

# MAKE GREEN GROWTH A PRIORITY: ISSUES AND CHALLENGES IN ORGANISING GREEN SPORTS TOURISM EVENTS

Lim Khong Chiu<sup>1</sup>, Asmahany Ramely<sup>2</sup>, Anisah Abdul Wafi<sup>3</sup>  
School of Tourism, Hospitality and Event Management, UUM<sup>1, 2</sup>  
Universiti Pendidikan Sultan Idris (UPSI)<sup>3</sup>

E-mail: [kc@uum.edu.my](mailto:kc@uum.edu.my)

Received: 2 July 2019

Accepted: 24 July 2019

Published: 30 June 2020

## ABSTRACT

*Despite many sports tourism events have been organized globally yet the understanding about the event greening practices is reasonably low. Hence, the impact of the sports event towards the environment and the communities are exceptionally high. For the purpose of this paper, some academic and consultancy-based literature on management and organization of sports tourism events in relation to green growth were reviewed. This conceptual paper focuses on the conceptualization and implementation of green sports events which covers the theory and principles of green practices, strategies and implementation of green practices in the case of selected Olympic Games, issues and challenges, and the roles of stakeholders. In addition, the critical insight from the literature also provides some “green” suggestions to be considered by sports tourism event organisers.*

© 2020MySE, FSPU, UiTM Perak, All rights reserved

**Keywords:** *green event, sports tourism event, environment, challenges, Olympic Games*



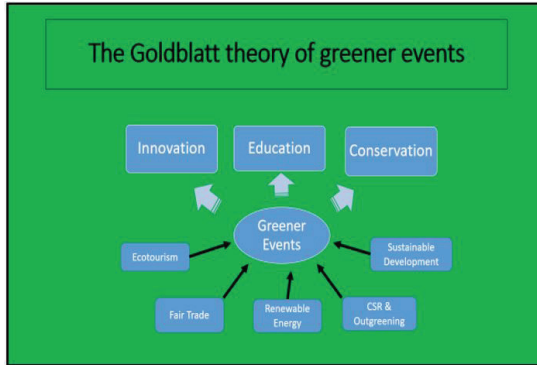
## **INTRODUCTION**

Green event can be defined as special events that incorporates sustainable and environmentally friendly practice and policy into management and operations. It has the greatest potential to minimize various economic, social and environmental negative impacts on the destination. It also associates with emerging and keeping products and services that fulfil customers need and want, without damaging the environment (Praveena, 2013). Importantly, Rittichainuwat and Mair (2012) found that the majority of attendees prefer to have greener events, even though the fees for non-green event are cheaper than green event.

Economically, events can bring thousands of people who will contribute to the local economy (Ranjan, 2016), but socially and environmentally, events create thousands of tons of waste (Case, 2013), use excessive amount of electricity, the damage lands due to overuse and increase Co2 emission (Ranjan, 2016). Hence, a balance needs to be found to protect and enhance the destination's resources for the future while managing the complex interaction of all the stakeholders. Without this, damage can be caused to the local environment, producing a social and cultural conflict and alienating the host community (World Tourism Organization, 2007). In that regard, the current Malaysian government will give more emphasis to environmentally-friendly development (Keshminder, 2018), with a focus on pursuing a green agenda specifically on improving conservation, delaying climate change (Mohd Shobri, Wan Ali, Mt Akhir & Md Sakip, 2017) and reducing carbon footprints (Malaysia, 2015; The Star, Oct, 19, 2018).

According to Goldblatt theory, greener events, promote three core values, which are innovation, conservation and education as a result of ecotourism, sustainable development, fair trade, renewable energy, corporate social responsibility (CSR) and out greening (Refer to Figure 1). Innovation refers to creatively harnessing emerging strategies and green technology for increased energy efficiency and environmentalism; conservation is the responsible use of the earth's natural resources and waste minimization, and education is related to promoting ethical behaviour towards the environment by creating memorable event experiences (Goldblatt, 2011). Thus, in order to stage a greener event, the event organizers should incorporate green technologies, environmentally-friendly plan of action, minimal production

of waste, minimal use of the earth's raw resources, and at the same time promoting ethical behaviour towards Mother Nature (Goldblatt, 2011).



**Figure 1: Goldblatt Theory of Greener Events.**  
(Source: Goldblatt, J., 2011)

Not limited to Goldblatt Theory of Greener Events, sports tourism event organisers are also free to choose any other green approach produced by the local public authority of the host country. Clewer (2014) classified going green as an emerging movement that has gained credibility. Therefore, local public authority should have their own green event guideline, as going green has become an evolution for people's lifestyle and trending Worldwide. (Clewer, 2014).

## METHODOLOGY

For the purpose of this paper, some academic and consultancy-based literature on management and organization of sports tourism events in relation to green growth were reviewed. In the review process, the literature was accessed through internet search engines on seminal works of the previous authors as well as selected academic books available pertaining to the area of green practices in organizing sports tourism events. The search sought to include as far as possible works from across the globe, although much of the research around green sports events has been undertaken in Australia, the UK, the US and Canada. However, there is a general scarcity of research on green practices on sports events in South East Asia regions, the review does include some works from developing countries. Hence, the

review does not claim to be exhaustive, but seeks to give a general overview of the scope and range of discourse on green practices in organizing sports tourism events.

The aims of this concept paper are to discuss on conceptualising the green concept and some pertinent issues as well as challenges in organising sports tourism events. Hence, with the existence of a proper event greening approach it will assist the organizations and companies to promote and train their employees on the issue of event greening practices. In addition, it could be the new responsibility of the organizations and companies to develop a green planning guide which can contribute to a more favourable behavioural intention and preferences among event planners and audiences as well.

## **PERSPECTIVES FROM LITERATURE REVIEW**

The growth of sports tourism events, plays an important role in local identity building, increases community participation as well as increases social capital (Peric, Durkin & Wise, 2016). Liu and Wilson (2014) believe that sports events used as imaging tools in most tourist destinations whereby they can draw worldwide media exposure, especially for mega scale events such as the Olympics game. Despite the benefits of sports events, the growth of sports event undoubtedly creates diverse and complex impact to the economic, sociocultural, psychological, political, and importantly to the environment (Preuss, 2013). Osterwalder (2015); Casper, Pfahl and Mc Cullough (2014) as well as Preuss (2013) believes that event has produced a lot of waste, high consumption of energy and water. Therefore, sport event organisers should change the way of managing events by being more responsible whereby the event hosted did not harm the environment (Osterwalder, 2015).

### **Benefits, Strategies and Implementation of Green Practices in Sporting Events**

Moise and Macovei (2014) posit that responsible actions, social and environmental protection are imperative when planning and implementing environmentally friendly sporting events in order to fulfil the needs of consumers and businesses, as well as meeting the needs of the future

by agreeing to maintain or increase the resources. Other than that, the green approach has become the central topic discussed by recent scholars (Kaufmann, Panni & Orphanidou, 2012). Eventually, the implementation of green event brings various impact to the environment and community nearby. For instance, the community can benefit in terms of economic savings, environmental health, reduced stress on public infrastructure, and the often long-term benefits of the facilities. Green practice in tourism related sector also provide a good branding image for the destination whereby it has been recognised as “new tourism” (Praveena, 2013).

Holmes (2015) believes that green practices are important for bid process for many mega events. Securing a mega event tender for the next consecutive year would be rather more difficult than its bidding process. Therefore, Liu (2018) believes that green practice would help to sustain the tenders and helping the host to earn more sponsors (FISA, 2013). Moreover, green practice is also important to preserve the business in the long term (Rittichainuwat & Mair, 2012).

Great London Authority (2012) stressed that those events, which apply the green concept as their management strategy will reap a lot of benefits mainly on the reduction of water and energy usage supporting local products (Jenkins, 2012) as well as imparting knowledge on environmental impacts to the community. A green sports event is a sporting event that stresses on utilizing greener resources. There are many ways that the event organizer can do to ensure that the event adopt the green concept in their management, such as follow the green guidelines which encompassed reducing energy and transport usage. Similarly, impact of purchasing, waste and sanitation too should be minimized. Thus, by implementing the green concept, not only has a positive impact on the environment, but it helps in educating the participants and organizers in terms of saving cost and resources (Ranjan, 2016).

There are numerous ways of maneuvering and employing the green concepts in sport events because sports and the environment are interconnected, and injecting green concepts to conserve the environments are vital. The United Nations Environment Programmes (UNEP) is one of the big agencies that has been appointed and involved with a lot of mega and major sporting events to ensure that the environment is being

protected. Among them are the Olympics Games, FIFA World Cup and the Commonwealth Games. According to Allen et al. (2011), UNEP begin working in the field of sport and environment in 1994 and their main objective is to encourage the integration of environmental considerations in sports. For example, UNEP promotes awareness among the public on the importance of the environment and also provides a green guideline for the Olympic Games. However, as a result of the impact of the sport events on the environment, the green sport movement has not only captured the eyes of UNEP but the Natural Resources Defence Council (NRDC) also shows their support in joining the cause of protecting the environment and creating awareness since 2004. Indeed, the UNEP (2010, n.p.) lists a number of ways in which sporting events can impact the natural environment, including:

1. Development of fragile ecosystems or scarce land;
2. Noise and light pollution;
3. Consumption of non-renewable resources;
4. Consumption of natural resources;
5. Emission of greenhouse gasses;
6. Ozone layer depletion;
7. Soil and water pollution from pesticide use;
8. Soil erosion during construction and from spectators; and,
9. Waste generation from construction of facilities, and from spectators.

In the year of 2005 until 2013, NRDC allied with different associations and league such as the Major League Baseball (MLB), National Basketball Association (NBA), United States Tennis Association (USTA), National Hockey League (NHL), Major League Soccer (MLS), and The National Association for Stock Car Auto Racing (NASCAR). Other examples of organizations embracing event management environmental sustainability initiatives in sports can be found, including the “Green Goal” work done by the Federation Internationale de Football Association (FIFA) on the World Cup (FIFA, 2006), the Football Association’s FA Cup initiatives (Collins, Flynn, Munday & Roberts, 2007), the newfound focus on sustainability by the National Football League (NFL) and its flagship Super Bowl event (Scharwath, 2012), the 2010 Commonwealth Games (Sobhana, 2010), and the London 2012 Olympic and Paralympic Summer Games (Tian & Brimblecombe, 2008).

## The Olympic Games and Sustainable Development

According to Jacques Rogge, President of the International Olympic Committee, ‘The IOC is committed to promoting sustainable development and respect for the environment in and through sport. Our efforts are driven by two considerations: the impact that a degraded environment can have on the sport, and the effects that sport – and, in particular, the Olympic Games – can have on the environment.’(www.unep.org). Figure 2 indicates the vision of the Olympic Movement on sustainable development of the Olympic Games in Sydney 2000, Beijing 2008, and London 2012.



**Figure 2: The Visions of the Olympic Movement on Sustainable Development of Olympic Games**

Source: www.unep.org.

However, initially The International Olympic Committee (IOC) was slow to give acknowledgement on environmental considerations in the planning and delivery of the Olympic Games. During the 1992 Winter Olympics in France, environmental concerns were raised by the public for the first time, which eventually led to the first ‘Green Games’ in Lillehammer, Norway, in 1994. As such, the organizing committee of Lillehammer Olympic was awarded the “Global 500 Roll of Honour” by UNEP. They also set the environmental standards which were absent from previous Olympic games. Moreover, alongside sport and culture, The International Olympic Committee (IOC) made environment as the third pillar of the Olympic Movement as an effort to promote sustainable development. Indeed, the Olympic Movement’s Agenda 21 report highlights

the commitment of the organization to environmental sustainability. Later in 1995, IOC Sport and Environment Commission were created to support the effort (<http://www.olympic.org/sport-environment-commission>). This operation was continued at the Summer Olympics in Sydney in 2000. The Environmental Guidelines for the Summer Olympics were developed to ensure that facilities are constructed in a more environmentally friendly manner. As such, Olympic host was required to use the guidelines as can be seen during the 2000 Sydney Olympic Games. Based on Sydney Olympics 2000 (cited in Allen, O'Toole, Harris & McDonnell, 2011), these guidelines outlined several aspects, mainly in the planning and construction of Olympic facilities, energy and water conservation, waste avoidance and minimisation, air, water and soil quality, protecting nature and natural environments, merchandising, ticketing, catering, waste management, transport, and noise control. As a result, from the implementation of these guidelines, the Sydney Olympics is acknowledge as the 'greenest or most sustainable Games ever' (Campbell 2011 cited in Allen et al, 2011). Eight years later, the 2008 Beijing Olympics achieved the world's best environmental practice by using environmentally friendly methods to host the game. Previously, the existing technologies and system of the developing world were both polluting and destructive to the environment. In line with the theme "New Beijing, New Olympics", one of the purpose of the 2008 Beijing Olympics is to set up a "Green Olympics" (Yichen Han, Haojie Sun, Yu Dong & Yong Li, 2011).

In that regard, Beijing has been able to prove that concerted effort to opt for more sustainable approaches is made possible. For instance, one of the main refinements in Olympic venues is the introduction of state-of-the-art energy saving technology. This is proven where various technologies such as solar hot water, geothermal, and solar photovoltaic (PV) systems has been showcased in the Olympic Village. Hence, it represents a new paradigm by depending on green technology instead of polluting fossil fuels (Beyer, 2006). Furthermore, to improve the air quality to cater for the Games, Beijing takes a step further by increasing its new vehicle emissions standards to EURO IV thus making it the most stringent emissions standards in the world. Additionally, in order to reduce traffic congestion and emission from vehicles, and to promote usage of public transportation, Beijing has added four new rail lines in the city, as well as a direct line within the Olympic Green. (<http://chinesejil.oxfordjournals.org/>).



## **Issues and Challenges in Implementing Green Sports Tourism Events**

The implementation of green sports tourism events brings positive impact towards the environment. However, there are some issues and challenges that may be faced by the sports event organizers during the implementation of green concepts. Here are some of the pertinent issues and challenges that need to be encountered by the event organizers.

### **Participation of key stakeholders**

Before the event organizers decide to run a green sports event, they need to consider about the participation of key stakeholders because not all stakeholders may necessarily be supportive with the green concepts (Figueredo & Tsarenko, 2013). As most of the events are often organized by stakeholders with different and sometimes conflicting interests, and requiring collaborative alliances or partnerships as well as inclusion to be developed between the parties (Figueredo & Tsarenko, 2013), As such, in order to ensure success of the event, various stakeholders need to agree on the purpose and benefits of an event. The event organizers are always faced with the challenge of trying to attract the participants to participate and support the green practices.

Some of the participants do not know the importance of green event and why they should apply the green practices while attending an event. In addition, sponsorship decisions will be based on the focus on the green elements of the event, thus, sponsors might demand that particular pertinent information as well as material in supporting of the green credentials of event planners and managers.

### **Operational issues**

Event organizers need to consider the operational issues in order to improve the green practices in an event. Robbins et al. (2007) put forward that travel is a key issue for event management because the transportation is detrimental to the environment mainly due to greenhouse gas emissions. On top of that, there are also other negative impacts, particularly on the use of cars to reach event venues that may lead to traffic congestion and noise pollution (Ranjan, 2016; Liu & Wilson, 2014). Besides, waste management is also one of the aspects of operational issues that need to be considered

especially on events that cater for large numbers of individuals in fragile environments. This is because some event organizers lack of awareness on ways to implement green principles practically.

### **Promoting a message regarding a green event**

Furthermore, environment-friendly and culturally friendly operation and venue are not only the main elements in developing a green event as the event itself can also be a platform to promote the green message through several ways, such as themed displays, presentations, and food and beverage sales that is suitable with the green theme (Turco, Riley & Swart, 2002). The challenge of promoting the green message may happen when the event organizers did not successfully deliver the message to the participants. Probably the media coverage about the event is unclear and inappropriate. The participants may not realize about the green practices implemented in the event. Hence, the objective of the green event cannot be achieved successfully.

### **Administrative strategies**

Successful events are characterized by the effective and efficient use of all resources, including financial and human resources (Greenwell, Danzey-Busell, & Shonk, 2014). Unsuccessful events are often a result of incompetent personnel and inefficient financial management. Therefore, in this context, the challenges face by the event organizers are to recruit a suitable staff with the necessary qualifications and skills to perform the job successfully. Furthermore, designing proper training and maintaining the personnel workforce is essential. Indeed, most events rely on volunteers as well as the staff to create a successful event.

Subsequently, financial and budgeting are essential implementation strategies to ensure that the event incurs no loss, or, more important, makes a profit. For instance, in organizing a greener event, a more sustainable resource management can be attained by adjusting the pricing system. At the same time, resource shortage and pollution will be reduced too. This is supported by Turco, Riley and Swart (2002) who outlined the effectiveness of good financial planning in reducing air pollution and energy consumption through surcharges and consumption based taxes, particularly for high polluting vehicles.

## **Role of Stakeholders for Going Green in Sports Tourism Event Management**

At the beginning of the project itself, event greening should involve all the key players, such as participants and spectators, organizers, community, sponsors, media, and other suppliers (Laing & Frost, 2010). The key stakeholders in organizing sports tourism events are as follows:

### **Travel organization**

Travel and tourism organizations play an important role in green sports tourism development. Airlines and tour operators often initiate development by offering holiday packages to a green sport destination which includes transportation, lodging, supplies and also catering services. However, transportation is shown to have the highest carbon footprint, hence, careful consideration should be given to the ways of travelling to the venue. This can be done by encouraging vehicle efficiency and developing a system that encourages the use of public transport or shuttle bus in accessing to the event, therefore, reducing the traffic's impact on the environment.

### **Executive officer**

The role of an executive officer is to ensure the adherence of laws and regulations, or the right governance structure to oversee a destination successfully embark on a green strategy towards a sports event. For example, to ensure success of green sport tourism, the laws outlined should give emphasis mainly on environment protection through limiting potentially harmful development, control detrimental practices, and promoting healthy behaviour.

### **Government**

At the government level, the ministry of tourism and heritage should collaborate with other main ministries and local municipalities with its main focus on the green elements. Moreover, the ministry also plays a role in motivating and influencing of other stakeholders in both public and private sectors to work hand in hand. The ministry should also support the stakeholders to engage in behaviour that supports green sports tourism. For example, incentives, preferential marketing agreements and tax rebates can be given by policymakers to business in the tourism sector that adopt the green policy. Additionally, the ministry of tourism can also establish

an accreditation service that recognizes sustainable accommodations and services.

### **Green sports tourism managers and administrators**

A strong commitment and positive attitude towards their environmental effort of all staff are crucial in supporting the implementation of the green concepts towards sport tourism. Thus, a planning timeline must be sufficient and inclusive in their green event's agenda. The transparency is vital to the process of decision-making by sports managers and administrators as they are the role models who provide a safe environment at all times. As such, they must look at every aspect of the event for green possibilities.

### **Marketing and media**

When embarking on a green initiative, marketing officers need to make sure that the 'greening' of the event is properly explained on the website from the beginning and during the programme itself by utilizing every opportunity to talk about them. In addition, make sure that the material used for promotion, emails, and also tickets include the 'green' message. Besides, organizers can also run a poster campaign on green concepts which can be pasted on public transports to the event. Also, the event itself should include eco-stations and reminders for attendees to practice recycling and uphold environmental friendly practice such as using their own containers and waste prevention.

### **Sponsors**

It is pivotal that event organizers should also welcome feedback from individuals or organizations that have the 'green' expertise, namely vendors, sponsors, and non-profits and local organizations. Hence, through new sponsorship development, it can expand the opportunities with existing or new partners who want to be associated with the goals of eco-friendly theme. Thus, those sponsors and vendors can provide financial, organizational, and media support through funding, advertisements, infrastructure, and products that support the green effort.

## **SUGGESTION ON GREEN SPORTING EVENTS**

According to Nelson, Ross and Peters (2013), while there are many different approaches, model, and certification systems, the most basic elements of

a sustainable event include reducing energy use and carbon emissions, conserving water, maximizing recycling opportunities and minimizing waste headed to a landfill, supporting local business, providing access to all and building a positive legacy within the community. Specifically, here are some “green” suggestions for the sports event organisers to consider when planning and organizing a sports event:

1. Maximize social media, websites and electronic files instead of printed materials.
2. When unavoidable, print double-sided on recycled paper with bio-friendly inks.
3. Choose sustainable materials for participant and volunteer T-shirts (i.e. Bamboo, organic cotton, etc.)
4. Utilize bus routes and promote shuttle service for fans.
5. Provide bicycle racks and shelters.
6. Use biodiesel vehicles or electric golf carts for staff and athletes.
7. Request cleaning crews use eco-friendly cleaners.
8. Choose sports planners and meeting spaces that implement green policies.
9. Employ local companies for service and products.
10. Utilize green power (i.e. Solar, hydro, wind or human energy) for the duration of the event.
11. Promote and honour reusable traveller mugs, water bottles, and cloth bags throughout the event.
12. Highlight local and organic coffee, tea, fruit juices, and food products for special event menus.

## **CONCLUSION**

It is unlikely to create all events to become completely green, but all events can become greener. So, the event organizers should try to plan, organize, manage and stage a greener sport event in order to reduce the negative impacts and optimize the opportunities. Thus, each stakeholder should participate and support the green concept to ensure that the green message will be successfully delivered to the participants and communities. They should acknowledge the importance of green implementation that brings many benefits to the host community. The event organizers should make a plan and consider an effective and efficient strategy before implementing

the greener event. They need to identify the green focus areas, such as waste management, transportation, energy efficiency, water conservation, and selection of venue in their green sports tourism events planning. Indeed, managing events with consideration for environmental sustainability should be a priority for every event manager in the future.

Essentially, the sustainability of the events requires responsible actions, social and environmental protection, to meet the current needs of consumers and businesses, and agreeing to maintain or increase the resources for future generations to meet their needs. Thus, in designing, promoting, and running an event, the organizations and companies have to take into account of its direct and indirect impact on the stakeholders and the impact on the environment as well. Recent challenges to the event industry is to improve the environmental quality due to event programmes and activities which may cause pollution, such as large amount of waste and over excessive of resources. Thus, the role of the event organisers or planners are vital to ensure that the ecological- friendly or environmental-friendly events are engaged. In that regard, there is still a lack of related studies pertaining to green events especially in the context of organizing sports events. Thus, it is recommended that future research could be carried out to fill a gap in the literature about green events and further extend the related research to behaviour intentions as well as preferences to practice events greening among the event organisers and stakeholders.

## **ACKNOWLEDGEMENT**

The authors would like to extend their appreciation to Universiti Utara Malaysia and the 1st International Symposium on Festivals & Celebrations 2019 (ISFC2019) committee for their encouragement and support in making this research possible.

## **REFERENCES**

- Allen, J., O'Toole, W., McDonnell, I. & Harris, R. (2011). *Festival and Special Event Management*. (6th. Ed.). Milton: John Wiley & Sons Australia, Ltd.

- Available at: [https://www.london.gov.uk/sites/default/files/gla\\_migrate\\_files\\_destination/2012-sustainable-olympics.pdf](https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/2012-sustainable-olympics.pdf)(Accessed: 20/06/2019).
- Beyer, S. (2006). The Green Olympic Movement: Beijing 2008. *Chinese Journal of International Law*, 5(2), 423–440. <https://doi.org/10.1093/chinesejil/jml018>
- Case, R. (2013). *Events and the Environment*. New York: NY. Routledge.
- Casper, J. M., Pfahl, M. E., & McCullough, B. (2014). Intercollegiate Sport and the Environment: Examining Fan Engagement Based on Athletic Department Sustainability Efforts. *Journal of Issues in Intercollegiate Athletic*. <http://csri-jiia.org>
- Clewer, J. (2014). *A Model for Meeting and Event Venues to Implement Green Practices* (UNLV Theses, Dissertations, Professional Papers and Capstones). Retrieved from <https://digitalscholarship.unlv.edu/thesisdissertations/260>
- Collins, A., Flynn, A., Mundy, M., & Roberts, A. (2007). Assessing the Environmental Consequences of Major Sporting Events: The 2003/04 FA Cup Final. *Urban Studies*, 44(3), 457-476. Retrieved from <https://doi.org/10.1080/00420980601131878>
- Federation Internationale Football Association (FIFA). (2006). Green Goal-Environmental Goals for the 2006 FIFA World Cup. Retrieved from <http://www.Oeko.de/oekodoc/169/3003-044-en.pdf>
- Figueredo, F. & Tsarenko, Y. (2013). Is ‘Being Green’ A Determinant of Participation in University Sustainability Initiatives? *International Journal of Sustainability in Higher Education*, 14, 242-253. Retrieved from <https://eric.ed.gov/?id=EJ1014217>.
- FISA (2013). BMW Partner with World Rowing for Clean Water. Available at: <http://www.worldrowing.com/news/bmw-partners-with-world-rowing-for-clean-water> (Accessed: 20/04/2016).

- Goldblatt, J. (2011). *Special Events: A New Generation and the Next Frontier* (6th. Ed.). New Jersey: John Wiley & Sons, Inc.
- Great London Authority (2012). The Environment Sustainability Of the London 2012 Olympic Game and Para Olympic Game. Retrieved from [https://www.london.gov.uk/sites/default/files/gla\\_migrate\\_files\\_destination/2012-sustainable-olympics.pdf](https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/2012-sustainable-olympics.pdf).
- Greenwell, C. T., Danzey-Bussell, A. L., & Shonk, J. D. (2014). *Managing Sport Events*. Champaign, IL: Human Kinetics.
- Holmes, K.; Hughes, M.; Mair, J.; Carlsen, J. *Events and Sustainability*; Routledge: London, UK, 2015.
- International Olympic Committee. (2012). Sustainability through Sport: Implementing the Olympic Movement's Agenda 21. Retrieved from <http://www.ourplanet.com/ioc/ioc.pdf>.
- Jenkins, H (2012).The Environment Impact of Sport- The case of football. Available at: [https://www.cardiff.ac.uk/\\_\\_data/assets/pdf\\_file/0010/348661/the-environmental-impacts-of-sport-the-case-of-football.pdf](https://www.cardiff.ac.uk/__data/assets/pdf_file/0010/348661/the-environmental-impacts-of-sport-the-case-of-football.pdf) (Accessed: 20/04/2016).
- Kaufmann, H. R., Panni, M. F. A. K., & Orphanidou, Y. (2012). Factors Accepting Consumer's Green Purchasing Behavior: An Integrated Conceptual Framework. *Amfiteatru Economic*. 14, 31, 50–69. Retrieved form [http://www.amfiteatruconomic.ro/temp/Article\\_1100.pdf](http://www.amfiteatruconomic.ro/temp/Article_1100.pdf).
- Keshminder, J. S. (2018). Environmental Developments in Malaysia: A Review on Challenges and Opportunities Ahead to Eco-Innovate. *Malaysian Journal of Sustainable Environment*, 5 (2), 1-14. Retrieved from [http://www.myse.my/#templatemo\\_journal6.1](http://www.myse.my/#templatemo_journal6.1).
- Laing, J., & Frost, W. (2010). How Green Was My Festival: Exploring Challenges and Opportunities Associated with Staging Green Events. *International Journal of Hospitality Management*, 29, 261–267. Retrieved from <http://course.festivals.coplacdigital.org/wp-content/uploads/2016/01/laing.pdf>.



- Liu, D., & Wilson, R. (2014). The Negative Impacts of Hosting Mega-Sporting Events and Intention to Travel: A Test of the Crowding-Out Effect Using the London 2012 Games As An Example. *International Journal of Sports Marketing and Sponsorship*, 15(3), 12–26. Retrieved from <http://doi.org/10.1108/IJSMS-15-03-2014-B003>.
- Liu, Y. De. (2018). Legacy Planning and Event Sustainability: Helsinki as the 2012 World Design Capital. *Sustainability (Switzerland)*, 10(7). Retrieved from <http://doi.org/10.3390/su10072453>.
- Make Green Growth a Priority (Oct, 19, 2018). THE STAR, p. 6. Retrieved from <https://www.thestar.com.my/news/nation/2018/10/19/make-green-growth-a-priority-we-must-focus-on-making-sustainable-development-a-mainstream-goal/>.
- Malaysia. (2015). *The Eleventh Malaysia Plan, 2016-2020*. Putrajaya: Percetakan Nasional Malaysia Berhad.
- Mohd Shobri, N.I., Wan Ali, W. N. A., Mt Akhir, N., & Md Sakip, A. R. (2017). Carbon Footprint Assesement at Universiti Teknologi Mara Seri Iskandar Campus, Malaysia. *Malaysian Journal of Sustainable Environment*. 2(1), 59-72. Retrieved from <http://myjms.mohe.gov.my/index.php/myse/article/view/5576>.
- Moise, D., & Macovei, O.I. (2014). Green Events - The new Responsibility of the Organisations. *Romanian Journal of Marketing*. Retrieved from <http://connection.ebscohost.com/c/articles/99420661/green-events-new-responsibility-organizations>.
- Nelson, E., Ross, J., & Peters, K. (2013). Eco-Friendly Events: Tips for Hosting a Sustainable Sporting Event. Retrieved from (<https://www.sportsdestinations.com/management/other/eco-friendly-events-tips-hosting-sustainable-sport-5842?>).
- Osterwalder, R. (2015). Communicating Sustainability in Green Winter Sport Events: The FIS Nordic World Ski Championship Falun 2015. (Master dissertation). Retrieved from <https://stud.epsilon.slu.se/8295/>.

- Perić, M., Durkin, J., & Wise, N. (2016). Leveraging Small-Scale Sport Events: Challenges of Organising, Delivering, and Managing Sustainable Outcomes in Rural Communities, the case of Gorski kotar, Croatia. *Sustainability (Switzerland)*, 8(12). <http://doi.org/10.3390/su8121337>.
- Praveena, L. (2013). Green Tourism as a Demand Driver for Destination Branding of India. *International Journal of Applied Services Marketing Perspectives*, 2(1), 268–272.
- Preuss, H. (2013). The contribution of the FIFA World Cup and the Olympic games to green economy. *Sustainability*, 5, 3581-3600. Retrieved from [www.mdpi.com/journal/sustainability](http://www.mdpi.com/journal/sustainability).
- Ranjan, W. (2016). A Study of Analysis and Evaluate Issues and Challenges in Sport Events. *IOSR Journal of Sports and Physical Education*, 3(4), 25–29. Retrieved from <http://doi.org/10.9790/6737-03042529>.
- Rittichainuwat, B., & Mair, J. (2012). An exploratory Study of Attendee Perceptions of Green Meetings. *Journal of Convention & Event Tourism*, 147-158. Retrieved from <https://doi.org/10.1080/15470148.2012.706786>.
- Robbins, D., Dickinson, J., & Calver, S. (2007). Planning Transport for Special Events: A Conceptual Framework and Future Agenda for Research. *International Journal of Tourism Management*, 9, 303-314. Retrieved from <http://dx.doi.org/10.1002/jtr.639>.
- Scharwath, K. (2012, February 3), The Super Green Bowl. Environmental News Network. Retrieved from <http://www.enn.com/lifestyle/article/43947>.
- Sobhana, K. (2010, September 7). Games Committees Ropes in Players to Counter Footprint in 2010. Retrieved from <http://www.indianexpress.com/news/games-committee-ropes-in-players-to-counter-carbon-footprint-in-2010/513827/0>

- Sydney (2000). Environmental Guidelines. Sustainable Development Principles in Action: Learning from the Sydney 2000 experience, CD-ROM resource, Green and Gold Inc.
- Tian, Q.T., & Brimblecombe, P. (2008). Managing Air in Olympic Cities. *American Journal of Environmental Sciences*, 4(5), 439-444. Retrieved from <https://pdfs.semanticscholar.org/9d0e/f1451ebfdc75adbf863697c5d788935fddc8.pdf>.
- Turco, D.G., Riley, R., & Swart, K. (2002). Sport Tourism. Morgantown: Fitness Information Technology.
- UNEP magazine for youth, 30(1), p 8. Retrieved from [www.unep.org](http://www.unep.org).
- United Nations Environment Programme. (2010). About UNEP, Sports and the Environment. Retrieved from <http://knowledge.wharton.upenn.edu/article/reducing-sports-impact-environment>.
- World Tourism Organisation. (2007). A Practical Guide to Tourism Destination Management. Spain: World Tourism Organisation.
- Yichen Han, Haojie Sun, Yu Dong., & Yong Li. (2011). The Sports Tourism Impacts – zxThe Case of Olympics events. The proceeding in 2011 International Conference on Future Computer Science and Education, 71-74. DOI: 10.1109/ICFCSE.2011.26.

