did the event perform? Again, consideration is given to the three sustainability measures. For example, considering our youth soccer event, if the event manager shows $28,000 in net profit, financially the tournament is deemed a success. However, if environmental degradation and social injustices occurred to achieve these fiscal gains, a Triple Bottom Line approach would account for these deficiencies.

McDonough and Braungart (2002) note that frameworks such as these are great tools for integrating sustainability into the business agenda by balancing traditional economic goals with social and environmental concerns. The key word here is *balance*. Of vital importance when interpreting Figure 9.0 is the need for *all* of the spheres to be strong. A common misconception of sustainable management is that it is *only* focused on environmental concerns. This is simply not true! ES at the expense of economic viability is in itself unsustainable. Randjelovic, O'Rourke, and Orsato (2003) address this point noting the "need to develop competences … which can create economic value *and* reduce environmental impacts/risks" (p. 251).

Hannah Jones, Nike's sustainability chief, addresses the concept of organizational sustainability by noting the desire at Nike to produce ROI[2]. This term is used to describe the company's

commitment to increasing value for shareholders, a traditional perspective, while simultaneously enhancing value, socially and environmentally, for the multitude of organizational stakeholders. The thought process at Nike is that ES does not, and should not, come at the expense of increasing shareholder value. "We can do well and do good at the same time" said Jones (Hollender and Breen, 2010, p. 121).

‹ B› Why is ES important in event management? ‹ B›

Barrett and Scott (2001) note that every organization, small to large, must consider environmental issues such as transportation, personal and organizational consumption, and waste management. Examples abound concerning "an increasing growth in the consumption of natural resources combined with a corresponding ferocious growth in the volume of waste" (Ingebrigtsen and Jakobsen, 2006, p. 389). The United Nations Environment Programme GEO-4 (2007) report noted clear evidence of environmental change facing the world today and, of particular importance, the report clearly assigns responsibility for these environmental changes to "human activities …" (p.8).

If we accept that the actions of all individuals collectively contribute to environmental change, then surely responsibility to enhance sustainability is the duty of everyone: governments, businesses and citizens. Indeed, it can be argued that every event manager should be held accountable for their actions with respect to sustainability. Here, accountability is defined as "being called to account for one's actions" (Mulgan, 2000, p. 555).

Indeed, where no accountability is taken by any individual party for a mutual entity, the outcome may be the deterioration or destruction of said entity. In the case of ES, that entity is a vibrant planet. While this assertion may seem dramatic, Perelman (2003) noted that "in a complex world where the environment is now at the breaking point, the continued experiment with this dangerous system of organization represents a grave risk to everybody and everything" (p. 221).

Business as usual within the events industry can't continue. Our industry can't keep producing mountain ranges of rubbish, or leave clouds of CO_2 in legacy. No matter the type of event, every coming together of people for a purpose can be done so with consideration for sustainability (Meegan Jones, 2011, Australian Delegation Head of ISO 20121).

‹ B› Roles and responsibilities for environmental sustainability in event management ‹ B›

The United Nations Environment Programme (UNEP) lists a number of ways that sport events can impact the natural environment including:

Development of fragile ecosystems or scarce land

Noise and light pollution

Consumption of non-renewable resources

Consumption of natural resources

Emission of greenhouse gases

Ozone layer depletion

Soil and water pollution from pesticide use

Soil erosion during construction and from spectators

Waste generation from construction of facilities, and from spectators (UN, 2010, n.p.)

Recognizing this, it has been argued that event managers should be responsible to do their part in protecting the natural environment (Mallen and Chard, 2011). Such responsibility has begun to be embraced by some sport organizations. For example, the environment is now recognized as the "third pillar" of the Olympic Movement alongside sport and culture (Cantelon and Letters, 2000). Indeed, the Olympic Movement's Agenda 21 report highlights the commitment of the organization to environmental sustainability. Other examples of organizations embracing event management environmental sustainability initiatives in sport can be found including the "Green Goal" work done by Fédération Internationale de Football Association (FIFA) on the World Cup (FIFA, 2006), the Football Association's FA Cup initiatives (Collins et al., 2007), the newfound focus on sustainability by the National Football League (NFL) and its flagship Super Bowl event (NFL, 2008), the 2010 Commonwealth Games (Sobhana, 2010), and the London 2012 Olympic and Paralympic Summer Games (Tian and Brimblecombe, 2008).

At a micro-level, Hums (2010) notes that "students need to know the actions they can take with their events and their facilities to contain the impact of sport on the environment" (p. 5). So, it appears that environmental sustainability in event management is gaining support from the university classroom to the Olympic boardroom. At a practical level the question remains, who is ultimately responsible for ES and how might this responsibility be proactively and effectively managed?

‹ B› Assignment B: Ace Corporation Triathlon Group (ACTG) Sustainability Ownership and Accountability ‹ B›

Imagine you are the marketing manager of the Ace Corporation Triathlon Group (ACTG). At a recent managers meeting, which included the head of finance, legal, human resources, operations, information and yourself, the mandate from the President of ACTG was to move environmental sustainability to the forefront of the company's event delivery for the coming year. After the meeting, everybody is excited to integrate ES into their division's practices.

At the following managers meeting the President asks for an update on the company's sustainability initiatives. Who steps forward to give the breakdown of ACTG's progress on this initiative? If challenges are put forth by the management team who "owns" these event management environmental sustainability initiatives, who will be charged with the task of finding solutions?

While environmental sustainability is certainly in its embryonic stage for event management, work has begun to move initiatives forward on the managerial agenda. For example, the Sport Event Environmental Performance Measurement (SE-EPM) model designed by Mallen et al., (2010) provides a comprehensive framework for evaluating a sport event's environmental performance. Key items of consideration within the framework include:

The Environmental Organization System (environmental policies, environmental management committee, involvement in environmental programs).

The Environmental Activities, Stakeholder Disclosure and Relationships (information transfer, disclosure and communications).

The Environmental Operational Countermeasures (proactive initiatives such as renewable energy sources utilized, recycling, reduction, environmental training).

Environmental Tracking (are items such as energy use and waste reduction being measured).

Indicators and Measurement Items: Inputs and Outputs (paper, raw materials, CO_2)

The benefit of frameworks such as the SE-EPM is in its utility to guide event managers on ES initiatives. Moreover, a clearly defined rubric to guide assessment on event environmental performance can assist event managers in making individuals accountable for their assigned ES projects. This type of guideline should serve event managers well in the coming years. Indeed, as the introduction of formal policies becomes commonplace, such as ISO 20121: Event Sustainability Management Systems (www.iso.org), the future of event management, and the requirements asked of the event manager will change. Here, the requirement to be compliant around sustainability will be mandated and policies to ensure observance of set standards will need to be integrated into event planning decisions.

‹ B› Measuring to manage, integrating environmental impact assessment of events ‹ B›

Even as a growing number of events incorporate qualitative environmental management, few carry out quantitative assessment or modeling (Jones, 2008). Decisions are therefore often based on intuition, visibility, and ease of implementation rather than on an empirical understanding of major contributors to environmental harm.

There is a famous management axiom: "You can't manage what you can't measure." In monetary terms we rely on budgets and accounting procedures to make planning decisions and reflect the value of goods and services. As we have discussed earlier in this chapter, the environmental and social costs are not fully captured in current financial valuations. For example, the value of water loss from a water-stressed region is not reflected in the price of goods and services. As event managers, we therefore need additional indicators to make decisions about how we organize our events and answer questions such as: What is the biodiversity impact of fertilizers used by our soccer fields? How much will installing solar panels on our stadium reduce the impact of electricity use? Should we build temporary or permanent venues?

It is common to see events target waste reduction and recycled paper as part of their "green" initiatives. But are these the most important things to focus on? Arguably not since we know that Canada's GHG emissions in 2010 showed that the impact of waste was 3% percent compared to

81% for energy (of which 24% was transport) and 8% for agriculture (Government of Canada,

2010). While not ignoring the symbolic importance of the visibility factor of trash and the

expectation of fans to see recycling bins, organizers need tools to help them focus on the areas

where they can affect the greatest change. This section will discuss the emerging method of Life

Cycle Assessment (LCA) and two commonly used environmental metrics applicable to sport

events: the Carbon Footprint and the Ecological Footprint.

‹ C› Life Cycle Assessment ‹ C›

Sport event organizers can take advantage of a multitude of environmental sustainability

assessment methods, tools, and indicators (Ness, Urbel-Piirsalu, Anderberg, and Olsson, 2007),

but no internationally accepted agreement exists on how governments, let alone events, should

measure and report on impacts. We will focus on Life Cycle Assessment (LCA) as a promising

method for measuring environmental impacts over the life of a product or service: from cradle–

to–grave. LCA is being widely adopted by both the public and private sectors to assess impacts,

report on performance and as a basis for policies and regulations (Finnveden et al., 2009).

Specifically, it can be a powerful tool for deciding between alternatives: *does product/solution A*

or product/solution B have the lower environmental impact?

According to the International Standards Organization, which sets out the ISO 14044

(www.iso.org) guidelines and requirements for carrying out an LCA (2006), two of the key

features of this method are (a) life cycle stages: raw material acquisition, production, use, end-of-life treatment, recycling and final disposal; and (b) phases for carrying out an LCA study: goal and scope definition, inventory analysis, impact assessment, and interpretation. It is useful to understand each phase in a bit more detail (see Figure 8.1). *Goal and Scope*: Define the purpose of the study, the system boundaries, and the major assumptions. *Inventory Analysis*: Define the inventory of data, environmental inputs (resources) and outputs (emissions, wastes) of the system under study, and the methods for data collection and analysis. *Impact Assessment*: Translates the inputs and outputs into indicators of potential environmental impact (e.g. human health, climate change, ecosystem quality). *Interpretation*: Provide meaning to the results of the inventory and environmental impact assessment relative to the goals of the study.

Place Figure 9.1: The four iterative phases of a Life Cycle Assessment study according to the International Standards Organization (ISO) 14044.

Thinking with a life cycle perspective encourages both producers and consumers to consider the upstream and downstream impacts in the supply chain. For event management, this means not only understanding the environmental harm caused on-site by activities such as air quality affected by transportation emissions, but also the off-site impacts from purchased food, materials, and the generated waste. LCAs are used for a widening range of applications including business strategy, product and process design, environmental labeling, and product declarations. A key strength of LCA is its ability to characterize environmental impacts across multiple damage categories such as: human health, ecosystem quality, climate change, and resource

depletion (Jolliet et al., 2003). While LCA focuses on environmental impacts, it can be complemented by a broader set of Life Cycle Management (LCM) tools including Life Cycle Costing (LCC) and Social LCA.

There are, however, some considerations with using LCA for event management. Firstly, LCA results should not be used as a basis for comparison unless system boundaries, data sets, assumptions, and included processes are the same; we need to compare apples with apples. Secondly, the complexity of LCAs can be resource intensive if it requires extensive data collection and expertise. This can be a challenge for events with limited budgets or staff time. A third consideration is communication; while we all understand the value of a dollar, it can be challenging to interpret the importance of one tonne of carbon or one liter of polluted water. This leads us to a fourth issue, how to select between opposing results, such as: which is more important, carbon or water? The answer of course depends on many issues such as geographic location, water scarcity, stakeholder values, placing importance on current versus future impacts, and so on. LCA can be a powerful planning tool for events but brings with it a need for increased expertise, education, stakeholder buy-in and resources to implement effectively.

<C >Carbon footprint < C>

A carbon footprint measures global warming potential (synonymous with climate change potential) of a defined activity resulting from associated Greenhouse Gas (GHG) emissions over

a given time horizon that is usually 100 years (Wright, Kemp and Williams, 2011). The potential

impacts for a number of GHGs (some common ones are carbon dioxide, methane, and nitrous

oxide) have been characterized by the United National International Panel on Climate Change

into carbon 'equivalents' (IPCC, 2007). The unit of measure is therefore the mass of CO2

equivalents: kg CO2-eq.The carbon footprint is the most widely used 'single' environmental

impact category in the sports industry, with a host of mega events such as Vancouver 2010,

London 2012, and FIFA World Cup 2010 integrating it in their event management strategies. For

instance, the United Nations Environment Program estimated that the global warming impact of

the FIFA 2010 World Cup in South Africa totaled over 2 million tons of CO2 equivalent

emissions (CO2e) with 65% due to international travel, 17% due to national travel, and 13%

from accommodation energy use (UNEP, nd).

Some benefits to applying a carbon footprint approach are that: it is a widely used and

understood benchmark for environmental impacts; it has also become fairly well known and is

therefore easily communicated to the public realm; it has the advantage of being applicable

globally since global warming is not regionalized; and it benefits from a strong consensus in the

scientific community on the existence of the problem and on the characterization of impacts

(IPCC, 2007). A key drawback of events using a single indicator approach however, is that it

does not provide a full and contextual understanding of other impacts such as water use, land

use, or resource use (Collins, Jones, and Munday, 2009; Weidema et al., 2008).

<C>Ecological footprint <C>

The Ecological Footprint method developed by Wackernagel and Rees (1996) puts a focus on the carrying capacity of the earth. By estimating the total human consumption of resources and comparing it to the rate at which the planet can replace them, it can calculate whether our activities are meeting or exceeding its regenerative capacity. The unit of measure is the bioproductive area in hectares required to maintain human consumption. This can also be communicated in terms of the number of "planet earths" required to support our activities. According to the latest World Wildlife Federation (WWF) Living Planet report, the human population currently exceeds our regenerative capacity by using the equivalent of 1.5 earths (WWF, 2010).

London 2012, for example, embedded the ecological footprint as a measure for achieving their sustainability platform of a "One Planet Olympics." Collins et al. (2007) applied this assessment framework to measure the impact of the FA Cup international soccer match in Wales. They were able to show that spectators at the event increased their ecological footprint seven times over the daily average of a Welsh citizen.

Whatever environmental impact assessments managers choose to use, it is vital to become literate in the concept of examining impacts with a life cycle approach and across multiple indicators. As new tools develop for the event industry, managers can increase the sophistication level of their assessments and demonstrate increased accountability to their stakeholders.

‹B› Assignment C: Using a Carbon Footprint to Minimize the Accommodation Impact ‹B›

You are organizing a baseball tournament for 8 teams of 15 people each. You are in the process of selecting a sponsor hotel to house the teams during the 7 day (and 7 night) event. One option, *Dandelion Inn*, is certified with a 'green hotel' program, partly because they have achieved significant reductions in energy use, water use, and waste generated compared to the industry average. However, they are located 10 kilometers away from the venue. A second sponsor choice, *Median Hotel*, is an industry average hotel and is located only 1 km away. In either case, you need to send a shuttle bus to the hotel twice per day to pick up and drop off the teams. A recent LCA study tells you that Dandelion Inn has an impact of 6 kg carbon dioxide equivalents (kg CO_2-eq) per person per night and Median Hotel has an impact of 12 kg CO_2-eq per person per night. You also know that the shuttle bus travel impact is 0.050 kg CO_2-eq per person per km.

Figure 9.2: Scenario data chart approx. here

1) Determine the hotel, travel and total Carbon Footprints of each option. Which has the lowest impact?

Place Figure 9.3: Guidelines for determining the carbon footprints in Assignment C approx. here

2) What other ES considerations are there for an event manager when selecting between hotels?

3) How else could you lower the carbon footprint of accommodation?

4) What are the considerations of applying carbon as the only environmental impact category?

‹ B› Chapter Summary ‹ B›

Alexander (2007) captured the inherent challenge for many managers considering changing business operations to implement ES practices: how to convince those who currently enjoy economic success to enter into a process that could reduce their financial standing. From a similar perspective, Lothe, Myrtveit and Trapani (1999) noted that "a conflict does not exist when the environmental strategies save on raw materials, reduce government penalties, make waste into positive gross margin products or increase sales because 'green' is marketable.… A conflict does exist, however, when the environmental strategies require extra investment" (p. 314-315).

The call to manage events in a more environmentally sustainable manner will surely increase in the future. Reducing the direct harm caused to the environment is the responsibility of everyone.

Clearly, event managers have a part to play in ES. Indeed, managing events with consideration for each of the three spheres of sustainability should be a priority for every event manager in the future.

‹ B› Chapter questions ‹ B›

Drawing from your understandings of this chapter, please answer the following questions:

1. What is the difference between "sustainability" and "sustainable development"?

2. What are the three perspectives that are used to describe, manage, and assess sustainability?

3. "If you cannot measure it, you cannot manage it." Describe how this can be applied to ES initiatives in event management.

4. In your opinion, who or what department within an organization should "own" ES?

5. Consider a road race and think of the multiple environmental sustainability initiatives that an event could adopt. Think of at least 5 other Event Management Environmental Sustainability initiatives.

Place Figure 9.4: Answer to the assignment concerning choice of hotels
approx. here

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