



Governance and sustainability in sport federations: lessons and barriers from an international comparison

Gobernanza y sostenibilidad en las federaciones deportivas: lecciones y barreras desde una comparación internacional

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Abstract

Introduction: Sustainability is increasingly embedded in global sport governance, yet its implementation within national sport federations remains uneven across countries in terms of strategic integration, institutionalization, and communication across environmental, social, and economic dimensions.

Objective: This study compares how national sport federations in Czechia, Norway, and Australia integrate and communicate sustainability, identifies key barriers and drivers, and highlights areas for further development.

Methodology: A mixed-methods design was applied. Quantitative content analysis covered websites and strategic documents of 220 federations (78 Czech, 55 Norwegian, 87 Australian). Additionally, semi-structured interviews were conducted with representatives of six Czech federations. Sustainability initiatives were coded using a combined deductive-inductive approach across three pillars, supported by methodological triangulation.

Results: Norwegian federations demonstrate the most advanced and systematic integration, including formal strategies and diversified communication. Australian federations show broad engagement, especially in social and educational areas, but with moderate formalization. Czech federations rely mainly on fragmented and ad hoc activities, with limited environmental focus and weak strategic anchoring. Key barriers include limited staff capacity, low prioritization, and insufficient policy frameworks, while benchmarking and international standards act as important drivers.

Discussion: Differences reflect variations in institutional maturity, professionalization, and governance capacity.

Conclusions: Strengthening institutional support, strategic frameworks, and international knowledge transfer is crucial for advancing sustainability integration.

Keywords

Sustainability; sport federations; sport governance; sustainability implementation; comparative analysis.

Resumen

Introducción: La sostenibilidad se ha consolidado como un elemento clave de la gobernanza deportiva internacional; sin embargo, su implementación en las federaciones deportivas nacionales sigue siendo desigual en términos de integración estratégica, institucionalización y comunicación en las dimensiones ambiental, social y económica.

Objetivo: Este estudio compara cómo las federaciones de Chequia, Noruega y Australia integran y comunican la sostenibilidad, identifica barreras y factores impulsores, y señala áreas que requieren mayor desarrollo.

Metodología: Se utilizó un diseño mixto. El análisis cuantitativo de contenido incluyó sitios web y documentos estratégicos de 220 federaciones (78 checas, 55 noruegas y 87 australianas). Se añadieron entrevistas semiestructuradas a representantes de seis federaciones checas. Las iniciativas se codificaron mediante un enfoque deductivo-inductivo en los tres pilares, con apoyo de la triangulación metodológica.

Resultados: Las federaciones noruegas presentan el mayor nivel de integración sistémica, con estrategias formales y comunicación diversificada. Las australianas muestran una amplia implicación, sobre todo en iniciativas sociales y educativas, aunque con formalización moderada. Las checas dependen principalmente de actividades fragmentadas, con limitada orientación ambiental y débil anclaje estratégico. Las principales barreras son la escasa capacidad de personal, la baja priorización y la limitada formalización de políticas, mientras que el benchmarking y los estándares internacionales actúan como motores clave.

Discusión: Las diferencias reflejan distintos niveles de madurez institucional, profesionalización y capacidad de gobernanza.

Conclusiones: Es esencial reforzar el apoyo institucional, los marcos estratégicos y la transferencia internacional de conocimiento.

Palabras clave

Sostenibilidad; federaciones deportivas; gobernanza deportiva; implementación de la sostenibilidad; análisis comparativo.



Introduction

In recent years, sustainability has become a central strategic concern in sport management at both global and national levels (Moon, Bayle, and François 2022; Cury, Kennelly, and Howes 2023a; Cayolla and Escadas 2024; Glebova and Madsen 2024). The concept is typically framed through the “triple bottom line” (Booth et al. 2015; Hugaerts et al. 2023; Hugaerts and Könecke 2025), encompassing environmental, social, and economic dimensions, and has increasingly been incorporated into the agendas of sport governing bodies and federations. Beyond its normative value, sustainability is now closely linked to access to funding, institutional legitimacy, and long-term organisational competitiveness.

At the international level, key actors such as the International Olympic Committee and the United Nations have positioned sport as an important contributor to sustainable development, particularly through the Sustainable Development Goals (SDGs) (International Olympic Committee 2018; Lindsey and Darby 2019; Chong et al. 2022; Hernández-Hernández et al. 2023; Hayat et al. 2025). Despite this growing institutional emphasis, the practical implementation of sustainability within sport organisations remains uneven and often fragmented. The translation of global sustainability frameworks into organisational practice is particularly challenging at the level of national sport federations, which operate under varying resource conditions, governance structures, and institutional pressures.

From a theoretical perspective (Daddi et al. 2021; Hernández-Hernández et al. 2023), the adoption of sustainability in sport organisations can be understood through institutional theory, which explains organisational change as a response to coercive, normative, and mimetic pressures. In this context, federations may adopt sustainability practices to comply with regulatory requirements, align with professional norms, or emulate leading organisations. However, prior research suggests that many sport federations remain at an early stage of sustainability development, with activities often limited to isolated initiatives rather than systematically embedded strategies.

At the same time, the literature (Trendafilova and McCullough 2018; Hernández-Hernández et al. 2023; Opelík et al. 2025) indicates a strong imbalance in how sustainability is operationalised in sport. Social initiatives, such as inclusion or youth development, tend to dominate, while environmental and economic dimensions are less systematically addressed. This pattern reflects both the historical role of sport organisations and the lower technical and organisational barriers associated with social programming compared to environmental management.

Despite the growing body of sport sustainability research, comparative evidence on how national sport federations institutionalise and communicate sustainability across different governance systems remains limited. Existing studies have primarily examined either single-country settings or specific dimensions of sustainability, leaving insufficient understanding of how strategic anchoring, communication practices, and implementation barriers vary across national federation systems. This study addresses that gap by comparing federations in Czechia, Norway, and Australia and by linking observed patterns of sustainability communication to organisational capacity, institutional pressures, and practical barriers to implementation.

Literature review

In the realm of sport management, organizational sustainability is conceptualized as an emergent state that arises from the effective utilization of organizational resources to achieve strategic ends (Choi et al. 2023; Alawady and Robinson 2025). Within national sport federations (SFs), this involves a multi-dimensional synergy between viability (resources), encompassing human, financial, and physical capital, and capability, which refers to the administrative skills required to exploit these assets (Stevens 2017; Alawady and Robinson 2025). Modern governance often utilizes the Framework for Strategic Sustainable Development (Broman and Robèrt 2017), which operates across five levels: system, success, strategic guidelines, actions, and tools, ensuring that sustainability principles are embedded in the organization's core vision (Glibo, Misener, and Koenigstorfer 2022; Hozhabri, Sobry, and Ramzaninejad 2022).

Transitioning towards a truly sustainable organization requires a normative shift where sustainability moves from being a peripheral activity to a visionary strategy integrated across all policies (Glibo et al. 2022). This progress is often modelled through a “Sustainability Ladder” (Moon et al. 2022), which il-

lustrates an evolution from basic economic survival (financial stability) to social and environmental responsibility, eventually reaching full integration into the organization's core business (Nagel et al. 2015; Moon et al. 2022). However, empirical evidence (Hugaerts et al. 2023; Ramos-Díaz, Mercado-Salgado, and Farah-Simón 2025; Santos and Miragaia 2025) suggests that many sport federations remain in an early stage of development, characterized by institutionalized passivity and a persistent failure to communicate or implement meaningful environmental policies. This stagnation is frequently attributed to a lack of perceived urgency or insufficient institutional pressure (Hugaerts et al. 2023; Piller and Nagel 2024).

From the lens of institutional theory, the adoption of sustainable practices is driven by three primary pressures (Guevara, Martín, and Arcas 2021; Moon et al. 2022; Portaluri et al. 2025): coercive (regulatory mandates or funding conditions), normative (professionalization and industry norms), and mimetic (imitating leading peers for legitimacy). In emerging sectors of sport, like esports, academic partnerships further facilitate professionalization by establishing licensing standards and performance research to ensure long-term social sustainability (Hospodková et al. 2025). Furthermore, environmental policy integration is critical for ensuring that environmental concerns are prioritized in mainstream decision-making rather than being treated in isolation (Cury, Kennelly, and Howes 2023b).

Finally, long-term organizational sustainability is intrinsically linked to stakeholder loyalty, which is increasingly influenced by perceived service quality and social responsibility. This is especially relevant when engaging Generation Z, a demographic that displays a heightened sensitivity to social responsibility and environmental issues (Opelík et al. 2025). To be successful, federations must align their formulated strategies, policy development, and implementation to achieve a state of congruence (Chatzigianni and Mallen 2023), which is noted as a requirement for enduring environmental success.

Organizational sustainability in sports can be compared to a living organism in an evolving habitat: while its survival may initially depend on consuming basic nutrients (such as financial resources), its long-term flourishing requires the continuous development of advanced adaptive capacities (Alawady and Robinson 2025). These include the systematic integration of sustainability across all operational dimensions, the ability to adjust to ongoing environmental and societal shifts, and the construction of governance mechanisms grounded in project-management principles, multi-level dialogue, and knowledge transfer informed by international best practices.

The literature also underscores the necessity of conducting a critical analysis of the numerous areas in which the implementation of sustainability in sport remains incomplete, particularly within sport federations and associations (Moon et al. 2022; Piller and Nagel 2024; Hugaerts and Könecke 2025). This implementation gap, persisting between formal declarations and actual practice, is especially evident in Central and Eastern European contexts and in systems that are only gradually adopting international sectoral standards (Horváth et al. 2017; Cichowicz and Rollnik-Sadowska 2018; Moon et al. 2022; European Commission 2023; Huang 2023; Albu et al. 2024; Voráček et al. 2026).

Research objective

The aim of this study is to provide a systematic identification of how national sport federations approach sustainability. Specifically, it examines the ways and practices through which these organizations communicate and implement sustainability, and how they embed sustainable principles within the sport environment. This study responds to the fact that existing research on sport and sustainability is predominantly concentrated in North America (Cury et al. 2023a; Pellegrino and Stasi 2025) and, to a lesser extent, Western European contexts (Cury et al. 2023a, 2023b; Hugaerts et al. 2023), leaving other regions comparatively understudied. The analysis focuses on national sport federations in Czechia, Norway, and Australia, selected as contrasting cases that differ in sport governance arrangements, institutional maturity, and sustainability policy contexts. This comparative design allows the study to examine how sustainability principles are translated into federation-level strategies, formal roles and responsibilities, publicly communicated initiatives, and communication practices. The analysis specifically assesses the degree of strategic anchoring, operational integration, and public communication of sustainability, while identifying the main barriers, enabling factors, and areas requiring further development.

Method

The research was based on advanced triangulation of quantitative and qualitative methods, currently recognized as the empirical standard in studies on sports organization management and the implementation of sustainability practices (Gregori-Faus et al. 2025; Santos and Miragaia 2025). The study employs a combination of quantitative and qualitative methods, specifically content analysis and semi-structured interviews, to identify the ways in which sport federations communicate and operationalize sustainability. This multi-level research design enables data triangulation and allows for a deeper understanding of the contextual conditions within which sport federations operate. The research focuses primarily on Czech sport federations, while also incorporating federations in Norway and Australia to provide a comparative perspective. The selection of Czechia, Norway, and Australia followed a maximum-contrast comparative logic. The three countries represent different levels of institutional maturity, strategic formalisation, and public-policy embedding of sustainability in sport governance, which makes them analytically suitable for identifying variation in implementation patterns rather than for statistical representativeness. To enhance comparability within each national context, the study focused on federations affiliated with the principal umbrella sport organisation in each country (ČUS, CAS, and NIF), as these bodies constitute the most relevant and structured national federation field. The sample therefore represents the core national federation system in each country, although not necessarily every sport-related organisation operating within the broader sport sector.

Data sources and sampling

The research focused on national sport federations in three countries, Czechia, Norway, and Australia. In each national context, the analysis included federations affiliated with the country's principal umbrella sport organisation: the Czech Union of Sport (ČUS) in Czechia, the Confederation of Australian Sport (CAS) in Australia, and the Norwegian Olympic and Paralympic Committee and Confederation of Sports (NIF) in Norway. The initial sampling frame comprised 222 federations (78 Czech, 89 Australian, and 55 Norwegian). Two Australian federations were excluded because their websites were inaccessible during the data-collection period (January and February 2025). In total, 220 federations were identified (78 Czech, 87 Australian, 55 Norwegian) and included in systematic content analysis (see Table 1). An additional qualitative perspective was provided by semi-structured interviews with representatives of six Czech federations, selected through purposive sampling and conducted in March–April 2025. The selection aimed to capture variation in organisational context, accessibility, and visible sustainability engagement, while taking into account practical access to respondents. This strategy was appropriate for explanatory qualitative inquiry, as it enabled a more detailed interpretation of the barriers and enabling factors identified in the Czech context, but it also limits the symmetry of cross-national comparison, as interview data were not collected in Norway and Australia.

Table 1. Data set by country

Country	Number of sport federations analysed	Number of identified sustainable initiatives/cases
Czechia	78	457
Norway	55	560
Australia	87	816

Note: authors' own data.

Coding scheme

The unit of analysis consisted of sustainability initiatives and communication outputs, identified through desk research and digital content analysis. Coding followed a parallel approach: it combined deductive categories (environmental, social, economic pillars) with categories emerging from actual data analysis (e.g., environmental policies, inclusion, education, infrastructure, reporting, benchmarking) – inductive coding. The coding manual was developed based on the literature (Cury et al. 2023a; Di Tullio, Iraldo, and Daddi 2025; Gregori-Faus et al. 2025; Santos and Miragaia 2025) and pilot coding, with independent coding performed by two researchers. The resulting matrices underwent validation for intercoder reliability, and discrepancies were resolved through consensus and member-checking.



Analytical procedures

The analysis proceeded in two stages: first, a full reading and coding of content data and federation documents was performed; second, data transformation and aggregation into comparative matrices (Excel) was conducted. Final statistical and qualitative analysis relied on descriptive indicators of country and pillar variation, descriptive models, and the identification of recurring barrier and inspiration themes.

All interviews were audio-recorded, with individual sessions lasting between 30 and 60 minutes. After each interview was completed, the recordings were transcribed verbatim to preserve the accuracy and nuance of respondents' accounts. A strict anonymization procedure was applied to ensure that no respondent could be personally identified in the dataset. Following anonymization, the interview data underwent a systematic multi-stage analytic process. Initially, open coding (Krippendorff 2018; Alhassan et al. 2023) was employed to identify meaningful units of information and generate preliminary conceptual labels. In the subsequent phase, the interview data were subjected to thematic analysis (Krippendorff 2018; Lochmiller 2021; Squires 2023), allowing for the identification, refinement, and interpretation of overarching patterns across the dataset.

To strengthen the credibility and analytical rigor of the findings, the coding and thematic interpretation were conducted with the involvement of two additional authors, who independently reviewed the coded data and contributed to the iterative development and validation of the final thematic structure. This collaborative approach enhanced inter-coder reliability and supported a transparent and robust interpretative process.

Results

Sustainability Implementation Scope

Table 2 summarises cross-national variation in the breadth of sustainability implementation across national sport federations. Norway exhibits the most extensive engagement: none of the federations fall into the “no pillar” category, and a substantial share report initiatives spanning all three (environmental, social and economic) sustainability pillars (38%), with a further 24% covering two pillars and 38% focusing on a single pillar. Australia also shows broad uptake, with only 1% of federations reporting no sustainability pillar, while 22% address all three pillars and 32% cover two pillars. In Czechia, 10% of federations report no pillar, and implementation is concentrated primarily in single-pillar activity (67%), whereas multi-pillar approaches are less common (13% covering two pillars; 10% covering all three). Overall, these patterns indicate that sustainability is most consistently embedded across multiple domains in Norway, while Australia and particularly Czechia display a more fragmented profile, dominated by narrower, pillar-specific initiatives.

Table 2. Scope of sustainability implementation in national sport federation

Country	Federations	No pillars	One pillar	Two pillars	Three pillars
Czechia	78	10%	67%	13%	10%
Norway	55	0%	38%	24%	38%
Australia	87	1%	45%	32%	22%

Note: authors' own data.

These differences in approach are also reflected in the scope of sustainable activities. As shown in Table 3, sustainability engagement across all three national contexts is overwhelmingly concentrated in the social pillar, reported by 90% of Czech, 100% of Norwegian, and 99% of Australian federations. By contrast, the environmental and economic dimensions are markedly less prevalent, with the steepest deficit observed in Czechia (21% and 13%, respectively). Coverage of these pillars is substantially higher in Norway (62% environmental; 49% economic) and intermediate in Australia (38% environmental; 38% economic), underscoring a persistent cross-national imbalance in pillar breadth and a particularly limited operationalization of environmental and economic sustainability among Czech federations.

Table 3. Distribution of sustainability activity by pillar

Country	Social	Environmental	Economic
Czechia	90%	21%	13%
Norway	100%	62%	49%
Australia	99%	38%	38%

Note: authors' own data.

A more fine-grained examination of initiative profiles (Table 4) shows that programme portfolios are dominated by socially oriented interventions, most notably those targeting children and youth (Czechia 79%; Norway 82%; Australia 91%), alongside education (72%; 51%; 47%) and inclusion (32%; 96%; 92%). Equality-related initiatives are less common but remain more frequently reported in Norway (56%) and Australia (51%) than in Czechia (29%). Notably, the least prevalent initiative types in all three systems are those typically associated with more technical environmental management (e.g., emissions: 1%, 20%, 10%; energy: 1%, 5%, 11%; and water: 0%, 4%, 7% for Czechia, Norway, and Australia, respectively), indicating that sustainability action is framed primarily through social programming rather than resource- and impact-management measures (Table 4).

Table 4. Types of sustainability initiatives

Initiative type	Czechia (%)	Norway (%)	Australia (%)
Children and youth	79	82	91
Inclusion	32	96	92
Education	72	51	47
Equality	29	56	51
General sustainability	19	64	38
Waste management	13	49	18
Charitable activities	27	5	34
Suppliers	10	35	9
Finance	5	4	30
Sport events	13	13	8
Emissions	1	20	10
Infrastructure	3	15	8
Transport	4	13	6
Energy	1	5	11
Water	0	4	7
Employment	0	4	6
Other	6	35	21

Note: authors' own data.

Communication practices and benchmarking

The results indicate significant differences in the degree of formalisation of sustainability communication among national sports federations in the Czech Republic, Norway, and Australia (Table 5). Strategic documents represent the most utilized communication channel overall, dominating predominantly in Australia and Norway, whereas the Czech Republic exhibits a lower reliance on this formal codification of sustainability. Conversely, the dissemination of sustainability-related updates via news articles is most prevalent in Norway, followed closely by the Czech Republic, indicating a preference for regular, operational reporting; Australian federations utilize this specific format the least. Highly visible web placements, such as the main homepage, are utilized only marginally across all cohorts and are exclusively restricted to the social pillar of sustainability. Furthermore, dedicated sustainability sections are predominantly found on Norwegian websites, with minimal presence in Australia and a near absence in the Czech Republic. The publication of independent, systematic sustainability reports remains exceptionally rare, observed in only a single Norwegian federation, highlighting a critical gap in transparent sustainability evaluation across all examined countries. Overall, Norwegian federations employ the most comprehensive, multi-channel communication approach, Australian federations rely heavily on strategic documents, and Czech federations lag significantly in systematic communication.

Table 5. Placement of Sustainable Initiatives on Federation Websites

Communication Channel	Czechia (%)	Norway (%)	Australia (%)
Strategic Documents	68	89	95
"Elsewhere" (Other subpages)	71	93	75
Articles / News	42	56	33
Main Webpage	10	13	23
Dedicated Sustainability Section	3	22	7
Sustainability Reports	0	2	0

Note: authors' own data.

Regarding strategic anchoring, distinct national typologies were identified (Table 6). Norwegian federations predominantly integrate sustainability into their overarching strategic goals and areas (utilized by nearly two-thirds of federations), as well as core values and missions (nearly half), demonstrating a deep integration into their organizational ethos. Australian federations heavily favour conceptual documents and policies, an approach adopted by three-quarters of the organizations, while also frequently referencing values and missions. In stark contrast, the Czech Republic's approach is fundamentally different; sustainability is primarily relegated to operational committees or positions not strictly dedicated to the topic. Core strategic anchoring mechanisms, such as organizational values, missions/visions, or dedicated sustainability strategies, are either minimally present or entirely absent in the Czech context, indicating that sustainability is generally not deeply integrated into their fundamental strategic frameworks.

Table 6. Modes of Strategic Anchoring for Sustainability

Communication Channel	Czechia (%)	Norway (%)	Australia (%)
Goals & Strategic Areas	12	65	47
Other Committees / Positions	58	31	14
Conceptual Documents	4	13	75
Values	0	45	45
Missions & Visions	1	45	32
Sustainability Committee / Positions	5	16	6
Dedicated Sustainability Strategies	1	11	7
Other	10	2	14

Note: authors' own data.

The analysis reveals profound cross-national disparities in the institutional adoption of the United Nations Sustainable Development Goals (SDGs) among sports federations (Table 7). Norwegian federations exhibit robust engagement, catalysed by a 2019 national action plan, with 19 federations explicitly referencing the SDGs and 16 targeting specific goals. Conversely, Australian federations demonstrate nascent, fragmented integration, with only five organizations referencing the framework. Notably, the Czech Republic exhibits a complete absence of SDG integration, indicating a critical gap in strategic alignment with global sustainability agendas.

Despite these disparities in adoption rates, actively engaged federations universally prioritize objectives aligned with their core operational domains. The thematic consensus focuses heavily on SDG 3 (Health), SDG 5 (Gender Equality), SDG 12 (Responsible Consumption), and SDG 13 (Climate Action).

Table 7. Institutional Integration of the UN SDGs

Level of SDG Integration	Czechia	Norway	Australia
Specific Goal Mentions	0	16	4
General Mentions Only	0	3	1
No Mentions	78	36	82

Note: authors' own data.

Taken together, Tables 5–7 suggest that cross-national differences do not concern only the volume of sustainability communication, but the organisational logic through which sustainability is governed. In Norway, sustainability is more often embedded in strategic goals, values, and SDG-related framing, indicating stronger institutionalisation. In Australia, sustainability appears more document-based and policy-oriented, but less visible as a distinct reporting field. In Czechia, the predominance of operational positions and the near absence of mission-based anchoring suggest that sustainability remains weakly



embedded in core governance structures. These differences highlight key areas for policy improvement, organisational development, and international transfer.

Key barriers and enabling factors

The analysis of barriers and enabling factors reveals significant systemic disparities in institutional capacity for implementing sustainability. Czech national sport federations face the most pronounced challenges, particularly a shortage of qualified personnel, reliance on volunteers, low prioritisation of sustainability by leadership, and a lack of strategic and analytical structures.

These findings are based on interviews with representatives of six Czech sport federations, which uncovered not only structural deficiencies but also a limited understanding of the concept of sustainability itself. Respondents frequently perceived sustainability as a vague or ambiguous notion, with many activities being carried out intuitively and without a clearly defined strategic framework. As a result, a substantial proportion of initiatives emerge on an ad hoc basis, lacking long-term planning or evaluation.

Motivations for engaging in sustainability-related activities are often rooted in practical necessity, particularly in sports conducted in natural environments where environmental protection is essential for the sport's continued viability. Respondents also highlighted the potential of sustainability as a marketing tool and a means of distinguishing their sport from others. For some federations, external factors such as funding conditions or legislative requirements served as key drivers. One respondent noted: "...the grant from the City Council required that there be no plastic, single-use dishes" (R4), while another stated: "...if someone from the government or the National Sports Agency came and gave us the resources... then we would do it" (R6). The interviews also underscored the pivotal role of individuals as agents of change. As one respondent remarked: "...it's always mainly about finding someone willing to dedicate themselves to it" (R2). However, this reliance on individual initiative also exposes the vulnerability of the system, which depends more on personal enthusiasm than on institutionalised support.

In contrast, Norway and, to a lesser extent, Australia benefit from higher levels of professionalisation and institutional backing. In the Norwegian context, it is common for sustainability to be addressed by dedicated committees or paid officials, enabling a more comprehensive and coordinated approach. These differences in organisational and human resource capacity are directly reflected in the degree of sustainability integration across countries.

The interviews further confirmed the importance of international benchmarking, partnerships, and the exchange of good practices as key mechanisms for enhancing sustainability integration within the Czech context. The identified barriers and disparities highlight the need for targeted reforms, particularly in the areas of human and financial resource allocation, strategic planning, and systematic reporting. At the same time, the findings point to the potential of international knowledge transfer and the adaptation of proven practices.

Based on the interview analysis, four distinct types of approaches to sustainability among Czech sport federations were identified (see Table 8). This typology illustrates the fragmented nature of current practices and the extent to which they depend on individual actors or external circumstances, rather than on institutionally embedded strategies.

Table 8. Typology of Approaches to Sustainability among Czech Sport Federations

Approach Type	Characteristics
Intuitive	Activities are implemented without a conscious strategic framework, often informally
Reactive	Sustainability is addressed in response to external stimuli (e.g., funding, legislation)
Individually motivated	Initiatives stem from personal commitment of individuals within the organisation
Structurally supported	A committee or position exists, but lacks systematic activity or a clear mandate

Note: authors' own data.

In general, the results point to Norway's systemic superiority, while the Czech Republic and Australia lag behind with fragmented approaches. The identified barriers and differences underscore the need for targeted reforms, particularly in the areas of staffing and funding, strategic planning, and reporting. At

the same time, they highlight the potential of international knowledge exchange and the transfer of best practices.

Summary of results

The comparative analysis reveals that Norway leads in the institutionalization and multidimensional integration of sustainability within national sport federations. Norwegian federations demonstrate universal engagement, with over half implementing measures across all three sustainability pillars (environmental, social, and economic) supported by formal strategies, dedicated structures, and regular public reporting. The Australian follows with broad engagement and a strong emphasis on social and educational initiatives, though its strategic formalization and reporting practices remain moderate. In contrast, Czech federations, while showing high levels of basic engagement, exhibit limited systemic integration, with sustainability efforts often fragmented and lacking strategic anchoring.

These patterns are further reflected in communication practices and types of initiatives. Norwegian federations consistently utilize dedicated website sections, strategic documents, and institutional committees to communicate sustainability, while Czech and Australian federations rely more on general reporting and ad hoc initiatives. The Czech federations, in particular, show low uptake of environmental and economic sustainability measures, with only a minority implementing formal strategies or reporting mechanisms.

The integration of quantitative data with qualitative insights from Czech federation representatives highlights critical barriers to implementation. These include insufficient staffing, reliance on volunteer labour, limited strategic planning, and a lack of institutional support. Interviewees frequently described sustainability as a vague concept, with activities driven more by individual initiative or external funding conditions than by organizational measures.

Importantly, the triangulation of data sources confirms that the most pressing challenges, such as personnel issues, weak institutional frameworks, and low procedural formalization, are consistently identified across both statistical and qualitative evidence. Respondents emphasized the importance of international benchmarking, partnerships, and knowledge exchange as key factor of progress.

Discussion

This study set out to examine how national sport federations in three contrasting governance contexts (Czechia, Norway, and Australia) operationalise and communicate sustainability, and to identify the organisational conditions that inhibit or enable more systemic adoption. The results reveal a pronounced cross-national gradient in sustainability maturity: Norway exhibits the most institutionalised and multidimensional integration, Australia demonstrates broad engagement largely concentrated in socially oriented programming with moderate procedural formalisation, and Czechia remains characterised by fragmented, predominantly single-pillar activity with weak strategic anchoring. Interpreted through institutional and capacity-based perspectives, these differences are consistent with the proposition that sustainability diffusion in sport governance is shaped less by rhetorical commitment than by the interaction of coercive, normative, and mimetic pressures (Moon et al. 2022; Portaluri et al. 2025) with organisational resources and professionalisation.

Across the full sample, sustainability engagement is strongly skewed towards the social pillar. Nearly all federations report at least one socially oriented initiative, whereas environmental and economic dimensions remain markedly less prevalent, particularly in Czechia. The initiative typology further indicates that sustainability is most often framed as programme delivery, especially for children and youth, inclusion, and education, rather than as impact management addressing resource use, emissions, or water and energy stewardship. This pattern suggests that federations tend to prioritise domains that are closest to their traditional mission, most visible to stakeholders, and easier to implement with limited technical expertise. By contrast, the scarcity of emissions, energy, and water-related measures points to a persistent operational gap between sustainability as a normative aspiration and sustainability as measurable organisational performance.

Norway's comparatively strong performance, evident in the higher prevalence of multi-pillar portfolios, more frequent strategic anchoring in goals, strategic areas, values and mission statements, and the



greater use of dedicated website sections, signals a more advanced stage on the “sustainability ladder” described in prior work (Nagel et al. 2015; Moon et al. 2022). In institutional terms, Norwegian federations appear to operate in an environment where normative expectations (professional standards, governance templates, and sector-wide routines) and coercive incentives (national-level coordination and public-policy alignment) jointly favour formalisation. The comparatively higher uptake of the SDGs in Norway, catalysed by the national action plan, further illustrates how higher-level governance can translate global sustainability agendas into actionable, federation-level reference frames (Broman and Robèrt 2017; Hozhabri et al. 2022). Importantly, even in Norway, systematic sustainability reporting remains rare, indicating that the consolidation of sustainability as an auditable management domain is still emergent rather than fully routinised.

Australia occupies an intermediate position. The high presence of socially oriented initiatives and strong reliance on strategic documents indicate substantial engagement, yet the relatively limited use of dedicated sustainability web sections and the low prevalence of stand-alone reports suggest that sustainability communication is often embedded within broader organisational documentation rather than articulated as a distinct management field. This configuration may reflect a pragmatic approach in which sustainability is pursued through programmes that deliver immediate social value (e.g., participation and inclusion) while the more technical environmental agenda is less consistently operationalised (Cuesta-Valiño et al. 2021; Pérez et al. 2023; Trendafilova and McCullough 2018). From the perspective of institutional theory, mimetic pressures may be present, particularly via international standards and benchmarking, but they appear to translate into selective adoption rather than comprehensive, multi-pillar integration across federations.

Czech federations show the most pronounced implementation gap. Quantitatively, sustainability is frequently confined to a single pillar and rarely anchored in missions, values, or dedicated strategies (Choi et al. 2023); environmentally oriented measures are scarce, and SDG references are absent. Qualitative evidence helps explain these patterns: interviewees repeatedly described limited staff capacity, reliance on volunteer labour, and an ambiguous understanding of sustainability that encourages intuitive, ad hoc action rather than planned intervention and evaluation. The identified typology of Czech approaches (intuitive, reactive, individually motivated, and structurally supported but weakly mandated) is indicative of low organisational slack and limited professionalisation, conditions that constrain the translation of external sustainability discourses into internal routines. Notably, where coercive pressures arise, they can trigger discrete changes, yet these do not automatically generalise into organisation-wide sustainability systems without accompanying strategic frameworks and analytical capability.

The cross-national patterns in communication and strategic anchoring highlight that “doing” sustainability and “governing” sustainability are analytically distinct. Federations may implement socially valued activities yet remain weak in the governance mechanisms that enable continuity, learning, and accountability, such as explicit strategic goals, defined responsibilities, monitoring, and reporting. The very low prevalence of independent sustainability reports across all countries suggests that reporting is a late-stage capability that requires dedicated expertise, data infrastructure, and organisational incentives to disclose performance (Choi et al. 2023). In practice, the findings imply that umbrella organisations and public funders can accelerate sustainability maturation by coupling support with clear expectations: for example, by providing templates and training for sustainability plans, standardising minimal reporting requirements, and creating benchmarking platforms that reduce the transaction costs for smaller federations to adopt structured approaches.

The study contributes to the sport-and-sustainability literature in two principal ways. First, by combining large-scale website and document analysis with interview-based explanation, it connects observable communication outputs to underlying capacity constraints and governance logics, thereby offering a more process-oriented account of why implementation gaps persist. Second, the results broaden the empirical base beyond the North American and Western European focus noted in the Introduction, demonstrating that Central and Eastern European federation systems may face a distinct configuration of barriers in which sustainability is not resisted explicitly but is deprioritised amid limited staffing, low formalisation, and weak institutional pressure. The observed dominance of the social pillar across contexts further suggests that federations tend to interpret sustainability through legacy mandates unless external governance arrangements explicitly reward environmental and economic operationalisation.

The study makes a theoretical contribution by conceptualising sustainability in sport federations not only as a matter of programme presence, but as a matter of governance embedding. By distinguishing between sustainability activities, communication practices, and strategic anchoring, the analysis shows that federations may “do” sustainability without fully “governing” it. This distinction helps explain why implementation gaps persist even where socially oriented activities are relatively widespread.

From a practical perspective, the findings imply at least three priority interventions. For national umbrella bodies, the first step is to provide federations with standardised sustainability templates, including minimum reporting structures, examples of strategic wording, and simple indicator sets. For public policymakers and funding agencies, sustainability requirements should be linked to funding criteria in a developmental rather than purely punitive way, combining conditionality with training and technical support. For federation managers, especially in lower-capacity settings, the most realistic starting point is not a comprehensive ESG system but the gradual institutionalisation of responsibility through a designated role, a short sustainability action plan, and basic monitoring of selected social and environmental activities.

Several limitations should be acknowledged. First, the comparative content analysis is based on publicly available websites and documents; it therefore captures communicated sustainability rather than the full scope of internal organisational practice. Second, the qualitative component is asymmetrical, as interviews were conducted only with Czech federations. This strengthens contextual understanding of barriers in one country, but it does not provide equivalent explanatory depth for Norway or Australia. Third, the interview sample was purposive and based partly on accessibility and willingness to cooperate, which may have favoured organisations more open to discussing sustainability. In addition, the study relies primarily on descriptive cross-sectional indicators, limiting causal inference regarding the drivers of adoption and the temporal sequencing of sustainability maturation.

Future research should therefore (i) incorporate longitudinal designs to track whether federations transition from programme-based engagement to measured environmental management and reporting, (ii) extend interview sampling to Norway and Australia to test whether similar micro-mechanisms shape adoption under different governance regimes, and (iii) evaluate the effectiveness of specific policy instruments (e.g., funding conditionalities, accreditation schemes, and SDG/ESG alignment frameworks) in building federation capacity. Greater attention is also warranted to the development of comparable indicators of sustainability performance in federated sport, which would enable more robust cross-national benchmarking and facilitate the move from symbolic adoption to demonstrable outcomes.

The findings suggest that the primary challenge for advancing sustainability in national sport federations is not necessarily a lack of normative awareness, but rather a deficit in professionalised organisational capacity and systemic institutional support to operationalise these goals.

Conclusions

The comparative analysis of sustainable development strategy implementation in national sport federations in Czechia, Norway, and Australia revealed substantial differences in approaches to sustainability, professionalization, and the effectiveness of policy realization. The highest level of advancement was observed in Norway, where sustainability was more frequently anchored in strategic goals, values, dedicated communication structures, and SDG-related framing, supported by stronger professional capacities and institutional coordination. Australia was distinguished by a predominance of social and educational initiatives, while Czechia was characterized by a fragmented, intuitive approach and relatively low levels of sustainability policy formalization.

The results demonstrated that the key drivers of effective implementation were institutional support, the presence of formal policies, staff competence, external motivators (grants, regulations, benchmarking), knowledge transfer, and openness to international standards (ISO/SDG/ESG). The main barriers comprised financial constraints, a lack of specialized personnel, insufficient strategic communication, and a lack of systematic monitoring of outcomes.

This research constitutes an original contribution to international sport management scholarship, especially regarding the identification of practical implementation mechanisms, the specific context of



Central Europe, and the transfer of best practices from countries with highly developed sustainability systems. The findings are practically valuable for both academics and policymakers, as well as sport organization managers, underscoring the need for tailored strategies, capacity building, and the adoption of systematic reporting frameworks.

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