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Article

Sustainability in Sport: Sport, Part of the Problem ... and of the Solution

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Abstract: Sport is one of the most popular social activities in the world. It is also one of the most thriving industries from an economic standpoint. The sport sector is at the crossroads of economic, political and social issues. For this reason, sport organisations have to consider sustainability as a major concern. When facing such major issues (environmental protection, social connections, the concern of business for society), sport can appear as the “most important insubstantial thing”. But it could be seen both as the best and the worst example in terms of sustainability. This article addresses two complementary objectives. The first one is to provide an overview of the current state of sustainability-in-sport research over the last 20 years and demonstrate how this field became a major topic in the last 10 years. This has been done through a systematic search of existing academic research concerning sustainability in sport. The second is to offer an explanation of how the field of sport currently manages different sustainability-related issues. This has been accomplished by interviewing an industry panel, which also gives some perspectives for the future.

Keywords: sustainability; sport; carbon footprint; event; industry; sport venues



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1. Introduction—Sustainability in Sport: For Better and For Worse

1.1. Sustainability in Sport: A Major Issue

Sustainability is perhaps the most important social, political and economic challenge facing society today. This concept has been of interest to the scientific community for more than 200 years, but the word sustainability was first used in considering the future by [1]. In 1987, ref. [2] provided the most famous definition of sustainable development, which is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. While many studies have provided definitions of sustainability, there remain multiple definitions. The specific definition used depends on the aspects of sustainability (social, economic, environmental, governance) that the authors are studying. The definition depends on the aspects (social, economical, environmental) that authors attempt to study [3]. Environmental sustainability is defined as the ability to maintain the stability of the disruptive bond between the living world and human culture by means of sustainable practices such as pollution prevention and the harnessing of renewable resources. Social sustainability involves the ability of the social system to operate in a socially acceptable and sustainable way while improving quality of life. Economic sustainability entails production and investment endeavours that support long-term financial stability without negatively impacting the cultural, social and environmental aspects of society.

This approach is of course relevant in the field of sport, which is fully part of modern societies. Sport is one of the most popular social activities in the world. It is also one of the most flourishing industries from an economic standpoint, with a +7% annual growth between 2014 and 2019 [4]. The field of sport is at the crossroads of economic, political and social issues. For this reason, sport organisations have to consider sustainability as

a major concern. In particular, this question was brought to light by events in 2020: the postponement of the 2020 Olympic Games because of the pandemic, debates on stadium cooling at the 2022 FIFA World Cup in Qatar, the withdrawal of the sponsorship contract with Huawei by French football player Antoine Griezmann and the influence of the Black Lives Matter movement in sport, etc. What stands out from these examples is that, due to their high level of media exposure and their importance in many people's everyday lives, sport organisations have both a clear interest and a compelling duty to engage in sustainable initiatives [5]. Publications regarding sustainability in sport suggest different applications: long-term economic development [6,7], social welfare [8,9], environmental well-being [10,11] and organisational longevity [12,13]. In addition, scholars have intensified their focus on sport-related sustainability issues over the last few years, notably within two main areas: (mega-)sporting events and professional sports.

First, the legacy of major sporting events has become a major issue [14]. For instance, several authors aim to identify the social impact of such events (civic pride, sense of belonging, host-city image), as well as the influence on participation in sports (hosting mega-events could positively influence sport participation and provide an answer to overweight issues, obesity, diabetes or heart diseases). Other publications have assessed the environmental impact of these events (the Olympic Games are known to emit 3.4 million tons of CO₂, the Football World Cup emits 2.75 million tons of CO₂, etc.). Others have also discussed the strategies of event managers to limit negative impacts, for instance, by encouraging public transportation [15] or considering sport facilities that can be dismantled after the event. In general, ref. [16] promote two different approaches to assess the environmental impact: ecological footprint and environmental input–output analysis. In the context of spectatorship events, ref. [17] found attendance at an MLB game “had a statistically significant but negligible impact on local air pollution” (p. 236). Regarding the carbon footprint of sport participation, ref. [18] have focused on the impact among community-based ice hockey players in Ontario for “away” games. The CO₂ emissions of two teams composed of 17 players and 32 parents were calculated, and strategies and innovations were suggested by authors to reduce the emissions.

Some professional sport clubs or franchises started to follow a similar approach in the last 10 years [19]. Because they gather thousands of fans in stadiums every week, because they travel thousands of kilometres every season, and because they would like to be perceived as sport organisations having a positive influence on their fans' everyday lives, they identify strategies to develop their organisations in a sustainable manner. This is why some suggestions have been made to optimise the travel itineraries. The carbon footprint of the English Premier League (EPL) has been assessed by [20]. Some other studies have to be noticed: the study of [21] about the carbon footprint of the Forrest Green Rovers football club and the study of [22] on the carbon footprint of football fans of Bundesliga matches.

1.2. An Ambivalent Relationship

When facing such major issues (environmental protection, social connections, the concern of business for society), sport can appear as the most important insubstantial element. But it could be seen both as the best and the worst example in terms of sustainability. In short, sport is both part of the problem and of the solution. It is part of the problem because this sector organises the largest events; it gathers the highest number of people using thousands of aircraft (and their impact on carbon footprint) to attend the competitions; it involves thousands of workers to build the infrastructure, sometimes with little concern about human rights, causing violence, harassment toward minorities, poverty or expropriation. The sport industry also reflects the excess of a system, with inequalities raised over the last few decades: few people (top athletes) earning so much (huge amounts of money) and sporting events using public funds while many people cannot meet their own basic needs. Additionally, the sporting goods industry also faces different issues in terms of sustainability and environmental protection. One of those issues deals with the conditions of manufacturing in Asia (China, Vietnam, Pakistan) for some products to be sold in Western countries.

Moreover, sport is one of the most beloved sectors on the planet. It offers emotion, happiness, pride and prestige to athletes, teams and fans. It is one of the most visible areas that can shed light on contemporary social, political and economic issues of a society. Sport and sporting events are a relevant way to strengthen social inclusion. Sport is inspirational for people, public authorities and local communities. Top athletes can be role models for the younger generation, inspiring thousands of people (i.e., Marcus Rashford (football), Megan Rapinoe (football), Lewis Hamilton (formula one), Lebron James (basketball), etc.). Some companies in the sporting goods industry (i.e., Circle Sportswear, Bomolet, The Fair Sport, etc.) now care about sustainability and environmental protection and tend to introduce some innovations and changes in order to make the industry more eco-friendly (cf. presentation at ISPO Munich) by manufacturing some products from recycled materials and by providing some goods produced locally or with a low environmental impact. More generally, sporting organisations have a rare opportunity to influence the lifestyles of millions of people worldwide by setting the standard and showcasing environmental sustainability strategies. Sport can act as the catalyst for a generation of (sporting) facilities that can be used by local communities for decades. Sport can also change the reputation of destinations and places.

Providing an overview of sustainability in sport sounds like an impossible mission. Indeed, this approach should mix different stakeholders and organisations and address a large variety of issues as described below.

Table 1 shows the huge diversity of issues to be addressed when blending sustainability and sport. This article provides an overview of the current state of sustainability-in-sport research over the last 20 years and demonstrates how this field became a major topic in the last 10 years. This has been done through a systematic search of existing academic research concerning sustainability in sport. It also offers an explanation of how the field of sport currently manages different sustainability-related issues. This has been accomplished by interviewing an industry panel, which also gives some perspectives for the future.

Table 1. Variety of issues concerning sustainability in sport.

Type of Organisation	Organisation or Industry	Dimension of Sustainability		
		Environmental	Economic	Social
SPORT ORGANISATIONS	Sporting events	Example: Fans travel to attend the competition	Example: Economic impact of the event	Example: Heritage, attitude toward volunteering or people with disabilities
	Amateur sports	Example: Teams travel during the season	Example: Amount/percentage of public funding	Example: Gender equity in sport
	College sport	Example: Teams travel during the season	Example: Economic impact of the event	Example: Attitude toward sexual harassment
	Sport federation	Example: National team travels during the season or for a competition	Example: Amount/percentage of public funding	Example: Inclusion of disabled people
	Professional sport team	Example: Teams travel during the season	Example: Type of sponsors endorsed (+/- CSR oriented)	Example: Role toward the community
SPORT-RELATED ORGANISATIONS	Sponsors	Example: Use of natural resources by companies that sponsor the sport industry	Example: Type of sporting events endorsed	Example: Attitude toward the inclusion of employees
	Sport venues	Example: Sources of energy to power the venue	Example: Amount/percentage of public funding	Example: Attitude toward human rights of workers during the construction
	Sporting goods companies	Example: Origin of the raw materials	Example: Ability to work with local/national economic partners	Example: Working conditions of the employees
	Sport tourism	Example: Attitude toward mass tourism	Example: Employee wages, employment contract	Example: Working conditions of the employees

2. Methods

The method we used is composed of two different steps: a systematic search of existing academic research and some interviews with an industry panel.

2.1. Systematic Search of Existing Research

In order to provide a comprehensive overview of the published research, we conducted a systematic search of existing academic research concerning sustainability in sport. The first step was to identify the journals dealing with the concept of sustainability. 24 journals were identified. They are listed in Table 2.

Table 2. Journals dealing with sustainability.

<i>Geography, Environment, Sustainability</i>	<i>Geography and Sustainability</i>	<i>Environmental and Sustainability Indicators</i>	<i>Materials today Sustainability</i>
<i>Sustainability Science and Engineering</i>	<i>Journal of Teacher Education for Sustainability</i>	<i>Transport and Sustainability</i>	<i>Sustainability of Water Quality and Ecology</i>
<i>Sustainability and Climate Change</i>	<i>Global Sustainability</i>	<i>Journal of Sustainability Science and Management</i>	<i>Sustainability: Science, Practice and Policy</i>
<i>Ecosystem Health and Sustainability</i>	<i>Journal of Security and Sustainability Issues</i>	<i>Energy, Sustainability and Society</i>	<i>Entrepreneurship and Sustainability Issues</i>
<i>Sustainability Accounting Management and Policy Journal</i>	<i>International Journal of Agricultural Sustainability</i>	<i>Nature Sustainability</i>	<i>Environment Development and Sustainability</i>
<i>Sustainability Science</i>	<i>International Journal of Sustainability in Higher Education</i>	<i>Current Opinion in Environmental Sustainability</i>	<i>Sustainability</i>

However, all these journals examine the field of sustainability in a very broad sense, which has little to do with sport. For instance, some articles dealing with the connection with physical activity involve research about bicycle lanes and paths in urban areas [23]. As a result, in order to make this systematic search narrower, focused on sport and manageable, we limited our search to eight journals focused on sport management and marketing. Four of them are connected with a major academic association:

- *European Sport Management Quarterly*, connected with the European Association for Sport Management;
- *Journal of Sport Management*, connected with the North American Society for Sport Management;
- *Sport Management Review*, connected with the Sport Management Association of Australia and New Zealand;
- *Sport Marketing Quarterly*, connected with the Sport Marketing Association.

The four others are not connected with an academic association but are considered as representative journals of the field addressing an extensive understanding of the connections between sport and sustainability:

- *Sport, Business and Management*;
- *International Journal Sports Marketing and Sponsorship*;
- *Journal of Global Sport Management*;
- *International Journal of Sport Management and Marketing*.

We manually searched each journal for articles on sustainability in sport and included all the articles that mentioned “sustainability”, “sustainable”, “CSR” or “sustaining” in the title or as a keyword. In total, 54 articles from the examined journals were identified from 2006 to 2022 (none between 2002 and 2006). We then studied the articles for publication details (publication year, keywords and country in which the authors work) and content (the focus of the article, the focal entity and the methods used).

2.2. Industry Insights

We completed the work with a series of interviews with high-level practitioners. Our research, mostly exploratory, focused on the following topics, and we used five open questions:

- Q1. When did CSR issues emerge in your field?
- Q2. In what context? What explains the emergence? (external contingency? internal reason?)
- Q3. Which axis is privileged: social? environmental? economic?
- Q4. What concrete achievements have you been able to make in your activity?
- Q5. What do you think are the main results?

The first question was a way to introduce the topic, by including an historical approach.

As mentioned by [24], “the historical origin of sustainability can be traced to environmental accounting, as premised on the ideals of corporate social responsibility (CSR) and corporate management practices, in tandem with the demands of external stakeholders on the environmental, economic, and social dynamics of businesses”.

The protocol can be defined as follows: We interviewed a total of 14 people representing three international federations, three sport events, five sport agencies, one centre for Olympic preparation, one arena and one sport equipment supplier. We prioritised the first three as we mostly wanted to study the world of sport events that are tackled in the literature studied in part I of this article. This is also an approach that fits better with the North American approach that still dominates publications dedicated to sport and CSR. Finally, having an important sample of experts/consultants in our research was also fruitful, as those people have a broad and long experience of different situations, which is valuable for our research that can be considered as exploratory. Arenas/stadiums and sport equipment suppliers will be surveyed in a future investigation.

The 14 persons were interviewed online and the conversations were recorded. After transcription of the interviews, the experts had the chance to read them, provide feedback and make changes. Table 3 presents the list of experts who were interviewed. As much as we could, we targeted international experts.

Table 3. Interviews of experts.

	Stakeholders	Organisation	Contact Person	Position
1	International federation	UEFA	Neil Beecroft	Head of sustainability for Euro 2016
2	International federation	FISU	Fernando Parente	Development and healthy campus director
3	International federation	World Rugby	Dorian Grimaud	Senior communications director and member of the sustainability team
4	Sport event	Ecotrail Paris	Justine Birot	Head of sustainability
5	Sport event	Vendee Globe	Yannick Bersot	Head of communication and marketing
6	Sport event	Formula 1 Grand Prix of France	Francois Guyonnet Duperat	Head of CSR operations
7	Agency	17 sport	Francois Singer	Senior Purpose Partnerships manager
8	Agency	THE SHIFT	Anne-Cecile Turner	Campaign director, Sails of Change and Co-Founder of THE SHIFT
9	Agency	THE SHIFT	Phil Furrer	Co-Founder and Chief Impact Officer
10	Agency	Ipam	Xavier Parenteau	Co-founder of the agency dedicated to CSR programmes
11	Agency	Sport 1.5	Mael Besson	Co-Founder and Executive Officer
12	Center for Olympic Preparation	INSEP (National Institute of Sport Performance)	Patrick Roul	Deputy director of INSEP
13	Sport equipment supplier	Assos of Switzerland	Sebastien Plasson	Head of global consumer engagement and influencing
14	Arena and stadiums	Paris la Defense Arena	Jean-Baptiste Durier	Deputy CEO and Chief Revenue Officer at Paris La Défense Arena, the biggest arena in Europe

The top three countries housing the authors' universities were the US (42%), France (10%) and Canada (10%). Table 4 provides a full overview of the countries of origin of the authors' universities.

Table 4. Countries of the authors' universities.

Country	N = 123	Percentage
USA	52	42%
France	12	10%
Canada	12	10%
Australia	9	7%
UK	8	7%
Germany	6	5%
Turkey	3	2%
Italy	3	2%
Ireland	3	2%
Slovenia	2	2%
Denmark	2	2%
Brazil	2	2%
Thailand	1	1%
Switzerland	1	1%
Spain	1	1%
Scotland	1	1%
Korea	1	1%
Japan	1	1%
Greece	1	1%
Dubai	1	1%
Cyprus	1	1%

Regarding information on the content of the articles, it appears that most articles were focused on the environmental dimension of sustainability (51%). The social dimension represents 32%, while the economic dimension was examined by 17% of the articles. Additionally, it has to be noticed that these publications only focused on one of those dimensions (no mixed perspective). The three main focal entities were professional teams (25%), sporting events (23%) and grassroots sports. Interviews (39%) were also predominantly used. Questionnaires (21%) and archival material (19%) complete the range of methods used. This information is summarised in Table 5.

3.2. Lessons from the Industry Panel

The interviews conducted were very fruitful for better understanding the way the concept of sustainability has influenced stakeholders in sport over the last few years. Table 6 presents a summary analysis of the emergence of CSR issues with respect to different stakeholders. We can highlight a few key trends:

- It seems certain that in most cases, individual awareness was a prerequisite for any collective action, with some individuals appearing to be "ahead" of their time or their sector of activity in that they felt "more concerned" by the subject.
- Reading literature, reflecting on their environment and participation in scientific conferences were often the driving force behind their personal change of paradigm. Sometimes, a return to school and the writing of a thesis on the subject also triggered this reflection.
- The influence of NGOs, institutions, the United Nations and COP conferences should not be overlooked either, as it has put pressure on the sport sector.
- Finally, several stakeholders note the idea that sport and environment must be better linked, and that under no circumstances should the practice of sport be associated with the destruction of any part of our environment.

Table 5. Content overview.

	N = 123	Percentage
Focal entity	N = 52	
Professional team	13	25%
Sporting event	12	23%
Grassroots sport	6	12%
Sport facility	5	10%
Destination/tourism	4	8%
Sponsoring	3	6%
College team	3	6%
Sport industry	2	4%
Other	4	8%
Method	N = 57	
Interviews	22	39
Questionnaire	12	21
Archive material	11	19
Conceptual	9	16
Econometrics	2	4
Observation	1	2
Theories *		
Transdisciplinary theories	9	
Sustainable value framework	7	
SSCEM	7	
Environmental sustainability	6	
Strategic management theory	6	
Field theory of change	6	
Vulnerability-based theory	6	
Institutional theory	5	
Theory of innovation	5	
Hazard-based theory	5	
Social value	4	
Organisational tension	4	
Data envelopment analysis	4	
Triple-bottom-line theory	4	
Market performance theory	4	

* Only the theories that were used at least 4 times are included in this table.

Table 6. Emergence of CSR issues by industry.

	Person	Answer
1	Neil Beecroft (Federation)	<ul style="list-style-type: none"> • Before Euro 2016, our event had the potential to inspire new generations like no other. • It also coincided with COP21. • I met Martin Kallen to write the charter for the EURO 2016 sustainability project.
2	Fernando Parente (Federation)	<ul style="list-style-type: none"> • RSE was developed in our Department (Development and Healthy Campus) as part of Healthy Campus Programme • RSE in this FISU Programme contributes to the individual and collective well-being of campus communities.
3	Dorian Grimaud (Federation)	<ul style="list-style-type: none"> • Issues related to the social and societal impact of rugby have been present at World Rugby for more than a decade. • World Rugby's commitment accelerated after 2010 alongside other international actors such as the United Nations (UN Sport for Climate Action) or the IOC with the creation of specific working groups.
4	Justine Birot (Event)	<ul style="list-style-type: none"> • Early on, I started organising sporting events. • COVID was a gas pedal and allowed me to dedicate time to studying climate issues.

Table 6. Cont.

	Person	Answer
5	Yannick Bersot (Event)	<ul style="list-style-type: none"> • This emerged as soon as I took my job in June 2019. • Unfortunately, the implementation was overshadowed by the COVID pandemic.
6	François Guyonnet Duperrat (Event)	<ul style="list-style-type: none"> • I don't know if it's generational, if it's family, but these subjects have always interested me and I wanted to develop the themes. • The 4L Trophy (a student rally with a humanitarian vocation), my travels, • My experience with Jean Todt (former president of the FIA) have also led me to reflect and to want to put my ideas into practice.
7	François Singer (Agency)	<ul style="list-style-type: none"> • Red thread from Unibail. What societal impact? Then I left the company. • Professional thesis: prompted me to dig deeper • Interviews with experts: more environment than social impact, • Then authoring articles • Today teaching • Personal awareness
8	Anne-Cécile Turner (Agency)	<ul style="list-style-type: none"> • People are not really drivers but rather try to manage problems after the fact • An agency should be a driver, an innovator, a driving force, innovative, anticipatory • In this case it would be more productive because it would not allow fear, disaster, waste, catastrophes to push the need. • We are victims of our system, which is to say a consulting agency; that's why we want to change the model of the consulting agency with The Shift
9	Phil Furrer (Agency)	<ul style="list-style-type: none"> • Early 1990s—first Earth Summit in Rio 1992 and geography studies. • Second master's degree in Australia in 1997–1998 on the impact of the Sydney 2000 Olympic Games on the population, the economy, the environment. . . • These CSR themes have accompanied me throughout my career at the IOC (16 years), including the development in 2001 of OGGI—Olympic Games Global Impact: study and indicators to understand and measure the impact of the Games (to be conducted by OCOG + City over 12 years)!
10	Xavier Parenteau (Agency)	<ul style="list-style-type: none"> • The answers to this question are integrated in Table 7. • Personal thinking.
11	Mael Besson (Agency)	<ul style="list-style-type: none"> • I already had this desire to link "sport and environment" as part of my master's degree on tourism and sport. • Then, things accelerated and were confirmed in the professional context, since I took charge of the "sustainable development" unit of the Ministry of Sports; I then accompanied an NGO in its policy of sports partnerships, the WWF.
12	Patrick Roult (Olympic preparation)	<ul style="list-style-type: none"> • The CSR designation is recent, less than 10 years ago, I think; but several of the issues covered by this designation were already concerns or topics for reflection before the CSR acronym appeared. • The collective awareness, the injunctions of the State, the activism of certain lobbies.

Source: qualitative interviews.

Table 7 looks at the genesis of the awareness of CSR logic in sport organisations. The personal initiatives highlighted in the analysis of Table 6 are mentioned once again, but several interlocutors also mention volunteer initiatives and, of course, individual driving forces that will move the organisations as a whole:

- Nevertheless, there is also a collective dimension that has played a role in the changes observed: the societal need to act, the pressure of the media and the political and associative environment have all evolved and contributed to making our sport organisations change.
- Often, this has been done when a major sporting event is organised in the country or in the city. This is logical because it puts the spotlight on the place in question, so there is a communication effect. But there is also a much more concrete issue at stake since these events bring together several hundred thousand spectators, or even several million, and their impact can be colossal if the organiser does not act. Our interviewees mention, for example, the Olympic Games, the Euro soccer tournament, the Rugby World Cup, sailing races, the Stade de France or the Tour de France to illustrate their point.
- Finally, some of them underline that there is an inseparable link between people and nature in general, and that therefore, sport cannot be an element of partial destruction of nature.

Table 7. The context of and reasons for the emergence of CSR.

Person	Answer
1	Neil Beecroft (Federation) <ul style="list-style-type: none"> • My father was a glaciologist—one of the first scientists to witness climate change. • This phenomenon will have a serious impact on our lives and those of future generations, as well as on our sport. • This has brought me to an environmental, economic and social awareness that sport can be an important vehicle for good practices and powerful messages when working towards greater eco-responsibility.
2	Fernando Parente (Federation) <ul style="list-style-type: none"> • During the development of the Healthy Campus standard, in the work with 7 pilot universities from all continents and in the validation by international experts • We noticed that CSR is increasingly associated with physical activity and sport initiatives
3	Dorian Grimaud (Federation) <ul style="list-style-type: none"> • Internal awareness first originated from the creation of a “sustainability” unit composed of volunteers in 2017 • Some emblematic nations such as the Pacific Islands are the most at risk from the effects of global warming. • World Rugby has a duty to set an example and inspire its members.
4	Justine Birot (Event) <ul style="list-style-type: none"> • A strong personal shift, a “slap in the face”: confronted with the reality of planetary limits. • Jancovici, the Meadows report (Limits to growth), Gaël Giraud or Emma Haziza have actively participated in this awareness.
5	Yannick Bersot (Event) <ul style="list-style-type: none"> • First of all I read some books that changed my mind. • I then brought the subject to the company, insisting on the extremely important risk of short-term image, the need to be proactive vs. regulations, and public expectations • But also the strategic importance of evolving to ensure the long-term sustainability of the event. I was supported by my CEO.
6	François Guyonnet Duperat (Event) <ul style="list-style-type: none"> • When the GP returned to France in 2018, the notions of CSR, in addition to other objectives, were a big reason for the project. • It is through this F1 platform that we can carry messages and perhaps give a new model to major sporting events.
7	François Singer (Agency) <ul style="list-style-type: none"> • Global and massive awareness • But sport is 10 years behind other industries (Ex: very few CSR directors in soccer clubs) • Ecology = still a brake, a threat, a cost, a constraint. . . • Embryonic in sport • No knowledge of the IPCC • Much education work to do • Some clubs with a mission • Good examples (Clubs: Forrest Green Rovers; Federations: FF of Badminton; Athletes)
8	Anne-Cécile Turner (Agency) <ul style="list-style-type: none"> • In fact, I remember several interventions quite well: on the benches of the Sorbonne, seat of knowledge. It is also a rather inspiring place to reflect, to get out of the daily life, and there was both the political and the corporate world at this conference. • I remember a discussion between the Green Party and Monsanto, an interesting debate; poets, writers, academics discussing the major issues of tomorrow.
9	Phil Furrer (Agency) <ul style="list-style-type: none"> • Greater media pressure, emergence of social media, increasing accountability of companies, event organisers and sponsors. . . but fundamentally, greater “public scrutiny” on the spending of public money. • Millennium goals, then the United Nations’ MDGs and the (too slow) awareness of the urgency to respond (notably through sport and events) to environmental, social issues, etc. • On the other hand, the awareness is different according to the generations: critical for the new arrivals, still difficult for the sport boomers (still a lot, see FIS for example!).
10	Xavier Parenteau (Agency) <ul style="list-style-type: none"> • At the Stade de France at the time of the Rugby World Cup in 2007, it was the organiser himself who set up an innovative environmental component. The shareholders Vinci and Bouygues, the owner, the State, which was working on the declination of the SNDD in Sport via the Ministry of Sport, and finally the territory which was starting to ask for information other than accounting information from the SDF. . . • In short, beyond the economic success of the concession, the questions of externalities were posed at all levels • I was able to develop an expertise and a subject at the heart of the sectors of sports
11	Mael Besson (Agency) <ul style="list-style-type: none"> • For me, things happened naturally because I started from this postulate: the separation between man and nature is a mental construction. We depend on forests and oceans for our oxygen, on pollinating insects for our food (75% of the world’s food crops depend on pollination), or on the soil for our drinking water. . . • Our impact on the environment therefore inevitably has an impact on our lives. • Sport is no exception to this observation: it suffers the consequences of environmental degradation while contributing to it itself. • It is appropriate to question the role and responsibility of sport in the ecological transition of our society.
12	Patrick Roult (Olympic preparation) <ul style="list-style-type: none"> • The question of the carbon impact appeared at the end of the 1990s (CNOSF), in the early 2000s (before 2010) by Ademe. • The International Hockey Federation since 1976. In 2002-2004, studies were launched for the 2012 London Olympics, after Paris 2024, the new standard of non-watered pitches will be deployed. • Operation whistle against gender bias, we had received dozens of whistles

Source: qualitative interviews.

Table 8 looks at the CSR axes favoured by the organisations. Generally speaking, it is unquestionably the environmental axis that is “favoured” by our interviewees, for several reasons:

- Environment has a more “visible” and immediate dimension, in the eyes of the media and spectators, even though it is undeniably linked to the long term.
- The activities that have been on the rise in recent years are those related to outdoor sports, which logically have an obligation of achieving results with regard to ecology.
- With the exception of one particular sport, rugby, which has emphasised social and health issues in recent years, policies have tended to focus on ecology.

- However, all the interlocutors unanimously emphasise that the three dimensions are linked and inseparable, and that no battle can be won at the global level if we do not deal with them all together.
- Depending on their experience and vision, the interviewees diverge on one point: some think sport has taken these issues into consideration well before other sectors, while others evoke the idea that sport is “behind” what should have been achieved.

Table 8. The main axes privileged by organizations (social, environmental, economic).

Person	Answer
1 Neil Beecroft (Federation)	<ul style="list-style-type: none"> • The 3 axes of sustainable development must be considered equally. • During UEFA EURO2016, we developed a wide range of measures to address as many environmental, social and economic issues as possible. • Disabilities was a very important focus, circular economy policy, and food management.
2 Fernando Parente (Federation)	<ul style="list-style-type: none"> • The three axes are important; the Healthy Campus Program is in line with the SDGs, and for each of the 100 criterion there is an alignment with each of the 17 SDGs. • The universities are evaluated with the work they are doing regarding the SDGs.
3 Dorian Grimaud (Federation)	<ul style="list-style-type: none"> • For a long time, the focus was on social issues, with the undeniable contribution of sport to social cohesion and development. • It is clear that in recent years the environmental issue has taken over in the context of international sporting events, with their significant footprint.
4 Justine Birot (Event)	<ul style="list-style-type: none"> • I mainly master environmental issues, and my actions are oriented in this direction. • However there will be no ecological transition without social justice. It is necessary to pay particular attention to a fair distribution of wealth, to an equal access to natural resources, etc. . .
5 Yannick Bersot (Event)	<ul style="list-style-type: none"> • They are all intertwined, knowing that the main idea is to show that we can do things differently, better, and that the impact is not necessarily negative in terms of budget, or even positive in terms of generating new resources.
6 François Guyonnet Duperat (Event)	<ul style="list-style-type: none"> • Clearly, given the specificity of our activity, the environmental axis has always been privileged, even if there are programmes with a social vocation for a better access to our practice, which is expensive.
7 François Singer (Agency)	<ul style="list-style-type: none"> • Eco and social more than environmental • Business of sport driven by eco issues • UTMB (forgot about environment): regenerative leader, chief impact officer • Ranking of the 150 people of impact (by FS, coming soon) • Creative agencies on impact video content: very rare, FS hopes it will come (not the case for now)
8 Anne-Cécile Turner (Agency)	<ul style="list-style-type: none"> • the three dimensions are integrally linked and that people still refer in their mind to the environment • first of all because it's easier and easier to measure and to change • this is really important if we teach this subject afterwards, we must always think of the three dimensions
9 Phil Furrer (Agency)	<ul style="list-style-type: none"> • First, a very economic-centric approach around the impact of sport and events on the local economy. Then environmental issues emerged: carbon emissions, circular economy, sustainable procurement, pollution and biodiversity. . . • Finally, social issues are progressively arriving: health and well-being, inclusion and diversity, gender, skill development and capacity building, and even, ultimately, social entrepreneurship through sport (but still shy!)
10 Xavier Parenteau (Agency)	<ul style="list-style-type: none"> • From the start, I trained on the subject and understood the global management issues behind this notion. • The roadmap therefore integrated the 3 aspects from the start, if the environmental axis of the Rugby WC 2007 was an accelerator, the SD strategy of the Stadium did indeed integrate the 3 subjects, with a dimension of governance and societal subjects as reinforcement
11 Mael Besson (Agency)	<ul style="list-style-type: none"> • Because of my position at the ministry, I naturally favoured the environmental axis in my professional activity. • But this makes little sense since the three dimensions of CSR are intimately linked and inseparable.
12 Patrick Roult (Olympic preparation)	<ul style="list-style-type: none"> • Mostly environment.

Source: qualitative interviews.

Table 9 is rather difficult to summarise since it focuses on the concrete achievements the stakeholders have made in their professional careers:

- Nevertheless, several mentioned obtaining certifications or standards, or environmental quality charters.
- Most of them also emphasise the change in policies for sport events, such as for transport, the choice of sites, or the consideration of local specificities.
- The “pride” of the interviewed people generally lies in their ability to have succeeded in influencing management, in having “made things happen”.
- One person, who was involved for a long time in the global CSR policy of the transatlantic sailing race “The Ocean Race”, thinks that their greatest achievement “is to have disappeared, in the sense that we are no longer needed”, which is an interesting approach.

Table 9. Concrete achievements made by practitioners in their organisation.

Person	Answer
1	Neil Beecroft (Federation) <ul style="list-style-type: none"> • With UEFA EURO 2016, enormous progress has been made, with more than 500 sustainability initiatives and 500 key performance indicators in more than 40 functional areas of the tournament organisation. We have come a long way, but we still had a lot of room for improvement. • With The SHIFT, we also built and implemented the sustainability strategy for the Tour de France stage in Lausanne in 2022.
2	Fernando Parente (Federation) <ul style="list-style-type: none"> • Institutional certification of higher education institutions, currently we have 51 out of 118 registered • Promotion of initiatives and activities through a book of good practices for each of the criteria; • Educational events.
3	Dorian Grimaud (Federation) <ul style="list-style-type: none"> • I had the privilege of initiating and leading the development of World Rugby's 2030 environmental strategy and having it voted on by the federation's general assembly in late 2021. https://www.world.rugby/environment (accessed on 23 May 2023). • This step was absolutely essential to obtain an internal mandate and to make our governance structures and strategic decisions evolve in the direction of a more sustainable world.
4	Justine Birot (Event) <ul style="list-style-type: none"> • A local event for Parisians: 80% of the event's carbon footprint comes from the transportation of participants. • We want to show that another model of event is possible and accelerate the awareness of other organisations. • Implementing actions on the ground: <ul style="list-style-type: none"> - 100% vegetarian meals for all staff and volunteers - Reimbursement of train tickets for elite runners - Eco-adventures
5	Yannick Bersot (Event) <ul style="list-style-type: none"> • A roadmap of some 15 very concrete actions is underway and will be unveiled in early 2024. • It is based on 4 major axes: Anticipate/Reduce/Inspire/Build a positive legacy.
6	François Guyonnet Duperat (Event) <ul style="list-style-type: none"> • We have obtained the FIA 3^e environmental certification: the highest possible. • Our performance was measured on the direct carbon footprint of the event, as well as on the consideration of spectator travel.
7	François Singer (Agency) <ul style="list-style-type: none"> • Française des Jeux: reduce the environmental footprint of our projects and activation, help us, which invts? Which areas? • Project in progress: environmental • Social impact: Adidas, attacked on greenwashing issues • Set up "breaking barriers": 5-year programme, 60,000 young girls = give access to sports, decouple business issues. Ambassadors, because most girls drop out of sport after adolescence. • Change now summit exhibition. • Current project that will happen. Joining certain events: plan to decarbonise the entire sports system/Paris agreements. Who will sign this? Probably not many. Integrate sport into this type of event. Sport for change theme integrated since last year.
8	Anne-Cécile Turner (Agency) <p>The Ocean Race</p> <ul style="list-style-type: none"> • We have succeeded in doing what I think all sustainability professionals are trying to do, which is to disappear. And why? Because in fact, when we disappear, it means we are no longer needed and we have succeeded in our mission. • Finally, it's much more than a campaign; in fact, I came in as the Sustainability Director who defines the sustainability strategy for the organisation in 3 pillars: Impact, Footprint and Legacy. The idea was really to use the platform of a professional sailing race with 10 stopover cities around the world to raise awareness of the problem of plastic pollution in the ocean, so we conducted a project to put the house in order first. So we are ISO 20121 [25] in terms of the organisation of the event
9	Phil Furrer (Agency) <ul style="list-style-type: none"> • Best pro success: I am the father and creator of the IOC Young Leaders programme—I still can't understand why more isn't done in this field! https://www.olympic.org/young-leaders/profiles-projects (accessed on 23 May 2023). • Best private successes: COOKIE (support to young local athletes from 2011 to 2022), Republic of Sports (inclusion of young migrants through sport) and member of the GAME Board since 2022. • Teaching: I also contribute a lot to inspire young students in sport management towards all the beautiful CSR facets of the SPORT business
10	Xavier Parenteau (Agency) <ul style="list-style-type: none"> • We have been able to implement a certain number of actions at all levels and concerning all trades of the Stade de France sustainability policy
11	Mael Besson (Agency) <p>Today, my reflection looks like this.</p> <ul style="list-style-type: none"> • This adaptation of sport to the future will only be possible by limiting climate change and the loss of biodiversity. • To do this, sport must obviously reduce its environmental footprint • But, beyond sport, it is the impact of all human activities that we must reduce; otherwise, even with adaptation, a large part of our sporting activities will become impossible. Our own survival depends on it.
12	Patrick Roult (Olympic preparation) <ul style="list-style-type: none"> • I participated in many meetings, reflections, design thinking sessions and other ideation times on these subjects. • I have the impression that, as often as we were asked our opinion, we were in fact being asked to agree and to be happy to agree with what had been imagined by others

Source: qualitative interviews.

The last summary table of interesting quotes from our interview session focuses on the main results obtained (Table 10):

- Here also, all of them mention the influence they have had on events, policies that were adopted, audience habits and mentalities in general. Very often this also translates into increased collaboration with influential NGOs of reference in the field.
- Many spoke to us about the "pedagogical virtue" of sport, the example that athletes represent and its power of communication and prescription. Sport is a pretext for

them to show an image that affects people's daily lives. "If Kylian Mbappé and Paris Saint-Germain take the train instead of the plane, then I'll do it too". Sport must encourage the transmission of good practices. In this respect, it takes up the practices of classic communication such as sponsoring.

- All the interviewees underline that they like to transmit, to teach, especially in a university context, in order to change the mentalities and the perception of young people, because many of them will be tomorrow's managers or entrepreneurs, and they must be the most inspiring.

Table 10. The main results obtained.

Person	Answer
1	Neil Beecroft (Federation) <ul style="list-style-type: none"> • For the Tour de France stage in Lausanne, for example, which welcomed nearly 100,000 spectators, the main success was to have involved most of the key stakeholders, starting with the top management within the organisation, and to have been able to spread sustainability in the form of a waterfall in the different departments. • The work done was collaboratively and here are some of the results: 90% sustainable mobility, 40% waste recycling, 50 disabled people welcomed in Lausanne, etc. • One of the main results was the significant reduction of the carbon footprint of an event, which we were able to measure.
2	Fernando Parente (Federation) <ul style="list-style-type: none"> • The programme works in cycles of 2 years, in the first cycle we evaluate which institution KPI is to be developed for each institution and that will go through the measurement of initiatives, events and impact indicators (measurable). • From 2023 we will have tangible data. For now, we have 51 Universities certified out of 120 registered from 36 countries and 5 continents.
3	Dorian Grimaud (Federation) <ul style="list-style-type: none"> • Late last year, the international federation redesigned its World Rugby Sevens Series competition model by reducing the number of stages on the circuit from 12 to 7. The idea is to do less and better (environment, health and well-being of the players, a positive economic impact. . .) • This decision is remarkable when we see some sports talking about more stages each year or major competitions going from once every 4 years to every two years. . .
4	Justine Birot (Event) <ul style="list-style-type: none"> • Stronger awareness of the organising team • Ecotrail is now a key player in the field of committed events
5	Yannick Bersot (Event) <p>They will be known after the edition in 2025, but the objective is to:</p> <ul style="list-style-type: none"> • Raise awareness of environmental issues (protection of the ocean, solidarity actions) for the general public • Measure the impact of the event on a prospective assessment in order to reduce the footprint before it takes place • To advance science through actions in connection with the Ifremer and UNESCO • Encourage an entire ecosystem (sponsors, service providers, exhibitors, etc.) through calls for tenders and commitment charters, • Encourage changes in behaviour (arrive at the event in a low-carbon way, consume differently, live a different event experience. . .) • Development of channels (glass deposit, reuse of materials, etc.)
6	François Guyonnet Duperat (Event) <ul style="list-style-type: none"> • We already have results, but we want to go further by going for the ISO 20,121 standard [26]: it is the international standard for sustainable events. • We still need to reduce our carbon footprint while doing more for social issues, even if the media world talks less about that aspect.
7	François Singer (Agency) <ul style="list-style-type: none"> • Française des Jeux: reduce the environmental footprint of our projects and activation, help us, which invts? Which areas? • Project in progress: environmental • Social impact: Adidas, attacked on greenwashing issues • Set up "breaking barriers": 5-year programme, 60,000 young girls = give access to sports, decouple business issues. Ambassadors, because most girls drop out of sport after adolescence. • Change now summit exhibition. • Current project that will happen. Joining certain events: plan to decarbonise the entire sports system/Paris agreements. Who will sign this? Probably not many. Integrate sport into this type of event. Sport for change theme integrated since last year.
8	Anne-Cécile Turner (Agency) <ul style="list-style-type: none"> • In fact, what makes the success of what you have just mentioned is the idea to have taken things in a global way, seriously, by associating scientists of education, to act on all the means of action, and moreover to have succeeded in making something which goes out of the sport • Sport is pretext: I think that it's also the pedagogy of sport in relation to this, whether the PSG players fly or not, it doesn't make any difference. But maybe we'll make the 10,000,000 people change, and I think that it's at this level that the project is actually quite remarkable.
9	Phil Furrer (Agency) <ul style="list-style-type: none"> • Inspire young entrepreneurs and see them develop their own projects and social innovations for a better world through sport • Influence colleagues and leaders to be more sensitive to social issues: participation, diversity, development
10	Xavier Parenteau (Agency) <ul style="list-style-type: none"> • We have been able to implement a certain number of actions at all levels and concerning all trades of the Stade de France sustainability policy
11	Mael Besson (Agency) <p>After several years of work in the field, in the Ministry of Sport and as a consultant, I(we) have made several surveys that brought those results on the table:</p> <ul style="list-style-type: none"> • The adaptation of sport to the future will only be possible by limiting climate change and the loss of biodiversity. • To do this, sport must obviously reduce its environmental footprint • But, beyond sport, it is the impact of all human activities that we must reduce; otherwise, even with adaptation, a large part of our sporting activities will become impossible. Our own survival depends on it.
12	Patrick Roult (Olympic preparation) <ul style="list-style-type: none"> • Modest even though awareness is gaining ground.

Source: qualitative interviews.

4. Discussion

This paper offers an exploratory analysis of the relationship between one sector (sport) and one concept (sustainability). If these two aspects have long been studied separately, examining the current junction between them is meaningful on both theoretical and practical levels. Thus, it is interesting to look at the way academics who are specialised in sport have paid attention to the concept of sustainability and the methods they used to conduct such surveys. It is also valuable to examine the relationship between theoretical issues and the strategies implemented by managers involved in the field of sport. In short, does theory meet practices and vice versa? Due to the exploratory dimension of this research, we did not have a guiding question when collecting our data. The process was rather based on an inductive rationale. However, some lessons can be learned from both the bibliometric analysis and from the interviews that were conducted.

4.1. Some Publications That Do Not Reflect the Whole Picture

In studying the sample, what we observe is that most of the academics who published some articles in the field are originally based in North America. This is in line with [26] findings, which offer a bibliometric analysis of sport tourism and sustainability. Two hypotheses can be established to explain this observation. First, North American academics are the most important in numbers. As a result, their share in the total of authors who have examined these relationships between sport and sustainability is logically more significant. In that sense, their proportion could be similar to what is generally observed in the field of sport management, regardless of the topic: regarding the concept of sustainability, academics from Canada and the USA are the most important in numbers. Another explanation that could nevertheless be connected to the one above is the fact that issues about sport and sustainability are maybe especially crucial in North America. Indeed, in these countries, sport-related business has been in an advanced stage for many years. Therefore, being able to continue developing projects in this field while paying attention to their sustainable dimension is crucial.

Secondly, it is interesting to notice that publications mixing sport and sustainability are not as recent as we might expect. If “sustainability in sport” can be perceived as a hot topic over the last few years, according to our sample, only a few publications were written over 15 years ago. This assertion backs [26] since these authors even identified some articles in 2002. However, one finds different results in the distribution of the publications with regard to the date of publication. Ref. [26] found a progressive increase in research topics including an expansive stage from 2016 to 2019. In our research, we did not notice such an expansion. An explanation could be that we did not use the same method to collect the data. Another hypothesis could be that there is a time gap between issues that are discussed within society (sustainability, especially in sport, has been a growing concern over the last few years) and their translation into academic work: academics focus on social issues after having the confirmation that the latter have become major. This statement would debunk the idea that sport is at the forefront of the contribution in analysing sustainability concerns. Additionally, when looking at the journals in which these kinds of works have been published, we could theoretically identify either journals that overview issues in sport in general and then accept a paper dealing with its connection to sustainability or journals that examine issues in sustainability and publish papers related to sport.

Thirdly, as expressed in Table 1, sustainability in sport covers different dimensions. What we learnt from the bibliometric analysis is that these different dimensions are not equally examined. Three dimensions are over-studied: sport tourism, sporting events and professional sport are truly dominant. This can be noticed in the fact that these three dimensions cover the biggest stakes, the highest number of stakeholders and the most important businesses, which require a sustainable vigilance. As a supplementary approach, these three dimensions are definitely the most developed in North America. As we said, since this part of the world is also dominant in the authors’ countries of origin, this could

explain why sport tourism, sport events and professional sport are the leading sectors when studying sustainability in sport.

Furthermore, another point can be made. As explained above, the concept of sustainability covers three major dimensions: economic, social and environmental. The latter is, without a doubt, the most examined dimension. This finding is in line with [27] who, 15 years ago, already called for an integrative analysis of the concept of sustainability including these three dimensions. Environment-oriented studies are meaningful and reflect the fact that for numerous sport organisations, being involved in a sustainable process means promptly taking action in this particular dimension. This could be explained by the fact that there is a growing concern from the population (who are also the organisations' customers) who cares more and more about these issues, which encourages companies/organisations to be, as a result, more involved as well. On the other hand, for sport organisations, performing better in this environmental dimension is maybe more visible and then more symbolically valuable, rather than having a real strategy with regard to the social or economic aspects of sustainability.

Beyond the aforementioned points, there are several comments to be made. Some of them can be seen as limitations. The first one deals with the theoretical dimension of the published works. Indeed, if the number of papers examining the relationships between sustainability and sport is quite significant, they do not seem to be anything more than applied studies. This is confirmed by the use of a very long list of theories (see Table 5) that have been previously applied to other areas. In short, authors apply the concept of sustainability and its related theories to sport as they would to any other area (tourism, transport, industry, etc.). Accordingly, sport is nothing more than an application without, so far, any theoretical specificities. In order to make "sustainability in sport" a valuable field of research, further research should be conducted in order to identify some theoretical uniqueness. This limitation is in line with some former statements [28,29] underlining the lack of a scientific foundation or formalised definition of this concept. Thus, sustainability is not a theoretical model, just a topic of interest similar to environmentalism [30,31]. In their research, ref. [26] share some insights mentioning that the theoretical framework of sustainability could be found within different disciplines such as organisational behaviour, marketing, psychology, communication, facility, law and governance, finance and economics.

Finally, our exploratory bibliometric analysis does not take into consideration some variables that could have been valuable in order to offer a more in-depth analysis: a greater number of published authors, more cited articles, authors' universities of origin and co-occurrence of keywords along the period. This appears as a limitation of this study. One can refer to the work of [26] for further analysis.

4.2. Contributions from the Industry within the Theoretical Background

Sustainability in sport is definitely an issue. As explained above, the first dimension which is at the core of the published works is the environmental dimension (or ecological impact). The interviews that we performed confirm this assertion. Thus, many sports, especially outdoor sports, require natural resources (like snow, ice or good quality of water [32]). Going deeper into the understanding of natural management and compatibility between sport and natural resources is not only an issue for academics. It is also an issue for managers who lead businesses and have to find the most appropriate way to conduct the long-term development of their business through a sustainable perspective. The connection between these managers, academics and different organisations (such as POW (Protect Our Winter), which tries to defend a sustainable way to continue practicing skiing) that monitor the situation of our natural environment (storm activity, global warming, natural disasters) seems more and more crucial. This is an issue since [33] noted that there is a disconnection between academics and practitioners within this space. This requires a better connection between stakeholders, including some strategies leading, for instance, to the construction and/or the renovation of sport facilities and/or the organisation of sporting events [34].

One of the major conclusions that occurred during our interviews is the obligation to have a global vision of the problem. Most of the organisations focus on ecology first, but this seems to be only one aspect of the problem. Sport managers cannot improve a situation without taking into account social and economic aspects. Sharing the added value, thinking about the “fair” price to pay to have a sustainable event or product and defining the major stakeholders that have a bigger role in the problem are also crucial issues. This has already been confirmed by [35] research.

A second interesting piece of information is the origin of the sustainable policy or strategy implemented by the organisation: all the persons interviewed underlined that individuals have made the shift far in advance before their organisation. Most of the persons we interviewed can in fact be considered as “pioneers” who influenced their organisation. It is very rare to have a collective reasoning before an individual one.

Of course, when the organisation needs to move forward with a concrete ecological implementation, this requires expensive means that imply a collective decision on a long-term perspective. This confirms some other results from previous research, such as the work of [36]. Many facilities are currently implementing sustainable building improvements or construction principles, such as energy-saving lighting and low-flow faucets: those investments should last 20 to 30 years minimum.

Finally, those choices require a global agreement inside the organisation [37] but also with all their stakeholders. For example, as ticketing has become a minor revenue in professional sport in North America and Europe [38], sponsors and media, which represent 60 to 80% of those revenues, should be completely engaged in the process. This will actually be the most important issue for sporting event organisers that are mostly financed by corporate companies in the industries of airlines (Fly Emirates, Qatar Airways, Etihad, etc.), banks (that mostly finance the oil industry), gas (Gazprom, before the war in Ukraine, was one of the biggest sponsors in the world), or cars (Mercedes, BMW, Toyota, BYD, Peugeot, etc.).

5. Conclusions and Recommendations for Future Work

The purpose of this article was to propose a reflection from three perspectives.

5.1. A Societal Dimension

Sport presents a rather remarkable ambivalence. Sport is well placed to contribute to engaging positively with social issues including public health, stress, education, integration, reintegration and even post-traumatic or post-illness care. However, sport events, especially the biggest ones, have become destructive for the environment (the transportation of fans and teams around the world often has a calamitous carbon footprint, and the construction of facilities from scratch is sometimes disastrous in terms of legacy) and have a questionable social impact since there is little proof of a link between the organisation of an event and an increase in the practice of sports. Finally, in terms of inclusion, the increase in organisation costs and the need not to waste public money in democracies pushes organisers to increase the price of tickets, which can exclude a large part of the population from these events. It is then difficult, when managing these constraints, to be exemplary globally in terms of CSR. The societal challenge of sport is therefore optimised by taking a much more global approach to the issue.

5.2. An Academic Dimension

The second important aspect covered by this introduction to our Special Issue of *Sustainability* is academic. The first part of our article has shown the growing importance of the contents related to sustainable development in our field of sport management, by progressively covering the whole theoretical spectrum. It should also be noted that these themes are also present in many journals related to our field dealing with geography, sociology, marketing and economics, which shows the interest of a multidisciplinary approach crossing several approaches.

5.3. A Management Perspective

Finally, our interviews with experts allowed us to shed light on the needs of sport practitioners from a managerial perspective. While many of the developments in terms of taking sustainable development into account were originally individual initiatives, all stakeholders are now concerned. All of the people we contacted emphasised the global dimension of the phenomenon, integrating ecological, social and economic aspects on an equal footing.

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