GOVERNANCE OF THE SUSTAINABILITY AGENDA WITHIN FORMULA 1

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ABSTRACT
Despite the contentious nature of the concept of sustainability and its various interpretations, it has become a key element of the organizational life of any sport, concerning both its financial survival and development, and asserting legitimacy by contributing to the achievement of a range of broader goals imputed by various intergovernmental institutions, public authorities, and societal groups. The challenge of achieving a balance between the strive for continuous economic and fan growth, global expansion, and the inherent need for new resources, with the responsibility for the environmental impact of sporting activities, meeting diverse needs and interests, ensuring fair distribution of costs and benefits among members of society, as well as the very cost of implementation in these conflicting areas is particularly relevant to Formula 1 (F1). This inevitably involves the creation of an institutional framework to steer collective actions towards sustainable development. This process also leads to considerable changes in the governance, regulations, and business model of the very sport. The article aims to explore the main forms of steering and related policy instruments employed within F1 to implement sustainability strategies. To this end, we applied the analytical framework developed by Treib et al. (2005). The study builds on desk research and documentary content analysis as primary methods of investigation. The results demonstrate that three mechanisms for achieving sustainability commitments are at play, namely coercion, framework regulation, and voluntarism. The findings also indicate that the main focus remains on the environmental and economic issues, particularly in adhering to mandatory technical and financial standards, while teams decide on their own actions regarding the social aspect of the sustainability concept. In practical terms, the paper contributes to a deeper understanding of how a highly popular and commercialized sport like F1 deals with the complexities of sustainability, offering insights that may apply to other sporting contexts.

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INTRODUCTION

The societal and political commitment to sustainability has been increasingly impacting the governance and management of modern sports. However, very little is still known about how the complexity of sustainability in highly commercialized sporting contexts is governed. The paper examines the prevailing modes of governance and related policy tools used in the context of F1 to steer sustainability efforts.

Theoretical framework

The concept of sustainable development, in its core, seeks to reconfigure the balance between economic growth, as a key prerequisite for solving basic problems in social and environmental terms, which requires establishing an adequate institutional framework. In this sense, sustainability represents both a holistic political and normative concept, which, however, faces different interpretations stemming from value systems, interests, power, and resource relations. This idea is laden with promises and ambitions to meet the development needs and interests of different groups of people and organizations. It is tied to a moral imperative of fair distribution of costs and benefits among members of society, but in practice, it is also contradictory in the sense that it requires sufficient capacity building of a system/organization to predict future situations and deal with uncertain outcomes of institutional actions. The debate on basic human and/or organizational needs requires attention to the notion of triple bottom line, which integrates the goals of social well-being, environmental protection, and economic development (Fredline et al., 2003). The logic behind this thinking is that no meaningful social change would be possible, nor would any business or sector be successful in the long term without considering these components in a comprehensive way. The concept of sustainable development thus includes three basic interrelated aspects – economic, environmental, and social (WCED, 1987; UNSDG, 2000). Spangenberg (2004) argues for a fourth dimension – institutional/governance – which is related to the need for an integrated approach to the other three fundamental components.

The inherent difficulties in finding a balance between these interrelated properties make sustainable development a highly contentious concept for two main reasons. As Girginov (2018) points out in this regard, there is a lack of consensus on the basic elements of sustainability – needs and development – and the resulting difficulties in their operationalization and creation of an adequate governance mode. The second reason, also argued by Dresner (2003), is that the very idea of sustainability stems from a growing pessimism about the capacity of human institutions to deal with problems that are far less challenging than dealing with the unknown future. Nonetheless, sustainability is not a mere technical term but has become a powerful discourse with beliefs, values, principles, governance configurations, and instrumental practices, the primary role of which is to purposefully shape the meaning of human and organizational actions, prioritizing certain issues while silencing others. This duality presupposes different approaches to tackling these complex issues, but as reality shows, these ambitions remain unfulfilled. The strength and subsequent diffusion of the idea of sustainability in the global political and economic system depends very much on the status and resources of its promoters (McNeill, 2006).

Undoubtedly, all sports and sporting competitions inevitably produce some impact on the environment, as they concentrate in a limited physical space and time a certain number of people, equipment, and facilities, along with the consumption of energy, food, and drink, and the resulting consequences. However, there is still a great deal of uncertainty about what a sustainable sport means, and even the sustainability strategies of influential international sport governing bodies, such as the IOC, FIFA, World Athletics, or the International Federation of Automobile Sports (FIA), do not offer a holistic approach to sustainability. As a global sport, F1 is a kind of industry producing significant economic, environmental, and social consequences. Given the particularities of F1 as a sport that relies heavily on the use of non-renewable resources, the focus is reasonably on its environmental footprint. On the other hand, there is still no evidence in the extant literature that sport as a whole is one of the areas of human activity contributing to climate change and causing other harmful impacts on nature (Pfahl, 2018). Nevertheless, F1 is also associated with technological innovation in various fields, the applicability of which leads to the creation of significant value added and opportunities for multiplying effects in other economic and social sectors. At the core of sustainability is a pronounced concern for meeting the needs of diverse people and organizations, while distributing social and economic benefits in a fair manner (Dresner, 2003). In the system of F1, this entails attention to the specific needs of all stakeholders, such as governments, promoters, shareholders, partners, teams, employees, sponsors, suppliers, fans, host destinations, and the environment. The success lies in the ability to consistently address these needs through management systems, processes, and behaviors. These are complex issues that require careful planning, implementation, and resources.

The implementation of a vision and related strategies and policies for sustainable development requires the establishment of an appropriate institutional framework and mechanisms to steer collective actions towards achieving desired effects (Jordan, 2008; Pierre & Peters, 2000). They prescribe how goals are to be achieved and what the behavior of individuals and organizations should be. From an institutional perspective, Jordan (2008) outlines three main properties of sustainability governance. The first one is analytical, or how the idea of sustainability is perceived and articulated. The second property concerns the empirical manifestations of the policy instruments employed. The third quality, normative, prescribes which principles, rules, and practices should be adopted and how they should be implemented to achieve sustainability goals. The ideological, political, and moral imperatives that underpin the concept of sustainable development are the starting point in terms of exercising power and deploying legitimate means.

To analyze the main forms of steering and related instruments employed within F1 concerning sustainability, we used the analytical framework developed by Treib et al. (2005). The authors explicate that "Policies can be distinguished according to their steering instruments" (p. 5). They generally include norms, sanctions, and regulations. The typology encompasses four main modes of governance, which are premised on two key criteria (Table 1):

i) Depending on the extent of the legally binding conditions for implementers, instruments can be highly binding or non-binding, and

ii) Depending on the degree of maneuvering available to implementing organizations, a rigid and a flexible approach can be distinguished.

Table 1. *Modes of governance (adapted from Treib et al., 2005).*

		Instruments	
		Binding	Non-binding
Implementation	Rigid	Coercion	Targeting
	Flexible	Framework regulation	Voluntarism

Coercion "is characterized by binding legal instruments prescribing detailed and fixed standards that leave little leeway in implementation (Treib et al., 2005, p. 13).

Voluntarism is premised on legally non-binding instruments and only defines broad goals and desired outcomes that implementing entities may specify in their own way in implementation.

Targeting contains non-binding recommendations, but at the same time, they are sufficiently "detailed and thus leave less room for maneuver for specification at the implementation stage than is true in the case of voluntarism" (Treib et al., 2005, p. 14).

Framework regulation also contains binding conditions, but the implementing organizations have more flexibility to choose how to approach the practical implementation. Here, the influence exerted by an actor is less pronounced than in the coercive form, but more significant when non-binding tools are used.

Therefore, the present study aims to explore the main policy instruments of steering sustainability commitments by F1 teams.

METHODOLOGY

The study builds on desk research and documentary content/thematic analysis as primary methods of investigation. To achieve the study's aim, a case study approach was used**.** This allowed tracking similar processes, actions, sources of influence, and events related to the practical implementation of sustainability measures among F1 stakeholders, operating in specific structural, economic, technological, political, and socio-cultural contexts. As a central source of empirical information, various sources, such as sustainability strategies, implementation plans, industry reports, and specialized studies, were scrutinized, which allowed for the finding of relevant data for argumentation. More specifically, the sustainability strategies and their implementation tools of all ten current F1 teams, as well as the Formula One Management company's own strategy, were examined. These documents came into existence predominantly during the period 2019–2022, following F1 and FIA's accession to the UNFCCC Sports for Climate Action Framework in 2019. Some of them are available on corporate websites, while others were obtained through the authors' own channels. The inclusion criterion in the documentary selection was the identification of themes, targets, and measures related to any of the key dimensions of the sustainability concept (i.e., ecological, social, financial, and governance), their operationalization, and practical implementation. Bowen (2009) defines documentary content/thematic analysis as a process of documentary evaluation from which new empirical knowledge is created, the meaning of which is that the actions of managers and organizations leave an imprint on the documents produced.

RESULTS AND DISCUSSION

Today, F1 is a sport with a cumulative TV audience of 1.9 billion people and 500 million followers on social media. Beyond the entertainment, political, and business appeal of races, F1 is seen as a global 'caravan' that travels to 21 countries each year, accompanied by extensive equipment, personnel, and fans. Hence, F1 is widely criticized as one of the sports that generates a carbon footprint of 256551 tonnes (F1 Sustainability Strategy, 2019). The global popularity, interest, and importance of F1, as an industry integrated with other sectors, raises the question of its role in sustainability efforts. The theme of sustainability in F1 concerns not only the sport itself in terms of competition with other sporting events of global significance, spectator interest, financial stability, viewership, but also important environmental, social, economic, and institutional issues. This demonstrates that there is an inextricable link between these two interpretations of sustainability. In practice, they influence each other, with changes in one affecting the other, revealing the dynamics of this relation and its management complexity. Strict compliance with the responsible use of resources has become the norm for all competitions. The introduction of elements such as the promotion of sustainable behavior and technological innovation thus offers a new model of existence.

As our study shows, the FIA deploys a governance approach that requires all motor racing events, including F1 teams, to reconsider their contribution to achieving sustainability goals in environmental, economic, and social terms. To that aim, in the institutional format of F1, we found the employment of three out of the four steering modes identified by Treib et al. (2005), namely coercion, framework regulation, and voluntarism. The analysis below argues that the main focus remains on the environmental and economic dimensions of sustainability, in terms of abiding by mandatory technical standards and financial regulations. At the same time, with regard to the social aspect, F1 teams decide on their own what and how to do.

Coercive mode of governance

Under FIA jurisdiction, the F1 management is imposing new technical requirements to improve car energy efficiency. For example, starting from 2026, all teams must use hybrid engines that run on cleaner fuels and more electric power. Teams that do not meet these commitments will not be allowed to compete. Moreover, according to Sanderson and Shaikh (2018), the development of new vehicle technologies contributes to the creation of a set of economic and social benefits, with the switch to alternative fuels further creating indirect returns from new sponsors and prospective fans. Another example of a coercive mechanism is the introduction of a 'cap' on team spending. For the period of 2023-2025, it is determined to be up to $135 million. The budget cap includes expenses for cars' technological development, but it does not effectively impact some other key areas, such as drivers' salaries, marketing, logistics, and operational costs. In addition, the FIA can amend the sporting and/or technical regulations, as well as make changes to the financial regulations at any time it deems necessary for safety reasons, without the approval of the F1 Commission. Through these two mechanisms, the F1 management relies on the efficient use of resources over which it can exert influence with the aim of keeping financial stability and ensuring competitive balance between teams with bigger and smaller capital.

Framework regulation

In 2019, F1 adopted a new environmental policy announcing its first sustainability strategy. The document delineates the sport's claims to continue to be a pioneer in the automobile industry, working with the energy and car manufacturer sectors to deliver the world's first zero-carbon powertrain. F1 has incorporated the use of environmentally friendly management approaches and practices in compliance with the Events Sector Sustainability Standards (ISO20121 and the Sustainable Sport Event Management Standard). Moreover, with the direct involvement of the FIA, F1 has implemented an FIA Certification Program, which includes 17 different criteria that are binding for teams, but at the same time, they have flexibility in the implementation stage. Such an approach can be explained by the different capacities, understandings, and priorities of the teams concerning sustainability. Also, some of the teams implement policies that correspond to the sustainability strategies of their mother company, which they are part of. Therefore, the governance process is much more complex as teams have to consider not only their own interests but also the expectations of other stakeholders.

By introducing a clear and consistent management system for sustainability, the FIA provides F1 teams with a three-tier framework against which to position their activities:

- One star: core practices that demonstrate baseline environmental performance and a commitment to improved sustainability governance.
- Two stars: activities that demonstrate good environmental performance and are close to international standards related to sustainable development policies.
- Three stars: best practices that demonstrate a commitment to continuous improvement in environmental policies by team leadership.

In 2020, F1 was awarded 3-Star Accreditation by the FIA, which encouraged teams to change the way they are managed to include sustainability policies. In doing so, F1 has became the first motor racing championship in the world to have all participating teams accredited with the highest level of recognition for environmental sustainability.

Voluntarism

From another perspective, especially with regard to the social dimension of sustainable development, there are no specific legally binding or normative requirements in the sustainability strategy of the F1 management that should not be exceeded. Rather, it contains broadly defined goals and recommendations with a completely voluntary character, and the teams decide on their own discretion what and how to do in this area. For example, in 2022, Standard Ethics found that 30% of the teams have a code of ethics with international references to the UN Universal Declaration of Human Rights, ILO, and OECD. In addition, five teams – Scuderia Ferrari, McLaren, Aston Martin Aramco Cognizant F1, Williams Racing, and Mercedes AMG Petronas – publish a sustainability or corporate social responsibility report, with 80% of them highlighting the importance of human rights and committing to acting in an ethical way. All teams are involved in implementing and strengthening systems that prevent modern forms of labor exploitation. The important point here is that such a process is inevitably accompanied by a set of transformations in value systems, norms, rules, structures, processes, and practices, control and decision-making mechanisms, including the reflective interpretations of managers and stakeholders.

The adoption and implementation of sustainability strategies within F1 is influenced by various external and internal sources. It should be stressed that initially, this process has been catalyzed exclusively by external actors, such as the UN and EU, the FIA, investors, governments, NGOs, and the media. Subsequently, the F1 management itself, team owners, mother companies, employees, and team drivers have become significant internal factors. The key F1 stakeholders have different interests and views regarding sustainability, which proves the complexity of the process of its implementation and management. Among the leading motives for introducing a particular practice into organizational life are improving performance and/or gaining legitimacy. In the case of the F1 management and F1 teams, the search for legitimacy from their environment has become a chief driver for sustainability-related actions. Depending on the source/promoter of sustainability commitments, all three types of institutional isomorphism are observed within F1, as described by DiMaggio and Powell (1983), namely coercive, normative, and mimetic. Coercive isomorphism concerns the new mandatory technological requirements for cars coming into force in 2026; complying with generally accepted values and norms of behavior (normative isomorphism), while mimetic manifestations are seen in the attempts by F1 teams to replicate sustainable management practices introduced initially by their mother companies, other businesses, or leading international sport organizations.

CONCLUSIONS

Three mechanisms for steering sustainability commitments within F1 are at play, namely coercion, framework regulation, and voluntarism. Also, all three types of institutional isomorphism are observed. The underlying motivations of F1 teams and management for adopting the idea of sustainability have both strategic and tactical implications. The former serves the goals of legitimacy or how the sport is to be perceived by stakeholders, while the latter refers to deriving marketing and financial benefits. Although sustainability has emerged as an externally imposed imperative in the commercial world of F1, this concept has gradually become a new framework for managing organizational activities in sport. Nevertheless, the complex nature of sustainability and its different interpretations pose new challenges for F1 companies and teams in the governance of relevant strategies and policies. Further research is needed to explore the dichotomy between the striving for constant growth and inherent resource needs and the commitments to achieve a sustainable sport from a holistic perspective, taking into account all interrelated dimensions of the sustainability concept.

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