

Module 2. Sustainability in Sport Events

Unit 2.1

Introduction

This module aims to provide participants with an understanding of key issues surrounding sustainability for sport events, leagues, and competitions, covering developments across all three sustainability pillars (i.e., economic, social, and environmental). Sport organisations need to effectively balance their short-term goals with long-term sustainability to ensure the viability of events, leagues, and competitions over time.

First, we will attempt to define sustainability and provide a background to its application in the sport event context. Next, we will provide an overview of related developments across the three pillars, highlighting areas in which policy and practice have concentrated. Subsequently, we will present a case study to further discuss these developments. Finally, we will conclude by summarising the key sustainability benefits and challenges for sport events by introducing a related activity.

Sustainability in sport events: definition and background

Prior to focusing on the context of sport events, leagues, and competitions, we first need to define the concept of sustainability. It is worth noticing that there are over 200 definitions of sustainability in the literature (Parkin, 2001). However, the most frequently cited **definition** seems to be the one provided by the United Nations *Brundtland Commission Report*, which defines (the interchangeable to sustainability term of sustainable development) as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development [WCED], 1987, p. 41).

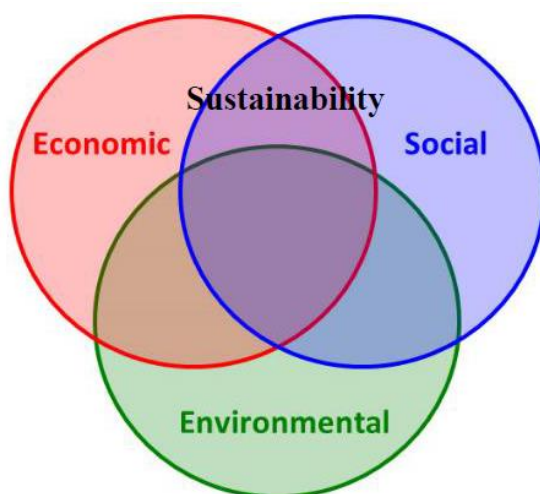
The Brundtland report not only presented this definition, but also shed light on the roots of environmental degradation, while emphasising the interconnectedness between economic growth, social issues, and environmental concerns (WCED, 1987). Furthermore, the report outlined some international guidelines, which later became known as the Millennium Development Goals (MDGs), to guide the international community toward



achieving sustainable development. These goals served as the predecessors of the seventeen Sustainable Development Goals (SDGs), which were introduced in 2015.

The literature agrees that sustainability comprises economic, environmental, and societal dimensions, which can be depicted as per figure 1 below. While economic sustainability focuses on the provision of physical resources into the production system (Goodland, 1995), environmental sustainability concentrates on the preservation and maintenance of the physical environment (Sutton, 2004), and social sustainability takes a focus on basic social values such as equity and democracy (Sachs, 1999). This three-dimensional, or triple bottom-line approach, recognises that “a desired level of ecological, social, and economic sustainability cannot be achieved separately without at least achieving a basic level in these areas simultaneously” (Elkington, 1998, p. 75), i.e., without ensuring liveability, equity, and viability (Ulloa-Hernandez *et al.*, 2023). The overlapping zone where sustainability lies implies that win-win situations between the three dimensions can also be achieved (Ehnert *et al.*, 2013).

Figure 1. The sustainability dimensions



Source: Mai, 2023, p. 15.

Making sustainability assessments for sport events can be challenging. Sport, by nature, is widely considered one of the most cost-effective and versatile tools to promote United Nations values and achieve the Sustainable Development Goals (SDGs). Since the inception of the MDGs in 2000, the predecessors of the SDGs, sport has played a vital role in enhancing all goals (Lemke, 2016). However, in recent times, there has been increasing criticism directed towards international sports organisations regarding the detrimental environmental impacts of global sporting events such as the Football World Cup, the Olympic Games, and others. Voices have called on the organisers of these (particularly international and mega) sport events to take on more responsibility and implement all measures to reduce negative environmental impacts and maximise social and economic benefits.



Furthermore, several initiatives, associations, and certifications have been developed that can influence, guide, and promote sustainability within the event-hosting sphere (Parent and Ruetsch, 2021). United Nations (UN) initiatives, such as MDGs and SDGs, even though largely government-focused, also ultimately influence sport sustainability practices. The UN, in collaboration with the International Olympic Committee (IOC), has developed the 'Sports for Climate Action Framework.' Participants in the Sports for Climate Action initiative commit to adhering to a set of five principles, as depicted in figure 2.

Figure 2. Sports for climate action framework principles



Source: Aeon Strategy, 2023.

These principles are incorporated into strategies, policies, procedures, and are mainstreamed within the sports community, setting the stage for a wider dissemination of the message and long-term success (UN, 2023). Signatories of the framework include international and national Olympic and Paralympic committees, international and national federations (including, for example, FIFA for football, FIBA for basketball, FEI for Equestrian Sports), leagues (e.g., Premier League, La Liga, Tennis Australia, Swedish Athletics Association), events (e.g., Paris 2024, Birmingham 2022 Commonwealth Games, Rugby League World Cup 2021), clubs (e.g., Arsenal FC, Liverpool FC, LA Galaxy), and media outlets (e.g., BBC Sports, Sky Sports, Channel 4). See UN (2023) for details, including a full list of participants.

Several associations have also been established to motivate sports organisations to focus on sustainable development. The most prominent among these are the European Football for Development Network (whose mission is to inspire and support all professional football clubs, leagues, and football associations within the UEFA territory to become



socially responsible [see www.efdn.org]) and the Green Sports Alliance (aiming to leverage the cultural and market influence of sports to promote healthy, sustainable communities where we live and play [see <https://greensportsalliance.org/>]). Moreover, environmental certifications, such as ISO 14000 about environmental management (International Organization for Standardization [ISO], 2015) and ISO 20121 about sustainable events (ISO, 2012), can further attest to the sustainability compliance of sports organisations. Particularly, ISO 20121 has been developed to relieve the strain from hosting events on local infrastructure and utilities, thereby reducing the potential for conflict in communities where events are hosted. The IOC and UEFA have also established the Global Reporting Initiative (GRI) Event Organisers Sector Supplement. This supplement provides guidelines for reporting sustainability activities and is acknowledged by the IOC as an appropriate standard for reporting Olympic Games sustainability and social responsibility activities (Parent and Ruetsch, 2021).

As a result, several global sport events have recently **incorporated sustainability practices** in their organisation, including the 2020 Olympic Games in Tokyo, the 2022 World Commonwealth Games in Birmingham, and the 2022 World Cup in Qatar. The organisers of the 2024 Paris Olympics are also planning to implement measures to cut the Games' carbon emissions by 50%, compared to the average of the London 2012 and Rio 2016 Olympic Games (Yang, 2023). Paris 2024 will be the focus of our case discussion. Event, league, and competition organisers, such as FIFA and UEFA, have also integrated sustainability considerations into their strategies, with UEFA particularly noticing the benefits that its 'strength through unity' sustainability strategy may bring in mobilising the European football ecosystem to invest in football's future prosperity (UEFA, 2021a).

Major sport events inevitably have a **significant impact** on the environment in many ways—from the construction of venues and the use of resources and energy to the effects of travel on competitors, media, and spectators. The impacts that a sporting event may have on local communities and the wider environment, both negative and positive, can be assessed from environmental, economic, and social perspectives, and all of these must be considered in the design and organisational process (Yang, 2023).

What are the three dimensions that sustainability comprises?

Economic.

Environmental.

Societal.

Policies.

Ensuring economic sustainability for sport events



Sustainability from an economic perspective is achieved by reducing costs while maximising the economic benefits of a sport event. One way to accomplish this is by using, for example, existing infrastructure and transportation networks, as well as collaborating with local businesses and suppliers to reduce transportation expenses (Yang, 2023). Achieving economic sustainability for sports events, leagues, and competitions necessitates thorough financial planning, including undertaking feasibility studies, preparing budgets, and securing funding. It also involves meeting licensing and fair play requirements and ensuring that collective bargaining agreements are in place.

Financial planning

Sport events require careful financial planning and control from the outset. A crucial part of this process involves preparing a budget and establishing financial targets. Additionally, event finances must be managed on an ongoing basis throughout the entire process. Acquiring funding and exercising control over expenditure are also essential aspects of financial planning for events (Masterman, 2021).

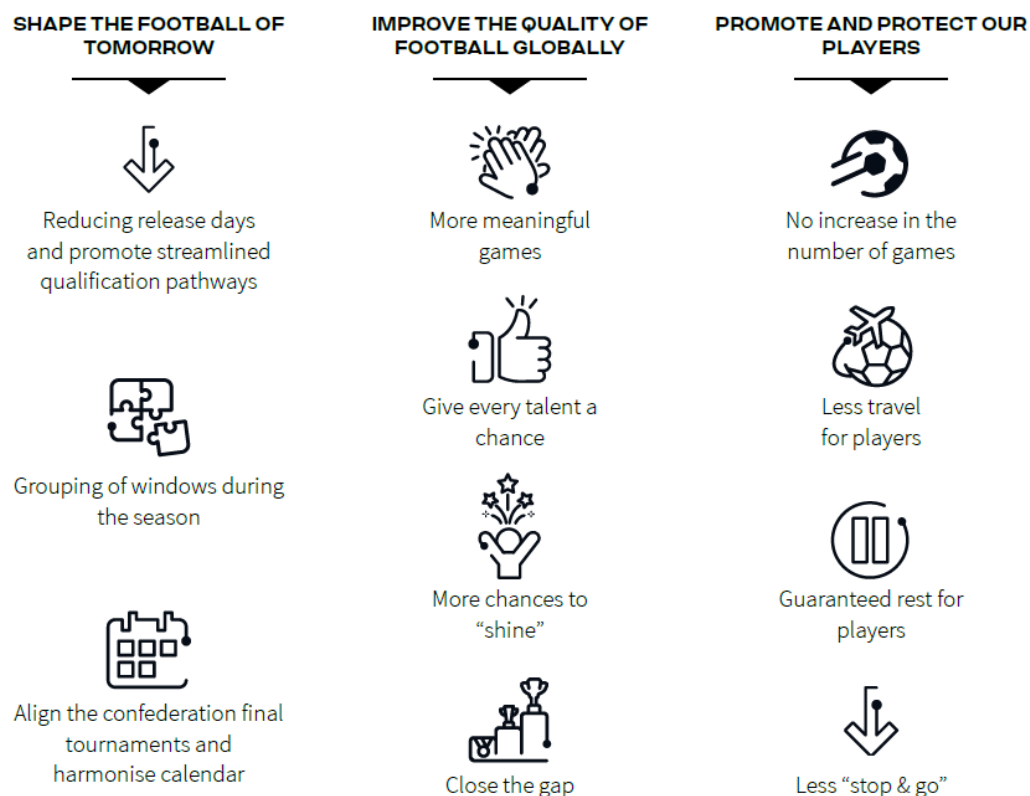
Financial planning begins by defining the goals and objectives of the event owners or rights holders (e.g., FIFA, CGF), which are then integrated to various extents into the bid/organising committees' vision, mission, and goals. Subsequently, event rights owners and the organising committee make strategic, long-term decisions for the event, as well as for a specific edition of the event (e.g., expanding the brand, entering new markets such as the Middle East with FIFA). Next, they consider specific operational decisions to understand how the predetermined objectives translate on the ground for a given edition of the event. Budgets are then used, to help define the costs involved in turning those operational decisions into reality. Lastly, continuous monitoring and correction take place (ongoing evaluation and tracking), where individuals are assigned responsibility for specific revenues and/or expenditures (Parent and Ruetsch, 2021).

Constructing a **feasibility study** is the first and one of the most crucial parts of financial planning. It provides a comprehensive analysis of the costs and benefits of the proposed event, considering its economic, social, cultural, and political implications. The results of the feasibility study should determine the fate of the project. However, a positive result in a feasibility study is not a guarantee of success; it merely indicates the level of risk involved. The more positive the results of a feasibility study are, the less risky it is to proceed with the event. All major sport events, whether successful or not, have been preceded by a feasibility study that ensured their viability. Nonetheless, whether the expected outcomes from the feasibility study are realised or not depends, among other factors, on whether the study has been conducted correctly or if it is unduly influenced by the political agendas of stakeholders (Westerbeek *et al.*, 2015).



FIFA (2022) has famously considered the idea of organising World Cups on a biennial basis and conducted a related feasibility study to present to its stakeholders. One of the threshold criteria for assessing the feasibility of the project was whether it could be implemented in a manner that yields positive impacts on the football landscape in terms of the international calendar, football quality, and player protection. Figure 3 summarises the key identified benefits. Despite the feasibility study's suggestion to go ahead with the project, it did not happen due to the opposition from players and other stakeholders around the world (Murphy, 2022).

Figure 3. Benefits of hosting a biennial FIFA World Cup



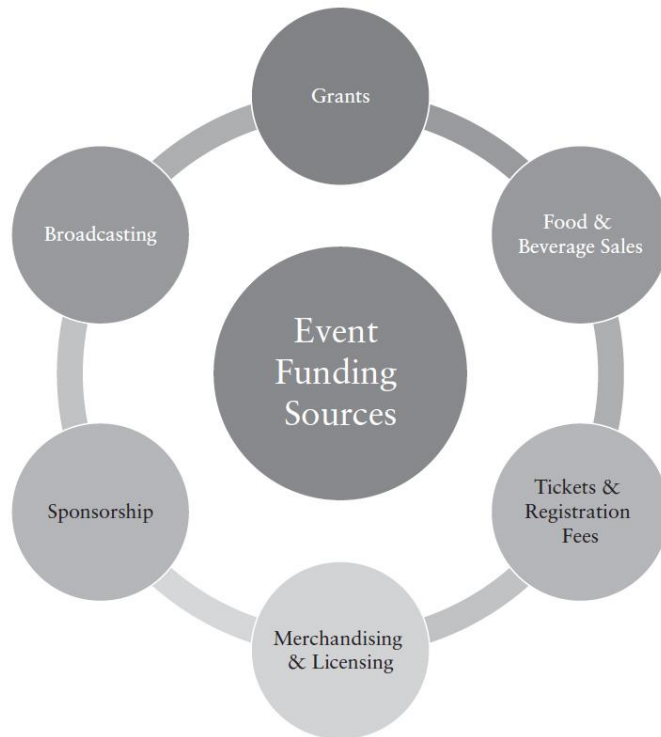
Source: FIFA, 2022, p. 65.

Major sport events often involve preparing two types of **budgets**: an operating budget, which is the budget for the organising committee and often excludes capital costs (venue construction), and the capital budget, which is the budget for capital expenditures only. Both types of budgets have two core entries: the revenues (what comes in, i.e., inflow of assets) and the expenses or expenditures (what goes out, i.e., outflow of assets). Several **financial controls** may be implemented in sport events to ensure budget targets are met. These would include assigning individuals as having the responsibility for certain parts of the budget, using the tendering process for major jobs, creating cost centres, and using financial reporting tools such as annual reports, budget revisions, and cash flow analyses. Additionally, inventory control systems and financial planning tools like breakeven analysis may be used to estimate elements such as ticket prices (Masterman, 2021).

Despite implementing these controls, costs typically exceed budgeted figures. For example, Flyvbjerg and Stewart (2012) found that all Olympic Games budgets between 1960 and 2012 experienced cost overruns compared to their bid budgets, averaging 179%. Becker *et al.* (2022) examined four major sports events held in Norway (1994 Lillehammer Winter Olympics, 2011 FIS World Skiing Championship, 2014 FIDE Chess Olympiad, and 2017 UCI World Road Cycling Championships) and found that these experienced financial challenges. Parent and Ruetsch (2021), with reference to the London 2012 case, emphasised several factors contributing to these overruns, including time lags from bidding to the event, governments underestimating risks, decision-making biases, and inadequate technical understanding during planning. Becker *et al.* (2022) also identify common drivers of financial problems, such as an excessive focus on event legitimacy, utilisation of soft-budget practices, and undue influence from political interests. The authors propose that a more structured approach, including a separation of risk-bearing, decision-making, and decision-control, could help mitigate the factors that contribute to cost overruns (Becker *et al.*, 2022).

Sport event organisers must also ensure appropriate sources of **funding**. Parent and Ruetsch (2021) identify six main sources of funding for sports events, as depicted in figure 4 below. While financial planning often emphasises ticket pricing and registration fees, from an IOC marketing revenue-generation perspective, broadcasting and sponsorship are the primary revenue sources at 73% and 18%, respectively. Findings from England's football Premier League and Spain's LaLiga also highlight the increasing significance of broadcasting revenue over the years (Buraimo *et al.*, 2010).

Figure 4. Event funding sources



Source: Parent and Ruetsch, 2021, p. 92.

Constructing a _____ is the first and one of the most crucial parts of financial planning.

Answer: feasibility study.

Licencing and fair play

Sustainability from an economic perspective is also predicated on meeting licensing and fair play requirements. Financial regulations have been established to prevent particularly professional football clubs from spending more than what they earn in the pursuit of success. In doing so, they aim to avoid getting into financial problems that might threaten their long-term survival. In 2011, UEFA introduced its first set of 'Financial Fair Play' (FFP) regulations. These regulations aimed to instil fiscal prudence, ensure long-term club financial stability, and foster competitive balance across leagues. The initial implementation brought sanctions and fines, affecting clubs ranging from major ones like Manchester City and Paris Saint-Germain to others like Galatasaray, Dinamo Zagreb, FC Astana, and Metalurh Donetsk. Despite the controversy surrounding its concept of competitive balance, FFP yielded positive financial outcomes, as evidenced by the first-ever collective profit reported by top-division clubs in 2017 (Ramchandani *et al.*, 2023).

UEFA's FFP regulations were firstly introduced as an extension of its existing **licensing regulations**. UEFA's club licensing regulations, originally enacted in 2003, define



minimum requirements that professional clubs must fulfil as a prerequisite for being granted a 'UEFA license' in five categories: sporting, infrastructure, personnel, and administrative, legal, and financial criteria. From the outset, UEFA opted to deploy the national associations or their appointed leagues as the licensing body. This was done to extend the licensing system from only including clubs that had qualified for European competitions to also include all would-be participants in the domestic top-flight leagues. Similar licensing agreements are offered across different sports leagues and competitions (Müller *et al.*, 2012).

On 1 June 2022, UEFA's Club Licensing and Financial Sustainability Regulations (the 'FSR') came into full effect, replacing its previous licensing and FFP regulations. The **new rules** limit club spending on wages, transfers, and agents' fees from 90% to 70%. They also double the permitted losses over a three-year period from €30m to €60m, provided they are covered by cash injections (Stone, 2022). UEFA is also planning to change its Financial Fair Play rules in response to Chelsea's recent trend of signing players to long-term contracts. Extended contracts allowed the team to spread the player's transfer fee over the life of that deal when submitting their annual accounts. UEFA now plans to set a maximum five-year limit over which a transfer fee can be spread (Stone, 2023). Leagues also set their own Financial Fair Play rules, with the English Premier League, for example, only allowing clubs to accumulate losses of £105m over a three-year period.

Collective bargaining agreements

Collective bargaining agreements (CBAs) ensure long-term sustainability for leagues and competitions, as they allow for long-term planning. CBAs trace their roots in labour law, alongside other employee rights, such as the rights to organise and join unions. CBAs often result from **extended negotiations**, such as the ones in relation to the NBA lockout in 1999, which is briefly overviewed next:

On January 20th, 1999, the longest lockout in the National Basketball Association's history ended after 205 days. The league lost \$1 billion in revenue, while players forfeited \$500 million in salary. The crux of the dispute was how revenue should be divided between owners and players. The stumbling block was the maximum contract, a limit on an individual's salary as a percentage of total revenue accorded to the players; this pitted players against each other. As time wore on, the cohesion of the union fractured, and the NBA became the first major league to adopt maximum contracts. While such contracts depress the salaries of stars and



increase those of non-stars in the immediate term, all players may benefit in future collective bargaining negotiations over the split of revenue. (Vohra, 2023, p. 2).

Collective bargaining agreements in leagues can play a crucial role in distributing revenues, which, as discussed earlier, often stem from broadcasting. Related agreements can be quite complex. For instance, in LaLiga, the premier football league in Spain, a percentage of the rights is divided equally among clubs. Another percentage is allocated based on a weighted average of the standings over the last five seasons, while yet another percentage is determined by assessing the clubs' social impact (including revenues from season ticket holders, attendance, and participation in televised matches) (Carreras and García, 2018). Even though these agreements undergo annual reviews, they influence the competitive balance in leagues and competitions. It is crucial to ensure their precision to prevent an escalation of financial inequality among the participants (Carreras and García, 2018).

Ensuring social sustainability for sport events

Unlike economic sustainability, which is well-established, defining the social and environmental sustainability aspects of sport events is still a matter of ongoing development. The social sustainability perspective primarily pertains to the effects of events on local communities, including their legacy (Yang, 2023). However, it is equally important to ensure that fair labour practices and respect for broader human and labour rights are incorporated into the event organisation to prevent any negative social impacts.

Sport events have an impact on host communities, encompassing both **direct impacts** felt by the local community and **indirect effects**. This distinction is important because many indirect impacts have previously been omitted from discussions on social impacts, despite their potential to affect the lives of community members. Direct impacts of events include employment opportunities, volunteering, and upskilling prospects, enhanced social cohesion and social capital, improved inclusion and tolerance of diversity, and increased levels of sports participation and infrastructure. These impacts have long been recognised as social outcomes of events. However, indirect impacts of events also hold the potential to influence local communities, either positively or negatively. These include the creation of new business and government networks, the showcase effect of destination branding, disaster preparedness, and improved accessibility for people with disabilities (Mair and Smith, 2021).

Sport events have an impact on host communities:



- **Encompassing both direct impacts felt by the local community and indirect effects.**
- Only indirectly.

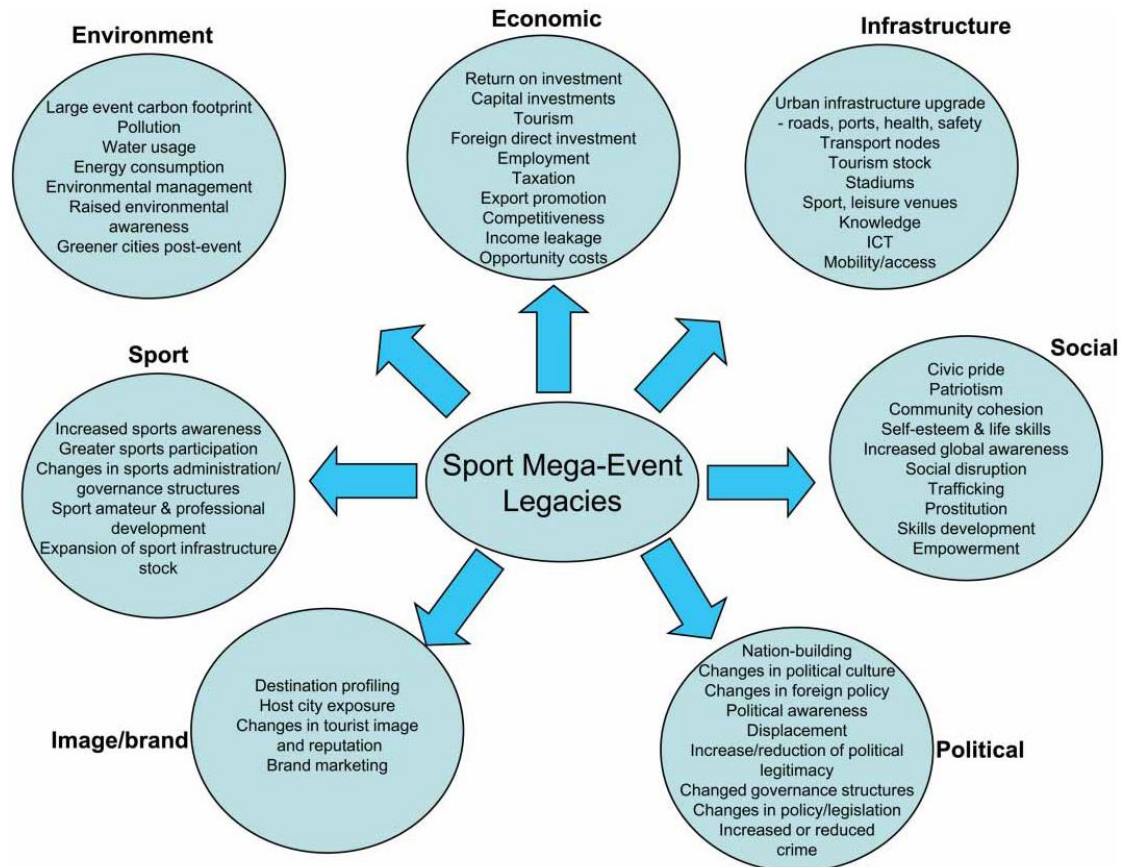
Legacy

Sporting events hold significant prominence in the global arena, often accompanied by substantial investments from host cities and countries. This has fuelled a growing interest in analysing their **lasting impacts**. Assessing legacy, however, appears to be quite challenging, as there is little agreement in the literature on what the term 'legacy' entails or how it should be defined (Cornelissen *et al.*, 2011).

As Kasimati (2003) observes, hosting an event such as the Summer Olympics may bring several potential long-term benefits to the host city. These benefits include newly constructed event facilities and infrastructure, urban revival, enhanced international reputation, increased tourism, improved public welfare, additional employment, and increased inward investment. However, in practice, hosting the event can also have potential downsides, such as high construction costs of sporting venues and related investments, particularly in transport infrastructure. Other challenges include temporary congestion problems, displacement of other tourists due to the event, and underutilised elite sporting facilities after the event, which offer little use to the local population (Gratton *et al.*, 2006).

Building on the influential work of Chappelet and Junod (2006), Cornelissen *et al.* (2011) identify seven types of sport mega-event legacies, as depicted in figure 5 below.

Figure 5. Types of sport mega-event legacies



Source: Cornelissen *et al.*, 2011, p. 311.

The authors have found the above scheme useful in their assessment of the legacy of the 2010 World Cup held in South Africa. They particularly notice the importance of integrating triple bottom-line principles consistently and systematically (i.e., focusing on all three sustainability dimensions) into mega-event planning, design, and evaluation (Cornelissen *et al.*, 2011). Parent and Ruetsch (2021) further notice that “legacy can be translated into a myriad of ways” (p. 409) and highlight the importance of each individual stakeholder in translating benefits.

The authors stress that, while working for an organising committee, your focus is on planning services and operations for the mid- to short-term, nowhere near the thirty-year span required to assess the impact of events. Additionally, they provide the following **practical insights** from a Ruetsch’s organising experience during UEFA EURO 2016.

Community legacy practical insights

According to Parent and Ruetsch (2021):

The social responsibility and sustainability programme for the UEFA EURO 2016 was designed to have a positive impact in France. One of the priorities was to have



a tobacco-free tournament. Measures to be implemented at the venue level by the different FAs were rolled out top-down, with no distinction made between FAs.

One of these measures was to have sustainability volunteers walk around the stadia's outside concourse to make populations aware that the venue was a tobacco-free environment. To do so, upon spotting someone reaching for a pack of cigarettes or lighting up, they would present them with a red card to condemn their behaviour and instruct them to go outside the perimeter to smoke.

Usually, protocol guests are segregated from other populations, but not in Toulouse. As part of our operations, because of the way the stadium, roads, and access points were designed, we had to use the outside concourse, interrupting spectator flow if needed, as in the case of dignitary arrivals. But red carding a head of state was not an option!

I am sure there are other ways to address the issue of smoking on venue with this client group. Rather than sanctioning them, should not efforts be geared towards leveraging their influence and power, using their image and egos to softly coerce them into supporting the measure for 90 minutes? What communication beforehand had gone to this group to inform them of this zero-tolerance policy and the potential benefits to them? 'Lead by example' is not always the most convincing argument for this population; they also need to be sold on ideas.

As tournament-time staff, I had no influence on the development of the social responsibility and sustainability programme. If only FAs has been individually consulted, maybe more efficient, impactful, and relevant measures could have been designed.

Eventually, I managed to have the sustainability volunteers stay outside the protocol zone and set up a small hidden smoking area just by the VIP drop-off. UEFA EURO 2016 operations were certified as a sustainable event management system (ISO 20121). (p. 410).

Parent and Ruetsch (2021), however, observe that, at the league level, "legacy and sustainability still feel more like administrative tasks rather than initiative-taking efforts or common sense" (p. 409). Nonetheless, federations such as FIFA and UEFA, along with national funding providers, such as the UK Sport/National Lottery, are increasingly considering legacy before awarding and sponsoring events. For example, on the eve of



the opening game, FIFA President Gianni Infantino announced that the FIFA World Cup Qatar 2022™ Legacy Fund would adopt a more global approach by emphasising educational projects for children, especially girls and women, in developing countries (FIFA, 2022). This approach aims to provide them with more opportunities to succeed. We will also consider legacy in the sport event ethics module.

Human rights

Human rights are a growing area of attention for sport event organisers and are widely considered a crucial aspect of social sustainability. The fundamental principles of human rights doctrine are outlined in the Universal Declaration of Human Rights (UDHR) in 1948, which asserts that every individual worldwide deserves to be treated with dignity and equality.¹

Although the concept of human rights has been established for a long time, its application within the context of sport event management has gained attention more recently. UEFA, for example, expressed its commitment to human rights in its sustainability strategy released in 2021.

As the federation highlights:

We strive for an inclusive culture in which no one is discriminated against or excluded based on any personal traits, whether playing, coaching, refereeing, or organising the game, and including all aspects of the game itself and any activities connected to it. (UEFA, 2021b, p. 30).

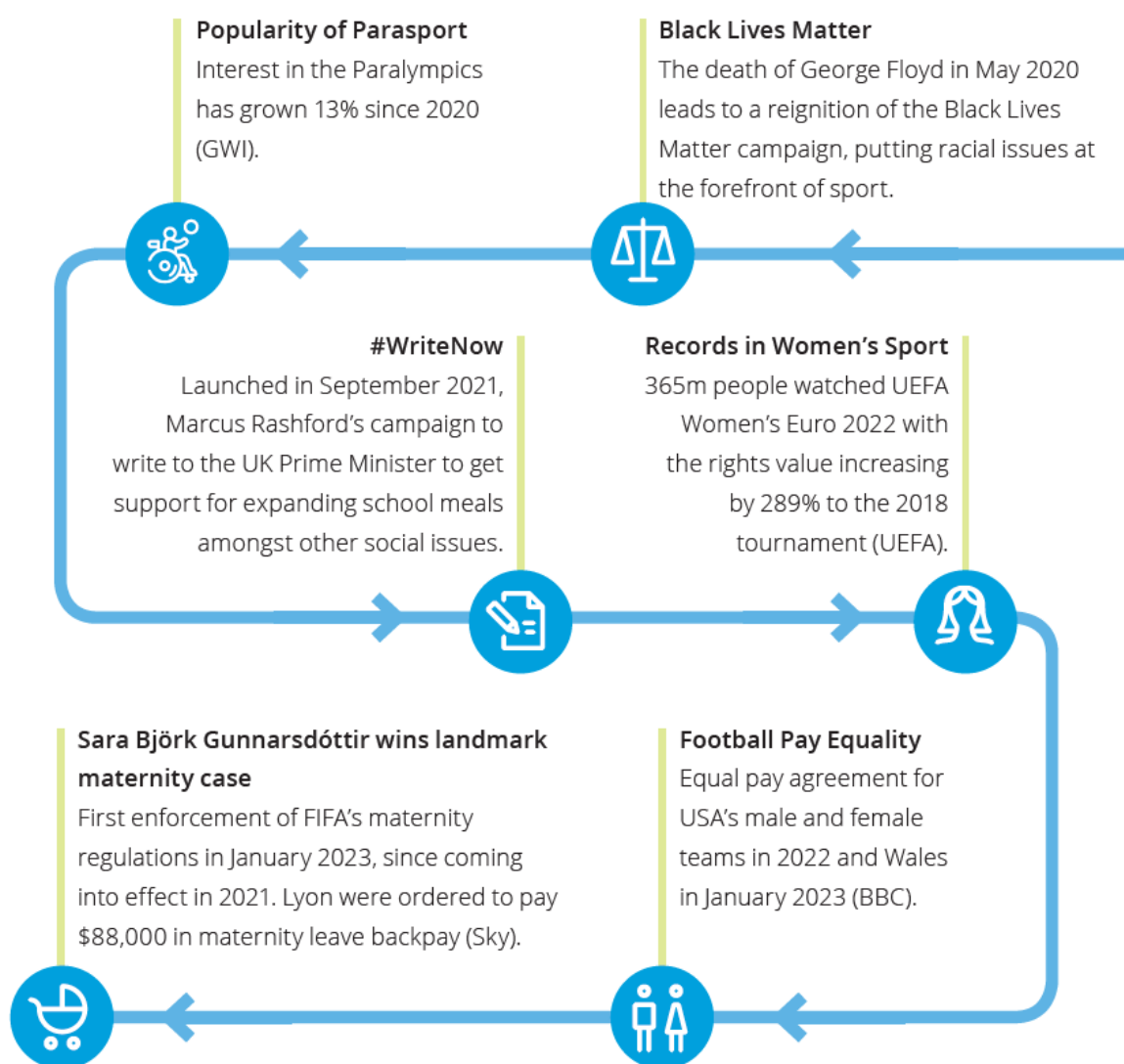
Furthermore, UEFA aims for football to serve as a platform for promoting human rights within broader society, engaging with society and governments on crucial topics, and providing information and education. In the realm of human rights, UEFA has outlined policies and initiatives in relation to anti-racism, child and youth protection, diversity, equality, and inclusion, as well as refugee support and solidarity. Importantly, UEFA has also documented some related achievements and set targets to guide future action. Similarly, national leagues and competitions have issued statements emphasising human rights. For example, the English Premier League has released an anti-slavery and human trafficking statement. However, it is important noticing that these statements are not always accompanied by evidence to support the related claims or to monitor progress.

¹ Universal Declaration of Human Rights. (1948). Proclaimed by the United Nations General Assembly in Paris on 10 December 1948 (General Assembly resolution 217 A).



Deloitte (2023) has specifically highlighted diversity, equity, and inclusion (DE&I) as a significant macro-force driving change and shaping the future of sports. We have also discussed diversity developments in the first module. Deloitte (2023) emphasises that DE&I is a critical priority, especially for younger generations. Additionally, it identifies key moments in sports related to this topic, as depicted in figure 6 below.

Figure 6. Key DE&I moments in sport



Source: Deloitte, 2023, p. 10.

Health and wellbeing

The health and wellbeing of athletes participating in sport events has become a growing concern for sport organisations. This is an area that Deloitte (2023) also recognises as a significant macro-force driving change and shaping the future of sports. Deloitte highlights that one in four people experience mental health issues each year, further underlining the importance of this issue. Notably, many athletes are increasingly vocal



about their mental health concerns. For example, basketball player Ricky Rubio recently announced a career break to focus on his mental health (Djordjevic, 2023).

A recent review of gymnastics in the UK shed light on 'systemic' physical and emotional abuse suffered by young athletes, dealing a severe blow to the reputation of the sport. Governing bodies of sports like cycling, swimming, and canoeing have also issued apologies following inquiries into their organisational cultures. Investigations into allegations have extended to British Judo, British Bobsleigh, and GB Archery. UK Athletics is also facing scrutiny regarding its past approach to child safeguarding, with an independent review revealing a 'lack of precision' in lines of responsibility (Roan, 2022). In the wake of the review, the chair of British Gymnastics called for the government to establish an independent safeguarding body across all sports to show they care as much about athlete welfare as they do about medal table success (Roan, 2023).

FIFA and UEFA also prioritise health and wellbeing. In their 2021 sustainability strategy, UEFA specifically mentions programmes aimed at older participants in football, youth-focused awareness campaigns, and various initiatives targeting staff, managers, coaches, trainers, mentors, and referees. However, there appears to be a lack of focus on initiatives specifically addressing the health and wellbeing of athletes. Similarly, FIFA does not seem to extensively discuss such initiatives, though they express their commitment to simplifying calendars and reducing the number of matches. Looking ahead, as sport organisations are anticipated to play a more influential societal role in promoting health and wellbeing for all (Deloitte, 2023), greater attention is also expected to be directed towards addressing the health and wellbeing needs of athletes.

Ensuring environmental sustainability for sport events

From an environmental perspective, sustainability focuses on the **preservation** and **maintenance** of the **physical environment**. As global environmental changes are primarily driven by human activities, the concept entails minimising adverse effects on the climate, natural environment, biodiversity, and consumption of natural resources. This involves using eco-friendly and renewable energy sources and materials (Yang, 2023).

Climate change and environmental sustainability are also areas that Deloitte (2023) recognises as significant macro forces **driving change** and shaping the future of sports. The report presents the following statistics, as depicted in figure 7, to illustrate the substantial impact climate change will have on sports.

Figure 7. Climate change impact on sports





Source: Deloitte, 2023, p. 15.

Undoubtedly, sport events, especially mega events, have significant environmental impacts (Cerezo-Esteve *et al.*, 2022), and event organisers have begun to recognise and address this issue. As discussed in the background section, organisers of sport events have demonstrated their commitment to environmental sustainability by participating in various relevant initiatives, associations, and certifications. Notably, FIFA and UEFA have both undertaken the responsibility of adhering to the guidelines outlined in the 'Sports for Climate Action Framework' and have formulated strategies to address climate change. In its sustainability strategy, UEFA pledges to uphold environmental standards by crafting policies related to circular economy, climate advocacy, infrastructure sustainability, and event sustainability. In relation to its commitment to event sustainability, UEFA provides an overview of existing initiatives and plans as depicted in figure 8.

Figure 8. Sport event sustainability



DESCRIPTION

Design, plan and implement events in ways that prevent or reduce negative environmental impacts on host cities and surrounding communities.

2030 AMBITION

Setting a new benchmark for zero-impact sporting events by developing and rolling out UEFA's own sustainable event management system.

MOVING FORWARD

The creation of the UEFA sustainable event management system (SEMS) will enable the measurement and benchmarking of event sustainability in football and provide end-to-end traceability of UEFA's impacts across its events. In the further implementation of the system, UEFA will collaborate closely with member associations, leagues and clubs. This will result in a process of continuous improvement around areas such as carbon footprint measurement, sustainable procurement and waste management. Lastly, this will lead to further cooperation and innovation with host cities, partners and other football stakeholders to shape a sustainable legacy for events.

EXISTING INITIATIVES

- Running carbon neutral UEFA events across the European Under-21 finals in 2021, UEFA EURO 2020, the UEFA Champions League and UEFA Europa League finals.
- Piloting the UEFA sustainable event management system (SEMS) at Women's EURO 2022. The first full implementation will take place at EURO 2024 in Germany.
- Ensuring that UEFA's event sustainability priorities are reflected in event bidding requirements and resulting plans laid out by local organising structures.

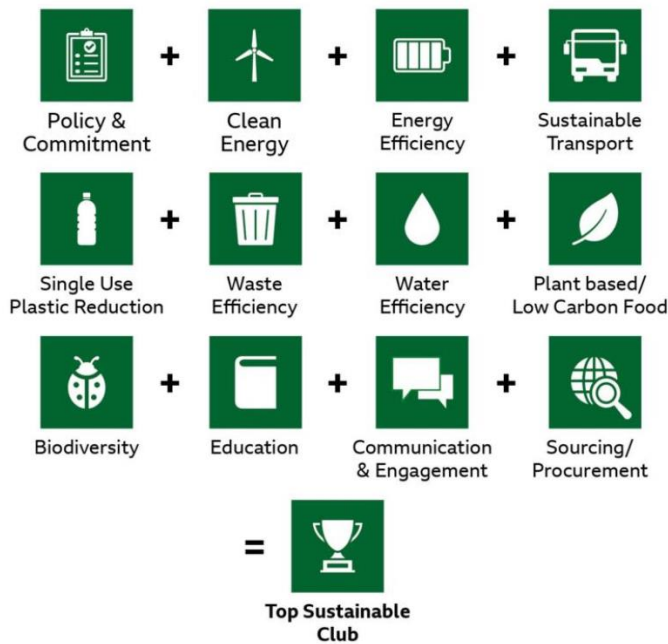
Source: UEFA, 2021, p. 44.

Importantly, UEFA has developed detailed key performance indicators (KPIs) for each area of concern. In terms of event sustainability, the KPIs include making a Sustainable Event Management System (SEMS) available by 2023, incorporating sustainability requirements related to the adopted eleven sustainability policies into 100% of bidding processes by 2022, and providing dedicated SEMS training to all member associations by 2025. Identifying targets and reporting on actions and outcomes are essential steps towards achieving the Sustainable Development Goals (SDGs).

At the national level, several leagues have pledged their commitment to sustainability. The English Premier League (EPL) has also signed up and committed to implementing the guidelines of the 'Sports for Climate Action Framework,' along with several of its participant clubs (see UN, 2023). United Nations-backed Sport Positive works with EPL, German Bundesliga and French Ligue 1 to assess the sustainability of member clubs and produce relevant rankings (see <https://www.sportpositiveleagues.com>). To make their assessment, they consider several sources of information, as depicted in figure 9.

Figure 9. Sport Positive assessment criteria

Sustainability Schemes



Source: Lockwood, 2023, <https://bit.ly/40KLpfT>.

While Sport Positive considers several areas of direct impact, aspects of indirect impact such as club ownership and sponsorship have not yet been integrated into the scoring matrix. Noteworthy findings from Sport Positive's 2023 review of EPL clubs include:

- for the second consecutive year, Tottenham and Liverpool have tied for the top position. Tottenham is the only club conducting classroom education sessions on environmental sustainability for both their men's and women's first-team squads.
- All teams received deductions for utilising domestic flights.
- Only four clubs publicly disclose all their emissions.
- Only seven clubs have set net-zero targets.

In general, there is significant diversity among sustainability scores (Tottenham and Liverpool scored 24/27, while Nottingham Forest scored 4.5/27), indicating a clear need for improvement and coordination. Findings from Bundesliga and Ligue 1 show a similar diversity in scores. While the Premier League (EPL) has declared its commitment to achieve net-zero emissions by 2040 (see Premier League, 2021), it has not yet developed an environmental sustainability strategy to coordinate related club activities (Lockwood, 2023).

Cerezo-Esteve *et al.* (2022), in their comprehensive review of the literature concerning the environmental impacts of fifty major sport events (including the Olympic Games, FIFA World Cups, Ski Championships, Grand Prix, Tour de France, and others), conclude that the environmental consequences of these events are predominantly negative (62%

negative versus 33% positive). Their analysis confirms that progress is being achieved; however, there remains an apparent need to persist in efforts to establish measures and strategies aimed at mitigating the adverse environmental effects associated with significant sporting events, while also amplifying their positive impacts. They additionally emphasise that “Every stakeholder in the world of major sporting events has a key role to play and should be responsible for ensuring that major events produce positive environmental impacts, including event promoters, host territories, politicians, residents, athletes, consumers” (Cerezo-Esteve *et al.*, 2022, p. 11). In this context, Yang (2023) provides **practical guidance** to organisers on incorporating sustainable practices into sports event management, summarised below.

Incorporating sustainable practices in events practical guidance

- Controlling and offsetting their carbon footprint: using low- or zero-emission technologies, incorporating renewable energy projects, supporting reforestation initiatives, etc.
- Using existing sporting venues, repurposing temporary facilities, and building sustainable facilities if new infrastructure is necessary.
- Reducing energy consumption and opting for green energy use: using renewable energy solutions like solar and wind power, employing energy-efficient equipment and technologies, such as LED lighting and low-flow water fixtures.
- Collaborating with local food producers and suppliers and using seasonal food to reduce the environmental impact of transportation and maximise local economic benefits.
- Control, reduce, and recycle waste generated by the event: using biodegradable food packaging, reducing waste by providing water fountains, digital tickets and similar, providing ample recycling options.
- Encouraging participants and visitors to use public transport and green alternatives to get to the venue: by including the cost in the event ticket price and by providing information about public transport options on their website and at the event. For the 2022 World Cup, the city of Doha provided dozens of electric bikes and scooters stationed close to metro stations (Yang, 2023).

Case study

As a case study within this module, we will focus on the legacy and sustainability plan for the Paris 2024 Olympic and Paralympic Games, as outlined in the Paris 2024 (2023) report.



As highlighted by the president of the organising committee in the report's introduction, "Along with all stakeholders, we decided to seize the Paris 2024 Olympic and Paralympic Games as an opportunity to increase the reach of sport in people's lives and come up with a new model for organising major events" (p. 4). As depicted in figure 10, the developed Legacy and sustainability strategy places emphasis on health, education, and civic involvement; inclusivity, equality, and solidarity; as well as environmental transformation. As discussed previously, these areas have been identified as significant macro forces that propel change and shape the future landscape of sports (Deloitte, 2023).

Figure 10. Pillars of the legacy and sustainability strategy

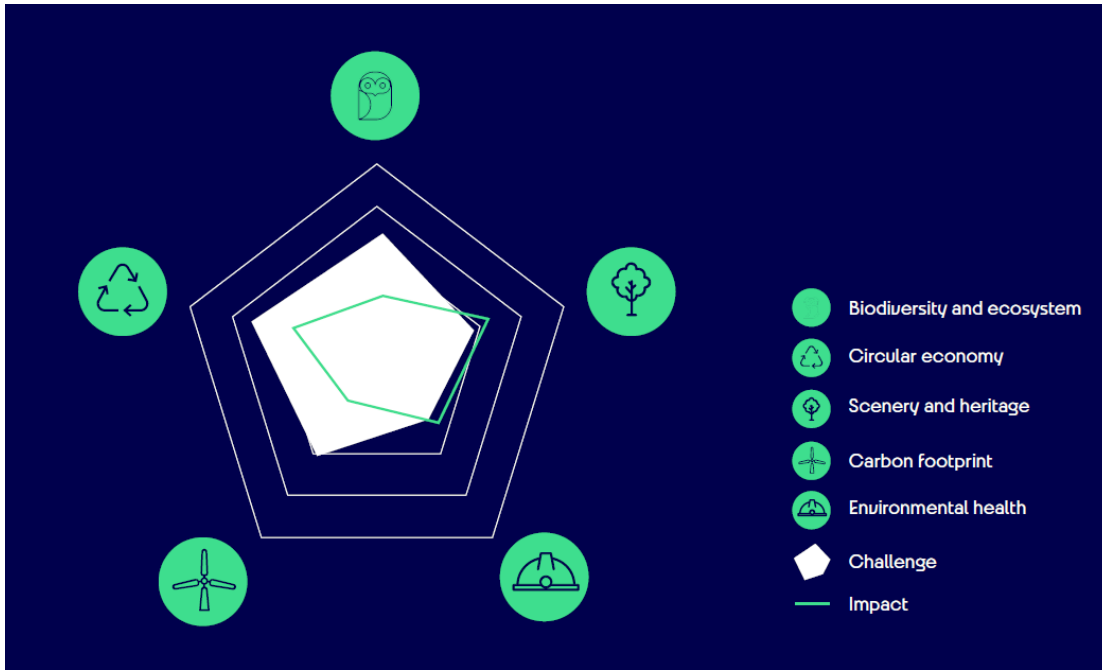


Source: Paris 2024, 2023, p. 8.

The report is undeniably comprehensive and can serve as a **benchmark** for future publications related to similar events. Within each focal area, the report provides both current accomplishments and future aspirations, accompanied by detailed objectives. Pertaining to its **environmental goals**, Paris2024 has committed to reducing carbon emissions by half when compared to previous Olympics, while also establishing objectives relating to biodiversity, the circular economy, and resilience. As mentioned earlier, quantifying carbon emissions for mega-events such as the Olympics presents challenges, given organisers' tendency to concentrate on direct rather than indirect impacts. A year before the event, an aquatics test event was cancelled due to pollution in the Seine, highlighting the substantial progress that needed to be achieved for the attainment of environmental objectives (BBC Sport, 2023). Notably, in collaboration with the IOC and the International Union for Conservation of Nature (IUCN) in France, an iterative assessment tool was developed. This tool allows for the evaluation of site-specific considerations as well as the environmental impact of Games' developments and events over time, spanning from the design phase until the conclusion of 2024, as illustrated in figure 11.

Figure 11. Innovative environmental impact analysis

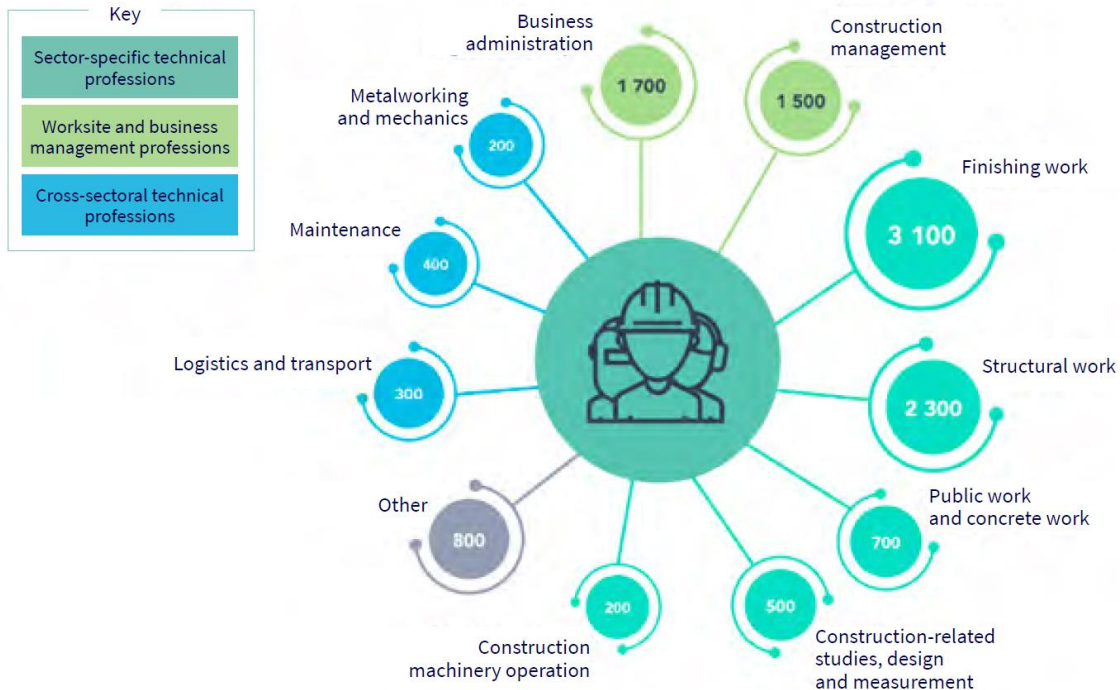




Source: Paris 2024, 2023, p. 20.

Regarding **social sustainability**, the Games have committed to enhancing regional growth and appeal, as well as improving the quality of life for residents. Their objective extends to ensuring inclusivity and accessibility for all participants, thereby leaving behind a lasting social and environmental legacy. Various sub-objectives and initiatives are outlined to fulfil these aspirations. As demonstrated in figure 11, Paris 2024 has established an examination of the employment opportunities generated by the Games and has developed an action plan that concentrates on the sectors integral to organising major international sporting events. The outcomes of this analysis can offer industries insights into the magnitude of jobs generated within their respective sectors. It can also guide training providers in identifying pertinent training requirements and facilitate the integration of professionals through bodies focused on professional integration and public employment services.

Figure 12. Job analysis



Source: Paris 2024, 2023 p. 56.

The Games also aim to enhance public health by promoting increased participation in sports and physical activities across various settings: schools, workplaces, urban environments, and rural areas. Numerous associated initiatives have been devised, encompassing efforts aimed at assisting organisations in effectively accommodating individuals with disabilities.

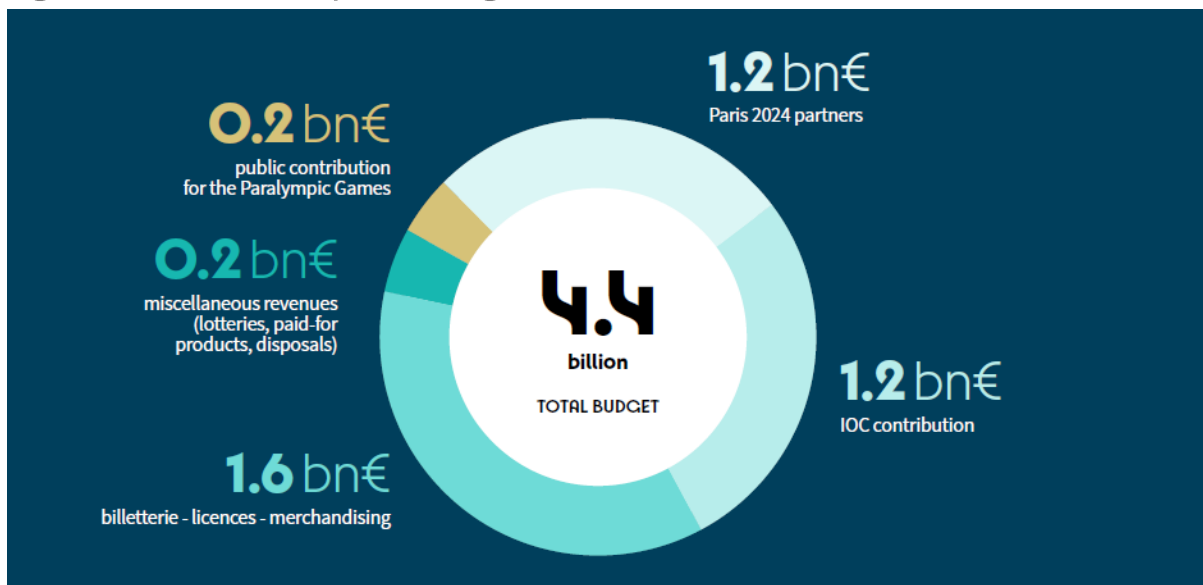
Figure 13. Training to accommodate people with disabilities



Source: Paris 2024, 2023 p. 75.

And what about financial sustainability? Paris 2024 shares related information through its annual reports. These reports provide overviews of budgetary alterations, as exemplified in figure 14. Paris 2024 attributes the observed 10.1% increase from the previous year's estimate to inflation. While a breakdown of secured revenues is also included, the related discussion remains concise. The reports primarily discuss organisational and broader stakeholder considerations.

Figure 14. Paris 2024 adjusted budget



Source: Paris 2024, 2022, p. 75.

Overall, it is great to observe such a detailed provision of objectives and initiatives. Hopefully, future events will also follow suit. It is important, nevertheless, to take note of two factors: a) the Olympic Games remain the largest sporting event in the world. Smaller events would normally provide significantly less information (and consideration) about sustainability and legacy), and b) while the detailed objectives have been provided, they are somewhat broadly outlined and are not presented as key performance indicators (KPIs), which would allow stakeholders to more effectively assess whether these objectives have been accomplished or not.

Summary

This module has examined key issues related to sustainability for sport events, leagues, and competitions, encompassing developments across all three pillars of sustainability. There are obvious signs of progress as sport organisations have taken steps to create more sustainable sport events, addressing economic, social, and environmental sustainability. However, it raises the question of whether the measures, particularly those focused on environmental and social aspects, would be sufficient to tackle the growing challenges faced by both people and the planet.

Much of these initiatives, as we have seen in this and the previous module, adopt a disclosure-focused approach. The argument is that transparent communication with stakeholders safeguards integrity and ensures accountability. However, this argument has encountered significant theoretical and empirical opposition over the years. We will look more closely into these arguments and related developments in the context of sport events in the next module.

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