TÉCNICO LISBOA

UNIVERSIDADE DE LISBOA

INSTITUTO SUPERIOR TÉCNICO

SUSTAINABLE URBAN DEVELOPMENT AND MEGA-EVENTS

The Effects of Olympic Agenda 2020 on Olympic Games Planning

Gustavo Alexandre Ferreira Lopes dos Santos

Supervisor: Doctor Maria Beatriz Marques Condessa

Co-Supervisor: Doctor Fernando José Silva e Nunes da Silva

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Thesis approved in public session to obtain the PhD Degree in

Territorial Engineering

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Resumo

Evoluindo de uma mera competição desportiva para um catalisador de desenvolvimento, os Jogos Olímpicos transformaram significativamente as cidades anfitriãs. Governos aproveitaram os Jogos para desenvolver legados, promover a regeneração urbana e posicionar as cidades como centros económicos e sociais globais. Contudo, alinhar as exigências do evento com os objetivos de planeamento urbano apresenta desafios. Enquanto edições como Barcelona 1992 mostraram o potencial transformador dos Jogos, outras, como Atenas 2004, revelaram as suas complexidades. Além disso, organizar os Jogos tornou-se cada vez mais dispendioso, apresentando riscos económicos, sociais e ambientais que, se não forem devidamente geridos, podem comprometer o desenvolvimento sustentável.

O crescente escrutínio público sobre estas questões intensificou a oposição ao evento, reduzindo a atratividade dos Jogos e o número de cidades candidatas. Em resposta, o Comité Olímpico Internacional lançou, em 2014, a Agenda Olímpica 2020, prometendo uma mudança radical na forma como os Jogos são planeados, com o objetivo de melhorar a sustentabilidade, a credibilidade e a atratividade para os jovens e visando alinhar o evento às expectativas sociais.

Partindo do pressuposto de que as medidas urbanas da Agenda, embora inovadoras, enfrentam desafios práticos, esta tese analisa criticamente a sua implementação. O objetivo é enquadrar a preparação de Paris 2024 e Milan-Cortina 2026 no contexto dos objetivos urbanos da Agenda, identificando ineficiências e propondo novas abordagens para as resolver.

Os resultados revelam lacunas persistentes entre as ambições globais da Agenda e os seus efeitos práticos contextualizados, evidenciando dinâmicas estruturais no modelo dos Jogos Olímpicos e nos sistemas urbanos das cidades anfitriãs que dificultam o planeamento e a execução. Ao identificar fragilidades e propor medidas de mitigação, esta tese contribui para o debate sobre megaeventos, oferecendo uma abordagem resiliente para o planeamento urbano Olímpico e promovendo esforços para alinhar os Jogos tanto às necessidades das cidades, como à sustentabilidade urbana.

Keywords planeamento de megaeventos, Paris 2024, Milão-Cortina 2026, oposição pública aos Jogos Olímpicos, planeamento urbano e do território.

Abstract

Evolving from a mere sports competition to a perceived catalyst for development, the Olympic Games have significantly shaped host cities. Governments have leveraged the Games to create legacies for their territories, accelerating urban transformation to position cities as global economic and social hubs. However, aligning the event's demands with urban planning goals presents challenges. While editions like Barcelona 1992 demonstrated the Games' transformative potential, others, like Athens 2004, highlighted the complexities involved. Moreover, hosting the event has become increasingly expensive, posing economic, social, and environmental risks that can undermine sustainable development if not properly managed.

Growing public scrutiny of these issues has recently intensified opposition to the event, reducing the appeal of hosting and leading to numerous bid withdrawals. In response, the International Olympic Committee introduced the Olympic Agenda 2020 in 2014, promising a radical shift in how the Games are planned and organised to enhance the event's sustainability, credibility, and youth appeal while aligning them with societal expectations.

Assuming that the Agenda's urban-related measures, while innovative, face practical challenges, this thesis critically examines their implementation. The objective was to frame the preparations for the first Summer and Winter Olympics fully benefiting from them – Paris 2024 and Milan-Cortina 2026 – within the context of the Agenda's urban goals, identify inefficiencies in implementation, and propose new approaches to address them.

The findings reveal persistent gaps between the Agenda's global ambitions and practical, contextualised outcomes, highlighting structural dynamics in both the Olympic Games model and host cities' systems that complicate planning and delivery. By identifying areas where the Agenda has fallen short and proposing mitigation measures, this thesis contributes to the broader discourse on mega-events by offering a nuanced and resilient approach to Olympic urban planning, advancing efforts to align the Games with host cities' needs and enhance urban sustainability for future editions.

Keywords mega-event planning, Paris 2024, Milan-Cortina 2026, Olympic Games public opposition, urban and spatial planning.

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This PhD project was made possible thanks to the support of **Fundação para a Ciência e a Tecnologia** (FCT), Portugal (Grant Number: SFRH/BD/146177/2019). A huge thank you to FCT for funding my research – without it, this journey would not have been possible. I am also grateful to the FCT staff who helped me navigate all the challenges along the way. Plus, thanks to FCT, I had the incredible opportunity to apply to the 2022 Olympic Studies Centre PhD Programme.

Speaking of which, my deepest gratitude goes to the Olympic Studies Centre, the Olympic Foundation for Culture and Heritage, and the International Olympic Committee for supporting a crucial part of this research. A big thank you to the **Olympic Studies Centr**e for selecting my application, welcoming me into your facilities, providing extra research materials, and connecting me to valuable networks. To the **Olympic Foundation for Culture and Heritage**, thank you for funding such a key part of this project. And to the **International Olympic Committee**, I truly appreciate the opportunity to share my findings with some of your departments.

A special thanks to **Nuria Puig**, **Laila Gintzburger**, **Maria Bogner**, and all the wonderful staff at the Olympic Studies Centre for your warm hospitality, guidance, and continuous support throughout this process.

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The academic content delivered through the PhD Programme's curricular courses played a fundamental role in shaping this research. I am immensely grateful for the knowledge and experience shared by the professors of these courses, namely **Ana Morais de Sá**, **Beatriz Condessa**, **Fernando Nunes da Silva**, **Joana Almeida**, **Jorge Baptista e Silva**, **Jorge Gonçalves**, **Rosário Macário**, and **Rui Cunha Marques**.

To all of them, my deepest thanks. However, among this incredible group of professors, I must highlight the role of Professor **Jorge Gonçalves** in shaping my academic path. Very early in my PhD journey, when I submitted my first academic manuscript for a course evaluation, he encouraged me to actively pursue publication – even before I had considered it myself. That early push ultimately shaped my approach, driving me to publish most of my course assignments and significantly influencing the way I worked and developed my research. Thank you very much!

I am truly proud of the publications I have produced throughout my PhD. For that, I owe a huge thank you to all my co-authors (or soon-to-be co-authors) for their collaboration, expertise, and willingness to share knowledge. I am especially grateful that they embraced the world of mega-event and Olympic studies – since being the only one in this field in my academic environment has come with its challenges. Their contributions have been invaluable, providing key insights

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Collaboration with various academic and professional institutions has profoundly shaped the outcomes of this research, not only by expanding my perspectives but also by allowing me to meet and engage with scholars whose work I have long admired. I feel incredibly fortunate to have crossed paths with **Stefano Di Vita**, **Zachary M. Jones**, **John Lauermann**, **Martin Müller**, **Davide Ponzini**, and **Mark Wilson**, whose insights, knowledge, and experiences have been invaluable. Your work has been a source of inspiration for me, and your encouragement has only strengthened my motivation to pursue excellence in this field.

In particular, I want to express my deep gratitude to **Eva Kassens-Noor**, whom I have come to regard as my PhD godmother. As one of the most renowned Olympic scholars, she has been a guiding force from the very beginning of my PhD, offering unwavering support, insightful advice, and a constant belief in my potential.

If I have a PhD godmother, then I must also have a godfather. **Pedro Pinto**, as a colleague with immense experience, has been a fundamental source of support throughout this journey. Seated next to me in the office, he was always there – whether to provide guidance, share his wisdom, or simply offer words of encouragement during difficult moments. Thank you, Pedro, for being both a mentor and a friend.

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and I hope you know that I will always be here for you, no matter what. No matter how much you grow up, you will always be my little brother.

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Mom, I miss you.

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Competing Interests

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Ethics Approval

This research involved interviews either in person, online, or in written form. The interviews adhered to the ethical guidelines and standards of the European Commission. The research protocols were approved by the Ethics Commission of Instituto Superior Técnico (Ref. n.º 27/2021, Date: 25/10/2021), and the full ethics approval can be found online at https://etica.tecnico.ulisboa.pt/en/pareceres-e-decisoes/2021-2/. Informed consent was obtained from all participants, who agreed to take part in the study and, when required, consented to the publication of their responses.

List of Abbreviations

ANOC – Association of National Olympic Committees

AIOWF – Association of International Olympic Winter Sports Federations

ARISF – Association of IOC Recognised International Sports Federations

ASOIF – Association of Summer Olympic International Federations

CAS – Court of Arbitration for Sport

FOP – Field of Play

HCC – Host City Contract

IBC – International Broadcasting Centre

ICAS – International Council of Arbitration for Sport

IF – International Sports Federation

IOC – International Olympic Committee

IPC – International Paralympic Committee

ITA – International Testing Agency

JSF – Joint Steering Forum

MPC – Main Press Centre

NOC – National Olympic Committee

NF – National Sports Federation

NPC – National Paralympic Committee

OBS – Olympic Broadcasting Services

OCOG – Organising Committee for the Olympic Games

PGG – Principles of Good Governance

RHB – Rights Holding Broadcasters

SDG – Sustainable Development Goal

TOP – The Olympic Partner

UN – United Nations

UNESCO – United Nations Educational, Scientific and Cultural Organisation

WADA – World Anti-Doping Agency

WSL – World Surf League

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Chapter 1

Introduction: The Olympic Games and Olympic Agenda 2020

From the second half of the twentieth century, the Olympic Games progressively evolved into the largest event in the world, transcending their original scope as a sports competition to become a global event with significant consequences for urban and economic development in host cities. Governments of host cities increasingly leveraged the Games as a strategic tool for place marketing, seeking to accelerate growth and showcase their cities' potential (Chalkley and Essex, 1999; Essex and Chalkley, 2004; Lopes dos Santos et al., 2021a; Müller et al., 2023; Gold and Gold, 2024). They sought to harness the global popularity and widespread viewership of the Olympics to rally stakeholders and propel developments that would highlight their urban assets and capabilities to an international audience (Lopes dos Santos and Gonçalves, 2022).

This often involved ambitious urban regeneration projects, recently focused on redeveloping brownfield areas. These locations not only provided the extensive space required for Olympic venues but also held significant potential for transformation into high-value zones for business, leisure, and residential development aimed at affluent demographics (Pinto and Lopes dos Santos, 2022). However, the process of hosting the Games entails complex and multilayered planning challenges and aligning the rigorous demands of the event with the strategic urban goals of host cities is often difficult (Kassens-Noor, 2016).

Historically, while some host cities have successfully capitalised on the “Olympic Effect” to transform their urban landscapes and elevate their global status, others have struggled to trigger lasting benefits (Viehoff and Poynter, 2016). A prominent example of success is Barcelona, which leveraged the 1992 Olympic Games to rejuvenate its cityscape and boost its economic attractiveness and touristic appeal (Degen and Garcia, 2012). Conversely, there are cases where legacy benefits have been less evident. Athens, which hosted the 2004 Olympics, continues to grapple with integrating the facilities built for the Games into the city’s urban fabric and maintaining them as functional resources for its population (Panagiotopoulou, 2014).

The role of the Olympic Games as instruments of globalisation and their compatibility with sustainable development in contemporary societies is now a topic of active debate among scholars and professionals. The event’s value has come under increasing scrutiny as the environmental, economic, and social sustainability of recent editions has shown a downward trend (Müller et al., 2021). Although environmental consciousness became a core Olympic value in the late twentieth century (Chappelet, 2008), significant concerns over other social aspects such as inequality, lack of inclusivity, displacement, gentrification, and human rights violations have increasingly come to the forefront (Lenskyj, 2006; Chappelet, 2022a). The scale and associated costs of the event continue to grow as well, with all editions experiencing cost overruns (Flyvbjerg et al., 2021; Müller et al., 2023). Moreover, public perception often views the Games as profit-driven, disproportionately benefiting corporate interests over public ones (Hiller and Wanner, 2018).

These issues have fuelled public criticism and fostered a surge in opposition to hosting the Games. Such public resistance has been a major factor behind numerous bid failures, forcing city officials to withdraw candidatures (Lauermann and Vogelpohl, 2017; Kassens-Noor and Lauermann, 2018). Between the bid period for the 2020 Summer Games and the 2026 Winter

Games, 15 cities withdrew their bids or intentions to bid due to public or political opposition, leaving very few candidates for these editions (Lenskyj, 2020).

In response to these growing challenges, the International Olympic Committee (IOC) introduced the Olympic Agenda 2020 in December 2014. This comprehensive restructuring initiative was designed to drive significant changes within the Olympic Games and the broader Olympic Movement, aligning them more closely with the concerns of contemporary society (IOC, 2014a). Key objectives of the Agenda included transforming urban planning practices associated with the Games to enhance sustainability and reduce costs (Lopes dos Santos and Delaplace, 2023). Paris 2024 marked the first major implementation of these guiding principles for the Summer Olympic Games, while Milan-Cortina 2026 was the first Winter Olympics to fully benefit from this new approach. These editions were expected to set a precedent for future Games planning, balancing their impact more effectively with the needs of host cities and their communities.

Olympic Agenda 2020 reflects the IOC's recognition of the shortcomings of past Olympic planning models and the urgent need for a shift in how the Games are conceptualised and delivered. However, the preparations for Paris 2024 and Milan-Cortina 2026 have shown that translating the Agenda's intentions into practice is complex. Despite promises of a more balanced and sustainable approach, persistent issues threaten to compromise the IOC's vision and objectives, namely regarding urban impacts, financial burdens and governance models.

In this context, the research here presented is based on the hypothesis that, while ambitious and innovative, the urban-related measures introduced by the Agenda would face challenges in their effective practical implementation. The objective was to frame the preparations for the Paris 2024 and Milan-Cortina 2026 Games within the context of the Agenda's urban goals, identify inefficiencies or gaps in its implementation, and propose new approaches to address these challenges. By highlighting areas where the Agenda has fallen short and suggesting mitigation measures, this research supports a more resilient approach to future Olympic planning, seeking better alignment with host cities' needs and contributing to the ongoing effort to enhance urban sustainability in future Games' editions.

This research gains its relevance from the dual nature of the Olympic Games, which serve as both a platform for cultural and sporting excellence and a stage for political and economic strategies. Rooted in the ideals of Pierre de Coubertin, who envisioned the Games as a celebration of human achievement and international unity, the Olympics remain unparalleled events that foster global engagement, inspire a shared sense of purpose, and elevate the values of sport as a universal language. However, as previously mentioned, the reality of their organisation often reflects broader societal challenges. Today, the need to reconcile the event with public expectations of transparency, sustainability, and equity has become increasingly urgent, particularly for democratic nations, with the increasing challenges in justifying Olympic candidatures highlighting this tension.

The principles behind the Olympic Agenda 2020 reflect a strategic vision that seeks to balance the values of mega-events with such ongoing societal concerns, aligning mega-event planning practices with sustainable development approaches in the territories where the event takes place. As the Games often require significant urban transformations, presenting both opportunities and risks, urban planning becomes the foundation upon which many of the Agenda's goals can be realised, addressing the complex relationship between the Games' global objectives and the local development priorities of host cities. With concepts such as circular

economy and inclusiveness becoming increasingly central to urban planning discourse, reflecting a shift towards minimising environmental impact and fostering public participation, balancing short-term operational demands with long-term urban legacies that benefit local communities is crucial. Urban planning thus enables the event to be used as a means to create economic and social value in alignment with the United Nations (UN) Sustainable Development Goals (SDGs) (cf. UN, 2015), respecting the environment and advocating for sustainability. Furthermore, the Agenda's emphasis on fostering innovation has the potential to introduce practices that can be replicated in other contexts, contributing to the advancement of planning techniques and sustainable development strategies that are worth being analysed.

Beyond the Olympics, the findings of this research have broader applicability to other mega-events. The recent shift towards co-hosting models involving several territories at different spatial scales – such as the FIFA World Cup 2030, which will be hosted by Marocco, Portugal and Spain, with additional matches in Argentina, Paraguay, and Urugay – to some extent illustrates the integration of the 3R principles (reduce, reuse, and recycle) into mega-event planning. This approach aims to minimise the need for developing new urban elements by prioritising the adaptation and reuse of existing infrastructure, thereby aligning event planning with sustainability objectives. Moreover, the lessons drawn from this analysis are relevant not only to events of this scale but also to smaller initiatives that share similar goals of leveraging global attention to achieve local development.

Therefore, it becomes imperative to analyse the urban-related implementation of the Olympic Agenda 2020 in the first Summer and Winter Games held under its framework, uncovering challenges and gaps in its application to develop strategies that contribute to ensure the Games deliver on their promise of sustainable development. To achieve this, the research is structured around the four sequential methodological parts systematised in **Fig. 1**, each addressing the following research questions:

- Within the broad Olympic Agenda 2020 framework, what are its specific urban-related goals, strategies, and implications and how are they supposed to be achieved?
- What challenges have emerged during the preparation phases of the Olympic Games that hinder the implementation of these goals?
- What underlying factors and decision-making processes by stakeholders contributed to these challenges?
- What strategic measures can be proposed to address these challenges and their causes and prevent similar issues in future Olympic editions?

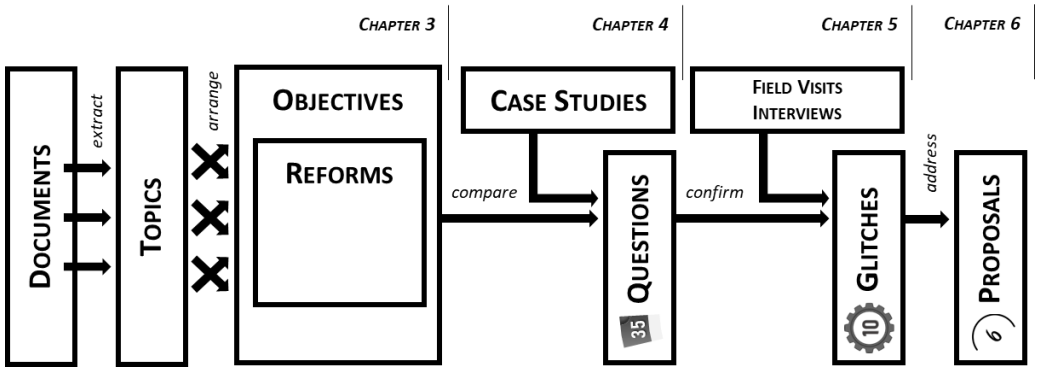

Fig. 1 Research structure, methodological steps and respective inputs/outputs.

These methodological parts represent the core of this research, with each employing distinct approaches and methods to progressively build on the findings of the previous stage. The process begins with a document systematic analysis of IOC official documents to examine the conceptual implementation of the Olympic Agenda 2020 and organise and systematise urban-related *Objectives* and *Reforms*. These outputs lay the ground for the subsequent exploratory research, which adopts a case study approach to explore the preparations for the two editions of the Olympic Games. This phase identifies key challenges in the practical implementation of the Olympic Agenda, generating a *Research Agenda* that consists of specific *Questions* requiring deeper investigation. Building on this, the research transitions to confirmatory methods to uncover the underlying reasons behind the identified challenges – referred to as *Glitches* – which compromise the Agenda's urban-related initiatives. The study concludes with a policy-making approach to craft *Proposals* aimed at addressing these *Glitches* and advancing the Games' urban sustainability.

Before presenting novel research, Chapter 2 establishes the foundation through an integrative literature review. Adopting a divergence-convergence model, the review initially broadens the scope to examine mega-event planning and the Olympic Games before narrowing the focus to the aspects considered the most relevant for analysing the implementation of the Olympic Agenda 2020. The chapter situates the research within broader debates on the urban context of the Olympic Games, encompassing a historical review of Games planning and its intersection with urban regeneration strategies, an overview of sustainability concepts and the evolution of Olympic sustainability efforts, and an exploration of Olympic governance, including its historical development and the structure of its stakeholder network. Additionally, it addresses theoretical and practical dimensions of Olympic urban planning, such as financial models, impacts, and legacies. Finally, the chapter examines the challenges posed by public opposition to the Games and explores the academic lens on the implications of the Olympic Agenda 2020.

Afterwards, to answer the first research question, Chapter 3 examines the urban-related initiatives stemming from Olympic Agenda, systematising the policy measures that potentially influence urban planning and respective impacts. The chapter extracts *topics* from official IOC sources, collecting and organising its initiatives through a thematic analysis into a structured framework that outlines the urban-related *Objectives* and *Reforms* within the Agenda. This approach provides a comprehensive systematisation that highlights the Agenda's strategies for addressing urban challenges and opportunities, setting the groundwork for further case studies analyses.

With this framework as a foundation, the exploratory research developed in Chapter 4 addresses the second research question by raising *Questions* about the practical implementation of the Agenda, specifically in the preparations for the Paris 2024 and Milan-Cortina 2026 Games. The chapter employs a case study analysis resorting to documental and online data, comparing the systematised *Reforms* with real-world observations from these editions. By identifying potential discrepancies and emerging difficulties that could hinder the achievement of the Agenda's urban-related goals, the developed *Research Agenda* serves for deeper investigation about decision-making processes in the following methodological step.

Chapter 5 delves into the underlying reasons why the urban-related *Reforms* of Olympic Agenda have not been fully realised during the preparations for the Paris 2024 and Milan-Cortina 2026 Games, answering the third research question. Confirmatory research involving field visits and stakeholder interviews highlights key factors and structural challenges that have impacted different stakeholders' decision-making and hindered the Agenda's implementation. These

identified *Glitches* reveal the broader social, political, and logistical complexities that challenge the practical application of the IOC's measures, providing insights into the constraints and competing interests that influence outcomes.

Following a policy-making approach, Chapter 6 addresses the fourth research question by proposing measures to mitigate the identified *Glitches*. Developed through research by design, these *Proposals* explore potential courses of action that support the evolution of the Games towards greater urban sustainability and public acceptance and trust, prioritising the needs and interests of host cities and their communities. The *Proposals* focus on creating a resilient and integrated Games planning framework that balances event and local interests, aiming to minimise misalignments with Olympic Agenda, reduce the risks of negative impacts, and enhance the Games' urban legacy.

Finally, Chapter 7 concludes by summarising the main findings and discussing their implications for future mega-event planning. It highlights the persistent structural issues that continue to affect the urban sustainability of the Olympic Games, emphasising the need for more comprehensive and adaptive planning strategies. The chapter situates these findings within new, ongoing efforts to enhance the Games' urban sustainability and calls for further research, as well as innovative policies and practices that can help drive the Games towards greater sustainability and, consequently, public trust and support.

Chapter 2

Olympic Games and Olympic Agenda 2020: Urban Context and Background

Throughout history, festivals and events have been integral to community life across cultures. Since the advent of mass tourism during the "jet age" in the mid- twentieth century, these gatherings have gained significant relevance. Only more recently, however, the recognition of mega-events as catalysts for urban development and destination branding has come to the forefront of scholarly and practical discourse (Jago et al., 2010).

Defining what qualifies as a mega-event is a complex task, as the term encompasses a wide variety of events that differ substantially in scale, impact, and context. While many people may feel they have an intuitive sense of what constitutes a mega-event – "we know one when we see one" (Müller, 2015a, p. 627) – the term's boundaries remain fluid and subject to interpretation. This ambiguity reflects the multidimensional nature of mega-events, which can be "mega" in distinct ways and to varying degrees. As Müller (2015a, p. 627) aptly states, "mega-events have different dimensions in which they can be 'mega', and not all mega-events are 'mega' in the same dimensions and to the same degree. We should thus not only ask 'if' an event is mega, but 'how' it is so". This perspective highlights the importance of examining the unique characteristics that define an event's mega-status within its specific context.

While there is no consensual definition for mega-events, they are characterised by a combination of recurring attributes, with academic literature agreeing on several of them:

- Purpose and nature: mega-events are primarily designed for leisure and tourism (Roche, 1994), spanning cultural, sporting, and commercial domains (Hall, 1992; Roche, 2000; Gold and Gold, 2024).
- Uniqueness: these events are typically one-off occurrences (Hall, 1992; Ritchie, 1984; Hiller, 2000a; Roberts, 2004), providing experiences beyond the ordinary everyday life (Jago and Shaw, 1998). They are discontinuous in time and ambulatory (Hiller, 2000a; Mills and Rosentraub, 2013; Müller, 2015a). However, some scholars argue that certain recurring events can also be considered mega-events (Ritchie, 1984; Hall, 1992).
- Duration: mega-events have a fixed, limited duration (Ritchie, 1984; Jago and Shaw, 1998; Müller, 2015a; OECD, 2020), which is typically short-term (Roche, 1994; Hiller, 2000a; Mills and Rosentraub, 2013).
- Participants and visitors: they attract large numbers of (international) participants (Hiller, 2000a; Jago et al., 2010; Mills and Rosentraub, 2013; OECD, 2020) and visitors, resulting in significant crowds (Jago et al., 2010; Müller, 2015a).
- Costs and investments: hosting a mega-event requires substantial financial investments (Jago and Shaw, 1998; Müller, 2015a), often involving significant public funding (Mills and Rosentraub, 2013; OECD, 2020).
- Impacts: mega-events produce substantial economic, social, and environmental impacts (Jago et al., 2010; Gold and Gold, 2024) on the built environment and local population (Müller, 2015a; OECD, 2020) in the long-term (Roche, 1994; Jago and Shaw, 1998; Hiller, 2000a; Horne, 2007). These impacts include event-specific and general infrastructure developments (Hiller, 2000a; Mills and Rosentraub, 2013), which may

result in significant public debt and necessitate long-term planning for continued use (Roche, 1994).

- Prestige and visibility: mega-events hold high international significance (Jago and Shaw, 1998; Hiller, 2000a; Roche, 2000; Roberts, 2004) and have mass popular appeal (Roche, 2000). They attract extensive media coverage (Roche, 1994, 2000; Jago and Shaw, 1998; Hiller, 2000a; Roberts, 2004; Horne, 2007; Gold and Gold, 2024; Mills and Rosentraub, 2013; Müller, 2015a; OECD, 2020), which enhances the host destination's profile and status in both the short and long term (Ritchie, 1984; Roche, 1994; Jago and Shaw, 1998; Roberts, 2004; Jago et al., 2010).
- Governance and organisation: these events are complex to organise, requiring extensive and long-term planning. They typically involve collaborations between international non-governmental organisations (such as the IOC) and host governments at various levels (Hiller, 2000a; Roche, 2000).

In addition to these general features, Hiller (2000a, p. 183) argues that to classify as "mega" an event must be "so significant that it reprioritizes the urban agenda in some way and leads to some modification or alteration of urban space which becomes its urban legacy (...) [while also intervening] in the normal functioning of the city to mobilize resources for event preparation and event hosting". Müller (2015a, p. 634) further advances that "an event that does not intervene to a significant degree in its host city, region or even country would thus not qualify as a mega-event". Therefore, the term "mega" is inherently context-dependent: what qualifies as a mega-event in one city might not meet the same threshold in another. For example, a medium-sized city hosting a large festival might experience transformative impacts. By contrast, the same event in a global metropolis with advanced infrastructure and a history of hosting large-scale events might integrate more seamlessly, producing less dramatic transformations. Thus, the term mega-event is not merely about the event's magnitude but also its relative significance to the host city.

Despite this contextual variability, some events, regardless of location, exhibit consistent features that elevate them to an undisputed mega-event status. Joo et al. (2017) refer to these as the "Big Four", or the grand slam of mega-events, encompassing the Summer Olympic Games, the Winter Olympic Games, the FIFA World Cup, and International Expositions (or World's Fairs). These events demand extraordinary levels of planning, resources, and coordination, invariably producing profound and lasting impacts on host cities. Their transformative potential sets them apart as classic examples of mega-events, offering a unique lens through which to study the phenomenon.

Given the complexity and transformative nature of these events, understanding their planning and execution requires a multidimensional approach that accounts for diverse perspectives and disciplinary insights. Therefore, this research literature review adopts an integrative approach to critically assess and synthetise representative knowledge on general mega-event planning and the specific context of the Olympic Games. A literature review serves as a valuable methodological tool for debating theory or evidence in a specific area (Tranfield et al., 2003). By combining insights from diverse fields and approaches, an integrative review facilitates the generation of new perspectives, interpretations, and conceptual frameworks, providing a strong foundation for critique (Torraco, 2005). As Snyder (2019) highlights, integrating perspectives from different disciplines is particularly effective for creating preliminary conceptualisations that guide research.

The review process was inspired by the divergence-convergence design theory proposed by Bánáthy (1996), which conceptualises any design process as comprising two sequential phases. The divergence phase involved broadening the scope of the review to explore a wide range of themes, boundaries, and frameworks related to mega-event planning, fostering a comprehensive understanding of the field. This was followed by the convergence phase, which narrowed the focus to critically examine and synthesise the most relevant aspects, ensuring alignment with the study's objectives. As Torraco (2005) puts it, this phase aimed to "tell a story" that contextualises the research within the mega-event planning debate. Where necessary, specialised studies were incorporated to provide concrete data that justified specific points and reinforced critical evaluations. This iterative approach enabled the deconstruction of key topics and their subsequent reconstruction, supported by robust evidence, thereby enhancing the understanding of the complexities of mega-event and Olympic Games planning while laying the groundwork for further critique.

This chapter is structured to provide a comprehensive review of the literature on Olympic Games planning, focusing on its urban, sustainability, governance, and planning dimensions, as well as the challenges posed by public opposition and the Olympic Agenda 2020 framework. It begins with an exploration of the historical evolution of urban planning for the Olympic Games, highlighting key milestones in their development. In the section afterwards, the discussion then shifts to sustainability, offering an overview of urban sustainability and sustainable development concepts before examining the origins and evolution of Olympic sustainability. The chapter further delves into Olympic governance, tracing its historical development and analysing the network of stakeholders while considering the importance of local contexts. Following this, the review addresses key theoretical and practical considerations in Olympic urban planning, including planning strategies, financial models, impacts and legacies, and the "wicked" nature of planning for the Olympics. Public opposition to the Games is then examined as a phenomenon influencing their planning and execution. Finally, the chapter concludes with a discussion of how the academic literature has been approaching the developments of Olympic Agenda 2020, providing a foundation for the subsequent analysis in this study.[1]

2.1. The "Urban" Olympic Games: Historical Highlights

The ancient Olympic Games represent one of the earliest accurate timelines in Greek history, dating back to 776 BC. For over a millennium, they were held as a religious tradition in honour of Zeus in the sanctuary of Olympia, where competitors also lived and trained (Gao and Bu, 2011).

[1] Some sections of this chapter draw significantly from the author's previous work, undertaken specifically within the context of this Doctoral Programme, but published elsewhere. Particularly, the chapter contains content, excerpts, figures and follows the approaches of:

- Lopes dos Santos et al. (2021a) in sections 2.1., 2.2., and 2.3.;
- Lopes dos Santos et al. (2021b) in section 2.6;
- Lopes dos Santos and Gonçalves (2021) in sections 2.2. and 2.4.;
- Lopes dos Santos et al. (2022) in section 2.4.;
- Pinto and Lopes dos Santos (2022) in section 2.4;
- Lopes dos Santos (2023) in sections 2.2. and 2.4;
- Lopes dos Santos and Delaplace (2023, 2024) in section 2.2;
- Lopes dos Santos et al. (2024) in section 2.3.;
- Lopes dos Santos et al. (2025) in section 2.4..

The site underwent many expansions and featured significant structures such as the Temples of Zeus and Hera, the Gymnasium, the Palaistra, the Leonidaion (guest house), Greek Baths, Treasuries, and the Stadium. The Games extended to Elis, the *polis* behind the organisation of the event, where preparations were made, and festivities held. Among the facilities in Olympia were "buildings that served the Elis-based civil government's need for political administration", illustrating "early and intriguing recognitions of the close relationship between host city and Games" (Gold and Gold, 2024, p. 18).

The event and sanctuary were always among the most influential elements of ancient Greek heritage, in a way serving as foundational developers of modern Hellenic identity and spirit (Littlewood, 2000). The Games grew to such a scale that they became renown beyond Greek borders, attracting thousands of visitors every four years to a crowded Olympia. Much like the modern Olympics, they provided a stage for the glorification of achievements, political projection, and the promotion of brotherhood in a festivity atmosphere (Gold and Gold, 2024). The Games lasted for 293 Olympiads until Emperor Theodosius I abolished them following the rise of the Christian dominance of the Romans (Young, 2008).

In modern history, Pierre de Coubertin revived the Olympic Games in 1896, recognising them as a global heritage beyond Greece. Drawing inspiration from ancient Olympia, Coubertin (1910, p. 7) conceptualised the idea of an "Olympic City" in 1906:

> *First, it is important that the Olympic city reveals itself to the visitor (...). Second, this initial view of the city should be in keeping with its role (...). Third, its shape should obviously seek to harmonise with and take advantage of the surrounding landscape. Fourth, it would undoubtedly be unfortunate to imitate the compactness of the ancient city, and it would be an opposite mistake to spread out excessively in terms of surface area. These general principles seem to us to be acceptable to all in terms of the city's framework.*

Coubertin envisioned a revival of Olympia as "ambulatory rather than based at a permanent site, (...) able continually to move to new host cities without loss of purpose" (Gold and Gold, 2024, p. 23). He viewed the host city as integral to the festival, as vital to the spectacle as the sports themselves (Wilson, 1996). However, the modest scale of the early modern Games meant that realising a "Modern Olympia" took time to come to fruition.

The IOC was founded two years before the first Modern Games, in 1894. In the early twentieth century, it was still a relatively small and exclusive organisation with the primary focus of selecting a host city for the Olympic Games every four years (Chappelet, 2016). At that time, the event was modest, with fewer than a thousand athletes participating in each of the first three editions (see **Table 1**). Only in 1908, the IOC published the first Olympic Charter, nowadays the uppermost document of the Olympic Movement. That same year, the London Games marked a pivotal moment in Olympic history. Participation increased dramatically, with the number of athletes more than doubling compared to previous events. Moreover, the construction of the first Olympic Stadium signalled the beginning of the Games' connection to urban planning (Lopes dos Santos et al., 2021a).

Coubertin's vision of an "Olympic City" was first reflected in the Olympic Charter of 1921, which stipulated that, with the exception of nautical sports, all events should take place within the host city, either at the stadium or in its vicinity. By the 1924 Paris Games, athletes were already being housed together in wooden cabins built near the Olympic stadium – an arrangement often regarded as the first Olympic Village. These accommodations provided athletes with furniture,

restaurants, and other amenities (such as a post office, laundry service, and newspapers), albeit in a primitive design (Muñoz, 1997; Caroux, 2019). Then, in 1930, the responsibility for providing athlete accommodation was officially assigned to the Organising Committees for the Olympic Games (OCOGs) (Lopes dos Santos et al., 2021a).

Table 1 Olympic Games' numbers: NOCs, sports events, and athletes. (Source: updated from Lopes dos Santos et al., 2021a).

Summer Olympics				Winter Olympics			
Year	**NOCs**	**Events**	**Athletes**	**Year**	**NOCs**	**Events**	**Athletes**
1896	14	43	241				
1900	24	95	997				
1904	12	95	651				
1908	22	110	2008				
1912	28	102	2407				
1916	*Cancelled due to WWI*						
1920	29	156	2626				
1924	44	126	3089	1924	16	16	258
1928	46	109	2883	1928	25	14	464
1932	37	117	1332	1932	17	14	252
1936	49	129	3963	1936	28	17	646
1940	*Cancelled due to WWII*			1940	*Cancelled due to WWII*		
1944	*Cancelled due to WWII*			1944	*Cancelled due to WWII*		
1948	59	136	4104	1948	28	22	669
1952	69	149	4955	1952	30	22	694
1956	67	145	3155	1956	32	24	821
1960	83	150	5338	1960	30	27	665
1964	93	163	5151	1964	36	34	1091
1968	112	172	5516	1968	37	35	1158
1972	121	195	7134	1972	35	35	1006
1976	92	198	6084	1976	37	37	1123
1980	80	203	5179	1980	37	38	1072
1984	140	221	6829	1984	49	39	1272
1988	159	237	8391	1988	57	46	1423
1992	169	257	9356	1992	64	57	1801
1996	197	271	10318	1994	67	61	1737
2000	199	300	10651	1998	72	68	2176
2004	201	301	10625	2002	77	78	2399
2008	204	302	10942	2006	80	84	2508
2012	204	302	10568	2010	82	86	2566
2016	205	306	11238	2014	88	98	2780
2020	205	339	11420	2018	91	102	2833
				2022	91	109	2834

This development, combined with a significant decrease in athlete numbers due to the Great Depression, created the conditions for what is widely regarded as the first fully developed Olympic village, built for the 1932 Los Angeles Games. Consequently, the local population became increasingly involved in the organisation of the event, providing a workforce for both construction and service roles. The Village was equipped with kitchens and other modern amenities, drawing clear inspiration from Ancient Olympia:

> *The Olympic Village included restaurants, sauna bathrooms, Greek Theaters, barbershops, post offices, and even attendants. All the following facilities made it convenient for everyone: pure woolen carpet, thick towels particular for athletes, reading tables, hot shower, bottled distilled water and telephone. (…) In the kitchen, 23 chefs, 16 assistant chefs and 130 assistants who provided local food for athletes*. (Gao and Bu, 2011, p. 128)

In the subsequent Berlin 1936 Games, the concept of an Olympic park began to take shape. Under Hitler's propaganda campaign for national socialism, a cluster of venues was developed across a 130-hectare site in the city's suburbs. This large-scale intervention introduced a way of thinking about the "Olympic City" that resonated with Pierre de Coubertin's vision, shaping the IOC's evolving preference for centralised models (Liao and Pitts, 2006). It marked the beginning of a growing commitment to this concept, which influenced Olympic planning strategies for decades.

However, the onset of World War II delayed the further realisation of this concept. Following two cancelled Games, the London 1948 "Austerity Games" relied entirely on existing infrastructure, including for athlete accommodation. Only later, in 1949, the Olympic Charter made the provision of an Olympic village a mandatory requirement for host cities. The same revision introduced a new fundamental principle, which, in addition to clarifying that the honour of hosting the Games was entrusted to a city rather than a country, required applications to host the Games to be submitted by the city's mayor or chief authority. This formalised the involvement of municipalities in the Games and underscored the growing relationship between the event and the host city (Lopes dos Santos et al., 2021a).

The importance of urban planning in the Olympic Games was further emphasised during Helsinki 1952, where the first Olympic park was constructed. Additionally, an Olympic village was developed in alignment with the city's municipal housing plan (Muñoz, 1997). That same year, Oslo hosted the Winter Olympics and introduced the first winter Olympic village, designed with post-Games uses in mind, including accommodation for students, a hospital, and a nursing home. However, the concept of an Olympic village did not become a consistent feature of subsequent Winter Games. The small populations of host cities, coupled with resistance from local stakeholders such as hoteliers and environmental groups, often hindered its adoption. To address these concerns and minimise long-term impacts on the local environment and economy, the 1960 Squaw Valley Games innovated by building the first temporary Olympic village (Essex and Chalkley, 2004).

As the popularity of the Olympic Games grew, so did the interest of cities in hosting the event. In response, the IOC began issuing a formal document in 1955 titled "Information for Cities Which Desire to Stage the Olympic Games", which included candidature questionnaires. This development coincided with an era marked by an exceptional number of bids from United States cities during the early Cold War period – a total of 19 bids for the 1948, 1952, and 1956 Summer and Winter Games. To manage this surge, the IOC introduced a new rule limiting each country to a single candidate city, requiring formal approval from the national government to ensure effective collaboration in staging the Games. This measure expanded involvement beyond municipal governments, bringing national authorities into the process as well (Lopes dos Santos et al., 2021a).

The 1955 Olympic Charter introduced additional requirements, including the provision of two separate Olympic villages for men and women, located near stadiums, facilities, and practice fields. By the 1958 revision, the Charter mandated that team officials also be housed in these villages, while requiring additional accommodation and transportation arrangements for technical delegates, officials, and juries. Moreover, the Charter addressed media requirements for the first time, mandating that free access and accommodation be provided for members of the press, radio, television, and cinema (ibid).

The growing number of athletes, stakeholders, and venues placed increasing demands on urban infrastructure, resulting in a sharp rise in both the size and cost of the Games. Host cities such as Rome in 1960 and Tokyo in 1964 began leveraging the Olympics as opportunities to implement large-scale urban developments at an accelerated pace. However, as these demands expanded, cities often struggled to meet stakeholder expectations. In this context, aligning Olympic interventions with municipal planning and the needs of local communities became an increasingly pressing concern (Muñoz, 1997; Chalkley and Essex, 1999).

These challenges also extended to mobility. While transportation had been a critical consideration for the Winter Games since 1952 – owing to the remote and weather-dependent nature of many venues (Essex and Chalkley, 2004) – it emerged as a significant issue for the Summer Games during the 1968 edition in Mexico City. Constrained by economic limitations, the organisers opted to refurbish existing facilities rather than construct new ones, resulting in a decentralised “Olympic City” model. Dubbed the "Games of Long Walks", this edition required extraordinary efforts to ensure mobility for all stakeholders, highlighting the growing complexity of hosting the Games (Liao and Pitts, 2006).

This edition also marked the beginning of a turbulent era for the Olympic Games, characterised by violent incidents and political boycotts. Mexico City 1968 set a grim tone, as student-led protests against the authoritarian government culminated in the tragic Tlatelolco massacre, where approximately 250 individuals were killed. This incident, which occurred just ten days before the opening ceremony, became a pivotal moment in Mexico's democratic transition (Kassens-Noor, 2020). The following edition, in Munich 1972, was overshadowed by a terrorist attack in which a group of armed Palestinians infiltrated the Olympic Village and took 11 Israeli athletes, coaches, and officials hostage. The subsequent rescue operation ended in tragedy, with all hostages, a German police officer, and five of the eight terrorists killed (Chalkley and Essex, 1999).

The Munich massacre had a significant impact on the subsequent 1976 Montreal Games. For security reasons, the IOC rejected Montreal’s initial plan to distribute athlete accommodations across five residential areas, which had been designed in alignment with the city’s housing strategy. Instead, the Olympic Village was relocated to a large urban green reservation, a decision that triggered local protests, delays, and substantial financial strain. Combined with the exorbitant cost of constructing the Olympic Stadium, this edition recorded the highest cost overrun in Olympic history, reaching 720% (Flyvbjerg et al., 2021). Perhaps in recognition of the consequences of this decision, the IOC amended the Olympic Charter in 1979 to allow host cities to share hosting responsibilities with other cities or sites within the same country. However, this amendment required the provision of additional accommodations in these locations – the “satellite” Olympic villages (Lopes dos Santos et al., 2021a).

This period was also marked by a series of high-profile political boycotts. In Montreal 1976, 22 African nations boycotted the Games in protest against the “apartheid tour” of New Zealand’s All Blacks rugby team to South Africa. In 1980, 65 Western nations boycotted the Moscow Games in response to the Soviet invasion of Afghanistan. Four years later, in 1984, 19 Communist nations boycotted the Los Angeles Games in retaliation for the 1980 Moscow boycott (Kassens-Noor, 2020).

These setbacks significantly reduced the appeal of hosting the Games, leading to a sharp decline in the number of candidate cities bidding for both the Summer and Winter Olympics, particularly during the bid periods between 1970 and 1981, which corresponded to the Games

held between 1976 and 1988. For the 1984 Summer Olympics, Los Angeles was the sole bidder. This unique position allowed the city to negotiate favourable terms with the IOC, including an agreement to organise the Games under a zero public funds premise (ibid). As further explored, this approach was instrumental in unlocking the revenue potential of the Olympics, fundamentally reshaping the financial model of the Olympic Movement.

Thus, the sequence of events leading up to this turning point – the 1968 Mexico City massacre, the 1972 Munich terrorist attack, the 1976 Montreal financial disaster, and the 1980 Moscow political controversy (4M's) – collectively paved the way for the unprecedented success of the 1984 Los Angeles (LA) Games. This unique sequence of events, referred to here as the "4M-LA" (formula sequence), led to a pivotal moment in Olympic history, with consequences that continue to shape key decisions within the Olympic Movement to this day.

To understand the reasons behind the success of the "Private Games", it is necessary to reflect on the early growth of media and its role in the evolution of the Games. The first radio broadcast of the Games was in 1924. This was followed by the first televised broadcast in public spaces during Berlin 1936 and local television coverage of London 1948 (Larrosa, 2016). By 1958, the Olympic Charter formally acknowledged the critical role of media stakeholders, requiring host cities to provide free access and accommodation for representatives of the press, radio, television, and cinema. This obligation expanded in 1972 to include "facilities", reflecting the growing complexity of media requirements. In 1974, a dedicated chapter titled the "Radio-Television Facilities Questionnaire" was added to the Charter, and by 1980, the provision of a Main Press Centre (MPC) became mandatory (Lopes dos Santos et al., 2021a).

Los Angeles 1984 intersected with this phenomenon at its apex, epitomising the emergence of a new era for the Olympic Movement. Organised by a privately managed OCOG, operating independently but with some government support, the Games were heavily influenced by the neoliberal policies of President Ronald Reagan. During a time of Cold War, the unprecedented interest from media and commercial stakeholders underscored the Games' potential as a revenue-generating platform. Los Angeles 1984 focused on leveraging existing infrastructure and was primarily financed by sponsors, broadcasters, and private entities, including the few new sports facilities constructed. The result was the most financially successful Olympics in history, leaving a lasting legacy for sports in Southern California. This innovative financial model – popularised by Andranovich and Burbank (2011) as the "LA Model" – transformed the economic, political, and cultural dynamics of the Olympic Movement. It prompted the IOC to launch "The Olympic Partner (TOP) Programme" in 1985. This initiative aimed to consolidate and control sponsorships by granting exclusivity to a select group of companies. Through this strategy, the IOC redefined its approach to commercialisation, becoming the manager of the respective revenues (Lawson, 1985; Tomlinson, 2006; Dyreson and Llewellyn, 2008; Dyreson, 2015; Llewellyn et al., 2015; Wilson, 2015; Wenn, 2015).

Together with the growing media and sponsorship interests, the Los Angeles innovative approach revitalised cities' willingness in hosting the Olympic Games. After just one candidate for the 1984 Summer Olympics and two for the 1988 edition, the number of candidates by 1986 increased to six for the 1992 Games. A similar trend was observed for the Winter Olympics, where the number of candidates rose from two or three between 1974 and 1981 to seven by 1986 for the 1992 edition. With growing competition, bidding cities began presenting increasingly elaborate proposals, often centred around ambitious urban interventions. Host cities started investing heavily in extensive renovations to their urban fabric, far exceeding the basic provision of competition facilities. These investments encompassed a broad range of supporting

infrastructure, including accommodation, transportation systems, water supply networks, urban landscaping, and other improvements (Chalkley and Essex, 1999). Over time, the spending on such support infrastructure outpaced investments in core Olympic venues (Baade and Matheson, 2016), reflecting the Games' evolving role as a catalyst for urban transformation.

Seoul 1988 and Barcelona 1992 marked peaks in such Olympic-related expenditures (Liao and Pitts, 2006), with the latter also setting a benchmark in both mega-event and strategic urban planning. The city leveraged the Games to rally broad civic support and unlock public resources to advance its urban development plans and strategic goals. By showcasing its local culture and defining its global identity, Barcelona transformed into a thriving business and tourism hub, significantly enhancing its position in the global competition for investment and visitors (Degen and García, 2012; Lopes dos Santos and Gonçalves, 2022). This "Barcelona Model" further guided urban planning in other European cities (Marshall, 1996).

From then on, cities increasingly seized the Games as a platform to improve their urban environment, attract investment, and pursue globalisation – a trend widely known as the "Mega-event Strategy" (Andranovich et al., 2001). This approach emerged alongside more entrepreneurial and neoliberal trends in urban planning, turning the bidding process highly competitive and often driven by private sector interests and growth coalitions. The Games ambulatory character, requiring cities to adapt to IOC standards, further underscored the importance of collaboration between public agencies, private firms, and non-profit enterprises. These partnerships provided essential financial assistance and other forms of support to manage the complexity of bidding and hosting for such events (VanWynsberghe et al., 2013; Lauermann, 2022).

This positioned the Games, and mega-events more broadly, as pivotal tools in global place competition. Attracting billions of viewers worldwide and hundreds of thousands of visitors, each event presented opportunities to draw in potential residents, tourists, and investors, amplifying the host city's economic prospects (VanWynsberghe et al., 2013). Hosting the Games became synonymous with business vitality and economic growth and the event's required infrastructure became seen as a critical factor to catalyse long-term economic development. Moreover, successfully securing the Games branded cities as major international players, symbolising their success in global competition while fostering recognition, investment, and unique opportunities for place promotion (Hall, 2006).

There are numerous examples beyond Barcelona's coastline regeneration where the "Mega-event Strategy" has driven successful development. For instance, Kaplanidou (2012) observed that citizens' perceptions of quality-of-life significantly increased following editions such as Atlanta 1996, Sydney 2000, Athens 2004, and Beijing 2008. In Sydney, the newly built Olympic Park and Village became a thriving suburb, featuring extensive green spaces of citywide importance (Pinto and Lopes dos Santos, 2022). Athens leveraged the Games to substantially modernise and expand its transport infrastructure network, addressing long-standing mobility challenges (Kassens-Noor, 2015). The Olympic Park of the 2008 Games became a new urban centrality, also functioning as a branding strategy that reinforced Beijing's global image (Broudehoux, 2007). London 2012 generated new working contracts, increased tourism in the city, and spurred the revitalisation of Stratford, where most of the new venues were built (Weed, 2014a). Similarly, Winter Games editions also yielded successes, such as Turin 2006's reformulation of its governance structure and advancement of its long-term redevelopment agenda (Ponzini et al., 2024), as well as Vancouver 2010's effective post-Games reuse of sports venues (Vaccarini and Gulc, 2021).

Despite these successes, the Games have also left less positive legacies. In Sydney, the rail loop constructed to access the Olympic Park became a costly misstep, suffering from poor planning and underuse (Kassens-Noor, 2009). Athens became infamous for its "white elephants", with many sports venues abandoned due to a lack of post-Games planning (Panagiotopoulou, 2014). Turin 2006 faced similar challenges, as its Olympic Village fell into neglect, reflecting a failure to ensure adaptive reuse (Bosia and Savio, 2016). Beijing's efforts to establish global prestige came at a high social cost, displacing large numbers of low-income residents to peripheral areas and deepening inequality (Shin and Li, 2013). In Vancouver, plans to deliver affordable housing in the Olympic Village fell short, leading to the gentrification of the neighbourhood – a pattern also observed in Stratford after London 2012 (Lopes dos Santos et al., 2025). The extravagance of Sochi 2014 further highlighted the risks of poor legacy planning, with an oversized Olympic Park and redundant sports facilities representing high opportunity costs and offering limited benefits to the local population (Müller, 2014; Azzali, 2017a). Rio 2016 left a troubling legacy of unused venues and heightened social polarisation (Pereira, 2018).

These positive and negative examples highlighted the duality of Olympic impacts and legacies. While some editions successfully achieved long-term benefits, others demonstrated the pitfalls of the "Mega-event Strategy", undermining the theory of pursuing long-term benefits through substantial public investment in the Games. Historical records of massive costs, escalating overruns, negative environmental and social impacts, and, especially, difficulties in ensuring the post-Games use of newly-built, high-maintenance venues evidenced the strategy's limitations, raising questions about its viability. Opportunity costs also weigh heavily, as culture and sports are not easily perceived as essential sectors when compared to others, such as healthcare, education, or housing. Moreover, certain characteristics of Games planning further complicate sustainability efforts and expose host cities to significant risks (Müller, 2015b).

Additionally, over time the Olympic Games have increasingly been perceived as elitist and lacking transparency. This notion gained prominence with the commercialisation of the 1984 Los Angeles Games through the lucrative sponsorship and broadcasting deals and was further amplified by the inclusion of professional athletes in 1991. Then, following the success of Barcelona 1992, hosting the Games came to be viewed as a pursuit of status driven by political leaders. Decision-making, often lacking public debate and overlooking the interests of local communities, was dominated by governments and sports organisations, being perceived to benefit niche sectors and higher social classes (Hiller and Wanner, 2018). Boykoff (2016) argues that this pursuit of prestige has often come at significant social and environmental costs, leaving a legacy of debt, underutilised infrastructure, and public mistrust. As a result, the business oriented "Mega-event Strategy" raised serious concerns in public policy about who truly gains from public funds allocated to the event. This, combined with issues such as corruption scandals, doping abuse, and human rights violations, led populations to challenge the decisions of mega-event elites and question whose interests were truly being served in the name of public interest (Andranovich et al., 2001; Trubina, 2020).

Thus, at the turn of the millennium, local activists began mounting anti-Olympic campaigns in bidding or hosting cities. Emphasising the Games' social and environmental impacts while advocating for more sustainable and equitable urban futures, local communities have become a core factor for bid failures (Lauermann and Vogelpohl, 2017; Kassens-Noor and Lauermann, 2018). Between 2013 and 2017, public opposition led to the cancellation of several bids, including three (Davos/St. Moritz, Hamburg, and Munich) following negative referenda, and six (Boston, Budapest, Krakow, Rome, Oslo, and Stockholm) due to public or political resistance

(Kassens-Noor and Lauermann, 2017). In some cases, the determinants of contestation were deeply contextual, shaped by local political dynamics and amplified by weaknesses in the political system (Bourbillères et al., 2023). This highlights how global anti-Olympic ideologies have evolved into critical, context-dependent reasoning. Facing a shrinking pool of host contenders, particularly during the bidding processes for the 2022 and 2024 Olympic Games, the IOC recognised the need to radically adapt the Games and their planning to contemporary sustainability paradigms, responding by introducing Olympic Agenda 2020.

2.2. Sustainability and Olympic Sustainability: A Brief Overview

Tied to environmental, social, and economic considerations, sustainability has become a crucial concept in the context of cities and urban development. This section explores its relationship with the Olympic Games. It begins by introducing the concepts of sustainability and sustainable development before examining how these ideals have evolved within the context of the Olympic Games.

(Urban) Sustainability and Sustainable Development: An Introduction

Sustainability awareness emerged in the late twentieth century from growing recognition of the environmental harm caused by business practices. In other words, from the need to carry out economic activities in a way to preserve and respect global ecology. This led to the realisation that control on economic growth was necessary to reduce negative external effects, with the concept of sustainability embodying the idea of maintaining balance over time (Scoones, 2007; Faber et al. 2010; Heinberg, 2010). Articulating this principle, one of the earliest and most enduring definitions of sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 8). Quoting Heinberg (2010, p. 1), sustainable is "that which can be maintained over time".

As the concept evolved, various interpretations of sustainability and frameworks for carrying out sustainable development arose. These include approaches such as broad vs narrow, big S vs small s and, notably, strong vs weak sustainability. Strong sustainability upholds the need to leave future generations with a stock of environmental assets at least equal to that inherited by the previous generation, while weak sustainability considers that the stock to be inherited must also take into account man-made assets and, therefore, be measured in terms of wealth. Weak sustainability thus suggests that natural capital can endlessly be substituted by equivalent forms of human-made capital, while strong sustainability asserts that these forms of capital are not substitutable but complementary and that environmental assets are irreplaceable (Scoones, 2007; Kuhlman and Farrington, 2010; Huang et al., 2015). Eventually, a consensus has emerged that, under a weak sustainability framework, sustainability is an integrative concept encompassing three fundamental dimensions, spheres, or pillars: environmental, social, and economic. Sustainable development, in turn, was characterised as responsible growth that balances natural, human, and economic capital – commonly referred to as the three Ps: planet, people, and profits (Hansmann et al., 2012).

Despite its foundational structure, sustainability remains an ambiguous and evolving term, lacking a universally accepted definition. While some focus on methods to measure it, others view it as a process of change that, to be coherent, cannot consist of a terminal state or be treated as a rigidly defined term; one that fosters continuous learning, adaptation, and improvement

within specific contexts and applications (Faber et al., 2010; Childers et al., 2014; Huang et al., 2015). This adaptability and inherent ambiguity have allowed the term to be used to simply describe practices claimed to be more environmentally sound than others or to evoke broader, symbolic ideals reflecting aspirations, visions, and normative commitments (Scoones, 2007; Heinberg, 2010).

In economic contexts where sustainability measures might be seen as cost-prohibitive, governments play a key management role. They establish environmental standards and regulatory frameworks to protect resources and improve quality of life (Wilkinson et al., 2001). Increasingly, sustainability has been incorporated into public policies, with indicators like gross domestic product addressing its economic dimension and values such as equity, social cohesion, inclusion, and public health reflecting its social aspects. While governments cannot entirely prevent the loss of human or environmental capital, they are responsible for determining which losses are acceptable and devising strategies to mitigate or compensate for them (Kuhlman and Farrington, 2010).

For these reasons, sustainability functions as a "boundary term" where science and politics intersect. Its "words, with often ambivalent and contested meanings, have an important political role" by serving as unifying links (Scoones, 2007, p. 589). This versatility allows the concept to be applied across various sectors and activities, including urban development. In city contexts, urban sustainable development is viewed as a means to achieve a desirable urban future, tailored to address each city's unique environments, challenges and vulnerabilities (Childers et al., 2014). However, as cities are predominantly human-made and concentrate activities that threaten sustainability, strong sustainability approaches are often impractical in urban contexts (Camagni, 1998). Instead, urban sustainable development requires the integration of economic growth, social equity, and environmental protection, while upholding human rights and fundamental freedoms and relying on democratic, transparent, representative, and accountable governance systems with effective participation from civil society (UN-Habitat, 1996). Tasked with influencing the spatial distribution of activities, coordinating land use, and managing conflicts between economic development and environmental and social policies, urban planning plays a pivotal role in this process.

Olympic (Urban) Sustainability: Origin and Evolution

Environmental concerns and growing sustainability debates of the late twentieth century also influenced the Olympic Games, particularly regarding the environmental impact of Winter editions on fragile mountainous regions. By the early 1990s, preparations for Albertville 1992 had become a focal point for criticism. The widespread backlash over the damage caused by construction projects to natural landscapes raised the debate about the overall sustainability of the event (Chappelet, 2008). Amid preparations for this edition, in 1991 the IOC made a modest move by amending the Olympic Charter to include an assurance that the Games would be conducted with responsible regard for the environment (Lopes dos Santos et al., 2021a).

Then, the participation of the IOC in the 1992 UN Earth Summit in Rio de Janeiro, which produced the UN Agenda 21, marked a pivotal step in the organisation's commitment to environmental preservation. At the time, the Norwegian government embraced this global paradigm shift by pledging to host Lillehammer 1994 as the first environmentally responsible Olympics. Lillehammer's success not only established it as a benchmark for Olympic environmental awareness but also helped restore the Games' image after the controversies of Albertville 1992 (Chappelet, 2008; Boykoff and Mascarenhas, 2016). Building on these

developments, the IOC adopted a stronger stance on sustainability and engaged in a significant environmental campaign. In 1994, it designated "environment" as the third pillar of Olympism, alongside "sport" and "culture". This was followed by the organisation of the first World Conference on Sport and the Environment and the establishment of the IOC Sport and Environment Commission in 1995. Later in 1999, it also published the Olympic Movement's own Agenda 21. These milestones significantly influenced subsequent Games, notably Sydney 2000 – which was widely recognised as the "Green Games" – and later editions like Beijing 2008 – which made significant efforts to enhance energy-efficiency – and Vancouver 2010 – the first to incorporate an Olympic Games Impact study as part of the planning requirements (Karamichas, 2019; Lopes dos Santos and Delaplace, 2024).

The goal of Olympic Movement's Agenda 21 was to guide the Olympic Movement activities towards sustainable development. However, the inherent ambiguity of the term "sustainability", coupled with the urban development success of Barcelona 1992, made environmental preservation rhetoric intertwine with more proactive "Mega-event Strategy" narratives. As previously mentioned, this approach, together with the growth in the number of athletes and events of the Games, brought important consequences to the editions being developed at the time. Notably, Athens 2004 and Beijing 2008 engaged in expensive venue developments integrated into massive urban regeneration projects that latter revealed significant post-Games challenges (Pinto and Lopes dos Santos, 2022).

Anticipating these issues, in the early 2000s the IOC created the Olympic Games Study Commission to advise on managing the size, complexity, and cost of staging the Games. The commission identified five main issues compromising the sustainability of the Games' traditional hosting model: i) Games format – a high concentration of activities in space and time; ii) venues and facilities – acting as significant cost drivers; iii) Games management – unclear governance structures and role definitions; iv) number of accredited persons – increasing overall requirements; and v) service levels – escalating due to comparisons to previous Games. Recommendations to avoid extravagant Games deliveries included maximising the use of existing and temporary venues, promoting venue sharing, and prioritising post-Games use of infrastructure to avoid "white elephants". The commission also emphasised scaling down activities and fostering knowledge transfer. However, it rejected options such as extending the Games' duration or hosting events across multiple neighbouring cities (IOC, 2002, 2003b).

Following these reports, a new role for the IOC was added to the Olympic Charter in 2003, reflecting its responsibility to "take measures to promote a positive legacy from the Olympic Games (…), including a reasonable control of the size and cost of the Olympic Games, and encourage OCOGs, public authorities (…) [and] the Olympic Movement to act accordingly" (IOC, 2003, p. 12). This marked the introduction of the concept of "legacy" into the Olympic Charter, although no formal definition was provided. Yet, just one year later, likely acknowledging the ambitious nature of the original wording, this role was simplified to "promote a positive legacy from the Olympic Games to the host cities and host countries" (IOC, 2004, p. 12).

This represented a turning point in Olympic bidding. A revised candidature file format was introduced, requiring cities to address sustainable development more explicitly, with a focus on long-term plans with integration of Olympic impacts and legacies. This shift reflected broader entrepreneurial trends in urban development, where strategic planning became integral to planning practices. The impact was notorious in the bidding process for the 2012 Olympics. Lopes dos Santos and Gonçalves (2022) highlight that, in the highly competitive race between five major global cities – London, Paris, Madrid, New York City, and Moscow – candidates

significantly increased their use of terms such as “sustainability”, “legacy”, and “strategy” in their proposals.

Fig. 2 shows these authors’ findings regarding the growth in the use of variants of terms related to strategic planning in candidature files. Notably, for 2012, variants of the word “sustainability” appeared four times more frequently per page than in bids for the 2008 Games. Applying the authors’ methodology, it is also possible to observe that the term appeared only twice across the documents of all six host candidates for the 1996 Games and four times among the seven bidding cities for the 2000 Games. In contrast, for the 2012 Olympics, variations of the term were used 149 times in four out of the five bids. A similar trend can be seen with the Winter Games: none of the six candidates for 1998 referenced the term, while the nine candidates for 2002 collectively used it 10 times only. This pales in comparison to the 77 instances it appeared in the Vancouver 2010 bid alone (Lopes dos Santos and Delaplace, 2024). This upward trend persisted across both Summer and Winter Olympic bids until the candidatures for 2024 and 2026, after which the candidature process was revised following the adoption of Olympic Agenda 2020.

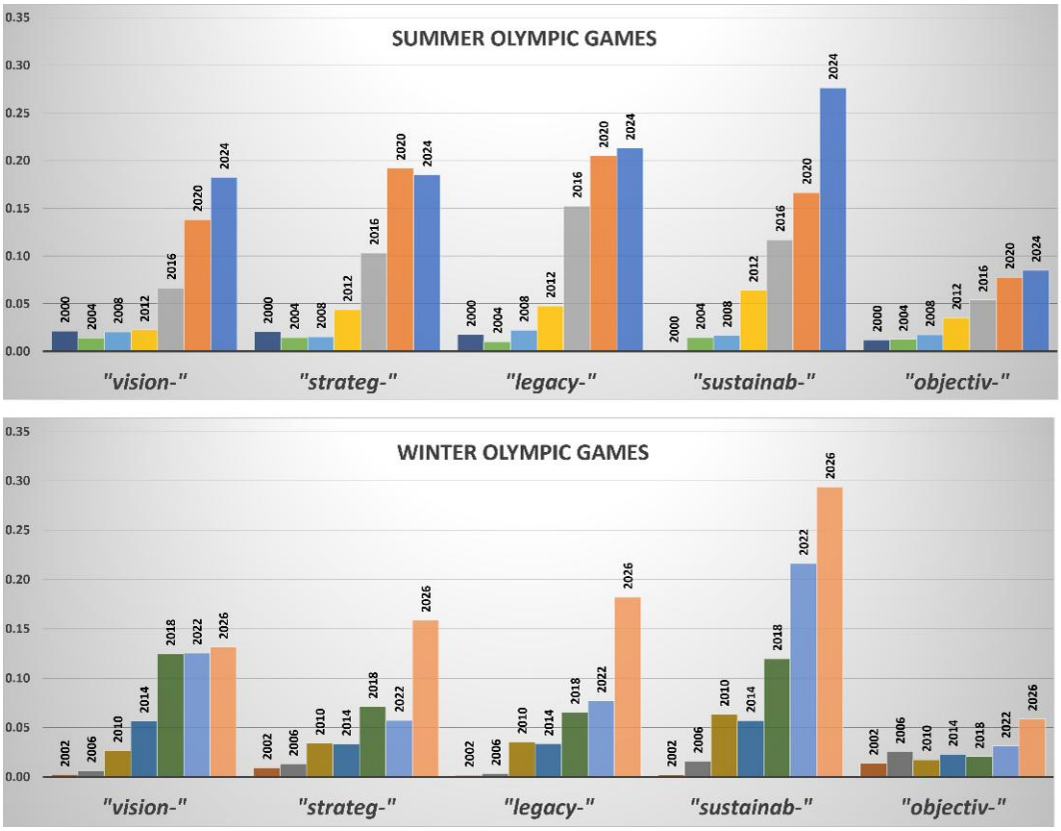

Fig. 2 Average word-frequency of strategic planning-related head-words in candidature files, per page, for host candidates of the Summer (top) and Winter (bottom) Olympic Games, 2000–2026. (Source: Lopes dos Santos and Gonçalves, 2022).

London 2012 indeed stood out as an important step towards Olympic sustainability, notably by maximising the use of existing and temporary venues and, for the first time, implementing a legacy plan alongside the Games’ preparations – a concept that became a requirement for subsequent editions (Azzali, 2017b). However, despite these advances, the edition still incurred significant costs. Around the same time, problems with the post-Games use of facilities and infrastructure built for Athens 2004, Turin 2006, and Beijing 2008 were becoming evident. Preparations for Sochi 2014 also faced escalating costs and severe environmental impacts, while

Brazil's economic and political crises during preparations for a series of consecutive mega-events foreshadowed the financial and sustainability turmoil that Rio 2016 would eventually face (Lopes dos Santos and Delaplace, 2024).

The preparations for these editions also evidenced significant negative social impacts of Olympic-led regeneration projects on local communities, particularly low-income populations. Often requiring substantial land acquisition, these projects have been linked to large-scale displacement, affecting hundreds of thousands of people across host cities. While these issues date back to editions like Seoul 1988, they gained greater prominence in more recent ones, such as Beijing 2008 or Rio 2016 (COHRE, 2007), as urban planning approaches to social sustainability emerged and concerns about inequality, exclusion, and the unequal distribution of resources and benefits grew. Post-Games, these impacts were frequently worsened by gentrification, driving up property values and further marginalising vulnerable populations – as seen in Vancouver 2010 and London 2012 (Lopes dos Santos et al., 2025).

Despite these issues, the social dimension of sustainability remained largely neglected by event organisers (Hall, 2012; Chappelet, 2022a; Mair et al., 2023), who tended to focus on environmental objectives like resource efficiency and reducing ecological footprints and carbon emissions. Yet, these initiatives have increasingly been perceived as a misleading market strategy promoting the event's image over its genuine sustainability. The overstatement of environmental achievements, the selective highlighting of successes while ignoring failures, and the unfulfilled promises of lasting legacies have fuelled accusations of greenwashing towards the Olympic Games, the IOC, and the broader Olympic Movement (Boykoff and Mascarenhas, 2016).

The combination of persisting economic burdens, increasingly concerning social side effects, and perceived dishonesty regarding environmental achievements underscored the disconnection between Olympic sustainability claims and the actual tangible outcomes of the event on urban environments and communities. This dissonance has intensified public scepticism, strengthening global anti-Olympic movement groups and mobilising local protest campaigns in bidding and hosting cities.

In this context, the Olympic Agenda 2020 emerged in 2014 as the IOC's latest strategy to enhance not only the event's sustainability but also its credibility and youth appeal. Key initiatives included reformulating the candidature process into an invitation format with a dialogue stage, allowing concepts and requirements to be flexibly negotiated with preferred hosts to align with their long-term needs. The definition of a host was expanded to include multiple cities, regions, or countries, encouraging the use of existing or temporary venues to reduce costs (IOC, 2014a). Also noteworthy was the creation of the Sustainability and Legacy Commission, along with a dedicated IOC department for sustainability (IOC, 2017a). Moreover, within the framework of Olympic Agenda 2020, legacy has finally been defined.

2.3. Olympic Governance: History, Stakeholders, and the Local Context

Since the foundation of the IOC in 1984, the organisation has evolved from a small visionary group into a highly influential non-governmental organisation representing sport and promoting its values on a global scale. While Pierre de Coubertin's ideals shaped the modern Olympic Movement as we know it today, they have also been the subject of contemporary debate, particularly regarding their historical and ideological implications, including ties to the fascist movement. Despite these controversies, the Olympics expanded significantly in scope over the

twentieth century, generating substantial revenue and influencing an ever-growing network of individuals and organisations. This expansion has brought about a diverse range of interests within the Olympic stakeholders network, presenting the IOC, as the leader of the Olympic Movement, with the complex task of balancing and managing these interests to ensure the success of the Games (Lopes dos Santos et al., 2021a).

At the heart of the Olympic Movement lies the core vision of contributing "to building a peaceful and better world by educating youth through sport" (IOC, 2024b, p. 12). The IOC seeks to fulfil this vision by promoting Olympic values, advancing sport as a tool for humanity, fostering sustainable development within sport, and encouraging lasting legacies in host regions (ibid). The continuous pursuit of such a vision requires concerted efforts across the Olympic governance structure, promoting collaboration among stakeholders to collectively uphold and propagate these values. In doing so, the IOC positions itself as a "positive instrument to [help] shape a better world" (Bridoux and Stoelhorst, 2022, p. 802). Within this framework, the Olympic Games and Movement, including bidding and organising committees, strive to cultivate cooperative relationships, enabling the alignment of values and fostering joint (societal) value creation (Lopes dos Santos et al., 2024).

The IOC's overarching role is formalised through the adoption, amendment and maintenance of the Olympic Charter, described as a "basic instrument of a constitutional nature" that "governs the organisation, action and operation of the Olympic Movement and sets forth the conditions for the celebration of the Olympic Games" (IOC, 2024b, p. 6). Since its publication, the Olympic Charter has undergone numerous revisions to reflect and address the evolving needs of the Olympic Movement and the Games themselves. Alongside the Charter, the IOC has introduced supplementary guiding documents over time to facilitate critical changes and address emerging challenges within its governance and objectives. These documents, shaped by historical developments, reflect how the governance of the Olympic Movement has continuously adapted to meet the demands of a growing event in an evolving world.

The Development of Olympic Governance: From Pierre de Coubertin to the Olympic Agenda 2020

Chappelet (2023) identified 1900 as the beginning of what he described as the "Classic Olympic System". This system introduced the core entities that remain integral to the Olympic Movement today: the IOC, the National Olympic Committees (NOCs), the International Sports Federations (IFs), the OCOGs, and the National Sports Federations (NFs). Although these entities were progressively formalised within the Olympic Charter throughout the early twentieth century, their involvement in the revival of the Modern Olympic Games dates back to the very beginning. For instance, the concept of an OCOG existed under various names as early as the Athens 1896 Games. During this time, NOCs also began to form to assemble national teams, with Germany being the first, in 1895 (Chappelet, 2016).

After its foundation, the IOC initially operated as a small, exclusive group, predominantly composed of white men and led by Pierre de Coubertin, with no formal staff structure (Girginov, 2012a). The first Olympic Charter, published in 1908, was a mere two pages long. It contained basic regulations supplemented by lists of members, meetings, and congresses, reflecting the modest scale of the organisation at the time (Lopes dos Santos et al., 2021a).

Following the London 1908 Games, the Olympic Movement began to take on a more formal structure. The principle of national representation was introduced in the Olympic Charter since

its first version, which stipulated that IOC members were to act as delegates to the sports federations and organisations of their respective countries. This edition of the Charter also included the first reference to NFs. By 1911, IOC members were officially listed by their countries of representation, further solidifying the concept of national affiliation within the organisation (ibid).

In the year of 1914, representatives from NOCs were invited to participate in the Olympic Congress for the first time, held in Paris (IOC, n.d.a). By 1920, the Olympic Charter formally recognised NOCs as part of the Olympic Movement, provided they were composed of IOC members (Lopes dos Santos et al., 2021a). At the same time, the existing IFs – whose numbers grew significantly following the creation of the IOC – sought to assert greater influence. They demanded a stronger voice in key areas such as rule-making and the management of the Olympic Programme, challenging the dominance of the IOC and the OCOGs in organising sports competitions. Their concerns included inconsistencies and instances of home-field advantage that compromised the impartial admission of amateur athletes. Frustrated by the lack of resolution at the Olympic Congress, the IFs established the Permanent Bureau of International Federations. This initiative served as a collective platform aimed at counterbalancing the IOC's authority, reflecting early tensions over governance within the Olympic Movement (Chappelet, 2016).

However, this power struggle was relatively short-lived. At the VII Olympic Congress in Lausanne in 1921, the IOC acknowledged the criticisms raised by the IFs and signalled its willingness to negotiate a future agreement. However, it also reinforced its authority, stressing the importance of "loyalty towards the IOC" (IOC, n.d.b). That same year, a revised Olympic Charter was introduced, featuring a new section on regulations and protocols for the organisation of the Olympic Games. For the first time, the role of OCOGs was formally outlined, and IFs were explicitly mentioned (Lopes dos Santos et al., 2021a).

It was not until 1924 that the Olympic Charter officially recognised IFs as part of the Olympic Movement. From this point onwards, IFs were invited to participate in Olympic Congresses. To address their demands, a section on "General Technical Rules" was added to the Charter, comprising nearly half of the revised document. Another significant change was the formal transfer of responsibility for organising the Games to the NOC of the host city's country, which was tasked with creating an OCOG to liaise directly with the IOC. This edition of the Charter also introduced the first five Fundamental Principles of Olympism, though these were markedly different from those in place today (ibid).

The inclusion of NOCs and IFs marked a significant milestone in shaping the modern structure of the Olympic Movement, fostering improved collaboration among key stakeholders. By the IX Olympic Congress, held in Berlin in 1930, IF representation had grown considerably, with more than double the number of delegates present at the previous Congresses (IOC, n.d.c). This year also marked the first English publication of the Olympic Charter, reflecting the growing international nature of the Games. In this version, the roles of the IOC, OCOGs, NOCs, and IFs were clearly outlined. Moreover, for the first time, NFs were explicitly referred to as such and were granted the right to participate in Congresses as part of the delegations of their respective NOCs and IFs (Lopes dos Santos, 2021).

Three years later, in 1933, the IOC published a supplementary document titled "The International Olympic Committee and the Modern Olympic Games", which provided additional clarification on the structure of the Olympic Movement. A revised version of this document,

released in 1950, included an organisational diagram that closely resembled Chappelet's (2023) concept of the "Classic Olympic System". This further solidified the evolution and institutionalisation of Olympic governance into the form recognised today.

As previously mentioned, municipalities bidding to host the Olympics were formally introduced as part of the Olympic framework in the 1949 version of the Olympic Charter. By 1955, national governments were required to approve bids, marking their official association with hosting the Games. Additionally, with the growing number of athletes after World War II, the importance of team officials, technical delegates, and jury members also increased. These groups were mentioned in the Olympic Charter for the first time in 1958, alongside the first reference to members of the media (Lopes dos Santos et al., 2021a).

Chappelet (2023) identifies the beginning of the "Regulated Olympic System" in 1960. During the late 1970s and early 1980s, the Olympic Movement underwent significant expansion, leading to the creation of new associations to represent various stakeholder groups. The decolonisation era of the 1960s and 1970s contributed to a sharp rise in the number of participating NOCs, which increased from 83 at the Rome 1960 Summer Olympics to 140 at the Los Angeles 1984 Games. In response to this growth, the Association of National Olympic Committees (ANOC) was established in 1979 to represent the collective interests of NOCs. Later in 1981, the IOC launched the Athletes' Commission to ensure athlete representation within its organisational structure. By 1983, three additional associations were created to strengthen coordination with the IFs: the Association of Summer Olympic International Federations (ASOIF), the Association of International Olympic Winter Sports Federations (AIOWF), and the Association of IOC Recognised International Sports Federations (ARISF) (Chappelet, 2016).

Recognising the increasing diversity and complexity of Olympic stakeholders, the IOC took significant steps in the 1980s to adapt its governance and operational frameworks. In 1983, it established the Court of Arbitration for Sport (CAS) as an independent mechanism to resolve disputes, ensure sound legal oversight, and uphold fairness and integrity in sport. CAS, however, was only formally mentioned in the Olympic Charter in 1991. To further safeguard CAS's independence from the IOC, the International Council of Arbitration for Sport (ICAS) was later established in 1994, following a recommendation from the Swiss Federal Tribunal (McLaren, 2001).

As the Games became increasingly commercially appealing and host communities assumed a larger role, the IOC introduced the "Host City Contract" in 1985. This document aimed to streamline cooperation between the IOC and its expanding network of stakeholders, ensuring that the Games adhered to a set of core requirements. The same year saw the launch of the TOP Programme following the Los Angeles 1984 Games, an initiative that significantly boosted the commercial appeal and media coverage of the Olympics. Media accreditations for the Summer Olympics rose from approximately 9,000 in 1984 to 16,000 in 2000, and eventually 25,000 in 2008, while a parallel trend was observed in the Winter Olympics (see **Fig. 3**). The growing audience interest also attracted new forms of commercial sponsorship, with companies recognising the immense financial potential of sports and beginning to provide substantial funding to both national and international sports organisations (Essex and Chalkley, 2004; Lopes dos Santos et al., 2021a).

The 1991 Olympic Charter introduced several radical changes that redefined the Olympic Games and Movement's structure and values. One of the most notable was the decision to permit professional athletes to compete in the Games. This shift, coupled with the growing influence of

sponsors and media, spurred a significant increase in participation. Athlete numbers in the Summer Olympics rose sharply, from approximately 6,800 in 1984 to 10,300 by 1996, with the Winter Olympics following a similar trajectory.

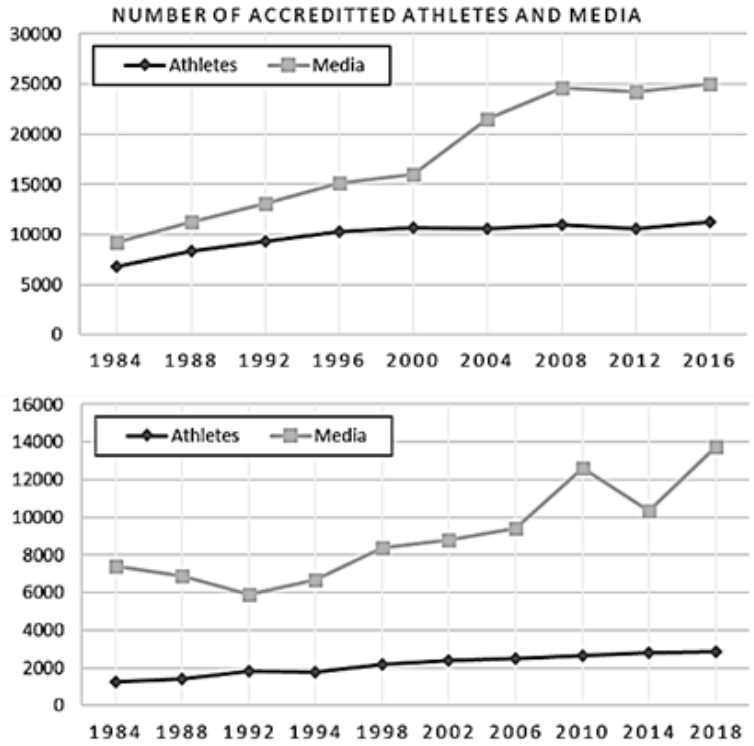

Fig. 3 Growth of athletes and accredited media at the Summer (top) and Winter (bottom) Olympics. (Source: Lopes dos Santos et al., 2021a).

Beyond this, the 1991 revision of the Olympic Charter brought a profound transformation to the principles underlying Olympism. Previously focused on technical and organisational aspects of the Games, the Fundamental Principles of Olympism were redefined to reflect broader societal and ethical values, embracing themes such as peace, human rights, inclusion, education, sport, and culture. The five new principles became very close to today's seven Fundamental Principles of Olympism, even though in slightly different arrangements: Olympism and its goals were clearly defined (today's first and second principles); the Olympic Movement was differentiated from Olympism as being the mechanism responsible to vouch for it (today's third principle), with the goal of securing human rights and upholding a more peaceful world (today's sixth principle); and the Olympic Charter was identified as the guiding document of the organisation (today's seventh principle). Today's fourth principle, which identifies sport as a human right, was later added to the Olympic Charter in 1996 (Lopes dos Santos et al., 2021a).

From this point onwards, leveraging the growing influence and media attention of the Olympic Games, the IOC began redefining its role within society. Shifting beyond its traditional focus on organising the Games, the IOC positioned itself as a global advocate for societal values, championing the principles of Olympism to promote global peace and address pressing societal challenges. This evolving role also strengthened the IOC's ties with international organisations, namely the UN. During the 1990s, amidst the Yugoslavia wars, the IOC collaborated with the UN to revive the Olympic Truce, inspired by ancient Greek traditions. This initiative enabled

Yugoslavian athletes to compete at the 1992 Barcelona Olympics, despite the ongoing conflict (Burke, 2019), marking the beginning of a formal and enduring partnership.

This shift of perspective put the IOC in a wider managing role, more concerned with sports and society values and less capable of portraying an operational role in staging the Games. Therefore, the 1993 Olympic Charter called for the creation of a Coordination Commission for each edition of the Games, tasked with enhancing the collaboration among Olympic Games stakeholders and monitor the event's organisation progress (Lopes dos Santos et al., 2021a). By 1994, the Commission's composition evolved to include athletes, theme-specific specialists such as transportation advisors, and members from previous OCOGs, further strengthening its expertise and capacity to address complex organisational demands (Parent, 2013).

The IOC celebrated its centenary at the XII Olympic Congress in 1994 in Paris, placing particular emphasis on environmental concerns. This Congress also marked the first time media representatives were invited to speak, underscoring their critical and growing role in the Olympic Movement (IOC, n.d.d). By the late 1990s, the IOC had established strong commercial partnerships, garnered significant media attention, and achieved substantial societal influence. This prominence made hosting the Games highly desirable, leading to intense competition among cities eager to bid.

However, the ethical foundations of the bidding process came under scrutiny following the 1998 corruption scandal surrounding Salt Lake City's successful bid to host the 2002 Winter Olympics. Investigations revealed that several IOC members had accepted bribes during the bidding process, raising questions about similar practices in previous candidatures. Although similar issues were reported for other editions of the Games, sanctions were applied only to some of those involved in the Salt Lake City case (Hamilton, 2010).

Recognising the need for reform, the IOC acknowledged weaknesses in the Olympic Charter regarding the ethics of the candidature process and implemented structural changes in its administration. It established the Ethics Commission to oversee and enforce the "Code of Ethics". Additionally, the Nominations Commission was created to evaluate candidates for IOC membership, ensuring greater transparency and accountability. The composition of the IOC Executive Board was also restructured to include representatives from the Athletes' Commission, as well as associations such as ANOC, ASOIF, and AIOWF, thereby enhancing stakeholder representation (Lopes dos Santos et al., 2021a). In response to the growing number of cities bidding to host the Games, the candidature process was further reformed into a two-phase system. This new approach enabled the IOC Executive Board to shortlist finalists before the final vote by the IOC Session (Olympic Studies Centre, 2018a).

Around the same time as the Salt Lake City corruption scandal, European governments' concerns about doping were confirmed by another major incident, the so-called "doping tour". Actions taken by French customs and police during the Tour de France revealed that "drug use in cycling (...) was widespread, systematic, and organized (...) institutionalized within the structure of professional cycling" (Hanstad et al., 2008, p. 228). In response, and in collaboration with intergovernmental organisations, governments, public authorities, and other public and private entities, the IOC established the World Anti-Doping Agency (WADA). WADA was tasked with developing, harmonising, and coordinating anti-doping rules and policies across all sports and nations and was immediately referenced in the 1999 Olympic Charter (Lopes dos Santos et al., 2021a). As part of its role, WADA became responsible for accrediting laboratories (WADA-accredited laboratories) that comply with standardised doping analysis methods and conditions,

certified to conduct sample analysis in accordance with the "World Anti-Doping Code" (Kamber and Mullis, 2010; WADA, 2019). Following a similar approach to the CAS, the International Testing Agency (ITA) was established later in 2018 to ensure that the management of anti-doping programs and testing operates independently of sporting and political entities – an outcome of Olympic Agenda 2020.

In 2004, after these developments, the IOC incorporated the concept of good governance within the Olympic Movement into the fourth Fundamental Principle of Olympism. This initiative was further strengthened in 2008 with the publication of the "Basic Universal Principles of Good Governance of the Olympic and Sports Movement". By 2011, governance had gained its own dedicated Fundamental Principle in the Olympic Charter, established as the fifth principle and constituting the most recent addition. It currently states:

> *Recognising that sport occurs within the framework of society, sports organisations within the Olympic Movement shall apply political neutrality. They have the rights and obligations of autonomy, which include freely establishing and controlling the rules of sport, determining the structure and governance of their organisations, enjoying the right of elections free from any outside influence and the responsibility for ensuring that principles of good governance be applied.* (IOC, 2024b, p. 8)

Although this marked the formal inclusion of governance in the Olympic Charter, the concept had been evolving alongside the expansion of the Olympic Movement. What began as a restricted club of sports organisations transformed into a global social movement with significant commercial capacity and the ability to engage governments across ideological divides and international organisations (Girginov, 2012a). One notable development was the agreement signed between the IOC and the International Paralympic Committee (IPC) in 2001 requiring the host city of the Olympic Games to also host the Paralympic Games. This strengthened ties between the stakeholders and strictly linked the two events, raising social awareness for Paralympic sport and people with disabilities (Blauwet and Willick, 2012). Another example was the effort to cultivate closer ties with the UN to leverage sport as a tool for building a better and more peaceful world, culminating with the IOC being granted Permanent Observer status at the UN General Assembly in 2009. Topics such as human rights, sustainability, corruption, and anti-doping policies became central to this partnership (van Luijk, 2018). Moreover, despite early interactions with the United Nations Educational, Scientific and Cultural Organisation (UNESCO) being marked by controversies (Meier, 2017), shared concerns over societal issues and the role of sport eventually led to meaningful collaborations. The 2005 UNESCO Convention Against Doping in Sport represented a key milestone, securing government financial commitments to WADA (Chappelet, 2016). These collaborations, including those with the European Union and its constituent organisations, underscored the IOC's expanding influence in global governance and societal impact.

The expansion of the Olympic governance system became evident during what Chappelet (2023) refers to as the "Current Olympic System" – from 2010 onwards. Organisations such as ASOIF, AIOWF, ANOC, and their continental associations overseeing regional Games became more prominent. For example, the ANOC assumed greater responsibility for redistributing the NOCs' share of revenue from the Games through a programme called Olympic Solidarity (Chappelet, 2016). Moreover, athletes, who had historically been limited in their influence within the Olympic system, began to assert their voices. Previously, potential Olympians and their clubs relied on representation through their IFs, NOCs, or national governing bodies, with limited direct involvement. This dynamic began to shift in the 2010s, driven by the establishment of athlete

commissions within sports organisations and Olympic bodies and the emergence of independent associations advocating for athletes' rights. As Chappelet (2023, p. 793) observes, “athletes are now much more willing to speak out, as they demonstrated during the Russian doping crisis (2016–2020), when several athletes openly criticized decisions taken by WADA, and the IOC [and] more recently, [when] they complained about the time taken to postpone the Tokyo 2020 Olympics”.

Governments have also taken on an increasingly prominent role in Olympic governance, particularly as the scale of the Games has outgrown the capacities of local authorities. To address this complexity, host governments have been establishing coordination mechanisms involving local, regional, and national stakeholders, often appointing dedicated Olympic ministers to oversee preparations and ensure smooth execution. Furthermore, since Sydney 2000, “Olympic laws” have also been introduced to facilitate the Games, granting exemptions in areas such as taxation and urban planning, while establishing specialised agencies to manage infrastructure, transportation, and security (ibid).

These extraordinary legal frameworks and their broader governance implications have amplified the role of civic groups and public opinion as powerful forces within the Olympic Movement. The Games have increasingly come under scrutiny for issues such as human rights violations, excessive costs, and inadequate legacy planning. Activist groups, often supported by non-governmental organisations, have coalesced into a somewhat coordinated anti-Olympic movement, which has amplified local opposition in both host and potential candidate cities (Boykoff, 2017; Lauermann, 2019). This growing opposition has had a profound impact on the bidding process, compelling several cities to abandon their aspirations to host the Games. The heightened scrutiny has also triggered legal challenges that extend beyond the jurisdiction of the CAS. National courts of justice have begun addressing the actions of the IOC and other sports-related organisations, which were previously shielded from such accountability. Allegations have arisen not only from civic groups and non-governmental organisations concerning the organisation of the Games but also from athletes, who are increasingly willing to pursue legal action to address their grievances (Chappelet, 2023).

Since 2014, Olympic Agenda 2020 brought about significant changes to the legal and governance framework of the Olympic Movement. For instance, in 2015, the Olympic Charter underwent key amendments to promote transparency, credibility, and ethical values. One notable change was the creation of a Members Election Commission to appoint members for the IOC. Additionally, IFs were granted full authority to govern their respective sports within the Olympic Games. Interestingly, in the Olympic Charter of 2017 terms such as “administration” were replaced with “governance” when concerning IFs (Lopes dos Santos et al., 2021a).

Given this historical background, as Girginov (2012a) argues, the Olympic Games are undoubtedly a matter of governance as they (i) have always pursued political ideals, (ii) represent a development project promoting a universal normative vision of principles, with the Olympic Charter prescribing the roles and conduct of the entities involved, and (iii) are a collective undertaking, from the bid to the legacy stage, involving multiple stakeholders. Thus, in the multidisciplinary world of the Olympic Games, the term “Olympic” regards governance as an assembly of disciplines, with Olympic governance emerging as a way of guiding diverse stakeholders' perspectives into a consensual direction through the management of various governance systems (urban, sports, corporate, etc. – **Fig. 4**) within the broader framework of global governance (Lopes dos Santos et al., 2021a). Olympic stakeholders engage with this system to advance their own objectives, with each stakeholder constructing its own version of

Olympic legacy, which varies significantly across contexts. Girginov (2012b, p. 544) aptly highlights this complexity inherent in legacy-building: “it is this tension between what is being done in the name of legacy, for whom, at what cost and to what effect that turns Olympic legacy into a governance issue”. Thus, distributing the benefits of hosting the Games fairly among stakeholders with differing perspectives constitutes one of the greatest challenges for Olympic governance (Leopkey and Parent, 2017).

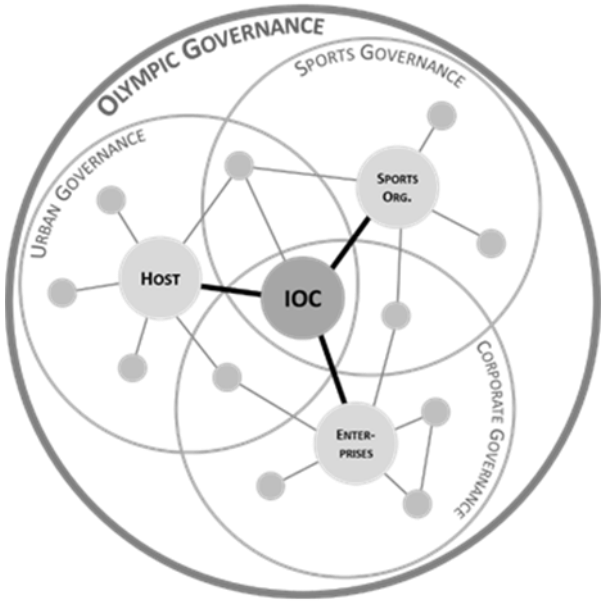

Fig. 4 Examples of governance systems within the Olympic governance framework. (Source: Lopes dos Santos et al., 2021a).

This raises a critical question: how well can the IOC – and, at a later stage, the OCOGs – coordinate stakeholders whose interests often diverge? As the central governing body, the IOC has sought to reconcile these competing priorities by adapting its governance framework through amendments to the Olympic Charter and other binding documents. While this adaptability is a strength, it warrants critical assessment to determine whether it genuinely prioritises inclusivity and innovation or merely preserves the IOC's authority amidst growing scrutiny. Over time, the Olympic governance framework has demonstrated its ability to evolve. However, portraying the IOC’s actions as entirely altruistic oversimplifies the complexities of navigating this intricate system. Decisions often reflect broader institutional priorities and the constraints of global governance. For instance, the adaptation of the Olympic Charter to incorporate urban strategies or innovative practices from host cities is less a natural evolution and more a pragmatic response to external pressures, such as public criticism and stakeholder demands.

In conclusion, the evolution of Olympic governance illustrates a dynamic yet fragile system. Reforms such as Olympic Agenda 2020 demonstrate a willingness to address structural issues, but their effectiveness depends on reconciling competing interests and ensuring equitable outcomes. The true test lies not only in the IOC’s capacity to adapt but also in its ability to foster transparency, accountability, and genuine collaboration among stakeholders. As the demands on Olympic governance grow, these principles will be critical to sustaining the legitimacy and relevance of the Olympic Movement.

The Network of Olympic Stakeholders: Structure and Relationships

Organising an event like the Olympic Games is a task that spans numerous disciplines and inevitably involves a wide array of stakeholders. While the IOC owns the Games and retains the associated rights and properties, its practical role in organising the event is primarily one of coordination and oversight (Lopes dos Santos et al., 2021a; Lopes dos Santos et al., 2024). The successful delivery of the Games depends on the contributions of various stakeholders, each with distinct interests and roles: hosts provide the necessary infrastructure and services, often funded by public resources; IFs direct the sports competitions; NOCs manage athletes' delegations; OCOGs handle planning and operational delivery; private enterprises offer significant financial support through sponsorships, broadcasting rights, and other contractual agreements; and volunteers ensure the smooth execution of the event's activities (Theodoraki, 2009). Beyond these core contributors, additional stakeholders – including regulatory bodies, legal institutions, and non-governmental organisations – play key roles within the Games' broader governance system.

Therefore, cities bidding for and hosting the Olympic Games must establish a robust governance and management structure capable of dealing with this extensive network of stakeholders and competing interests involved, all while adhering to the core principles of the Olympic Games and Movement. Although the bidding and organising committees typically lead this system, their success relies on effective collaboration with a broad range of external stakeholders (Parent et al., 2011). Challenges in effectively driving efforts stem not only from the varied requirements of hosting the Games but also from the stakeholders' aspirations to generate impacts and legacies, both of which are profoundly shaped by the IOC's approach to managing the Olympic governance system.

In governance literature, the transition from "government" to "governance" (Peters and Pierre, 1998) signified a shift towards more complex and dynamic models that transcend traditional hierarchical perspectives of political systems (Rhodes, 1996). It highlighted the importance of not only rules and resources but also the relationships and interactions among societal actors (Kooiman, 2003). The state, while no longer the sole actor within the political system, retains its role as the institution capable of embedding "complex social relations" in a multifaceted system. Within this framework, Olympic governance is conceptualised as inherently collaborative, requiring the integration and coordination of diverse actors to achieve shared objectives.

Research on event governance emerged prominently in the 1990s (Hede, 2007), leading to a growing body of literature examining governance systems for sports events and mega-events like the Olympic Games. These studies, shaped by different contexts and issues, have provided critical insights into the diverse networks of stakeholders involved. For instance, Hautbois et al. (2012) identified critical stakeholders during the national stages of France's bid for the 2018 Winter Olympics; Kearins and Pavlovich (2002) highlighted key stakeholders responsible for Sydney 2000's environmental commitments; Parent (2008, 2013) explored the primary stakeholders of an OCOG across the Olympic cycle; Girginov (2012b) investigated how state-society relations were influenced by sustainability and legacy goals for London 2012; Leopkey and Parent (2015, 2017) critically analysed stakeholder perceptions of governance processes, including legacy management, for Sydney 2000 and Vancouver 2010; Lopes dos Santos et al. (2021a) examined how evolving Olympic governance and the involvement of new stakeholders have shaped the Olympic Charter over time; and Gignon (2023) explored how Paris 2024 stakeholders' legacy aspirations influenced public policy development. As Lesjo (2000)

observed, this diversity of Olympic stakeholders not only influences the Games' outcomes but also adds layers of complexity to the Olympic governance system.

Several studies sought to comprehensively identify and analyse key stakeholders in sports events (Parent and Deephouse, 2007; Ferkins and Shilbury, 2015; Naraine et al., 2016; Oh et al., 2019). While some focus on categorisation (McDonnell et al., 1999; Shone and Perry, 2001; Friedman and Miles, 2004; Parent, 2008; Frawley, 2015), others map stakeholders based on their functions and interests (Gargalianos et al., 2015; Chappelet, 2022b; Lopes dos Santos et al., 2024). To this end, the IOC has also developed visual models to represent Olympic stakeholders over time, using frameworks like concentric circles and inverted pyramids (Parent, 2013). These visualisations are instrumental in understanding the dynamics between stakeholders, facilitating more effective event delivery and advancing the broader goals of the Olympic Movement (Gargalianos et al., 2015). As Freeman (1984, p. 53) observes,

> *an organisation which understands its stakeholder map and the stakes of each group, which has organisational processes to take these groups and their stakes into account routinely as part of the standard operating procedures of the organisation and which implements a set of transactions or bargains to balance the interests of these stakeholders to achieve the organisation's purpose, would be said to have high (or superior) stakeholder management capability.*

Nevertheless, many of these studies are deeply rooted in specific case studies or research contexts. While they offer valuable insights, their general applicability across different settings remains a challenge (Naraine et al., 2016). This issue is particularly relevant given that each edition of the Olympic Games is situated in unique temporal and spatial contexts – it is place-based (Delaplace, 2020). Analyses of the foundational, context-neutral system from which each edition's governance model derives are, therefore, scarce (Chappelet and Kübler-Mabbott, 2008). Understanding this foundational system and identifying where local contexts are integrated – or ought to be – is, thus, critical to ensuring that the rigid structures composing the Olympic regulatory and governance frameworks can be effectively adapted to different settings (Lopes dos Santos et al., 2024).

Furthermore, academic analyses of Olympic stakeholder networks from a top-down perspective remain limited, particularly in relation to the governance structure of the Olympic Movement. Among the few contributions, Chappelet and Kübler-Mabbott (2008) provide a seminal overview of the Olympic system's structural evolution, identifying three historical phases: the "Classical Olympic System", including core entities such as the IOC, OCOGs, NOCs, IFs, and NFs; the "Extended Olympic System", emerging with the involvement of governments, sponsors, and sports leagues; and the "Regulated Olympic System", introducing organisations like WADA and CAS. Chappelet (2023) later revised and updated this framework, delineating the three historical periods mentioned in the previous section. Importantly, the latest phase – the "Current Olympic System" – further broadens the network to include sports clubs, non-Olympic athletes, civic groups, NGOs, and national courts.

Differently, Lopes dos Santos et al. (2024) conducted a systematic analysis of the regulatory framework governing the Olympic Games and Movement to identify the stakeholders involved and the formal, legally binding relationships between them. Their methodology centred on an in-depth examination of the Olympic Charter and its referenced documents, including the Host City Contract – thus reflecting the IOC's perspective on its own regulatory network. This comprehensive approach highlighted the varying characteristics and attributes of stakeholders

(e.g., individuals or groups), revealing that they can be "conceptualised as distinct types of nodes defined at different multiple levels (...) with ties possible between all nodes, both within and across levels" (Lomi et al., 2016, p. 266).

To capture this complexity, Lopes dos Santos et al. (2024) adopted a multilevel network model with six levels: superfamilies, families, entities, sub-entities, groups of constituents, and constituents. Of these, three levels – entities, sub-entities, and constituents – encompass unique stakeholders, while the remaining levels represent aggregated groupings of stakeholders. This methodology enabled the identification of 63 entities and 115 sub-entities, which collectively included 137 constituents organised into 44 groups of constituents. The stakeholders were further organised into 17 families, grouped into three main superfamilies: the Olympic and Paralympic Movement Superfamily, covering "the concerted, organised, universal and permanent action (...) of all individuals and entities who are inspired by the values of Olympism" (IOC, 2024b, p. 8); the Regulations and Organisations Superfamily, consisting of stakeholders responsible for establishing and enforcing regulatory frameworks, either directly related to sport or extending to broader national and international contexts; and the Community Superfamily, including stakeholders representing broader groups and activities that interact with the Olympic world. Additionally, the authors defined the Host Superfamily to account for stakeholders from these superfamilies specifically involved in a particular edition of the Games. **Fig. 5** illustrates the first three levels of the resulting stakeholders map.

Those involved in the Olympic Games are best understood as participants in a "human process of joint value creation" (Freeman, 1994, p. 415), engaging in interactions that "give meaning and definition" to the event (Wicks et al., 1994, p. 483). These stakeholders comprise "those groups and individuals who can affect or be affected" by the process of value creation, participating in collective action that fosters mutual interdependence (Freeman et al., 2010, p. 9; Bridoux and Stoelhorst, 2016, 2022). Together, they constitute a dynamic network actively involved in the discussions, planning, decision-making, and management of the Games.

Coordinating this intricate network is critical, as the relationships between stakeholders are characterised by interdependence and are governed through pluricentric negotiations within shared frameworks of rules, norms, and discourses (Sørensen and Torfing, 2008). The governance of the Olympic Games can thus be compared to such a network structure, wherein interdependent actors collaborate to address challenges that no single entity can resolve independently (Rhodes, 1996; Agranoff and McGuire, 2001). In such systems, interaction among stakeholders becomes indispensable for mobilising resources, forming alliances, and addressing institutional gaps, with social mechanisms employed to coordinate and facilitate exchanges (Jones et al., 1997). This dynamic is particularly evident in the delivery of public services, which unfolds within complex systems of interactions involving both public and private entities (Provan and Kenis, 2008; Klijn and Koppenjan, 2015; Sørensen and Torfing, 2018).

Using Social Network Analysis, Lopes dos Santos et al. (2024) also examined stakeholder relationships, mapping interactions and power dynamics among the entities and sub-entities they identified (see **Fig. 5**). The analysis identified nearly 6,100 relationships, visualised in **Fig. 6**. The resulting network shows highly centralised, with a few key stakeholders exerting significant control. The (host) OCOG and the IOC emerged as the stakeholders with the highest number of connections (node degree) and having the relationship pathways with the biggest volume of interactions (betweenness centrality). This grants them substantial influence, control, and autonomy, also making them critical intermediaries linking different segments of the network. Additionally, this enables them to align with specific stakeholders to address diverging interests

or conflicts, significantly impacting decision-making processes. Notably, the (host) OCOG interacts with 79% of the stakeholders.

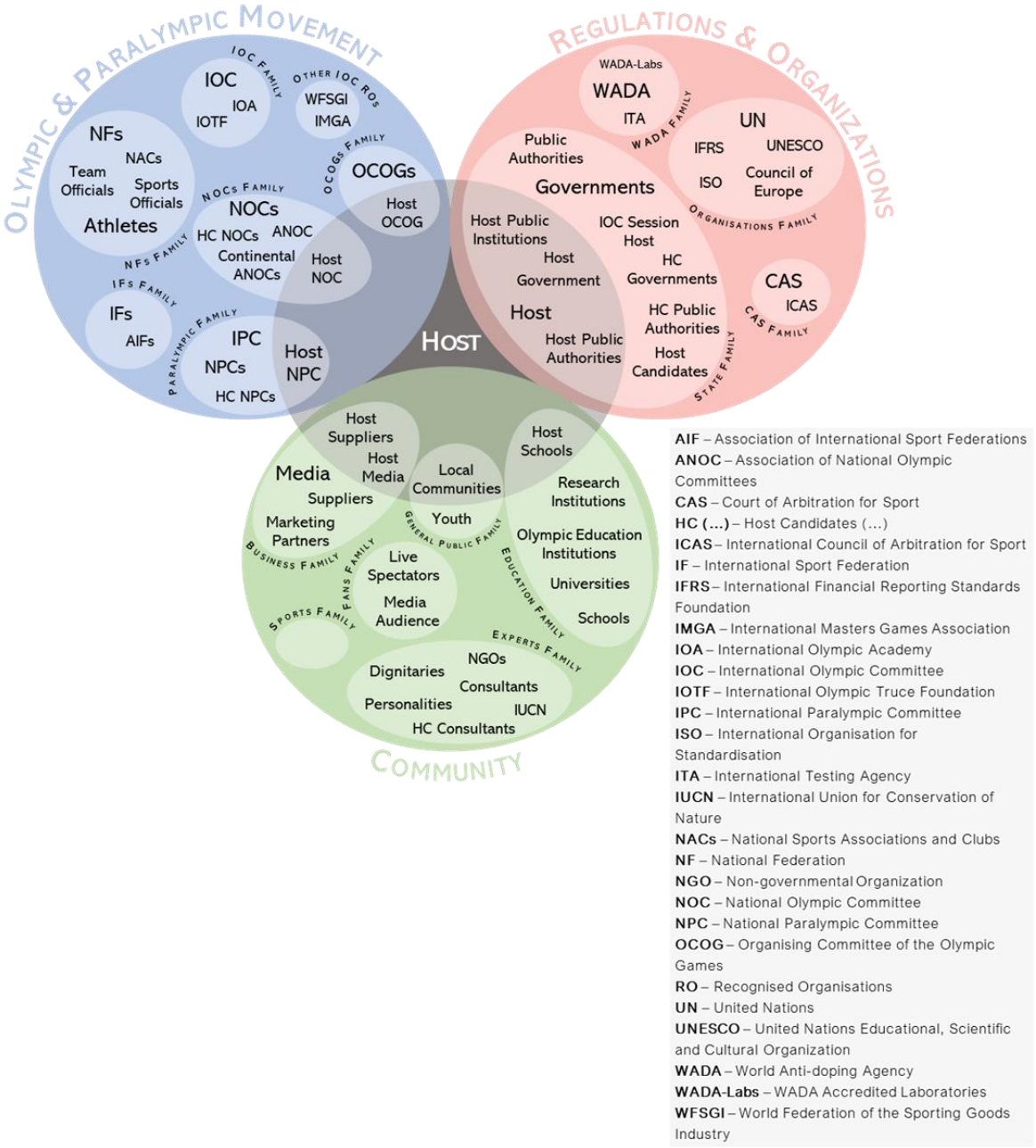

Fig. 5 Graphic systematisation of the superfamilies, families and entities within the network of Olympic stakeholders. (Source: Lopes dos Santos et al., 2024).

The authors also classified relationships into 11 types – such as collaborative, executive, informative, managerial, and operational – and analysed for directionality, that is, distinguishing "sending" (outdegree) and "receiving" (indegree) stakeholders. For executive relationships, the IOC, IPC, IFs, and WADA demonstrated higher outdegree, indicating a directive role, while the (host) OCOG predominantly exhibited indegree relationships, indicating a more subordinate position. Conversely, the (host) OCOG showed high outdegree in operational and informative

relationships, consistent with its responsibility for delivering the Games and keeping other stakeholders informed.

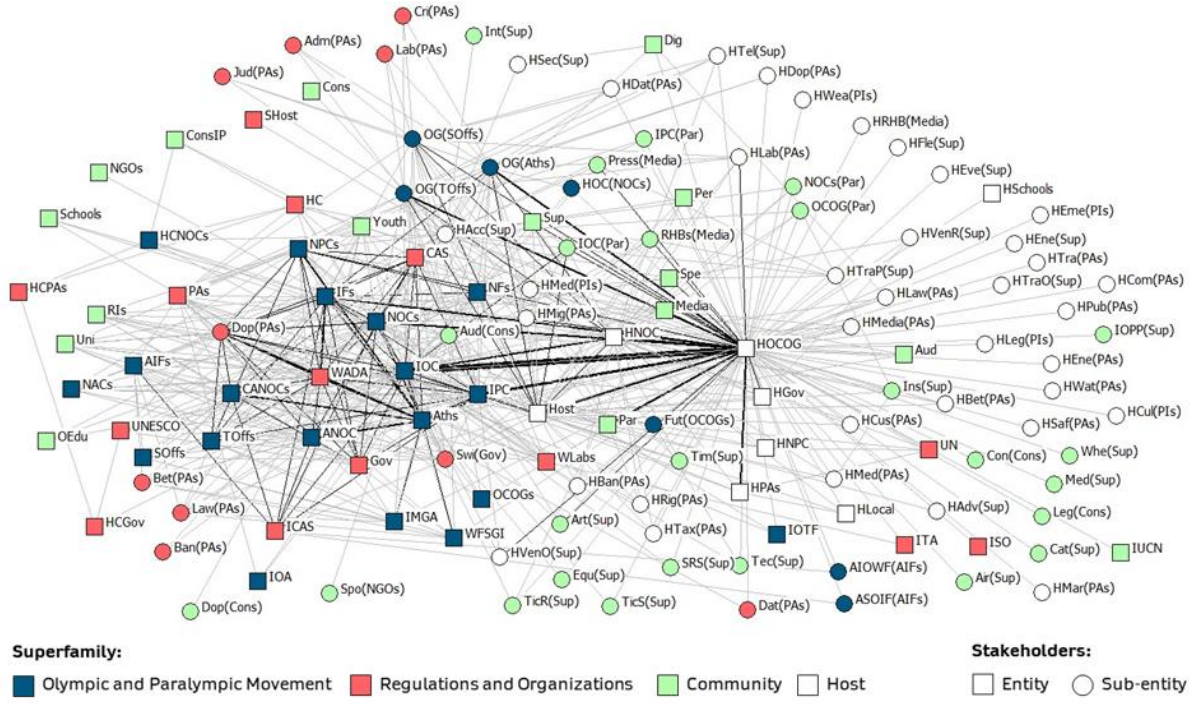

Fig. 6 Network of Olympic stakeholders (centralised by relationship count).[2] (Source: Lopes dos Santos et al., 2024).

These findings portray the Olympic Movement as a largely self-contained system with a rigid, top-down structure and minimal external influence. Stakeholders from the Regulations and Organisations and Community Superfamilies have limited roles, often restricted to specific issues. Peripheral stakeholders face restricted formal interaction and delegated responsibilities, with the IOC controlling (executive), the IOC and the (host) OCOG handling (managerial), and the (host) OCOG operationalising (operational) most activities. This concentration of power and responsibility within Olympic Movement entities, despite the Games being framed as a public interest initiative, limits the inclusion of local perspectives and the development of contextualised public benefits (Lopes dos Santos et al., 2024). This is demonstrated by Gignon (2023), which observed that for Paris 2024, the OCOG's vision, largely disconnected from local priorities, overshadowed contributions from other stakeholders.

Managing this type of issues poses significant challenges for public authorities and managers (Duignan et al., 2023). While the OCOGs concentrate on ensuring the event's success, local authorities bear the responsibility of prioritising community benefits. Hosts are also expected to secure favourable public opinion, an increasingly critical factor as cities grow hesitant to submit bids (Hiller and Wanner, 2018). This highlights the moral obligation of event organisers to address the interests of all affected groups, especially local communities, who often bear the brunt of the long-term consequences of mega-events (Weaver et al., 2022). However, evidence suggests that mega-event planning frequently marginalises local input, as implementing democratic

[2] Additional abbreviations relevant to the discussion: (host) OCOG – HOCOG; Host Government – HGov; Host Public Authorities – HPAs (and all other sub-entities within the Host Superfamily labelled as "(PAs)"); Local Communities – HLocal.

approaches can prove difficult (Pappas, 2017). The divergent roles of involved stakeholders often create power imbalances, leading to community disengagement or even opposition. This underscores the need to elevate residents from peripheral roles to central positions in decision-making processes (Sadd, 2012; Weaver et al., 2022).

Lopes dos Santos et al. (2024) further analysed the positioning of local stakeholders within the Olympic regulatory network, highlighting the peripheral roles occupied by public management entities such as the Host Government and other specific types of Host Public Authorities, even within the Host City Contract. Most of their interactions are classified as collaborative and executive. Nevertheless, the executive relationships of Host Governments are predominantly outdegree, directed largely towards the (host) OCOG and reflecting the institutional control they exercise over certain aspects of the Games' organisation, particularly through the application of national regulations. Conversely, the executive relationships of Host Public Authorities are primarily indegree, suggesting power imbalances and indicating they are often subject to oversight by other stakeholders – they are responsible to make sure the requirements are met according to what is agreed between the main four host contract signatories (McGillivray et al., 2020). This aligns to what Müller (2015b) describes as the "rule of exception", where ordinary regulations are suspended or altered to expedite event preparations, often in line with requirements specified in the Host City Contract. Under such a regulatory framework, it becomes likely that practices of exception, where authority is transferred to groups with corporate interests, transform civic power – and notions of the "public" or "general" good – into instruments for advancing private agendas (Vainer, 2015).

When it comes to the Host – typically a city and thus a public entity – Lopes dos Santos et al. (2024) conclude that it is tasked with managing and operationalising specific activities within the network. However, most of its regulated relationships are collaborative and primarily involve the (host) OCOG. Therefore, while the public sector is expected to uphold principles of public benefit and collective choice (Gillett and Tennent, 2022), the binding documents of the Olympic Movement do not explicitly support these responsibilities. Instead, they compel the public sector to engage in collaborative efforts that prioritise the success of the event, often facilitating business-oriented approaches that overlook public interests (Andranovich et al., 2001). In what concerns the Host's executive relationships, they are relatively balanced between indegree and outdegree and primarily involve interactions with the IOC, the (host) OCOG, and the Host NOC. However, while executive relationships with the (host) OCOG and Host NOC are reciprocal, the Host's interactions with the IOC tend to be more one-sided, leaning towards indegree relationships. This imbalance underscores the IOC's dominant authority within the hosting system (Lopes dos Santos et al., 2024).

A substantial body of literature emphasises the importance of involving local communities in mega-event planning to secure both successful bids and sustainable outcomes. Such involvement can help maximise positive impacts, ensure a fair distribution of benefits, and minimise disruptions (Weaver et al., 2021). Ideally, community participation should extend across formal and informal decision-making channels, embedding local values into the core of event planning. Public policies that encourage active citizen involvement, such as continuous consultation and direct participation, empower communities to enhance public well-being and align mega-event objectives with sustainable, community-focused legacies. Collaborative approaches further position local communities as active agents of change, strengthening social capital at the community level (Misener and Mason, 2007). Smith (2007) argues that securing legitimacy for mega-events requires institutional representation of public interests, particularly

within organising bodies, to facilitate local influence over planning. This form of engagement enables communities to negotiate outcomes that align with their interests, addressing the power imbalances prevalent in mega-event governance, where private sector priorities often dominate. By empowering communities to exert greater control over local impacts, organisers can build trust, mitigate opposition, and enhance the long-term social and economic legacy of the event (Sadd, 2012).

Interestingly, Lopes dos Santos et al. (2024) highlight that binding Olympic documents devote minimal attention to Local Communities, which are not even involved in informative relationships – meaning there is no regulatory requirement to inform them or seek their feedback for decision-making. Local Communities maintain only 13 relationships within the network, primarily with the (host) OCOG, the Host, and Host Public Authorities. These relationships are executive, operational, or collaborative in nature and mostly pertain to topics such as human rights, city activities and live sites, and cultural programmes. Notably, two additional relationships with the (host) OCOG address sustainability and legacy issues (collaborative), and venue construction (operational). This limited representation starkly contrasts with the collaborative governance models advocated by scholars, which emphasise the importance of public participation in achieving balanced decision-making and equitable distribution of benefits (Smith, 2007; Sadd, 2012; Weaver et al., 2022). The lack of formal inclusion of local communities within Olympic regulatory frameworks likely contributes to recurring conflicts between event organisers and local populations – as highlighted by Wolfe (2023a) for Paris 2024.

It is important to acknowledge that all versions of the documents analysed by Lopes dos Santos et al. (2024) were developed after the adoption of Olympic Agenda 2020; that is, they already reflected significant changes induced by it. While these documents reflect efforts to align the Games with contemporary sustainability priorities, they reveal persistent gaps in recognising public management stakeholders and local communities as integral actors. Shifting away from traditional top-down governance models and structurally incorporating collaborative, multi-actor approaches – where citizens are treated as partners – could enhance the legitimacy of public sector involvement (Dupuy and Defacqz, 2021). Such an approach may also help mitigate opposition and reduce disruptive actions against the Olympic Games.

2.4. Olympic Urban Planning: Key Theoretical and Practical Considerations

Olympic urban planning is a dynamic and complex process shaped by the tension between the ambitious vision of the Games and the realities of urban contexts. At its core lies the challenge of balancing the transformative potential of the event – often referred to as the "Olympic Effect" – with the practices required to deliver it. This tension is heightened by the financial model of the Games, which exerts systemic pressures on decision-making and complicates the balance between urban development goals and event-specific priorities.

Moreover, while the Olympics are celebrated for their long-term impacts and legacies, achieving these outcomes is rarely straightforward. Legacy is often contested, caught between aspirations for sustainability, equity, and regeneration, and the practical challenges of aligning global ambitions with local needs. This misalignment frequently leads to conflicting priorities and unintended consequences, complicating the promised transformation. Urban dilemmas further exacerbate these challenges, exposing structural vulnerabilities. Social effects derived from Olympic developments, for example, highlight the “wicked” problems of mega-event planning,

as efforts to accommodate Olympic needs can negatively disrupt some residents while benefiting others, deepening inequities.

This section critically examines these key theoretical and practical considerations. It delves into how these elements interact, intersect, and, at times, clash, offering insights into the broader implications for host cities and their urban futures.

Planning the Olympics: The "Olympic Effect", Games Requirements, and Planning Frameworks and Practices

The Olympic Games are the largest sports mega-event in the world, involving a large number of participants. Hosting an event of this scale requires the implementation of sophisticated and comprehensive urban strategies, not only to meet the logistical demands of the Games but also to deliver meaningful impacts and lasting legacies for host territories and their populations (Kassens-Noor, 2010). This ambition is often framed around harnessing what is commonly referred to as the "Olympic Effect".

In academic literature, the term "Olympic Effect" broadly denotes the amplified policy outcomes or societal changes associated with hosting the Games. While the term may have been used before, its first notable academic application emerged in the context of Beijing 2008 to denote reductions in air pollution during the Games' preparation period that brought significant health benefits (Brajer and Mead, 2003). Since then, the term has been linked to a variety of other impacts. For instance, Zhang and Zhao (2009) used it to describe the city-branding effects that enhanced Beijing's global image. Gries et al. (2010) referred to the influence of the 2008 Games on American attitudes towards China. Rose and Spiegel (2011) popularised the term in their controversial study on the trade benefits experienced by host and bidding cities – a subject latter addressed by Bayar (2017) using the same term. Papanikos (2015) applied the term when addressing Greece's economic growth. In a more intangible context, Edwards (2016) used it to capture the impact of London 2012 on employees' sense of pride in their employers. Kokolakakis et al. (2019) attributed the "Olympic Effect" to increased sports participation as a legacy of London 2012. More recently, the term has been revisited to examine effects of the Games on air pollution in Beijing (Ma and Takeuchi, 2020) and its influence on housing market prices and affordable housing development (Wang and Bao, 2018; Bernstock, 2020). Across these diverse applications, the common denominator is that the "Olympic Effect" refers to the consequences of hosting the Games – i.e., an outcomes' enhancement factor.

In contrast to these interpretations, Lopes dos Santos and Gonçalves (2022) explored the "Olympic Effect" through the lens of strategic urban planning. Emerging in the 1970s, strategic planning was developed as a response to the limitations of rigid regulatory planning frameworks, offering an aspirational and flexible approach to addressing urban challenges (Hall, 2014). By the 1980s, the focus of strategic planning shifted towards enhancing the quality of specific places as a means of achieving broader social, economic, and environmental objectives (Healey, 1998). This approach prioritised "place-making" through large-scale urban renewal projects advocating economic development and quality of life (McNeill, 1999; Hiller, 2000b; Qu and Spaans, 2009; Patterson, 2022). Since then, strategic planning became an indispensable tool for public, private, and civic stakeholders, enabling them to craft a shared vision for a city's medium- and long-term development while aligning these aspirations with the available resources (Gonçalves and Ferreira, 2015). Central to this approach is the idea of operating cities in a manner similar to companies, where urban marketing is employed to revitalise a city's image and enhance its

economic competitiveness (Harvey, 1989). This may explain why communities are rarely involved in early and meaningful decision-making.

As a corporate practice, strategic planning facilitates the development of coherent visions, actionable goals, and effective implementation strategies to shape a place's future (Albrechts, 2006). Healey (2004, p. 46) defines it as:

> *self-conscious collective efforts to reimagine a city, urban region or wider territory and to translate the result into priorities for area investment, conservation measures, strategic infrastructure investments and principles of land use regulation*.

In this context, traditional urban planning, often criticised for its slowness, inflexibility, and resource limitations, has ceased to function as the sole planning instrument. Instead, it has evolved into an operative tool that serves a broader strategic vision. When this vision is collectively shared and openly discussed, it becomes a mobilising force for cities and their communities, fostering social capital (Gonçalves and Ferreira, 2015).

Lopes dos Santos and Gonçalves (2022) thus argue that the "Olympic Effect" lies in the unparalleled ability of the Games to drive urban transformation through strategic planning – something no alternative policy measure can achieve to the same extent. They compare it to the "Bilbao Effect", which underscores the transformative potential of iconic architecture in enhancing a city's global profile, and the "Barcelona Model", which demonstrates the power of large-scale urban renewal projects in spurring further development (González, 2011; Ponzini, 2011; Degen and Garcia, 2012; Raevskikh, 2018; Patterson, 2022). Both concepts exemplify the appeal of strategic planning as a dynamic process that identifies the most effective means to achieve collective and aspirational goals, ultimately reimagining and revitalising urban spaces. Within this framework, the "Olympic Effect" is not merely an amplified consequence of hosting the Games; it is a critical driver. It enables the implementation of a broad spectrum of initiatives, policies, and projects aimed at realising a shared vision of the future, leveraging the unique platform provided by the Olympics to catalyse transformative change.

To understand the value of hosting the Olympic Games within the framework of strategic planning, Lopes dos Santos and Gonçalves (2022) analysed 26 candidatures for the Summer and Winter Olympic Games between 2012 and 2026. Their study concluded that Olympic strategic planning plays a pivotal role in merging two key elements: sport and the city. Sport, as a universally engaging and widely celebrated activity supported by a robust global organisation, attracts a diverse array of stakeholders. Cities, as dynamic and vibrant hubs of cultural, economic, and social activity, provide the infrastructure, resources, and distinct identity necessary to host the Games. The Olympics serve as a unique platform, creating an unparalleled opportunity to unite the global enthusiasm for sport with the distinctive character of a city, ultimately resulting in legacies of international significance (**Fig. 7**). In this context, strategic planning involves designing a Games concept that harmonises diverse interests, optimises available resources, and aspires to deliver enduring benefits for all involved. Bidding committees thus function as strategic planners, crafting proposals that align with these multifaceted aspirations.

Further analysis of candidate cities' strategic plans by the authors highlighted varying perceptions of the Olympic Games' role within long-term urban goals. Some strategic plans conceptualise the event as an "engine", a mechanism "that produces a particular and usually desirable result". Others regard it as an "accelerator", a tool "that increases speed". Still, others

define it as a "catalyst", a force that "provokes or speeds significant change or action" (Lopes dos Santos and Gonçalves, 2022, p. 676). Notably, the catalyst metaphor encompasses the functions of both an engine and an accelerator, but it extends further by fostering additional, often unforeseen benefits. According to Sternberg (2002), urban catalysts are both "activity generators" and "anchors", which not only initiate activity but also stimulate development in adjacent areas. Drawing from these insights, hosting or bidding for the Olympic Games can be understood as an action-oriented strategy designed to (i) provoke – trigger the realisation of specific objectives; (ii) accelerate – expedite the implementation of planned developments; and (iii) spur – generate undefined but unique additional benefits. Within this framework, the "Olympic Effect" emerges as a phenomenon that embodies these three dimensions, defined by Lopes dos Santos and Gonçalves (2022, p. 679) as:

> *The influence on people that the worldwide popular celebration of the Olympic Games has to inspire and mobilise them to engage in producing development. It results from combining people's passion for sports and respect for the values of Olympism, with their patriotic spirit and sense of belonging, which shall be leveraged by strategic planning to (i) provoke; (ii) accelerate and; (iii) spur unique kind progress.*

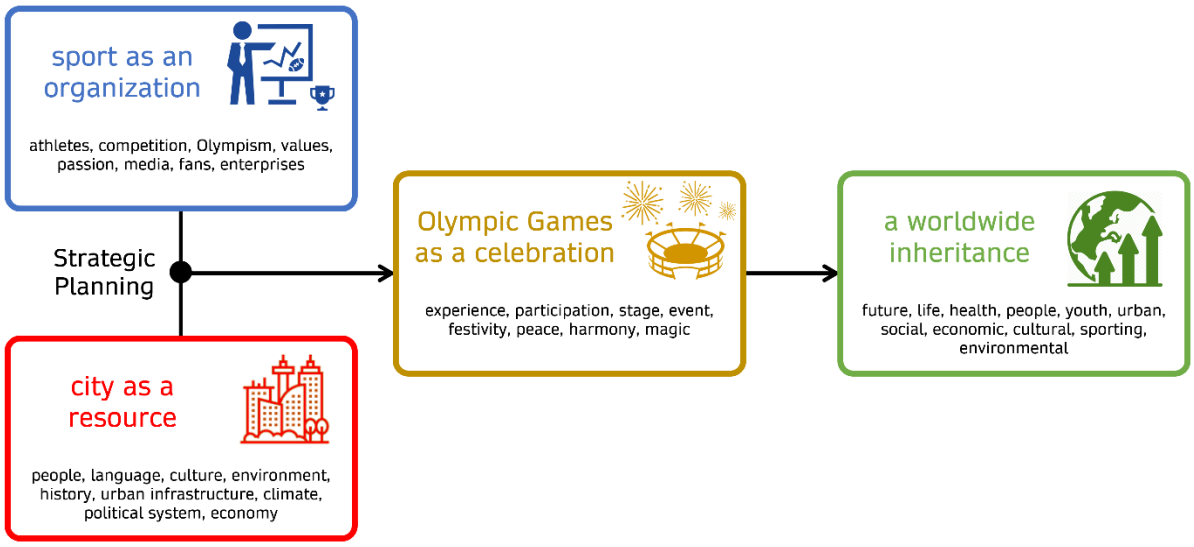

Fig. 7 Strategic planning within the Olympic Games framework. (Source: Lopes dos Santos and Gonçalves, 2022).

In an era of intensifying interurban competition, this "progress" is frequently materialised through large-scale urban regeneration projects, typically accompanied by narratives advocating economic growth. These initiatives seek to harness the "Olympic Effect" to elevate the host city's international profile, enhance global brand performance, and attract investment (Andranovich et al., 2001; Berkowitz et al., 2007). Since the 1996 Olympic Games in Atlanta, the Summer Olympics have consistently set records as the most-watched television event, with London 2012 and Rio de Janeiro 2016 drawing an audience of 3.6 billion. The opening ceremony of the 2008 Beijing Olympic Games remains the most-watched live event in history, with over 1.5 billion viewers. Furthermore, an IOC survey revealed that the Olympic symbol is the most widely recognised brand symbol, with 93% of respondents identifying it (IOC, 2014b). These figures underscore the unparalleled capacity of the Games to draw global attention to a city, territory, community, economy, and culture. With such extensive reach, the Games represent a powerful tool for place marketing, urban boosterism, and globalisation. Similar to "Starchitecture"

projects and other mega-developments, they are positioned as drivers of economic growth and job creation, theoretically enhancing the wealth and quality of life of local communities (McNeil, 1999; Hiller, 2000b).

These projects frequently involve the complex and costly regeneration of derelict brownfields or former industrial sites, particularly along waterfronts (Pinto and Lopes dos Santos, 2022). Such transformations are intended to create prime urban spaces that contribute to city branding and real estate marketing (Ponzini, 2011). The resulting urban and architectural outcomes establish a distinct relationship between urban planning and the communication of a specific city image. This approach, often referred to as "Olympic Urbanism", epitomises a unique model of urban intervention, with its most prominent expression found in the design of Olympic villages – which serve as focal points for urban regeneration and symbolic identity creation (Muñoz, 2006; Viehoff and Poynter, 2016).

To achieve these outcomes, host cities typically rely on alliances between corporate elites and local politicians (Lenskyj, 2008). This model inevitably arises from the necessity of developing highly sophisticated plans in response to the intensely competitive process of bidding for the Games, requiring innovative efforts to secure hosting rights. Such collaborations are described as

> *a central component of neoliberal urbanism [which] entails a shift from the delivery of public services to various forms of private sector innovations designed to achieve social change through market incentives.* (VanWynsberghe et al., 2013, p. 2089)

The governance structures of OCOGs are themselves prime examples of such alliances. As public-private partnerships, OCOGs yield significant decision-making and management authority to the private sector while working at hands with governments to secure financial and human resources and fast-track regulatory approvals (Andranovich et al., 2001; Black, 2017; Chappelet, 2020). In fact, according to the Bye-law to Rule 35 of the Olympic Charter, the executive body of an OCOG must include, alongside IOC members from the host country and representatives of the host NOC, at least one representative elected by the host city and, where relevant, representatives of public authorities (IOC, 2024b, p. 75).

Rule 32 of the Olympic Charter further specifies that the host is typically a public entity, in principle a city, though, since the implementation of Olympic Agenda 2020, “where deemed appropriate, (…) [it can be] several cities, or other entities, such as regions, states or countries” (IOC, 2024b, p. 72). The IOC mandates public sector involvement to ensure compliance with the Olympic Charter, guarantee coverage of any cost overruns in Olympic budgets, and facilitate the enactment of necessary regulatory and legislative provisions for event preparations (Lenskyj, 2000; Flyvbjerg et al., 2021; Black, 2017; IOC, 2024b). In practice, the urgency of meeting strict event deadlines often results in governments allocating significant public funds and issuing exceptional regulations to accelerate projects. These measures typically include statutory powers to compulsorily assemble land and bypass standard planning processes, justified by claims of economic and sustainable development (Davis and Thornley, 2010; Müller, 2015b).

This frequently materialises through the “Olympic law”, which is created to designate the event as a matter of “public interest”. Such a designation may transform actions that might otherwise be controversial from a legal standpoint into permissible measures if deemed essential for the realisation of the event. In other words, to some degree legal disputes become “biased” by this exceptional law. The interpretation of what is considered "essential" is then

guided by the terms of the host contract and its signatories. In cases of disagreement, the host is ultimately responsible for ensuring a resolution “at all costs”. Specifically in the urban context, these legal exceptions for mega-events tend to result in bypassing public consultation processes, reducing the detail of impact studies, awarding construction contracts directly, granting tax exemptions, transferring land ownership, modifying territorial management plans, expediting bureaucratic procedures, prioritising funding, and, in some cases, improper expropriation (Lopes dos Santos, 2023).

Additionally, as will be discussed in the following section, hosts are responsible for funding capital investments in urban infrastructure, a burden that often weighs heavily on public finances (Baade and Matheson, 2016). This reliance on taxpayer money has sparked considerable controversy, as the private sector often reaps substantial benefits while the public sector assumes the financial risks. Private entities, such as media organisations, sponsors, and corporations, typically gain the most, whereas host communities bear significant costs, endure uneven resource allocation, and witness the prioritisation of event requirements over local needs (Müller, 2015b; Flyvbjerg et al., 2021). This dynamic aligns with governance theories that emphasise the dominance of private sector interests in shaping public policy and management practices (Peters and Pierre, 1998). Within the Olympic framework, this reciprocal dependency requires balancing event-specific demands, which often align with private sector priorities, against the needs of local communities. However, despite promises of inclusive benefits, the visibility and economic advantages of hosting the Games frequently remain unevenly distributed (Trubina, 2020).

In his concept of the “seven symptoms of the mega-event syndrome”, Müller (2015b) effectively encapsulates the primary issues often observed in the planning and execution of mega-events, which frequently undermine the intended outcomes. These symptoms include:

- Overpromising of benefits: unrealistic claims about the economic, social, and environmental benefits of hosting the event, often failing to materialise and leading to the misallocation of resources, disillusionment among citizens, and erosion of public trust in both event organisers and government authorities.
- Underestimation of costs: systematic overlook of financial expenses, driven by fixed deadlines, inexperience of hosts, and the lengthy implementation periods, frequently resulting in budget overruns, profiteering by private contractors, and compromises in construction quality.
- Event-takeover: prioritisation of the immediate, short-term event needs over long-term urban development goals, often resulting in the construction of unfinished or oversized infrastructure, which may lack utility and impose a financial burden on host cities.
- Public risk taking: significant shift in financial risks from private entities to public institutions and taxpayers, creating an inequitable balance in which the public sector shoulders the costs while private companies enjoy the primary financial benefits.
- Rule of exception: suspension of regular legal and regulatory frameworks to meet event deadlines, often leading to practices such as forced displacement of vulnerable populations, expedited or opaque decision-making processes, and diminished opportunities for public participation and oversight.
- Elite capture: unequal distribution of resources throughout the host city's urban landscape, promoting the creation of exclusive, gentrified areas, benefiting wealthier communities while neglecting the needs of marginalised or lower-income groups.

- Event fix: replacement of coherent urban planning by quick fixes, dictating national priorities for funding, bypassing regular processes and diverting resources towards projects justified solely by the event's requirements.

These symptoms underscore the risks and challenges inherent in hosting mega-events, emphasising the necessity of sophisticated strategic planning to avoid inefficient or wasteful investments based on the assumption that such events will automatically drive broader urban development. However, while Müller presents these practices as strictly negative, it is worth considering whether an efficient, well-structured, and equitable application of some of them could transform mega-events into powerful catalysts for urban development. For example, these practices are particularly effective in situations where political and public consensus exists regarding the importance of specific projects, yet disagreements persist over related aspects. In such contexts, the event serves to align the interests of various public institutions, fostering collaboration and compromise, both institutionally and politically, as stakeholders work towards a common objective. Moreover, the fixed deadlines for event-related urban projects enhance their resilience to political cycles, ensuring continuity regardless of changes in leadership. The global visibility of the final outcome also introduces reputational pressure on organisers, incentivising effective and timely execution (Lopes dos Santos, 2023).

Policymakers should ideally harness the exceptional opportunities offered by mega-events responsibly, maximising benefits while mitigating potential negative impacts. However, experience demonstrates that host institutions frequently exploit the exceptional circumstances of mega-events to push forward projects not strictly required for the event but still framed as “essential” to qualify for legal and procedural exceptions. Political agendas often exacerbate this misuse, prioritising vested interests over public good. Moreover, it is important to recognise that these practices can also create opportunities for corruption, further eroding the potential benefits of hosting mega-events (ibid).

The "mega-event syndrome", as conceptualised by Müller, finds clear representation in the case study results of Pinto and Lopes dos Santos (2022), even though their focus was on a specific type of Olympic projects – Olympic waterfronts. Their comprehensive analysis examined nine Olympic waterfront redevelopment projects, using an adapted version of a tool originally developed by Pinto and Kondolf (2020). This tool, shown in **Fig. 8**, serves to identify and assess elements of waterfront projects that are prone to failure, categorised under five common “Wrongs”, each further divided into five specific criteria.

Fig. 9 illustrates the study's main findings, which reveal that the most frequent issues were linked to “The Wrong Plan” and “The Wrong Budget”. Top-down decision-making processes often implemented to meet tight deadlines and Olympic requirements, contributed significantly to these problems. This approach tended to obscure processes (“Conceal”) and enforce decisions unilaterally (“Dictate”), leaving projects open to undue external influence (“Interfere”). The financial management of these interventions was another major concern, with frequent cost overruns (“Overspend”) and gross underestimation of initial budgets (“Underestimate”). The push for iconic infrastructure further exacerbated these challenges. Oversized and over-engineered facilities (“Overburden”, “Overengineer”) were common, prioritising grandeur over practicality. Additionally, the focus on delivering a memorable Olympic Games often led to inadequate planning for post-event transformations (“Improvise”), which hindered long-term investment and diminished the project’s overall legacy (“Deflate”). In extreme cases, plans were left incomplete or entirely abandoned (“Unfinish”).

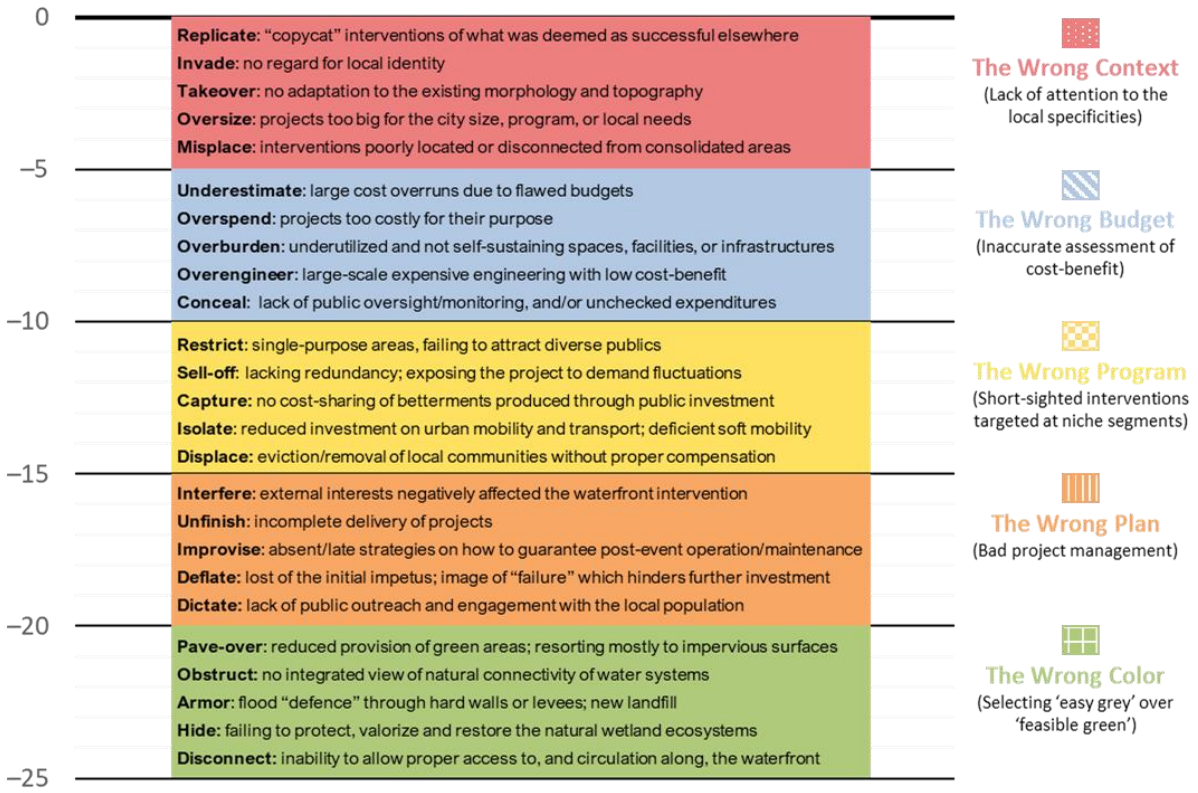

Fig. 8 Olympic waterfront interventions assessment tool: The "Wrongs" and respective criteria. (Source: Pinto and Lopes dos Santos, 2022).

For "The Wrong Program", the study highlighted the economic pressures faced by decision-makers, often compelling them to align with private interests to ensure short-term project success ("Sell-off"). Unfortunately, this prioritisation sometimes resulted in limited future adaptability and failed to foster vibrant, mixed-use developments ("Restrict"). Public funds were frequently channelled into large-scale infrastructure projects that disproportionately benefited private developers ("Capture"), often at the expense of displaced local communities ("Displace"). While selecting large brownfield sites for redevelopment ("Oversize") helped mitigate some displacement issues, these sites were often located in remote areas ("Misplace"), which, without adequate public transport links and thoughtful site design, became poorly accessible ("Isolate").

Less frequent, yet still present, was "The Wrong Context". The study found that Olympic projects' high visibility generally encouraged architects and planners to avoid replication ("Replicate") and minimise the overshadowing of local identity ("Takeover"), resulting in designs that aimed for integration within waterfront settings. Similarly, issues categorised under "The Wrong Color" were less prevalent, likely due to heightened public awareness of environmental sustainability and the evolution of Olympic standards. Nonetheless, some waterfront interventions obstructed the natural connectivity of waterbodies ("Obstruct") and failed to safeguard or restore wetland ecosystems ("Hide"). The most problematic cases paved over ecological areas, prioritising impervious surfaces and neglecting green spaces ("Pave-over"). Some projects also failed to fully capitalise on the waterfront's potential, leaving areas inaccessible and poorly connected for pedestrians ("Disconnect"). Although less frequent, some

projects introduced new flood control measures (“Armor”), but this may have been due to the frequent reuse of sites that already included such hard defences.

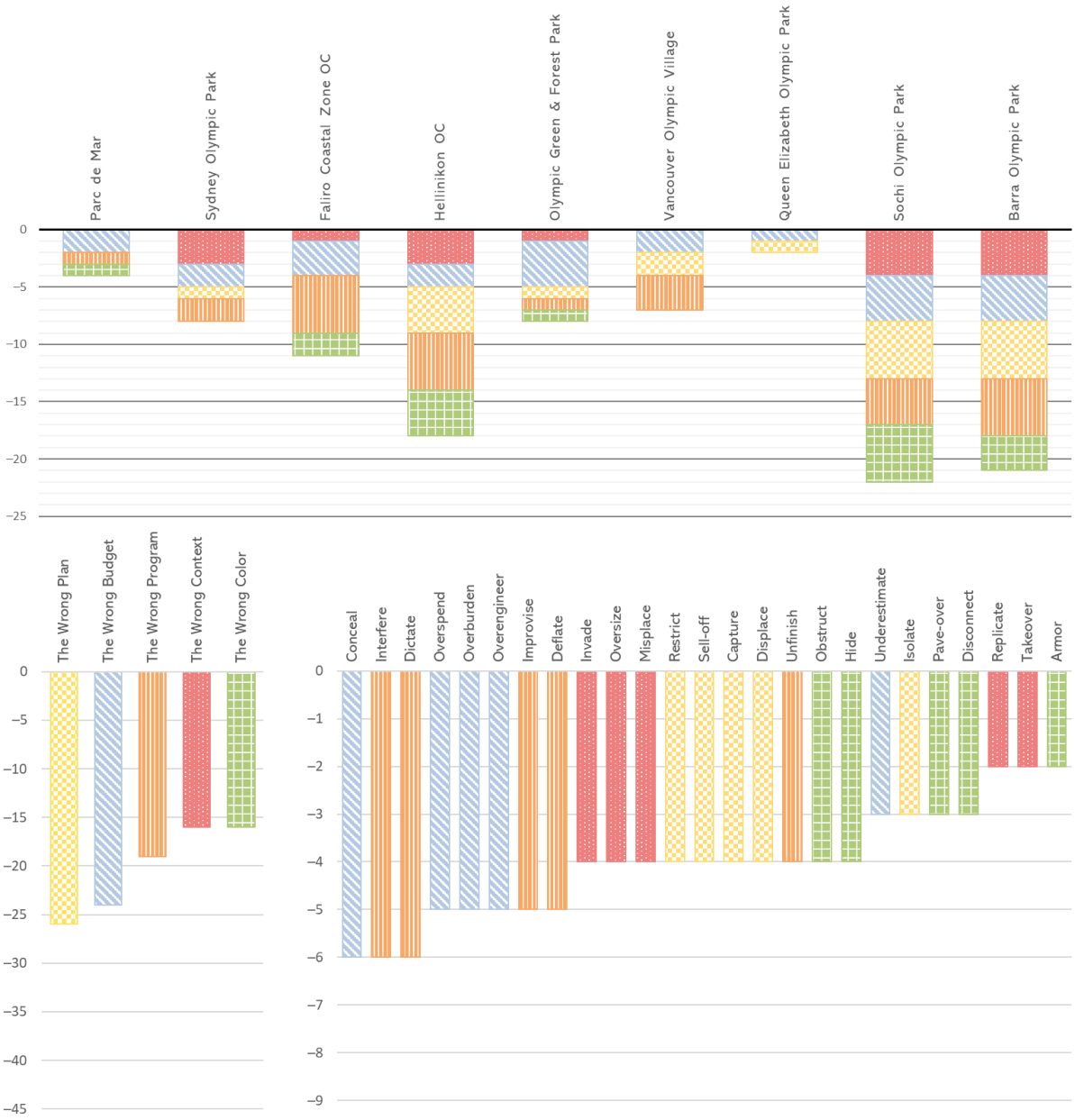

Fig. 9 The “Wrongs” of Olympic waterfront interventions by case study (top), by “Wrong” (bottom left) and by criteria (bottom right). (Source: Pinto and Lopes dos Santos, 2022).

In relation to this last topic, it is important to emphasise the need to plan mega-events with a heightened awareness of their environmental impact. In general, all large-scale events leave significant ecological footprints due to activities that consume various natural resources, such as land, require the transport of materials, products, and people, and generate waste, particularly plastic. The types and scales of these footprints vary depending on the event (Collins et al., 2009). For the Olympic Games, the ecological footprint of the winter edition is particularly concerning. This is primarily because the nature of winter sports depends on natural resources such as snow and ice. To provide conditions suitable for high-performance sports, these resources often need to be artificially created, resulting in considerable energy and water consumption. This not only entails financial costs but may also require the construction of infrastructure, further amplifying

the environmental impact through land use (Żemła, 2021). This issue is especially pressing given the global challenge of climate change, which threatens the future of winter sports. By the latter half of the twenty first century, very few locations are expected to have sufficient natural snow for competitive events.

Additionally, winter sports events are typically hosted in mountain environments that are minimally developed from an urban perspective. This often necessitates new construction for transportation and accommodation to handle large crowds. In such natural settings, urban interventions result in significant land use and environmental damage, as the natural landscape dominates and construction impacts tend to be particularly destructive. Moreover, competition venues for these events often suffer from limited and inefficient access, particularly in terms of public transport. As a result, large winter events frequently lead to the construction of additional transport infrastructure, usually roads, which promotes unsustainable mobility practices (Chappelet, 2008; Collins et al., 2009; Żemła, 2021).

At the core of all these issues and concerns is the fundamental objective of aligning the long-term development goals of host cities with the demanding requirements of hosting mega-events. The inherent difficulty lies in the sheer scale and specificity of these requirements, which rarely align seamlessly with a city's strategic vision, complicating their integration into sustainable urban development plans. From an urban planning perspective, it is neither practical nor efficient for a single city to accommodate such a vast concentration of high-quality sports facilities or to scale transportation services for the large crowds they attract (Kassens-Noor, 2016). Furthermore, there is often a mismatch between the intended purpose of these high-performance facilities and their use by the general population (Müller, 2015b). These facilities are designed to host large-scale competitions rather than cater to local needs, such as amateur or learning-based sports activities. In many cases, such infrastructure is not made available to the public because the design and functionality of large stadiums or Olympic-sized pools may be unsuitable for recreational use. As a result, it becomes difficult to generate sufficient revenue from daily usage to cover operating costs, let alone maintenance expenses (Smith, 2014a). For these reasons, organisers increasingly opt for temporary solutions which, while still costing up to two-thirds as much as permanent ones, can prove more cost-effective in the long term if there is no justifiable legacy need for permanent infrastructure (Lopes dos Santos, 2023).

These issues often lead to sports facilities becoming obsolete, burdened with high maintenance costs but without a viable justification for continued operation – the so-called "white elephants". In some cases, even when facilities are useful and self-sustaining, they may replace the role of existing infrastructure, rendering the latter obsolete (Smith, 2014a). This highlights the significant opportunity costs associated with hosting such events (Preuss, 2009). For the Olympics, these costs are particularly relevant as the Games are typically the most expensive sports mega-event, with a strong tendency for budget overruns (Flyvbjerg et al., 2021). Moreover, much of the financial burden falls on taxpayers in the host city and country, using public funds that could otherwise address pressing societal needs with less risk and greater direct benefits (Mills and Rosentraub, 2013). Therefore, it becomes crucial to ensure alignment between the requirements of hosting mega-events and the host city's broader goals, as failure to do so risks transforming these events from opportunities for progress into sources of significant strain (Lauermann, 2016a; Kassens-Noor, 2016).

Such requirements are established in the Host City Contract, which, together with the Olympic Charter, defines the deliverables and obligations of its signatories – the IOC, the host, the host NOC, the OCOG, and, where applicable, other entities – pertaining to the planning,

organisation, financing, and staging of the Games (IOC, 2019b). As the physical space where Olympic activities occur, host cities must provide numerous and diverse competition and training venues, such as stadiums, swimming pools, and arenas, all of which must meet the high-quality standards set by the IOC and the relevant IFs and be appropriate to provide the needed ticket revenue. Media facilities for press and broadcasting services must also be strategically located near these venues. Additionally, non-ticketed fans expect to watch competitions and live events in large public spaces, such as plazas and parks. Inter- and intra-urban transport and accommodation must be arranged for all stakeholders, including an Olympic village for athletes and their delegations.

Additionally, any new constructions require significant investments in essential urban utilities, such as telecommunications, water and energy supply systems, storage infrastructure, and waste and wastewater management systems. All these developments must also be integrated harmoniously into the urban space and landscaping. Since host cities welcome thousands of visitors and broadcast the event globally, urban interventions often extend beyond Olympic sites to enhance the city's overall appearance. These efforts typically include the restoration of building façades, monuments, sculptures, pavements, and lighting systems, as well as the creation of new urban landmarks or tourist attractions linked to the Games. Investments may also encompass environmental initiatives, such as the development of green spaces, waterfront revitalisation, pollution reduction measures (air, water, or noise), and urban cleanliness and waste management programmes. Furthermore, hosting the Games often leads to investments in education, sport, culture, public health, and business opportunities that arise from the event (Chalkley and Essex, 1999; Essex and Chalkley, 2010; Flyvbjerg et al., 2021).

Knowing from the outset that no city possesses sufficient resources to independently host an event of the Olympic Games' magnitude, the critical challenge in bid development lies in formulating a contextualised plan. Such a plan must harness the event as an opportunity to address a city's deficiencies and long-term needs in a sustainable and lasting manner (Kassens-Noor, 2016). When alignment between event requirements and urban priorities is achieved, expenditures can shift from being seen as mere event-related costs to becoming investments that yield tangible benefits for the city and its population. This approach requires balancing economic, social, and environmental sustainability with the inevitable financial risks and urban interventions associated with hosting mega-events. Combined with additional advantages, particularly the potential of mega-events as instruments of globalisation, this outcome epitomises the aspirations of host cities and nations. This reasoning forms the basis for justifying public investments in organising large-scale events (Andranovich et al., 2001). However, as illustrated throughout this section, achieving such alignment is complicated.

Kassens-Noor (2016) addresses the fundamental misalignment between the rigid, standardised demands of mega-events and the diverse urban realities of host cities, reimagining planning for mega-events through the concepts of utopias, dystopias, and heterotopias. Utopias represent the ambitious visions of urban transformation often showcased during the bidding process, where mega-events are framed as opportunities to modernise cities, revitalise underused areas, and deliver lasting legacies. These visions, while inspiring, frequently overlook the complexities of implementation, particularly the challenges of aligning temporary event requirements with a city's long-term development goals. When these aspirations prove unrealistic or are poorly executed, with short-term event needs dominating decision-making, they can result in dystopian outcomes – urban landscapes marked by costly infrastructure, social displacement, and economic burdens that persist long after the event has ended. In such cases,

short-term imperatives take precedence over sustainable development, leaving cities grappling with long-term consequences and unmet promises.

To address the gap between aspiration and outcome, Kassens-Noor calls for heterotopias, which acknowledge the coexistence of the temporary and the permanent. Heterotopias challenge the prevailing notion of mega-events as isolated occurrences, instead advocating for an integrative approach to planning that harmonises event-specific needs with the broader urban context. This perspective shifts the focus from constructing single-use, event-driven facilities to creating adaptive, multi-purpose infrastructure that balances the imperatives of global visibility with local sustainability. Heterotopic planning, as the author argues, requires a collaborative effort among international organising bodies, local governments, and communities. It demands a fundamental shift in practice – prioritising investments that serve both immediate event needs and enduring urban objectives while minimising expenditures on elements irrelevant to the city's future. By embracing this approach, host cities can transform mega-events from sources of disruption into platforms for sustainable development, effectively handling the tensions between the event's temporary demands and the enduring needs of urban environments.

In a more practical approach, Lopes dos Santos et al. (2022) introduced a framework to conceptualise the planning challenges of mega-events applied to mobility aspects. This framework identifies eight dimensions of knowledge within the mega-event mobility problem, here adapted to reflect the broader mega-event planning problem: 1. Time; 2. Edition; 3. Stakeholders; 4. Scales; 5. Decision levels; 6. Actions; 7. Reactions; and 8. Legacies. Together, these dimensions provide a greater understanding of the practical challenges faced by mega-event planners, offering some clarity over the complexity of mega-event planning. These are systematised in **Fig. 10** and further detailed below.

Mega-Event Planning Concerns Three Time Periods The first period is the preparation stage, which is pivotal for decision-making. It consists of two distinct phases: the candidature process and the actual preparation phase, separated by the host city election. Recognising this distinction is crucial, as the dynamics, priorities, and stakeholders involved shift significantly once a city is awarded the event. Before Olympic Agenda 2020, host cities were elected seven years prior to the event but today, the Olympic Games' life cycle has no fixed starting point, with candidature processes initiated as needed. This new approach involves two phases: an informal dialogue where the IOC explores initial ideas with potential hosts, and a formal dialogue to refine proposals from shortlisted candidates (Olympic Studies Centre, 2018a). Following the preparation, the delivery stage is the shortest period, covering the Olympic and Paralympic Games along with limited service periods before and after both events. This stage poses significant challenges, including managing place- and time-specific peak demands, infrastructure strain, security, and service delivery (Kassens-Noor, 2009). Finally, the legacy stage comes after the event, driving long-term effects on the host city, which can be positive or negative depending on the effectiveness of earlier strategies and their implementation (Preuss, 2019).

Mega-Event Planning is Edition-Specific While mega-events share similar features across editions, their planning depends on two distinct sets of characteristics. Host characteristics include the spatial, social, economic, environmental, cultural, and political aspects of the host territory and community. These factors determine the starting point for planning, outlining available resources, actor networks, and policy frameworks (Kassens-Noor, 2009; Girginov, 2012b; Delaplace, 2020). Event characteristics, on the other hand, relate to the specific conditions under which the event must occur. These often involve fixed requirements, with only

minor changes such as adjustments to the Olympic Programme. Additionally, global or regional circumstances, such as economic crises or pandemics, further influence contextual planning.

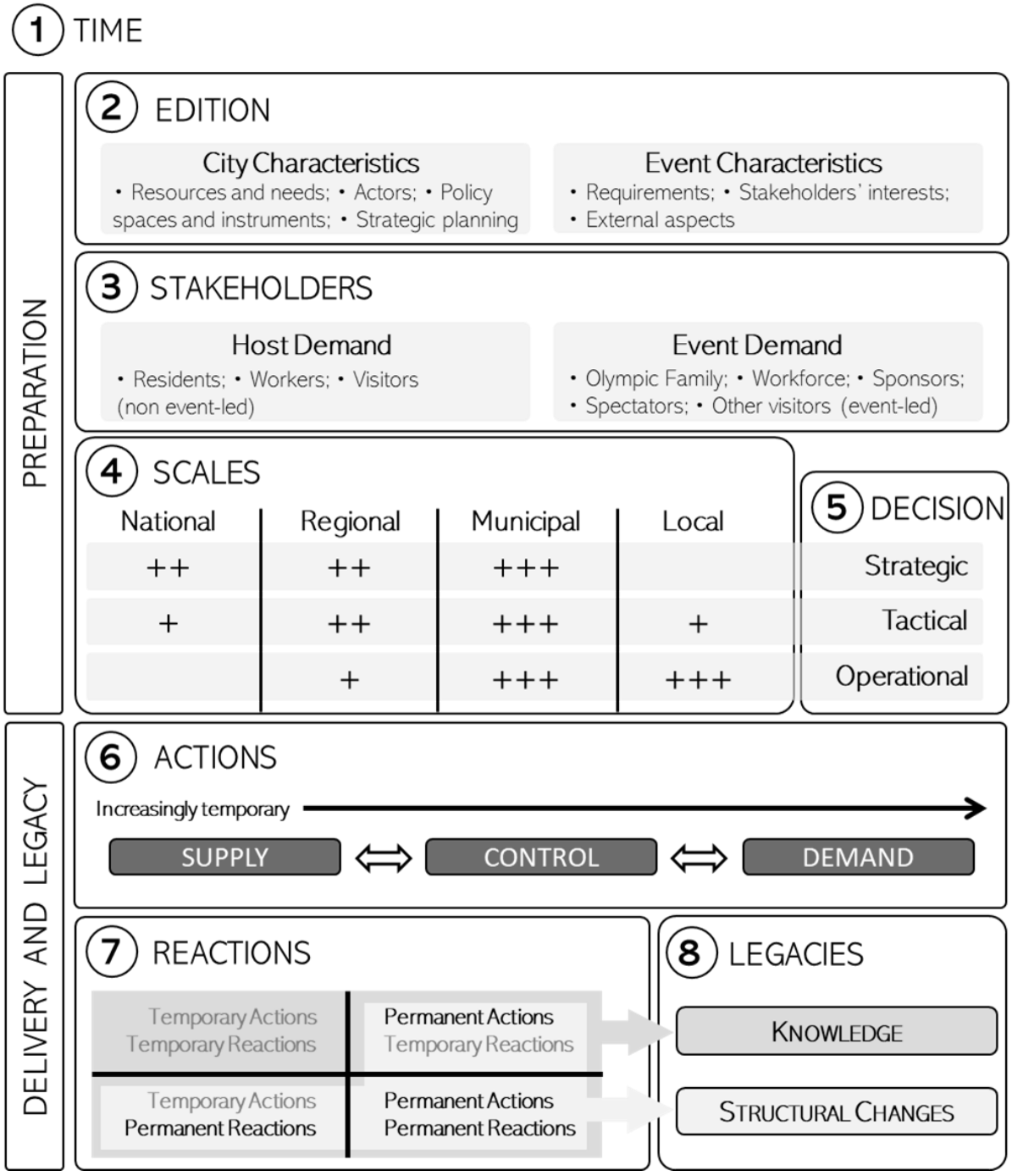

Fig. 10 Framework for the mega-event planning problem. (Source: adapted from Lopes dos Santos et al., 2022).

Mega-Event Planning Responds to Two Stakeholder Groups Planning must account for host city and event stakeholders' demands. Residents and traditional visitors continue to rely on the city for daily activities, even as many avoid crowded areas during the event – the "crowding out" effect (Matheson, 2006; Delaplace, 2020). Meanwhile, event visitors create a significant surge in demand. The Summer Olympics typically involves approximately 900,000 additional daily city users, including athletes (≈11,000) and their team officials (≈8,000), accredited and non-

accredited media (≈24,000 and ≈10,000, respectively), members of the IOC, NOCs, and IFs (≈4,000), sponsors (≈50,000), volunteers and workforce (≈145,000), spectators (≈500,000–600,000 per day), and non-ticketed fans (≈150,000) (Bovy, 2004, 2009, 2010). This concentrated demand is time- and location-specific, often causing congestion, environmental strain, and public opposition (Parkes et al., 2016a).

Mega-Event Planning Occurs at Different Spatial Scales Each planning scale requires distinct but interconnected strategies. At the national scale, governments often play a pivotal role in financing projects and establishing regulatory and governance frameworks. At the regional scale, efforts focus on aligning strategies across neighbouring areas, creating shared solutions, improving infrastructure connections, and coordinating initiatives in areas such as tourism and marketing. At the municipal scale, planning focuses on the host city itself, addressing issues like urban regeneration, infrastructure upgrades, public services, and enhancements to public spaces. Finally, at the local scale, planning concentrates on operationalising facilities, incorporating sustainable design, managing crowds, and ensuring security.

Mega-Event Planning Involves Three Interconnected Decision-Making Levels At the strategic level, decisions focus on long-term goals, such as defining objectives, securing funding, and integrating sustainability into planning. The tactical level bridges strategy and execution, with decisions on venue selection, scheduling, budgeting, and stakeholder coordination. Finally, the operational level addresses the day-to-day management of the event, including logistics, on-site activities, safety, and real-time issue resolution. Importantly, the IOC encourages hosts to prioritise strategic and tactical planning in the early years, reserving the final years for operational readiness and delivery (IOC, 2018a).

Mega-Event Planning Results in Permanent or Temporary Actions Planning drives actions on the supply side (e.g., new infrastructure or service improvements), on the demand side (e.g., measures to eliminate, reduce, or spread demand), or on controlling the equilibrium between supply and demand (e.g., efficiency monitoring, or client segregation). These actions can be either permanent or temporary. Permanent actions aim to address long-term needs, while temporary actions are designed to meet short-term demands and are typically withdrawn post-event. However, temporary actions can become permanent if proven effective. Generally, supply-side actions tend to be permanent, while demand-side actions are more often temporary (Kassens-Noor, 2010).

Mega-Event Planning Drives Permanent/Temporary, Planned/Unplanned Reactions Every action taken produces reactions, which can also be permanent or temporary. For instance, temporary actions aimed at behavioural change among residents may lead to lasting shifting habits (Parkes et al., 2016a). Conversely, permanent actions may result in temporary reactions. For example, a new facility may attract users only during the event, driving limited post-event use. However, such permanent action (building a facility) also drives permanent reactions, such as management and maintenance burdens. These reactions – positive or negative – may be planned or unplanned, highlighting the risks associated with mega-events (Preuss, 2007).

Mega-Event Planning Always Produces Legacies All actions and their resulting reactions create legacies, regardless of their permanent or temporary nature. Permanent actions with temporary reactions are often associated to additional negative permanent reactions, such as underutilised infrastructure requiring ongoing maintenance. Moreover, all permanent reactions have the potential to emerge as structural changes, shaping both people and places in lasting

ways (Preuss, 2019). As for temporary actions with temporary reactions, they generate knowledge legacies, like all the other action-reaction pairs, offering valuable insights for the future.

Beyond this mega-event planning framework, it matters to particularise how the post-event legacy phase is crucial for the host city or country, as it is during this stage that the benefits of the investments made should materialise. Once the infrastructure and facilities built for the event have served their purpose, it is essential to ensure their ongoing usefulness for the host community. This utility must be planned from the candidature stage, as many critical decisions regarding permanent constructions are made at that time and should be well-justified.

One significant challenge to achieving a successful legacy is the lack of prior planning and the failure to implement initial proposals (Kassens-Noor, 2015). For example, adapting the Olympic village into family housing requires thoughtful planning, as it is originally designed as dormitories with shared spaces. Similarly, sports facilities that are intended to have reduced spectator capacity post-event must be reconfigured to avoid excessive operational and maintenance costs (Davis, 2020). Temporary structures should be dismantled promptly to minimise material degradation and their impact on the urban landscape. Any created urban environments must also be integrated into the city's fabric by creating services and commercial establishments that attract residents and stimulate economic activity in the new neighbourhoods (Lopes dos Santos, 2023).

"White elephants" emerge when adaptations fail or are poorly executed. The causes of such negative legacies include inadequate legacy funding, often due to underestimated costs, delays in adaptations leading to loss of momentum and interest, or facilities that are oversized for the population's needs (Pinto and Lopes dos Santos, 2022). Therefore, it is essential to define a legacy strategy in advance and establish an effective governance system. Such a system is critical but complex, as it often involves stakeholders from both public and private sectors – who may be different from those involved in organising the Games – requiring coordination between urban, corporate, and, where relevant, sports governance networks. For the Olympic Games, a growing strategy is the establishment of an entity responsible for managing the event's legacy. This entity usually oversees the short-term management of new infrastructure and facilities, striving for their profitability and integration into the urban structure. Once these conditions are met, responsibility can be transferred to local institutions or privatised, typically through public-private partnerships (Girginov, 2012b; Reis and Cabral, 2017).

As a final remark, it is essential to acknowledge how the (strategic) planning concepts, frameworks, practices, and challenges described above are influenced or exacerbated by the financial model underlying the Olympic Games. This model not only shapes decision-making but also affects the alignment – or misalignment – between urban development goals and event-specific requirements. In the next section, the discussion will explore these aspects, offering critical insights into the financial pressures that drive host city strategies and plans, and providing greater clarity on how these pressures perpetuate the challenges outlined thus far.

The Olympic Games Financial Model: A Critical Approach

The organisation of large-scale events often requires substantial financial investments, with a significant portion typically sourced from public funds and state budgets (Mills and Rosentraub, 2013). Although the nature and funding model of an event may influence how these expenditures are categorised and allocated among stakeholders, financial frameworks for such events generally exhibit similar characteristics.

In the case of the Olympic Games, costs are broadly divided into two main categories: operational costs (OCOG) and capital costs (non-OCOG). Operational costs, as the term suggests, cover the expenses necessary to organise and deliver the Games. These costs are typically for temporary assets, incurred specifically for the event (Flyvbjerg et al., 2021). Between 2010 and 2016, the primary areas of expenditure within operational costs included venues (21%), technology (18%), workforce (13%), administration (10%), transport (6%), and other budget categories (31%) (IOC, 2018a) such as catering services, ceremonial activities, and accommodation for certain participants. Security costs represent a specific case within operational expenses. While the OCOG covers certain venue-related security expenditures at the local scale, the majority of these costs at national to municipal scales fall under the responsibility of the host.

A substantial share of these expenses is attributed to "Olympic overlay" – the temporary modification of venues, facilities, and infrastructure to meet the unique requirements of the Games. Olympic overlay costs can vary significantly in scale and complexity. At one end of the spectrum are relatively straightforward upgrades, such as decorating venues, equipping stadiums with modern technology, or converting existing spaces into functional back-of-house areas like storage rooms or conference facilities. At the other end, more extensive interventions may include temporary enhancements to transport systems, leasing venues, or constructing provisional facilities such as modular arenas, racecourses, or press centres. For instance, modular arenas often built for events like beach volleyball fall under overlay costs, as do adaptations of urban spaces – such as streets, beaches, squares, or parks – for competitions like marathons, road or mountain cycling, open-water swimming, or sailing (Smith, 2014b).

When the required structures are relatively simple, event organisers typically engage specialised companies to deliver modular solutions tailored to the event's specific needs. These modular units are designed for rapid assembly and disassembly, using systematic techniques that minimise both time and effort. However, when facilities demand more complex structural characteristics that exceed the capabilities of standard modular units, bespoke construction projects are undertaken. These temporary structures often follow the planning and design principles of permanent facilities but are constructed with a strong focus on sustainability and efficiency. They employ materials and techniques that enable easy assembly and disassembly, promote the reuse and recycling of components, and aim to minimise both costs and environmental impact. Some are even designed to be sold and reconstructed elsewhere, thereby extending their utility beyond the event (Davis, 2020).

On the other hand, capital costs represent one-time investments in permanent assets designed to leave a lasting legacy for the host city’s economy, society, and environment. These costs are typically much higher than operational expenses, encompassing the construction of new sports venues and urban infrastructure, as well as the refurbishment, rehabilitation, and repair of existing facilities, public spaces, and services (Baade and Matheson, 2016; Flyvbjerg et al., 2021).

Capital costs are further categorised into direct and indirect expenses. Direct capital costs refer to investments deemed essential for hosting the Games, often tied to mandatory requirements explicitly outlined in the host contract. These typically include high-quality sports venues for competitions and training, Olympic villages for housing athletes and delegations, media villages (when necessary), and key media facilities such as the MPC and the International Broadcasting Centre (IBC). Between 2010 and 2016, the primary areas of expenditure within

direct capital costs were transport (39%), venues (31%), and other budget categories (30%) (IOC, 2018a).

In contrast, indirect capital costs involve expenditures that, while not essential to staging the Games, are deemed critical by the host for ensuring the event's overall success. These may include upgrades to transport infrastructure, the development or enhancement of accommodation facilities, improvements to public spaces, and investments in basic infrastructure. They can also extend to environmental initiatives and other business-related investments (Essex and Chalkley, 2010; Flyvbjerg et al., 2021). Unlike direct capital costs, indirect costs are rarely included in the official event budget but often surpass direct costs in magnitude. For instance, the Barcelona 1992 Games – among the most expensive editions in Olympic history – highlight the stark disparity between these two categories. While the cost of sports infrastructure amounted to 1.485 billion 2015 USD, the expenditure on general infrastructure reached a staggering 12.457 billion 2015 USD (Baade and Matheson, 2016).

The most comprehensive comparative study of Olympic costs and cost overruns, conducted by Flyvbjerg et al. (2021), analysed data from 30 editions of the Summer and Winter Olympic Games held between 1960 and 2016. Despite their rigorous methodology, inconsistent data meant that only operational costs and direct capital costs could be consistently accounted for. The study revealed an average cost of 6 billion USD with an average cost overrun of 213% for the Summer Games, and 3.1 billion USD with a 142% cost overrun for the Winter Games. Moreover, the analysis identified a significant rise in expenditures for more recent editions. For Olympic Games held between 2008 and 2016, the average cost surged to 12 billion USD. During this period, the three Summer Olympics averaged 11.8 billion USD, while the Sochi 2014 Winter Olympics reached an extraordinary 21.9 billion USD. Although Sochi 2014 is clearly an outlier, these figures underscore the escalating financial demands of hosting the Games.

The financial model of the Olympic Games is defined in the host contract and may vary for each edition. Principle 4.2 of the contract explicitly states that, unless otherwise agreed, the host NOC bears no financial responsibility for any obligations arising from the Games (IOC, 2021a). Similarly, Rule 36 of the Olympic Charter specifies that the IOC is not liable for such undertakings, apart from its financial contribution as outlined in the contract (IOC, 2024b). As a result, the OCOG is solely responsible for managing operational costs, while the host bears the burden of all capital expenditures. The funding of these capital expenditures then depends on the national, regional, or local financial models adopted by the host.

Fig. 11 provides a schematic representation of this financial model as applied to Paris 2024. It illustrates the revenue streams generated by the five key commercial programmes and the corresponding shares allocated to each signatory of the contract. Notably, revenues generated directly by the Games are distributed exclusively among Olympic Movement stakeholders – the OCOG and the IOC – leaving the host with no share to offset its capital costs. This arrangement implies that any permanent infrastructure constructed for the Games cannot be funded by the event’s revenues.

The OCOG manages revenues from three of the five commercial programmes, although small percentages must be allocated to the IOC:

- The Marketing Programme, which includes revenues from local partnerships and service contracts managed by the OCOG.
- The Ticketing Programme, encompassing the sale of tickets for event sessions.

- The Licensing Programme, which involves the sale of commemorative coins, banknotes, and stamps.

The remaining two programmes are managed by the IOC, which retains their revenues entirely:

- The International Programme, which consists of revenues from the IOC's premier sponsorship deals with its TOP Partners and income from other contracts negotiated by the IOC, such as intellectual property rights and service provisions.
- The Broadcasting Programme, which generates revenue through the sale of broadcasting rights to television networks worldwide.

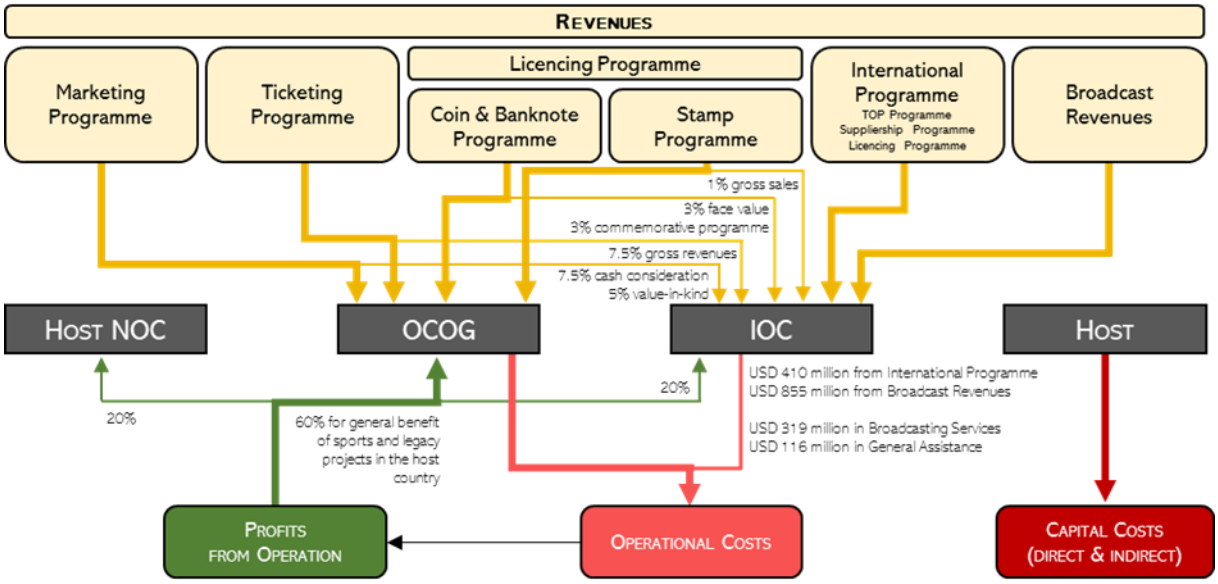

Fig. 11 Financial model for Paris 2024. (Source: Lopes dos Santos et al., 2025).

The Olympic Games' revenue constitutes the largest source of income for the IOC. Between 2013 and 2016, the IOC derived 18% of its revenue from the TOP Programme's marketing rights and 73% from broadcasting rights, with the remaining 9% coming from other rights (4%) and miscellaneous sources (5%) (IOC, 2018b). As stipulated in the host contract, the IOC allocates a portion of the revenue from the International and Broadcasting Programmes to the OCOG. This allocation may take the form of direct financial contributions or the provision of specific services (IOC, 2021a). The IOC retains part of the remaining revenue to support its operations, while the majority is redistributed among stakeholders within the Olympic Movement to promote sport globally, including NOCs, IFs, and their respective associations.

Using its revenue streams, the OCOG is responsible for covering all operational costs. In addition to these revenues, the OCOG may benefit from financial contributions provided by public entities from the host country or city. Historically, most Olympic Games have reported a "break-even" operational balance, meaning that OCOGs typically avoid incurring either profits or losses (Long, 2013a). In cases where operational profits are achieved, the distribution is structured as follows: 20% is allocated to the host NOC, 20% to the IOC, and 60% remains with the OCOG. Crucially, any profits retained by the OCOG must be used exclusively for the general benefit of sport within the host country or, since 2019 within the Olympic Agenda 2020 framework, for associated sport legacy projects (IOC, 2021a). This means that operational profits cannot be directed towards offsetting capital costs. Moreover, since the IOC and the host NOC

bear no financial liability, the host assumes all risks in case of operational losses (Chappelet, 2020).

Both the OCOG and the host are "free" to explore various forms of financial contributions, including those from the private sector. However, securing private investment for large-scale events such as the Olympic Games often presents significant challenges (Müller, 2015b). Additionally, contractual restrictions imposed by the IOC, particularly concerning intellectual property rights and licensing agreements, frequently limit access to private capital. For instance, while OCOGs can secure their own partners and suppliers to support operational costs, their influence is constrained by the IOC's TOP Partners, who hold exclusive sponsorship rights in many domains. These exclusivity agreements restrict opportunities for further private investment, particularly for overlay costs, such as the construction of temporary venues. This is because companies cannot be advertised on TV or granted naming rights for venues during the Games, further reducing the attractiveness of such investments (Lopes dos Santos et al., 2025).

By contrast, permanent urban interventions, due to their long-term impact, provide greater flexibility and opportunities for more diverse financing models. This makes them comparatively more appealing to private investors than Olympic overlay projects. However, not all forms of land use are equally attractive to private sector funding. Enhancements to public spaces and the provision of large-scale public amenities are traditionally funded by public entities in regular urban developments. Private developers generally contribute to localised amenities through mechanisms such as developer obligations or value capture tools (Muñoz Gielen and Krabben, 2019). Since the Olympic Games do not inherently increase the value of such public infrastructure for private sector stakeholders, this dynamic remains largely unchanged in Olympic contexts.

Certain public interest amenities, such as transportation networks and basic infrastructure, have shown some potential to attract private investment. However, this typically occurs through public-private partnerships, where, depending on the national contexts, the public sector still assumes a significant share of both investment and risk (Koppenjan and Enserink, 2009; Marques and Berg, 2011). Similar to other public amenities, the Olympic context does not inherently provide additional incentives to enhance private sector interest in these areas. As a result, opportunities to secure investment or mitigate public sector risk remain comparable to those observed in standard urban development projects.

Specialised sports venues, such as swimming pools or canoeing centres, often face difficulties in attracting private sector interest due to their limited adaptability for post-Games use. In contrast, facilities with broader functionality – such as stadiums, arenas, and exhibition centres – are more likely to attract private investment, often through public-private partnerships that utilise Build-Own-Operate-Transfer (BOOT) models (Jefferies, 2006). Notable examples of public-private partnerships include the Sydney and Beijing Olympic Stadiums, Rio Olympic Park, and a multipurpose arena constructed for the 2026 Winter Games in Milan.

The BOOT model is a complex arrangement requiring sophisticated agreements and the coordination of numerous stakeholders, which frequently leads to conflicts. These partnerships also involve unique risks, particularly due to the long-term nature of concessions. Evidence of success remains limited, as few mega-event BOOT projects have reached the expiration of their concession periods (Jefferies and Chen, 2004; Yuan et al., 2010). Additionally, stakeholder opposition has emerged as a significant factor in the failure of such partnerships. Yuan et al. (2010) identify several key stakeholders for the success of these arrangements: governments and

public clients, who play a central role in decision-making; contractors, subcontractors, suppliers, designers, and consultants, who implement the project under concession agreements; the general public, including affected communities and end-users, whose satisfaction is critical to the project's success; and researchers, who provide impartial, evidence-based insights, particularly during the planning phase.

A few studies have identified critical success factors for public-private partnerships in developing venues for mega-events. These investigations include projects such as Stadium Australia (Jefferies et al., 2002; Jefferies and Chen, 2004) and the Sydney SuperDome (Jefferies, 2006), both constructed for Sydney 2000; the Beijing National Stadium (Liu et al., 2010; Liang et al., 2011; Zhang and Yang, 2013), built for Beijing 2008; the Guangzhou Gymnasium (Zhang and Yang, 2013), developed for the 2001 National Games of China; the Asia World-Expo in Hong Kong and the Auckland City Arena in New Zealand (Liu and Wilkinson, 2014). These studies identified several key factors contributing to successful partnerships:

- Streamlined financial arrangements: effective financial structures rely on complementary contributions from government and private investors. Government funding establishes early-stage credibility, while long-term private equity investments encourage rigorous financial analysis and reduce delays.
- Robust tendering: a well-designed tendering process fosters innovation and ensures value. Flexibility in bid requirements and competitive evaluation mechanisms promote creative solutions and robust risk management.
- Sound business case development: strong business cases are essential for financial sustainability and broader economic benefits. They incorporate cost-benefit analyses to address uncertainties, cost overruns, and post-event demand, while multi-use venue designs enhance long-term viability.
- Effective governance and partnerships: strong governance structures, clear role definitions, mutual trust, and collaboration are crucial. Defined consortium structures and government facilitation in regulatory approvals help navigate complex institutional environments.
- Realistic risk allocation: assigning risks to stakeholders best equipped to manage them ensures smoother execution. Governments typically manage risks related to land acquisition and regulatory processes, while private partners handle construction and post-event revenue uncertainties.
- Long-term stakeholder alignment: aligning stakeholder objectives and engaging the community help balance competing interests and foster trust. Transparent communication, consensus-building, and lessons from past projects enhance future partnerships.

These public-private partnerships appeal to both public and private stakeholders for different reasons. Governments contribute land, tax exemptions, and streamlined administrative processes, while private investors provide additional funding, thereby reducing the public sector's financial burden and risk. Additionally, private sector involvement fosters innovation and builds networks that enhance service quality (Yuan et al., 2010; Long, 2013b). For instance, Alm et al. (2014) found that football stadiums built for mega-events are more likely to succeed in post-event use when privately managed and leased to major teams as anchor tenants.

Despite these advantages, several sector-specific factors influence partnership dynamics, including cultural, political, economic, and environmental contexts, the project's public image,

differing demands during and after mega-events, and the diversity of stakeholders involved. This forces public entities to often bear a substantial share of the investment and risk (Jefferies et al., 2002; Yuan et al., 2010; Liang et al., 2011; Reis and Cabral, 2017). Moreover, operational revenues from these venues rarely offset initial capital investments, opportunity costs, or long-term maintenance expenses (Zhang and Yang, 2013; Liu and Wilkinson, 2014). As such, public authorities primarily pursue these public-private partnerships not to generate profit but as a strategy to deliver facilities of public interest with reduced financial risk.

In contrast to sports venues, housing projects are far more attractive to private investors. Within the context of the Olympic Games, new housing developments tend to command higher market values than comparable properties, as the symbolic significance of the Games enhances buyer interest (Wang and Bao, 2018; Bernstock, 2020). Scherer (2011, p. 784) notes that these developments are marketed as

> *lucrative post-Olympic anchors of new, sustainable lifestyle 'communities' (...) who want access to, and can afford, luxury condominiums, shopping complexes, and sport and entertainment facilities*.

Such projects are typically characterised by well-designed urban layouts, excellent accessibility, and strong potential for long-term value creation. As further addressed, research shows that very specific segments of the population, particularly those from higher social classes, are more willing to pay for these developments (Agostini et al., 1996; Coates and Humphreys, 2006; Atkinson et al., 2008; Walton et al., 2008).

Therefore, Olympic villages and related accommodation developments are particularly appealing to private investors, as they cater to high-income households seeking premium living environments. These projects also generate public revenues over the short, medium, and long term, making them an attractive opportunity for private-sector involvement (Lopes dos Santos et al., 2025). For example, during the Barcelona 1992 Games, private investment accounted for 32.7% of total costs, primarily directed towards housing, hotels, business centres, and toll motorways (Brunet, 1995). This highlights how private funding can play a key role in delivering such infrastructure while alleviating the financial burden on public authorities. However, as will be further explored, aspects related to social sustainability hinder the exploitation of such developments for broader economic benefit.

To conclude this analysis, it is important to consider that the current financial model for the Olympic Games operates on the assumption that while the IOC's contribution is sufficient to help cover operational expenses, capital investments aligned with a host city's long-term development plans should not impose additional financial burdens on the public sector, as these interventions would theoretically occur regardless of the event (Lenskyj, 2008). This assumption is rooted in the financial model established by the Los Angeles 1984 Games – the "Private Games". As noted earlier, this edition uniquely generated both financial revenues for the OCOG and broader economic benefits for Los Angeles and neighbouring cities. However, its success was deeply tied to specific historical circumstances, including the "4M-LA" sequence, the growth of media relevance, the neoliberal presidency under Ronald Reagan, and flexible sponsorship opportunities before the TOP Programme. Consequently, relying on this model today risks overlooking the significant contextual and structural differences in contemporary Olympic urban planning.

The debate over public funding for Olympic-related urban development remains highly contentious, with several factors contributing to the controversy. First, since the 1990s, host cities have shifted from the contained "LA Model" to the ambitious "Barcelona Model" of urban development. Second, the move towards more entrepreneurial and neoliberal approaches in bid planning to enhance winning chances has tied Olympic concepts to corporate interests rather than public sector priorities. Third, even when previously planned, new, high-quality sports venues have become difficult to manage, often failing to achieve financial self-sustainability and sometimes replacing pre-existing facilities, rendering them obsolete. Fourth, the Games' scale has grown dramatically, with escalating costs requiring massive public investment and overruns often intensified by constraints in the bidding process that induce underestimations. Finally, strict Olympic deadlines for complex, large-scale projects that cannot be phased or adapted to delays and current market situations (they are "nondivisibile") increase risks for the public sector, which often spend more to ensure their timely delivery (Lopes dos Santos et al., 2025).

Combined with host cities' relative inexperience in managing mega-events, these dynamics make the Olympic Games some of the most financially risky mega-projects, with frequent and significant cost overruns (Flyvbjerg et al., 2021). Operational and venue costs have risen dramatically over time, reflecting the growing scale of the event (Müller et al., 2023). Boykoff (2016) highlights this trend with examples like Rio 2016, where costs reportedly doubled from an initial estimate of 11 billion to 20 billion US dollars. While such comparisons require careful interpretation due to differing accounting practices and economic contexts, they underscore the financial uncertainties inherent in hosting the Games. Faced with an inflexible financial model limiting private investment and pressured by the need to address social, economic, and environmental responsibilities, hosts are thus put in a sensitive position to simultaneously develop competitive and innovative projects while ensuring successful, sustainable legacies for their populations.

Olympic Impacts and Legacies: Definitions and Complexities

The term "legacy" was first mentioned in the Melbourne 1956 candidature and later recognised as a subject in Calgary 1988's bid, dating back to 1981. It was only explicitly identified as a goal in 1990, in the Atlanta 1996's candidature (IOC, 2017b). In 2003, it was incorporated into the Olympic Charter, albeit without a formal definition by the IOC. With the implementation of Olympic Agenda 2020, legacy was finally defined in the IOC Legacy Strategic Approach as "long-term benefits initiated or accelerated by the hosting of the Olympic Games/sport events for people, cities/territories and the Olympic Movement" (IOC, 2017b, p. 13). However, this definition can be contested because, while necessarily aligning with a weak sustainability approach, it largely overlooks negative impacts. Yet, when presenting this definition and referring to "the benefits, i.e. positive effects", the IOC acknowledges that the Olympic Movement "does not overlook pitfalls and negative results from its activities" (ibid, p. 15).

Although empirical research on mega-event legacy has been conducted over the years, the concept remains complex and difficult to translate into objective frameworks or typologies (Leopkey and Parent, 2012). It is "a topic of contentious discourse among event researchers, over definition, measurement, and significance" (Orr and Jarvis, 2018, p. 345). This might be because legacy is "complex, fluid (...) [and] likely to be realised differently in different locations, depending on local social, economic and political contexts" (Brownill et al., 2013). Chappelet (2012, p. 77) highlights that the concept is vast and, above all, somewhat unclear, defining it as "all that remains and may be considered as consequences of the event in its environment". Cashman

(2002, p. 33) warns that the term is "an elusive, problematic and even dangerous word"; a view supported by Grix et al. (2017), who argue that legacy "as a concept has, within a short space of time, entered the pantheon of abused, maligned, misquoted and misunderstood concepts in popular discourse and sports studies alike".

According to Preuss (2007), to provide conceptual clarity and avoid misapplications it is important to distinguish between mega-event impacts and legacies. The author defines impacts as short-term stimuli directly triggered by the mega-event. They are strong, but on the demand side (Gratton and Preuss, 2008). Examples include the event's revenues or losses or the exogenous economic activity shock from visitor spending. Impacts can generally be understood through changes resulting from a particular activity in a contextual indicator or parameter when compared to the situation that would have occurred had the activity not taken place (Preuss, 2015).

Legacies, on the other hand, are conceptualised by Preuss (2019) as more enduring structural changes that generate effects on people and spaces across multiple domains, having a value-in-context, determined by explicit circumstances, that shifts over time while being bound to a specific territory. Moreover, they are often seen as stemming from impacts and can, in turn, create new impacts in a "snowball effect" (Essex and Chalkley, 1998; Preuss, 2007). Given this dynamic, legacies can be understood as path-dependent processes, where their "historical development (...) can strongly influence [their] current state and future outcomes" (Eitan and Hekkert, 2023, p. 3). Consequently, "it should be the aim of politicians to initiate structural changes that improve the 'location factors', which are the basis of new post-event impacts" (Gratton and Preuss, 2008, p. 1925). Because legacies are complex, interconnected systems of causes and effects that are more prominent in the long term, affect people differently, and are heavily influenced by the unique contexts of each event and location, they are particularly difficult to conceptualise and often lack standardised measurement techniques (Chapplet, 2012; Leopkey and Parent, 2012).

Alongside various scholarly perspectives on the concept of legacy, numerous approaches to categorise different legacies have emerged. Kassens-Noor et al. (2015) offer an original and intriguing framework that explores legacy within the context of urban development, focusing on the motivations behind its creation – essentially asking why these legacies came to exist. Their model first distinguishes between legacies generated from a (successful/unsuccessful) bid and those resulting from hosting the event. The latter are further divided into three subcategories: legacies that are cancelled due to the event, those delayed until after the event, and event-driven legacies implemented before the event. Within this last category, a further distinction is made between accelerated and motivated legacies. Accelerated legacies refer to projects that were already part of the city's urban agenda before the bidding process but were expedited because of the event. These can either result in finished legacies, which are fully realised and integrated into the urban landscape post-event, or unfinished legacies, where the projects remain incomplete and fail to deliver their intended long-term benefits. Motivated legacies, on the other hand, represent projects introduced specifically in response to the event and integrated into urban agendas. These are characterised as either renovated legacies, involving the improvement or adaptation of existing infrastructure or urban elements, or created legacies, which consist of entirely new projects conceived because of the event.

Differently, Preuss (2007) proposed a framework for categorising legacies in a simple and generic manner – here also considered equally applicable to impacts. This framework consists of a cube comprising eight smaller cubes (**Fig. 12**), each representing legacies – or impacts –

defined by a combination of three specific dimensions, here named “intentionality”, “materiality”, and “value”.

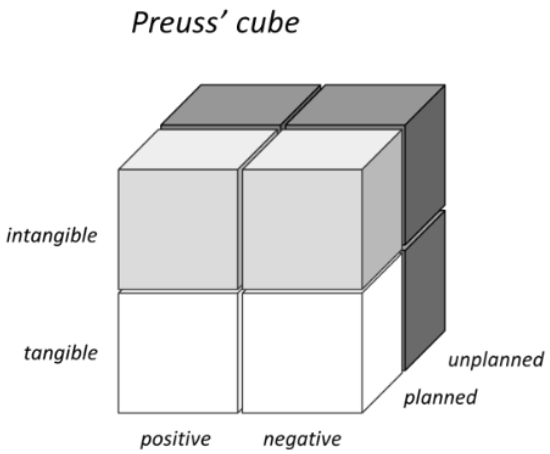

Fig. 12 Characterisation of impacts and legacies: Preuss’ cube (Source: replicated from Preuss, 2007).

Intentionality distinguishes effects as either planned or unplanned. Planned effects are those deliberately intended and anticipated, such as behaviour changes resulting from improvements in public transport networks and services or increases in sports participation due to the development of new sports facilities. In contrast, unplanned effects are those that occur unexpectedly and, many times, cannot be foreseen (Preuss, 2007). These effects are highly varied and often unique to each situation, making them difficult to illustrate outside specific contexts or prior to the occurrence of concrete events.

The theory of the four mega-event “knowns”, popularised by Horne (2007), offers a valuable perspective that complements the notion of intentionality. While not exclusively tied to impacts and legacies, the framework identifies four categories of knowledge that critically examine the complexity and unpredictability of mega-events: known knowns, known unknowns, unknown unknowns, and unknown knowns. Known knowns – “things we know that we know” – refer to aspects of mega-events that are predictable, understood, and widely accepted, such as their global media appeal and massive organisational scale. Known unknowns – “things we know that we don’t know” – highlight the intersection of planning and uncertainty, representing elements that organisers anticipate but cannot fully comprehend or control. Legacies exemplify this category, as they are acknowledged in advance but remain elusive until they materialise. Unknown unknowns – “things we do not know we don’t know” – capture the truly unforeseeable and unexpected aspects that arise during the event lifecycle, defying prediction and existing entirely outside organisers’ knowledge. These are not merely unplanned aspects, as some unplanned elements can be anticipated and managed through measures such as risk mitigation, placing them within the domain of known unknowns. Finally, unknown knowns – “things we don’t know that we know” – relate to assumptions, beliefs, and misrepresentations that often lead to issues being forgotten, suppressed, or ignored. These include aspects that, due to their complexity and the challenges associated with addressing them, are frequently omitted from mega-event narratives.

The materiality dimension categorises effects as tangible or intangible, sometimes also regarded as hard or soft, physical or spiritual (Chappelet, 2012). Tangible effects refer to outcomes that are concrete and often more straightforward to identify and measure using available quantitative or qualitative methods and can be directly attributed to specific actions. Examples include variations in air quality or fluctuations in property values. Intangible effects, in contrast, involve non-physical outcomes that are difficult to directly observe or quantify through conventional methods. While intangible effects are no less impactful, their influence is often understood through subjective interpretation rather than objective measurement. They usually pertain to abstract concepts, perceptions, or relationships being often influenced by personal, social, or psychological factors. Examples include increased civic pride among residents, the enhancement of a city's global reputation, soft power, or shifts in community perceptions (Dwyer et al., 2000a; Preuss, 2007, 2015).

The third dimension, value, classifies effects as either positive or negative. Determining the value of an effect requires evaluation from a specific perspective, as effects have a value-in-context, influencing territories, activities, or populations differently (Chappelet, 2012; Preuss, 2019). For example, the redevelopment of an urban area may improve housing availability but could simultaneously displace lower-income residents. Similarly, investments in public transport infrastructure may provide mobility benefits but could disrupt local communities during construction. Thus, as further explored, Olympic impacts and legacies benefit some while simultaneously producing negative consequences for others – they are not "for all".

The notion of value-in-context is closely tied to two additional dimensions critical to evaluating the effects of major events: time and space. Event effects may be most noticeable in temporal proximity to the event itself, meaning during and immediately before or after its occurrence (Preuss, 2007). This explains why impacts are often more readily understood, even if they eventually dissolve within broader systems and transform into legacies. However, some effects may begin to manifest well in advance of the event – the "pregnancy" effect – or persist long after it has concluded, or even emerge much later (Preuss, 2015). Such scenarios are particularly common when events involve permanent urban interventions, where construction activities generate effects prior to the event, and the long-term utilisation of the resulting urban infrastructure continues to produce effects far beyond the event's conclusion.

Similarly, the spatial context and scale of analysis play a significant role in determining the value and perception of mega-event effects. On a micro scale, certain effects are more pronounced within the event venue itself than in its immediate surroundings – for instance, improvements to facilities or damage to specific sites. On a meso scale, the effects in the host city are often more significant than in other cities within the same region, such as fluctuations in property values or changes in public transport accessibility. On a macro scale, the broader region surrounding the host city typically experiences greater effects than other regions within the same country – for example, heightened civic pride or economic activity. Mega-events can also generate effects beyond the host country, such as through the contracting of services or procurement from foreign companies. Additionally, international media coverage can lead to various external effects, such as revenues earned by foreign media outlets or the satisfaction and entertainment experienced by international audiences (Preuss, 2007, 2019; Chappelet, 2012).

Each of the eight small cubes comprising the Preuss' cube can also involve effects across various domains, natures, categories, or types. This diversity arises because, over time and across different contexts, hosts have approached the organisation of distinct mega-events in diverse ways, seeking to maximise their benefits. As these strategies are inherently context-

specific, so too are the resulting effects. Nevertheless, numerous studies have sought to discuss and define these domains. One of the earliest efforts is by Ritchie (1984), who identified six types of impacts: economic, tourism/commercial, physical, sociocultural, psychological, and political. While this categorisation can now be considered outdated – modern perspectives easily identify overlaps among these types – it highlights the long-standing challenge of defining these multifaceted domains in a comprehensive and structured manner. This complexity is not only influenced by values-in-context but also by causality considerations, as further explored.

Koenigstorfer et al. (2019) conducted a literature review to systematise legacy domains, revealing that nearly half of the analysed studies did not present a specific structure. Among those that did, the primary domains of focus included social, urban, human, and environmental factors, policy, governance, and regulation, and intellectual property. Furthermore, the authors examined the consequence areas associated with these legacies, finding that most studies emphasised economic and social consequences, as well as sport-related, urban area-related, environmental, political, community-related, and even security or surveillance-related. Notably, the authors caution that many of these consequences do not occur spontaneously; they require targeted strategies and implementation processes to ensure they materialise.

Even if its usefulness can be contested (Chappelet, 2012), it seems worthwhile to highlight some examples of classifications and their respective contexts. Witt (1988) categorised impacts into physical, social, cultural, psychological and political. Very similarly, Malfas et al. (2004) defined the socio-economic, socio-cultural, physical, and political categories. Cashman and Hughes (1999) identified economic, built environment, information and education, public life, politics and cultures, sport, memories and history legacies. In the transportation realm, Kassens-Noor (2010) denotes physical, institutional, and behavioural changes. Analysing bid documents and final Olympic Games reports, Leopkey and Parent (2012) systematised 13 legacy themes: cultural, economic, environmental, image, informational/educational, nostalgia, Olympic Movement, political, psychological, social issues, sport, sustainability, and urban. Clark (2008) suggested eight categories: visitor economy, transportation and other physical infrastructure, cultural infrastructure, sporting infrastructure, visible legacy, city image, business interest, and managerial and events strategy. Grix et al. (2017) identified five types of legacies most commonly emphasised by the "coalition of beneficiaries" – those who are likely to benefit most from mega-event investments: economic, urban regeneration, national pride or the "feel-good" factor, increased participation in physical activity and sport, and international prestige or soft power. Building on lessons learned from previous experiences, Preuss (2019) proposed six domains: urban development, environmental enhancement, policies and governance, human development, intellectual property, and social development. This categorisation was later officially adopted by the IOC as part of the Olympic Agenda 2020 framework (IOC, 2017b), albeit with slight differences in nomenclature.

It is also important to highlight “knowledge” as a distinct and valuable type of legacy, particularly for its role in reducing risks and avoiding the need to "reinvent the wheel". Regardless of the value-in-context derived from measures implemented for mega-events, intellectual legacies are consistently beneficial. They provide lasting value to host policymakers and planners by informing urban policy and decision-making for both daily operations and extraordinary activities, such as future events (Lopes dos Santos et al., 2022). In the context of transportation, Bovy (2004, p. 48) highlights that the Olympics “are more and more viewed as ‘real scale laboratories’ for urban and metropolitan mobility plan innovation and developments”. Likewise, they benefit mega-event planners and stakeholders by offering adaptable event strategies and

guiding future hosts through benchmark approaches (Preuss, 2007), transmitted through academic knowledge or practical experience. For the Olympic Games, the latter is formalised through the IOC's Transfer of Knowledge programme, which plays a pivotal role in mitigating risks and ensuring that future hosts build on previous experiences (Bovy, 2006; Kassens-Noor, 2012).

For simplicity, it can be considered that all these domains are reflected or unfolded into the three dimensions of the concept of sustainability: economic, environmental, and social. Examples of economic effects include expenses arising from visitors, participants, or event organisers (Kasimati, 2003; Hodur and Leistritz, 2006; Ramchandani and Coleman, 2012; Davies et al., 2013; Kwiatkowski, 2016); tourist attractiveness during and after the event (Fourie and Santana-Gallego, 2011; Weed, 2014b); "displacement/crowding-out effects" (when spending by visitors displaces spending that would have otherwise occurred) (Preuss, 2011; Liu and Wilson, 2014); real estate market impacts (Wang and Bao, 2018); international trade (Rose and Spiegel, 2011); destination image (Erfurt and Johnsen, 2003; Kaplanidou and Vogt, 2007; Chalip and Costa, 2005; Gignon et al., 2024); city branding (Berkowitz et al., 2007; Zhang and Zhao, 2009; Gignon et al., 2024); soft power (Grix and Houlihan, 2014; Brannagan and Rookwood, 2016; Grix and Brannagan, 2016); and opportunity costs (Preuss, 2009). Environmental effects are highly dependent on the specific measures taken (see Cerezo-Esteve et al., 2022) but can be associated, for example, with air pollution, carbon footprint, and greenhouse gas emissions (Brajer and Mead, 2003; Parkes et al., 2016b; Ma and Takeuchi, 2020; Piccerillo, 2023), water conservation (Wang et al., 2019), or environmental remediation/valorisation (Pinto and Lopes dos Santos, 2022). Social effects are distributed across an immense array of areas (see Mair et al., 2023), including quality of life (Kaplanidou, 2012; Pfitzner and Koenigstorfer, 2016); sense of community (Kerwin et al., 2015; Sullivan, 2018); "feel-good" factor (Kavetsos and Szymanski, 2010); civic/national pride (Wood, 2006; Storm and Jakobsen, 2020); social capital (Xing and Chalip, 2012; Gibson et al., 2014); volunteering practices (Doherty, 2009; Neufeind et al., 2013); skills development (Peachey et al., 2015); information, knowledge, and networks (Parent, 2016); increased participation in sports (Weed et al., 2015; Kokolakakis et al., 2019; Chen et al., 2021); social exclusion (McGillivray, 2014; Mackintosh et al., 2016; Pereira, 2018); and gentrification (Gaffney, 2016).

Therefore, any evaluation of mega-event impacts or legacies must consider the dimensions of intentionality, materiality, and value, adopt the perspective of specific actors, refer to a particular moment in time, be tied to specific territories and scales, and clearly distinguish the analysed domains (**Fig. 13**). This is inherently complex, as many of these aspects cannot be comprehensively characterised.

Nevertheless, studies on mega-event impacts or legacies are often conducted to highlight the benefits of hosting the event. These studies can be conducted either *ex-ante* or *ex-post*. *Ex-ante* studies rely on estimations and projections, using predictive models, scenario analyses, or cost-benefit frameworks. On the other hand, *ex-post* studies evaluate the actual outcomes, often comparing them against the initial forecasts to identify gaps or unexpected results. Thus, there is a complementarity between these types of studies, as some effects cannot be measured *ex-ante* but may become measurable *ex-post*. However, securing funding for *ex-post* studies tends to be more complex, as there is less interest from involved parties once the event has concluded, particularly when financial and political priorities have shifted.

Some authors provide guidance on the variables to consider and methods to adopt when conducting these studies (Ritchie, 1984; Dwyer et al., 2000a, 2000b; Carlsen et al., 2001; Li and McCabe, 2013; Dwyer et al., 2005, 2006). However, based on the dimensions of Preuss' cube, not

all effects can be measured at any given moment. For instance, unplanned effects (the four small cubes at the back of Preuss' cube) are unknown until they occur, making them inherently incomprehensible in *ex-ante* evaluations. Similarly, intangible effects (the four small cubes at the top) are, by definition, difficult to measure and lack clear methods with quantifiable results – even if there are recognised subjective methods that provide valuable insights and contribute to their deeper understanding (Mair et al., 2023).

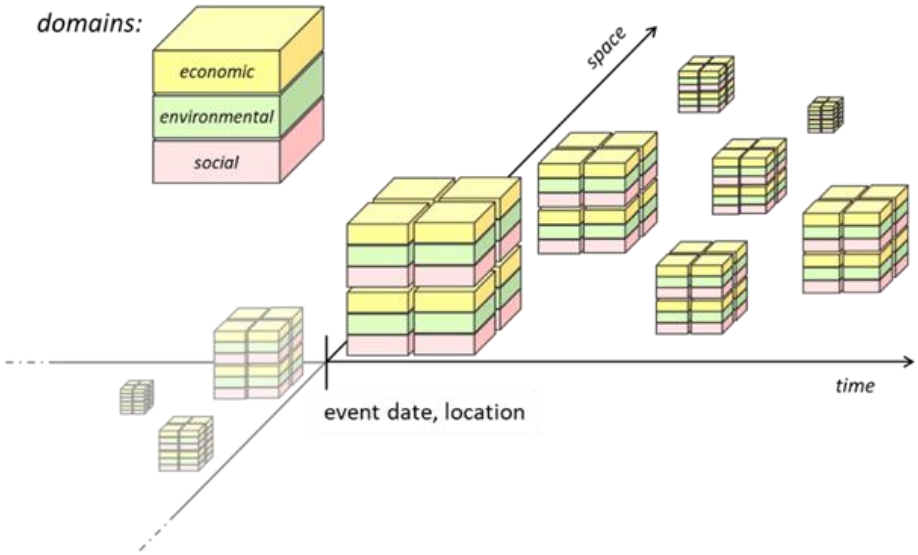

Fig. 13 Characterisation of impacts and legacies: assessment components.

As such, only planned and tangible effects, whether positive or negative (the two small cubes at the forefront and base), can be subject to more objective evaluations. Thus, to support decision-making by event-promoting entities, studies on the tangible effects of events tend to employ measurement methods that produce quantitative results, preferably in the form of economic return. However, not all tangible effects can be easily and coherently quantified using a single unit of measurement, even if conversion methods may exist or be created. Moreover, other tangible effects may lack any means of quantitative measurement, allowing only for qualitative assessment.

As previously mentioned, since mega-events generate a significant increase in economic activity in the host city or country, it is common for their financing to include a portion of public investment, particularly if the event involves permanent urban interventions in the built environment (Carlsen et al., 2001; Davies et al., 2013). To justify public investment for mega-events, economic return studies are often conducted, enabling an assessment of the expected return on investment and the induced effect of the event on the economic activity of the affected territory (Dwyer et al., 2005). Although these studies have certain limitations and are not fully representative of all effects – especially given the complexity of planning and executing the event and the resulting spatial and temporal scope of its effects, which extend beyond economic dimensions – input-output methodologies remain the most commonly used tool (Dwyer et al., 2006; Li and McCabe, 2013). Being quantitative and providing a concrete comparison element for the proposed investment, these studies stand out for their objective and practical application, offering informed decision-making support (Ramchandani and Coleman, 2012).

However, based on the dimensions of his cube, Preuss warns that *ex-ante* feasibility and economic impact studies are often biased. This bias stems from the fact that such studies are

typically commissioned by entities in favour of hosting the events, which, for political reasons, need to justify the expenditure of public resources. As a result, these studies tend to focus on the sub-cube of planned/positive/tangible effects, limited to a specific location and timeframe (Preuss, 2007). For this reason, while highlighting the concerning issues pertaining to economic return estimates, Késenne (2005) argues that cost-benefit analyses are more appropriate for obtaining information that can justify public subsidies for events.

Preuss (2007) outlines three methodologies for measuring the legacy of mega-events in a way that aligns more closely with urban development: the benchmark approach, the top-down approach, and the bottom-up approach. Each method offers distinct benefits and insights but also comes with notable limitations, challenges, and difficulties in implementation.

The benchmark approach is applied in *ex-ante* evaluations with the aim of forecasting legacy. It relies on past experiences from other editions of mega-events to predict the effects of the same event in the same city, the same event in different cities, or different events in the same city. However, despite similarities often found both across cities and editions of a particular event, the outcomes will always be specific to each host and edition. Moreover, both cities and events are period-specific, meaning they evolve over time and cannot always be extrapolated to other events, other hosts, or even the same event and host at a different time.

The top-down approach is used for *ex-post* evaluations with the objective of evidencing legacies. It relies on macro-economic indicators and employs a control case (without the event) to compare against the event case, thereby addressing the issue of causality. The control case can be determined in two ways. The first method involves using a reference case, which entails collecting data from cities with similar structure and size within the same macroeconomic context over a given period. However, this strategy has limitations, particularly in the selection of suitable reference cases, and it lacks robust validation of event cases due to the infrequency of mega-events. The second method involves collecting data based on the growth path of the host city without the event. Yet, this approach also falls short, as it cannot fully account for period-specific externalities.

Finally, the bottom-up approach is similar to the top-down approach but uses the host city's long-term development plan as the control case. This approach allows for the separation of pre-planned developments from event-led developments, considers opportunity costs, helps identify situations where temporary facilities are preferable, and provides a clearer understanding of the city's strategic planning, making it highly place-specific. However, the control case remains a predicted scenario that may not precisely represent the actual development trajectory of the city.

To use any of these approaches as legacy measurement techniques, reliable Key Performance Indicators are essential. These are measurable metrics that evaluate progress toward specific objectives. Various authors have worked to establish them for certain legacy effects. For instance, Kassens-Noor (2015) highlights that indicators such as miles travelled, vehicle miles travelled, and reductions in accidents or emergency response times can help assess the legacy of new roads or cycling and walking paths. She also identifies travel time reductions and emission decreases as key measures for evaluating modal shifts and environmental benefits. Similarly, Alm et al. (2014) developed the Stadium Utilisation Index, which measures the post-event use of sports venues by considering stadium capacity, the number of events hosted, and attendance figures. This index also enables correlations with attributes like venue ownership (public or private), Gross National Income per Capita, and the Corruption Perception Index.

However, authors caution that data availability remains a significant challenge, as such data are often difficult to obtain and inconsistent. For example, Alm et al. (2014) acknowledge the importance of evaluating the tourism value of venues (e.g., the Beijing National Stadium) but note that this aspect was excluded from their index due to its intangible nature. Preuss (2019) further shows concerns over this type of indicators, emphasising the difficulty of assessing value-in-context.

To advance legacy promotion, the IOC officially recognised the World Union of Olympic Cities. This organisation was created in 2002 and, as of 2024, included 51 member cities – hosts of the Summer, Winter, and Youth Olympic Games, as well as associate members. The organisation's mission is to foster dialogue and share information between former and future Olympic host cities to ensure the Games' positive impacts. As part of Olympic Agenda 2020, the IOC intended to strengthen its partnership with this Union, committing to the creation of a legacy information hub based on Key Performance Indicators. This hub aims to document both tangible and intangible long-term benefits of hosting the Games, as well as legacies from bid processes. The initiative seeks to increase transparency by incorporating diverse perspectives and providing data-driven insights. The ultimate goal is to enable cities to measure legacies in alignment with their specific visions, objectives, and local characteristics while facilitating meaningful comparisons across host cities (IOC, 2017b). This type of effort highlights the IOC's critical need to demonstrate the benefits of hosting the event in order to counter the growing public opposition that has been discouraging cities from bidding.

The Wicked Games: Acknowledging Mega-Event Planning Challenges Through Social and Housing Dilemmas

An essential consideration in addressing mega-event legacies – and, by extension, planning – is their inherently social nature. Legacies are ultimately designed to benefit the populations of host territories, but their effects are subjective, as they possess a value-in-context shaped by personal values and interests (Chappelet, 2012; Brownill et al., 2013). Beyond this subjectivity lies a deeper complexity: legacies not only influence urban systems but also become entangled with and transformed by them, obscuring perceptions of causality (Gratton and Preuss, 2008; Preuss, 2019). This dynamic interaction renders legacies examples of "wicked problems".

Rittel and Webber introduced the concept of "wicked problems" in 1973 to describe the inherent challenges of applying traditional problem-solving paradigms to social issues (Catron, 1981). According to the authors (1973, p. 155), "the search for scientific bases for confronting problems of social policy is bound to fail" because social problems cannot be solved like tame problems. Tame problems are characterised by clear definitions and measurable solutions, while wicked problems are inherently "malignant", "vicious", and "tricky" due to the conflicts they create around equity (Crowley and Head, 2017).

The concept of "public welfare" is inherently subjective and cannot be universally defined, making it impossible to establish a universally accepted notion of a "best societal state". Without a measurable "social welfare function" to describe and evaluate outcomes, social professionals are unable to rely on scientific precision in decision-making, particularly when questions of equity arise. Attempts to bridge this gap by constructing systems of social indicators are fundamentally limited, as they cannot resolve the dilemmas of distributing benefits equitably, always leading to dissatisfaction among certain individuals, shifts in policy directions, and the reconfiguration of value and goal systems (Rittel and Webber, 1973).

This limitation renders the concept of efficiency – commonly understood as achieving goals with minimal resource input – somewhat unsuitable for planning processes as there is no undisputable "public good". Stakeholders frequently hold divergent views on the nature of issues, their relative importance, and the appropriate responses. These disagreements stem from differences in assumptions, values, interests, and capacities. As Head (2019) notes, how a problem is defined or scoped is closely tied to the preferred remedial actions, meaning that contrasting perspectives profoundly shape the planning process and its outcomes. Experts themselves inevitable advocate for their own visions of the common good.

Therefore, the paradigms of science and engineering are not applicable to social problems, which are rooted in diverse and often conflicting values. Without an overarching social theory or ethic, it is impossible to determine universally what is right or wrong when planning for a group with such varied perspectives. In theory, decision-making could be entrusted to wise and knowledgeable professional experts. However, this raises the question of whether these experts can truly represent the values of an entire community. Ultimately, they must rely on political judgement for problem-solving, inevitably becoming players in a political game. This intertwining of planning and politics is unavoidable and, while political groups may make the rationales and repercussions of decisions more explicit, this does not guarantee improved outcomes (Rittel and Webber, 1973).

Moreover, these complex problems are systemic and interlinked, demanding integrated analysis and broad-based discussion among stakeholders to navigate their complexity (Head, 2019). Ackoff (1974, p. 21) aptly describes this aspect:

> *Every problem interacts with other problems and is therefore part of a system of inter-related problems, a system of problems (...) a mess (...) The solution to a mess can seldom be obtained by independently solving each of the problems of which it is composed (...). Efforts to deal separately with such aspects of urban life as transportation, health, crime, and education seem to aggravate the total situation.*

Wicked problems thus highlight the inherent complexity of the social world and its political processes, drawing attention to enduring, intractable issues that resist definitive resolution (Head, 2019; Byers et al., 2020). This framework has proven useful in explaining the persistent difficulties in fields such as environmental and natural resources policy, urban and regional planning, and social and health policy. Scholars have used the concept to shed light on why so many policies and programmes fail to achieve their intended goals and often produce unforeseen consequences (Alford and Head, 2017).

Within the realm of wicked problems, Byers et al. (2020) observe that planning for Olympic legacies is fundamentally related to the dilemmas described by Rittel and Webber. Olympic planning is naturally multifaceted, lacking definitive formulations or universally accepted solutions, and its outcomes evolve over time and differ across contexts. With no prior testing, each edition of the Games is a unique, one-off event shaped by distinct cultural and geopolitical factors and involving diverse stakeholder interests. Efforts to address one objective often create unintended consequences for others, further complicating the process. This, coupled with high public scrutiny and the inability to reverse major decisions, stresses the challenges faced by Olympic planning to deliver legacies that could universally be perceived as positive or equitable.

Although wicked problems cannot be fully resolved, progress can be made in managing or mitigating them. As Rittel and Webber (1973, p. 159) observe, "we have been learning whether

what we are doing is the right thing to do". Therefore, by acknowledging both the "dark side" of Olympic legacy – the unresolved and challenging aspects; the unknown knowns – and its potential positive dimensions, stakeholders can adopt a more realistic, multi-level approach to mega-event planning and delivery. Addressing these overlooked and generative issues offers the opportunity for greater rewards and more effective outcomes (Byers et al., 2020).

With this in mind, this section delves into a key example that illustrates the challenges of Olympic Games urban planning as a wicked problem. It comprehensively examines the housing-related consequences typically observed as a result of mega-events, highlighting the tensions between the economic goals of hosts and the resulting social impacts, shedding light on the inherent complexities of mega-event planning.

For decades, Olympic-related developments have provided housing for thousands of people in host cities around the world (Olympic Studies Centre, 2018b, 2018c). Beyond housing, it was already mentioned that the Games require extensive high-quality infrastructure, facilities, and public spaces. While such new facilities may address specific functional needs within host cities, some of them primarily serve as instruments to achieve broader and more complex urban objectives, namely place promotion and city branding. These efforts are often intended to stimulate economic development through the "Mega-event Strategy", resorting to the "Olympic Effect" to implement large-scale urban regeneration projects that often rely on "Olympic Urbanism" and "Starchitecture" approaches. Although these methods can be effective tools for city reinvention and rebranding, they are often accompanied by significant social side effects, particularly affecting living conditions of low-income communities (Rycke and Bosscher, 2019).

These projects require substantial land acquisition in strategically located areas, favouring affluent lifestyles while triggering displacement. In these often degraded areas, lower land costs make acquisition easier, and the expropriation of residents and businesses is facilitated by the powerlessness and lack of information within these communities. Even in democratic countries with laws designed to protect citizens in cases of expropriation, the compensation provided often fails to account for the disruptions and broader consequences these processes impose on people's lives, such as marginalisation, loss of established habits, community separation, and diminished employment opportunities (see Burgess and Monk, 2016). Additionally, these processes are frequently carried out with minimal public consultation or debate (Porter, 2009; Davis and Thornley, 2010; Blunden, 2012; Watt, 2013a).

Displacement is defined as the forced relocation of residents or the prevention of their access to housing due to conditions beyond their control (Grier and Grier, 1980). It can take various forms, including physical or economic displacement, chain displacement, gentrification/exclusionary displacement, or displacement pressure (Marcuse, 1985). Across Olympic host cities, it has affected hundreds of thousands of people, with cases reported for nearly every recent edition of the Games. These displacements are commonly driven by compulsory purchase orders, demolitions, or expropriations, although other mechanisms also contribute (COHRE, 2007).

For example, in Flamengo, the Hilton Santos building was converted into a hotel for the 2016 Rio Olympics. Its low-income residents faced intense physical and psychological pressure to vacate their homes. Additionally, rental prices in neighbouring areas soared following the announcement of the Games, forcing many displaced residents to relocate to distant neighbourhoods (Gaffney, 2016). The rent increases exemplify economic displacement, as landlords capitalised on the Games by temporarily renting housing units to visitors at inflated

prices, anticipating further property value appreciation after the event (Greene, 2003; Sadd, 2010). Displaced individuals often moved to already deprived areas – typically even poorer and lacking essential services, such as transport – like Rio's "favelas" or Beijing's "chengzhongcun". With the city's natural growth in the medium to long term, these zones often become targets for further regeneration projects, once again displacing the same population groups (Gaffney, 2012; Shin and Li, 2013). Somewhat similarly, in London short-life tenants from the Nags Head Estate were displaced to accommodate residents relocated from the demolished Clays Lane Estate, the site of the Olympic Village (Inside Housing, 2006). This constitutes an example of chain displacement. Important to mention, however, is that the scale of evictions observed in cities like Beijing or Rio far exceeds the relatively smaller and more controlled displacement processes seen in cities such as Vancouver or London.

Marcuse (1985) further defines gentrification, or exclusionary displacement, as the replacement of one social group by a wealthier group with distinct cultural patterns. This process is often visibly marked by

> *typologies of architecture, configurations of public space, and changing residential design [which] may be complemented by new cafés and consumer storefronts. These new landscape elements communicate messages about class, identity, and belonging*. (Gaffney, 2016, p. 1134)

In urban regeneration projects, these gentrification processes are often employed as a deliberate strategy to "cleanse" urban spaces. This is exacerbated in Olympic contexts since, within the framework of "Olympic Urbanism", the architectural and urban design of Olympic villages often becomes the flagship image that host cities aim to present on the global stage (Viehoff and Poynter, 2016), turning them particularly susceptible to gentrification (Kumar, 2012). Moreover, the popularity of sports and the symbolic nature of the event tend to increase acceptance of higher property prices among affluent social classes, who are willing to pay a premium to live in these areas (Bernstock, 2020). Such strategies are typically intentional, justified by campaigns promoting the city's image and turning it more appealing to global markets (Broudehoux, 2012). This, in turn, attracts capital flows and extracts wealth from areas formerly perceived as derelict (Gaffney, 2016).

Although gentrification is most commonly associated with speculative increases in land and property values – as seen in the case of London's Olympic Park (Watt, 2013b) – it can also manifest in other ways. For instance, the promotion of car-centric urban designs facilitates such processes, as demonstrated by Rio 2016 (Gaffney, 2016) and Seoul 1988 (Greene, 2003). Additionally, gentrification often alters the daily lives of surrounding communities, exerting economic pressure on long-standing residents to relocate. This phenomenon is exemplified by the transformation of the "old" into the "new" Stratford in London, where rising prices for food and consumer goods, coupled with the replacement of local businesses and traditional practices, effectively determined who could afford to remain in the area. As a result, lower-income residents were organically "pushed" into other parts of the city (Kennelly and Watt, 2012).

Evidence on the various types of displacement here explored extend well beyond the Olympic sites, including surrounding neighbourhoods and other prime urban areas. For instance, during the Seoul Olympics, slums along the Olympic Torch Relay route were cleared to prevent them from being visible in international broadcasts (Greene, 2003). Similarly, in Athens, the Games served as a pretext to evict Romani populations from several locations (COHRE, 2007). In Vancouver, low-income tenants and homeless individuals were forcibly removed from areas near

the Olympic Village (Porter, 2009). In London, some residents were relocated to provide media teams with access to upper floors of strategically located buildings (Watt, 2013b). Finally, in Rio, working-class neighbourhoods were transformed into hubs of global consumption and capital accumulation, tailored to the preferences of international tourists, corporate stakeholders, and the upper middle class (Gaffney, 2016).

Displacement – and gentrification in particular – is often framed as an inevitable aspect of urban development cycles and, given ethical and political implications, will likely remain a contentious issue in both academic and public discourse (Watt, 2013a). In Olympic contexts, such phenomenon is frequently justified as a necessary sacrifice for the "greater good" of delivering "legacies for all" (Porter, 2009; Gaffney, 2012). However, framing a mega-event as such is far from being universally accepted. For instance, while the urban regeneration associated with the 1992 Barcelona Olympics is widely praised for enhancing the city's international reputation (Degen and Garcia, 2012), it ended up prioritising private over public transport, leading to long-term mobility challenges (Garcia-Ramon and Albet, 2000). In contrast, while the Athens 2004 Olympics are often criticised for contributing to Greece's subsequent economic crisis (Panagiotopoulou, 2014), the city reaped significant benefits from Olympic-led upgrades to its transport infrastructure (Kassens-Noor, 2015), despite the high costs and concerns over social exclusion. These examples, drawn from a far more intricate web of causes and effects that are temporally and spatially unconfined (Preuss, 2007, 2015, 2019) demonstrate that hosting mega-events cannot be categorically labelled as wholly constructive or destructive.

Therefore, a more nuanced perspective is needed to acknowledge the deep importance of assessing value-in-context (Preuss, 2019). The broad discourse of "legacies for all" fails to recognise that the effects of mega-events vary significantly depending on individual circumstances. For instance, they differ based "on whether one is a sports activist or not, lives locally or elsewhere in the city, rents or is a homeowner, is well off or poor" (Davis and Thornley, 2010, p. 90). Moreover, opinions on what constitutes an acceptable sacrifice for a perceived common goal are also widely different, as illustrated by the perspective of a village landlord during the preparations for Beijing 2008, quoted by Shin and Li (2013, p. 572):

> *The Olympic Games is the nation's major event and is our glory. We should support it strongly. Every resident should support it. Even if there is a sacrifice to make, we should endure it.*

Furthermore, in the housing market, the effects depend on several distinct variables that evidence shows to be differently valued by private homeowners or public home-occupiers (Wang and Bao, 2018). Thus, while gentrified Olympic villages tend to marginalise already vulnerable communities, they often appeal to upper classes and real estate markets (Davis and Thornley, 2010). Additionally, as previously addressed, hosts are largely limited to housing projects to collect revenues that can cover capital investments. These villages are thereby pivotal for generating wealth, from which the public sector anticipates direct and indirect economic gains (Lopes dos Santos et al., 2025).

The economic implications of Olympic- or sports-related developments, however, extend beyond housing projects and into broader issues of public subsidisation for mega-events. The majority of research in economics, public policy, and urban planning examining the value of public funding for facilities such as stadiums, arenas, and sports franchises concludes that these fail to deliver consistent, positive impacts on employment, income, and tax revenues and that, therefore, public subsidies, tax exemptions, or expedited permits for the private construction and operation of such facilities are not usually justified (Coates and Humphreys, 2008; Long, 2013b).

However, this is not the same as to say that these projects produce no net economic benefits for their host communities (Matheson, 2019).

Indeed, these projects significantly disrupt land and property markets. Numerous studies explore the relationship between sports events, facilities, and housing markets, including theoretical models suggesting that new sports facilities and the arrival of professional teams generate agglomeration effects that alter the composition of services, drive up land and property values, and enhance local welfare (Humphreys and Zhou, 2015). Some studies find that property values increase when prominent teams relocate to new cities (Carlino and Coulson, 2004), while others observe similar trends when teams leave – attributed to the mitigation of negative externalities such as traffic congestion, noise, large crowds, or litter (Humphreys and Nowak, 2017).

Announcements of new stadium construction, even if unconfirmed, also disturb the market values on surrounding areas (Tu, 2005; Dehring et al., 2007). For example, following the announcement of the Pyeongchang 2018 Winter Olympics, apartment prices in the three host districts – Pyeongchang, Gangneung, and Jeongseon – rose by 6.6% over six years. Albeit smaller, increases were also observed in other districts across the Gangwon Province. A distance-decay effect was noted, with property values increasing by 27.9% to 35% within a 5-kilometre radius of Olympic venues and by 12.4% up to 25 kilometres away (Hur and Kim, 2022). In London, the announcement of the Olympic Games in 2005 boosted real estate prices within nine miles of the planned Olympic Park by £1.4 billion, accounting for approximately 15% of the Games' budget (Kavetsos, 2012). However, property prices in this area had already been influenced by speculative activity between 1995 and 2006, driven by the government's urban regeneration plans, including a high speed rail station – a period that includes the preparations for the Olympic bid (Hamnett, 2009; Kavetsos, 2012; Watt, 2013b). In Athens, small buffer zones around Olympic sites experienced inflationary pressures in the five years leading up to the Games (Zentelis and Labropoulos, 2004). In Sydney, the Olympics triggered significant increases in residential land values across multiple suburbs since 1995, with the greatest impact near the location of the future Olympic Village (Wu and Reed, 2006). In Barcelona, property prices soared by 131% during the five years before the Olympics, a stark contrast to the national average increase of 83% during the same period (Sadd, 2010). Similarly, land and property prices in Seoul rose by 27% in the year leading up to the Games (Greene, 2003).

Inflationary pressures then tend to intensify as the construction of sports facilities progresses and reaches completion (Davies, 2006). Evidence further indicates that these effects extend to properties located up to three miles from the venues, although the impact diminishes with distance (Tu, 2005; Feng and Humphreys, 2008; Ahlfeldt and Maennig, 2010; Propheter, 2019). Notable examples include rent increases of 100% to 200% near the Olympic Park in London (Davis and Thornley, 2010) and over 50% in the vicinity of the Beijing Olympic Park (Shin and Li, 2013). Additionally, an interesting distinction was noted by Kontokosta (2012) when comparing host cities that prioritised infrastructure improvements for regional competitiveness with those that pursued large-scale urban development aimed at positioning themselves as global hubs for tourism, investment, and commerce. Cities such as Los Angeles (1984), Calgary (1988), and Atlanta (1996), which focused primarily on infrastructure upgrades, experienced minimal or even negative impacts on house prices. In contrast, cities like Seoul (1988), Barcelona (1992), and Sydney (2000), which implemented comprehensive urban development plans, reported statistically significant increases in house prices.

Despite these observations, very few studies investigate who is willing to pay these inflated prices, but their results provide valuable insights for this discussion. Proximity to Olympic venues is a significant factor, as residents living near these facilities often perceive added value in their location (Coates and Humphreys, 2006). On a broader scale, data from the London 2012 Olympics suggests that willingness to pay for such benefits decreases with distance. For example, residents of cities like Bath, Manchester, and Glasgow demonstrated considerably less eager to pay for the Games' benefits compared to Londoners. Within London itself, East London residents were keener to back the event than those living in other parts of the city (Atkinson et al., 2008; Walton et al., 2008). Other socio-economic factors also play a role. People with higher levels of education, white-collar jobs, and higher incomes tend to show greater willingness to pay for sports facilities (Agostini et al., 1996; Coates and Humphreys, 2006). This pattern indicates that higher social classes are generally more supportive of hosting sports events, likely due to their perceived ability to benefit from the associated economic and social opportunities (Lopes dos Santos et al., 2025).

For these reasons, in recent years, many of the Olympic village developments have been marketed at inflated prices, capitalising on housing demand and rising property values. Beijing's Olympic Village stands out as a particularly profitable example, with apartments sold at prices 64 to 152 times higher than the average household disposable income in the city (Shin, 2009). Similarly, in Greater Western Sydney, the transformation of the waterfront industrial site into a vibrant middle-class suburb also leveraged speculative pricing (Scherer, 2011). In Barcelona, early promises of subsidised housing for the Olympic Village were abandoned under pressure from real estate developers, resulting in the majority of units being sold at market rates, ultimately turning the area into a gentrified neighbourhood for young, middle-income professionals (Lenskyj, 2006; Garcia-Ramon and Albet, 2000). In all three cases, the Olympic villages – with their urban and construction designs targeted at niche segments – acted as catalysts for economic development. Despite their success in this regard, these neighbourhoods, now vibrant yet gentrified, were established at the expense of varying degrees of social impact. By prioritising the economic value of the Games, these editions ultimately neglected broader social responsibilities, failing to deliver on the promise of "legacies for all" (Lopes dos Santos et al., 2025).

Nevertheless, given the displacement processes commonly associated with the Olympics, organisers have increasingly faced pressure to effectively compensate affected residents. In response, some recent editions of the Games have introduced affordable housing schemes within Olympic villages as a means to address these social issues (Scherer, 2011). While such initiatives remain relatively rare, the examples that do exist further underscore the planning challenges faced by host cities.

Athens' Olympic Village, situated at the foot of Mount Parnitha, was designed as both a response to environmental challenges and a large-scale initiative to address Greece's housing needs. 2,292 state-developed residential units were allocated through a lottery system to house approximately 10,000 low-income workers at reduced prices (Kissoudi, 2008). However, due to limited resources, public agencies were only involved during the production, allocation, and repayment phases, leaving the area without sufficient maintenance and upgrades. This neglect led to rapid deterioration. By 2006, only 400 families had moved in, many of whom faced issues such as unfinished amenities, inadequate garbage collection, poorly maintained green spaces, and limited transport access (COHRE, 2007). Furthermore, although a 2003 survey conducted among the Village's future beneficiaries predicted an unemployment rate of just 3.84% for the

area (Zamani et al., 2011), more recent data revealed an actual unemployment rate of 23.2% (Kandylis et al., 2018). This decline significantly altered the area's intended social identity. By entirely forgoing the marketing potential of the Olympic Village to enhance social value, the organisers created a neglected neighbourhood on the city's outskirts, characterised by low standards of liveability and significant operational and self-sustainability challenges, ultimately resulting in "legacies for none".

Vancouver's Olympic Village adopted a different approach, incorporating a social mix within Canada's "greenest" housing project. The development featured rainwater collection systems, green roofs, solar panels, and infrastructure for sustainable mobility (Afshar, 2016). However, this ambitious initiative faced criticism for its financial risks and poor cost management. Combining luxury condominiums with what became "likely the most expensive social housing units ever conceived or built" proved unsustainable (McCarthy, 2012, p. 71). The 2008 economic crisis further exacerbated the situation, leaving the private developer unable to complete the project and forcing the government to intervene (Scherer, 2011). Consequently, the quality of the final built outcome fell below expectations, and unit prices had to be reduced by one-third to one-half to attract buyers (McCarthy, 2012). To compensate financial losses, the proportion of affordable housing was drastically reduced from the planned 33% in 2005 to just 2.5% in 2011, supplemented by an additional 8% under other non-profit schemes (Pentifallo and VanWynsberghe, 2015). Additionally, the high costs of maintaining utilities and infrastructure in this technologically advanced neighbourhood were incompatible with the incomes of those most in need, undermining social inclusivity and necessitating government assistance (Westerhoff, 2016). In contrast to Athens, the organisers in this case attempted, albeit unrealistically, to maximise the Games' marketing potential while simultaneously committing to ambitious social sustainability goals. Ultimately, neither objective was fully or successfully achieved, and social housing was sacrificed to ensure economic viability.

The London 2012's Olympic Village case was similar to Vancouver's but on a larger scale. The Games were intended to accelerate the regeneration of Stratford by delivering a mix of social and affordable housing across new developments, where the Olympic Village was included (Watt, 2013b). However, the project's private developer, who had also worked on Sydney's Village, faced difficulties securing financing, presenting an alternative solution that the government deemed out of line with the long-term interests of the taxpayers. Consequently, the government eventually took over the project but found the returns fell far short of the investment (Bernstock, 2013). Post-Games, efforts to recoup public expenditure and pay off debts – also exacerbated by the 2008 financial crisis – resulted in a lower-than-promised share of affordable housing in Olympic Park developments (Porter, 2009; Bernstock, 2013). The prices of the new "affordable" units were still too high for low-income residents, who also struggled with the high maintenance costs of tall residential towers, landscaped gardens, and other public amenities (Bernstock, 2013, 2020; Watt and Bernstock, 2017). Although hosting the Games attracted significant investment in East London's regeneration, subsequent developments learned from the experience and responded to these challenges by delivering affordable housing off-site (Bernstock, 2020). Nonetheless, the area remains characterised by "islands of gentrification" that reflect uneven outcomes in urban regeneration (Wagg, 2015, p. 160).

The case of London provides additional insights that merit further exploration. In the United Kingdom, the central government has promoted "planning gains" as a form of indirect value capture, requiring developers to contribute to the delivery of affordable housing. This approach has been particularly effective nationwide (Crook et al., 2016). Value capture refers to legal

mechanisms aimed at redistributing to society a portion of the increased value of private land and property generated by changes in land-use regulations or public infrastructure investments. These instruments are often used to reclaim the value created by publicly funded urban improvements that enhance private property values, with the recovered funds reinvested for community benefit (Muñoz Gielen and Lenferink, 2018; Muñoz Gielen and Krabben, 2019).

London's Olympic Village, Park, and surrounding developments in Stratford illustrate the application of this model, albeit with notably lower success compared to other examples in the country (Bernstock, 2020). Stratford's challenges make it an outlier, likely due to a combination of factors, including the Olympics themselves. With limited public resources, the government relied on flagship projects, such as a shopping centre and a railway station, to attract private investment for regeneration (Florio and Edwards, 2001). The Olympics acted as a catalyst, amplifying the scale of these pre-existing plans by providing funding, incentives, and political support to overcome critical barriers. This reduced risks for private investors and stimulated further development (Smith, 2014c). However, this process also pushed Stratford "upmarket", intensifying the housing market and drawing higher-income groups to the area (Corcillo and Watt, 2022).

This had a significant impact on the delivery of affordable housing in East London. Before the Games, the annual delivery rate of affordable housing units in the area was rising, in contrast to London's general trends. After the Games, however, this rate declined substantially, aligning with levels observed in other parts of the city. At the same time, the total number of housing units delivered in the area increased sharply, standing out compared to other regions (Raco et al., 2022). Within East London, the borough of Newham – where Stratford is located – experienced some of the highest levels of gentrification in London between 2010 and 2016, with Stratford recording the borough's highest gentrification index (Almeida, 2021). Furthermore, between 2017 and 2020, Newham ranked as the second borough in London for new housing unit delivery, accounting for nearly half of all units built in East London during that period (Raco et al., 2022).

The examples discussed in this section are, of course, far more complex than described, each generating both positive and negative effects that warrant deeper analysis to reach more nuanced conclusions. However, it is important to emphasise that while the Vancouver and London cases sought to integrate private funding to balance social objectives with financial viability, the Olympic Games model often deterred the success when leveraging private investment. As a result, substantial public intervention was necessary to complete these projects. These cases highlight how the constraints of the Olympic Games model can undermine opportunities for private investment, thereby limiting host cities' capacity to innovate and deliver truly sustainable legacies. This exemplifies the inherent "wickedness" of reconciling the social and economic objectives of Olympic developments. Lopes dos Santos et al. (2025, p. 9) effectively describe this paradox, as also illustrated in **Fig. 14**:

> *On the one hand, building the Games by providing high-quality facilities via large urban regeneration projects has specific economic goals, valued-in-context. Such a strategy often results in side-effects of varying types, including negative social impacts. These can be mitigated by delivering affordable housing in the newly built housing facilities. However, the financing model of the Games complicates this endeavour, exacerbating the level of public risk involved. On the other hand, paying for the Games involves large public spending. At the same time, private investment is difficult to attract and subject to contract constraints that complexify the search for cost-effective solutions. Since the host needs to guarantee the delivery and viability of the projects – virtually at all costs – hosting the Games turns out to be*

extremely risky for the public sector. One way to mitigate this risk is by taking advantage of the real estate market to profit from the newly built housing facilities and recoup part of the capital costs, especially because the way the Games are built greatly contributes to the inflation of land and property values – yet further provoking additional negative social impacts. Thus, in leveraging the Games, hosts face a paradox between economic and social responsibilities, complexified by pressures of delivering "legacies for all" and constraints of a flawed financial model.

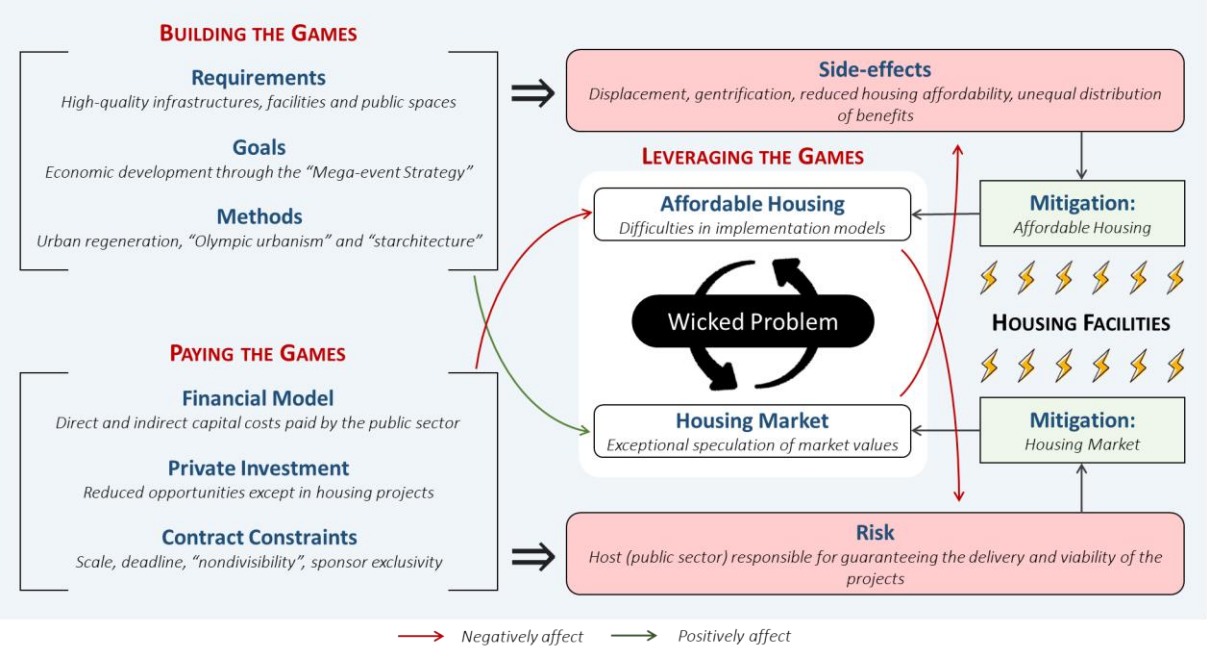

Fig. 14 The paradoxes between the Olympic host's economic and social responsibilities. (Source: adapted from Lopes dos Santos et al., 2025)

Looking ahead, future hosts appear to be attempting to address these challenges. To provide affordable and social housing at the Athletes' and Media Villages in Seine-Saint-Denis, Paris 2024 has adopted a strategy similar to those in Vancouver and London but with a key variation: relying on a consortium of developers. This approach may enhance the likelihood of successfully delivering the planned housing schemes under private investment. However, both villages are contributing to and intensifying the gentrification effects already evident in the department due to other development projects. In Milan, the Olympic Village for the 2026 Winter Games will be converted into student housing in an effort to address the challenges of student housing affordability caused by the city's highly speculative housing market. Nevertheless, it remains to be seen whether the housing costs will meet the needs of the most financially vulnerable students. For Los Angeles 2028, no Olympic village is being constructed; athletes will instead be accommodated in university dormitories, similar to the arrangement used during Los Angeles 1984. Despite this, the gentrification processes and homelessness crisis in the city have reportedly worsened, exacerbated by rising rental rates driven by tourism opportunities linked to hosting multiple sports events, including the Olympics. Finally, the Brisbane 2032 Olympic Village is also expected to deliver social and affordable housing schemes (Lopes dos Santos et al., 2025).

The inadequate mitigation of negative social effects of the Games has exacerbated issues of perceived inequity, inequality, and social polarisation, vividly illustrating the value-in-context of

Olympic legacies. In this sense, Olympic-related projects are increasingly seen as urban strategies that, while seeking for development, actively contribute to segregation and social exclusion, depriving displaced populations of access to the services and urban improvements potentially brought about by the Olympic Games. This highlights the complex dilemmas in (mega-event) urban planning, where no perfect solution exists that effectively addresses the rigidity of Olympic models while simultaneously producing "legacies for all". As explored in the next section, this and other "wicked" aspects of Games planning have become a major source of contention and a significant driver of public opposition and the Anti-Olympic Movement.

2.5. Opposing the Games: Public Resistance in Bid and Host Cities

Public and political opposition to hosting the Olympics has been present since the early days of the Modern Olympic Games. In fact, the IOC has long sought to suppress negative sentiment towards the Games by embedding restrictions within its official framework. Since the 1950s, the Olympic Charter has explicitly prohibited political demonstrations at Olympic venues (Boykoff, 2011, 2017), with a rule – currently Rule 50 on Advertising, Demonstrations, and Propaganda – stating that "no kind of demonstration or political, religious or racial propaganda is permitted in any Olympic sites, venues or other areas" (IOC, 2024b, p. 94).

This section highlights the key aspects that characterise opposition movements to the Olympic Games, beginning with a historical review of the evolution of opposition to Games-related issues in host cities. It then provides a more detailed analysis of recent anti-bid movements that led to the withdrawal of several candidate cities for the latest editions of the Games and ultimately contributed to the adoption of Olympic Agenda 2020.

Hosting the Games Under Protest: Key Historical Highlights

Research on opposition to the Olympic Games remains limited compared to other mega-event topics, but existing studies highlight how resistance has evolved significantly, particularly in recent decades (Lauermann, 2019). One of the earliest recorded protests occurred during the Paris 1924 Games, when workers silently demonstrated against ticket prices and the event's impact on the cost of living (Gagnepain and Gagnepain, 2024). More notable protests took place during the Los Angeles 1932 Olympics, interestingly coinciding with the first Games to drive significant urban development. During the Great Depression, the construction of the Olympic village sparked discontent due to the country's dire economic situation. Activists displayed placards in California's capital, Sacramento, with messages such as "Groceries Not Games! Olympics Are Outrageous!" This sentiment was echoed by the state's Governor, who criticised the Games as inappropriate given the economic hardships of the time (Boykoff, 2017). Although these protests reflected the dissatisfaction of the population, they had no significant impact on the organisation of the event.

In contrast, opposition to the 1956 Winter Olympics in Cortina d'Ampezzo produced tangible results. Concerns arose over the planned construction of an Olympic village, as local hoteliers feared the project would create competition by adding new accommodation facilities. Their strong objections ultimately led to the abandonment of the proposal (Essex and Chalkley, 2004). This marked one of the earliest examples of local resistance directly influencing Olympic planning decisions.

The most tragic and notorious instance of opposition to the Games occurred shortly before the 1968 Mexico City Olympics. Thousands of students protested against the government's

extravagant spending on urban improvement projects related to the event. The demonstrations culminated in the Tlatelolco Plaza massacre, where police ambushed the protesters, killing more than 200 people and arresting, beating, and torturing thousands more during this incident and throughout the Games. Despite the gravity of this tragedy, the IOC narrowly voted against cancelling the event, with the motion failing by just one vote (Boykoff, 2011; Lenskyj, 2020).

A few years later, opposition to the Olympics played a decisive role in shaping major decisions. Denver was awarded the 1976 Winter Olympics in 1970, but the decision was met with resistance from activists concerned about the environmental impact of the infrastructure needed for snow sports in the mountain regions. Local planners wrote to the IOC, criticising the organising committee's choice of venue locations for disregarding environmental commitments. This initiative was supported by other protesters, citizen groups, environmentalists, and fiscally conservative individuals who argued that the use of taxpayer money would be better allocated to more pressing needs. They also raised concerns about unplanned urban growth, environmental degradation, and the unequal distribution of the Games' costs and benefits (Boykoff, 2017).

In 1972, activists and like-minded politicians successfully called for a referendum, one of the first in Olympic hosting history, to determine whether public funds should be used to support the Games (Coates and Wicker, 2015). Voters rejected the proposal by a 60–40% margin. In response, elected officials, under increasing pressure, informed the IOC that the debate over the state's ability to host the Olympics was causing division and turmoil. They urged the IOC to relocate the Games following the referendum's outcome (Boykoff, 2017). Subsequently, the Games were moved to Innsbruck, Austria, making Denver the first and only city to withdraw from an Olympic contract after winning a bid (Lauermann, 2017).

Notably, the activist campaign and referendum in Denver were not anti-Olympic in nature. Instead, they focused on opposing the use of public funds for sports facilities and the environmental challenges associated with hosting the Games. Nevertheless, Boykoff (2017, p. 171) highlights that "the activist effort became a prototype for forcing public referendums in the future, a strategy that became commonplace in the decades ahead".

In the years leading up to the Los Angeles 1984 Summer Olympics, organisers encountered significant opposition to certain decisions and plans. One contentious issue was the OCOG's proposal to use the Sepulveda Basin – a large recreational and open space area in the San Fernando Valley – for the construction of a rowing course and velodrome. This plan faced years of sustained resistance from a coalition of homeowners and environmentalists. Protesters bolstered their campaign by conducting public opinion polls to demonstrate widespread opposition and urging the city mayor to honour promises that Olympic venues would not be placed in communities with substantial resistance. Amid this turmoil, the International Rowing Federation intervened and ultimately ruled out the use of the Sepulveda Basin due to public opposition. The OCOG accepted this decision, bringing the contentious discussions to an end. However, not all protests during this edition of the Games achieved similar outcomes. Efforts by local residents and religious groups to oppose development near the Olympic Stadium were ultimately unsuccessful, and the planned construction proceeded despite their objections (Burbank et al., 2000).

As Burbank et al. (2000) observe, opposition to the Olympics intensified and diversified during the 1990s, particularly in American cities, with the Atlanta 1996 Games illustrating this trend. Various projects associated with the event faced resistance, though the outcomes varied. For instance, suburban residents concerned about traffic and disruption successfully campaigned

to relocate a proposed tennis complex. In contrast, efforts by neighbourhood groups and taxpayers against the construction of the Olympic Stadium achieved only minor concessions, with the venue proceeding largely as planned. Tenant groups opposing the redevelopment of public housing were able to negotiate terms and eventually accepted the plan through a vote, while attempts to prevent the creation of the Centennial Olympic Park, including lawsuits, failed to alter its course. Additionally, protests by gay rights activists succeeded in relocating Olympic events from Cobb County, but homeless advocates opposing the renovation of a downtown park were unable to prevent its completion.

The Sydney 2000 Olympics offer notable examples of criticism and opposition, particularly regarding environmental and community impacts. Activists criticised the reliance on taxpayer money to cover environmental remediation costs, which earned the edition the label of the "Green Games", instead of applying the "polluter pays" principle. Additional backlash arose from the decision to stage beach volleyball at Bondi Beach, an ecologically sensitive area. Protesters condemned the disruption caused by constructing a temporary stadium, which was chosen to satisfy broadcasters' demands for a picturesque, TV-friendly location. Despite direct actions by local groups, including members of Bondi Olympic Watch who buried themselves up to the neck in sand to impede bulldozers, the stadium was ultimately completed as planned (Boykoff, 2017).

During the preparations for the Salt Lake City 2002 Winter Olympics, several instances of opposition to Olympic-related developments arose, driven by environmental, neighbourhood, and taxpayer concerns. Environmental activists opposed developments in mountain canyons and skiing sites, prompting a referendum and further negotiations that led to alternative site selections and limited construction in some cases. However, efforts to prevent the expansion of a ski resort were ultimately unsuccessful, as lawsuit actions were overridden by federal legislation. Similarly, objections from neighbourhood, religious, and advocacy groups over proposed skating oval locations led to the withdrawal of site proposals on two occasions following negotiations and public pressure. Taxpayer resistance also featured prominently, particularly regarding the use of public funds for Olympic projects. However, despite lawsuits, petition drives, public campaigns, and a referendum, most efforts to block tax diversion or city spending were unsuccessful. Lastly, advocacy groups managed to influence the composition of the organising committee, prompting structural changes within the organisation (Burbank et al., 2000).

The case of Athens marked a significant shift in the nature and structure of opposition to hosting the Games. During the city's unsuccessful bid for the 1996 Olympics, a group of citizens emerged to oppose the effort. When Athens decided to bid for the 2004 Games, this group reconvened, attracting distinguished academics and personalities to raise debates about the Games' role and impacts. They became the sole opposition group, participating in forums, organising discussions, and producing an anti-bid book sent to the IOC, highlighting the potential environmental impacts and costs. After Athens was selected as the host, the group transitioned into a more structured movement, the Anti-2004 Campaign, which monitored Olympic preparations, documented issues, organised public forums, press conferences, marches, concerts, and participated in international social forums and meetings with local authorities (Zervas, 2012).

Their campaign focused on three main issues: Olympic construction, economic concerns, and a lack of democratic accountability. They argued that construction plans violated Greek planning laws, particularly the Olympic Village, which was built on productive farmland despite zoning incompatibilities. Similarly, the rowing centre was constructed in a historic, wildlife

conservation area, damaging the landscape, and the Galatsi Arena was built on a forested site. The group also protested against the environmental impacts and poor working conditions on Olympic construction sites.

Another contentious issue was the heavy mobilisation of police and armed forces, which targeted homeless individuals and drug addicts to remove them from the city. This sparked opposition not only from the group but also from political parties, unions, and the mayor of Aspropyrgos, where these individuals were being relocated. The campaign also criticised the lack of democratic transparency from organisers, state institutions, and the media, accusing them of ignoring criticism of the Games. The group pointed fingers at politicians and businessmen, alleging corruption and mismanagement, including awarding Olympic contracts to officials' relatives, rigged bidding processes, and wasteful spending of public funds. Although the group gained some international attention and brief coverage in a major Greek newspaper, they accused domestic media of self-censorship and silencing critical voices. The campaign went on facing restrictions and oppression but left a mark through its actions and ideas. At the conclusion of the Games, the group issued a document summarising their activities and evaluating the event's impacts (ibid).

Meanwhile, opposition to the Vancouver 2010 bid began to grow early, with activists criticising the use of taxpayer money and the resulting opportunity costs, the threats to civil liberties posed by a heavily militarised police force, and the potential impact on unceded Aboriginal land. Similar to Athens 2004, groups such as the No Games 2010 Coalition highlighted the dangers of the Olympic industry and challenged the assumption of the Games as a win-win endeavour (Boykoff, 2011). Concerns coincided with previous Olympic opposition, including the misuse of public funds, gentrification, the criminalisation of dissent, and environmental degradation (Zervas, 2012). Although a referendum on hosting the Games was held, opposition efforts were overshadowed by well-funded bid supporters, with only one-third of voters rejecting the bid (Boykoff, 2017).

After Vancouver was selected as host, resistance evolved, this time with opposition arising not only from groups formed specifically to oppose the Games, such as No 2010 Olympics on Stolen Native Land, but also pre-existing organisations previously engaged in specific struggles. These groups developed radical critiques, with religious, environmental, and Aboriginal organisations also joining the resistance. One of the most notable conflicts concerned the construction of a highway connecting Vancouver to Whistler through Aboriginal land. With a history of indigenous resistance linked to the Olympics – seen in Montreal 1976, Calgary 1988, Sydney 2000, and Salt Lake City 2002 – “No Olympics on Stolen Native Land” quickly became a defining anti-Olympic slogan (Boykoff, 2011, 2017; O’Bonsawin, 2012).

More interestingly, the protests surrounding Vancouver 2010 fostered a dynamic coalition of diverse groups unified by shared environmental, social, and fiscal concerns. This alliance included direct action activists, non-governmental organisations, anarchists, civil libertarians, professors, poets, and indigenous groups, each contributing unique perspectives and resources. Organisations such as the Olympic Resistance Network, the No Games 2010 Coalition, and the Impact on Community Coalition provided platforms for critique, while militant groups like No One Is Illegal and the Anti-Poverty Committee contributed direct action experience. Religious, indigenous, student, and other groups, including Streams of Justice, the Power of Women Group, Van.Act!, and the Native Youth Movement, further enriched the movement’s diversity. Resistance took the form of marches, direct actions, and solidarity efforts, gaining media attention and drawing in youth from local universities that cancelled classes during the Games. Activists

deliberately framed their efforts as a "convergence of movements" emphasising fluid, spontaneous, and contingent alliances around the "Olympic moment" rather than a single unified social movement that would have rendered them an "anti-Olympic" label. This flexible and lateral organising structure fostered solidarity across heterogeneous groups, enabling them to support one another's calls to action and exemplifying the adaptability of modern resistance dynamics (Boykoff, 2011, 2017).

The case of London 2012 further illustrates the perpetuation of Vancouver's form of opposition, with the creation of multiple citizen groups opposing specific issues while uniting to build momentum through collective action. Nationally, widespread dissatisfaction, amplified by media coverage, centred on escalating public costs and the unequal distribution of resources and legacy benefits, with London prioritised over other United Kingdom regions. In London, discontent emerged on the Olympic Route Network's reserved lanes, seen as privileging elites while disrupting daily life. Locally, residents protested disrupted livelihoods, forced relocations, and unfulfilled promises of economic benefits. Environmental protests targeted developments like the temporary basketball facility at Leyton Marsh, the repurposing of Manor Garden Allotments, and the use of Greenwich Park, a UNESCO World Heritage Site, for equestrian events. Heightened security measures, including surface-to-air missiles on residential buildings, extensive policing in Newham, and public area closures, aggravated tensions, especially among marginalised groups. Labour-related protests gained attention, with transport workers striking against job cuts and low pay. Taxi drivers also protested against their exclusion from "Games Lanes", including one who dived off Tower Bridge into the Thames as a publicity stunt. "Glocal protests" also surfaced, extrapolating local contexts to address global issues like human rights and environmental concerns. Additionally, campaigners criticised sponsors for practices they deemed incompatible with Olympism's humanitarian ideals, seeking to delegitimise them before global audiences. Public resistance also included creative, spontaneous acts of transgression and situationist spectacles, which combined informal social movements with organised protests in high-profile settings (Giulianotti et al., 2015; Boykoff, 2017).

More stringent anti-Olympic movements coalesced through platforms such as the Counter Olympics Network and Games Monitor, which unified diverse groups opposing the event while serving as hubs for critical research, information, and protest coordination. These forums facilitated prominent demonstrations, drawing a broad coalition of activists opposing corporate power, environmental degradation, and austerity. Their events blended celebratory and informal protest forms, exemplified by the Olympic Protest Torch Relay, initiated by Vancouver 2010 activists. However, despite its scale and diversity, some activists felt the movement lacked meaningful engagement with local communities, failing to connect broader critiques of corporate power with pressing local issues such as policing and social inequities, which might have broadened its resonance and impact (Giulianotti et al., 2015).

In Rio 2016, opposition movements organised large-scale mobilisations linking the Olympics to broader political controversies and criticising the allocation of funds to the Games while basic health and education needs were neglected. Political groups led a 15,000-strong protest along Copacabana that disrupted the Olympic Torch Relay, while a citizen group opposing both the Games and the previous FIFA World Cup in 2014 – Comité Popular Anti Copa e Olimpíadas – hosted several rallies (Boykoff, 2017). Activists capitalised on the global media spotlight to protest the displacement of tens of thousands of residents to make way for the Olympics and to expose the stark gap between the promises made during the bid and the reality of their implementation. While supported by several NGOs, contestations in Rio were often met with

police brutality (Talbot and Carter, 2019). During the Games, the community celebrated its resilience and its fight against powerful forces, culminating in a protest near the Olympic Stadium where activists carried banners with slogans such as “Exclusion Games”, “#OlympicCalamity”, and “The State Is Terrorist” (Boykoff, 2017).

The Tokyo 2020 Olympics (held in 2021) witnessed significant opposition both before and after the Games. Resistance emerged early, with groups such as Hangorin-no-kai (No Olympics 2020) and OkotowaLink (short for No Thank You to 2020 Olympic Disasters Link) becoming focal points for anti-Olympic activism. These organisations, often involving activists from other social movements, utilised protests, workshops, and publications to once again raise concerns over the financial burden on taxpayers, gentrification, and the displacement of communities, particularly homeless individuals and residents of public housing cleared for Olympic infrastructure (Ganseforth, 2023). The new national stadium also faced criticism, leading organisers to modify its design (Hiller and Wanner, 2018; Kato, 2021). The COVID-19 pandemic amplified resistance, with critics arguing that prioritising the Games jeopardised public health and diverted resources from essential services. Petitions and public opinion polls reflected widespread opposition (Kato, 2021; Ganseforth, 2023).

Despite consistent and diverse protests, mainstream Japanese media largely ignored the opposition, while police repression deterred broader public engagement. Critics also called attention to issues such as environmental harm, corruption, and "greenwashing" through disputed claims of sustainability. Unique to Tokyo was the anti-Olympic movement's strong transnational dimension, which connected local activists with those from other host cities, fostering global solidarity. The first transnational anti-Olympic summit was hosted in 2019, when more than 30 activists from Los Angeles, Paris, London, Rio, and Pyeongchang joined Japanese protest groups in Tokyo. Although the Games proceeded as planned, the activism surrounding Tokyo 2020 left a lasting legacy of heightened scrutiny of mega-events and strengthened international anti-Olympic collaboration (Lenskyj, 2020; Ganseforth, 2023).

Paris 2024 serves as a significant case study of Olympic opposition, as it was the first edition to fully benefit from the reforms introduced by Olympic Agenda 2020, which aimed to mitigate growing resistance to the Games. However, despite these measures, opposition movements emerged in response to Olympic-driven urban developments, adopting diverse strategies. Radical groups such as Saccage 2024, which functioned as an umbrella group for all the others, called for the complete cancellation of the Games, while organisations like Comité de Vigilance JO 2024 advocated for more inclusive planning and community engagement. More localised resistance, such as the Collective for the Defence of the Aubervilliers Gardens, focused on specific projects, particularly protesting the destruction of historic community gardens to make way for an Olympic training facility. This conflict became one of the most visible flashpoints of opposition, with activists occupying the site, staging sit-ins, chaining themselves to construction equipment, and pursuing legal action to halt demolition (Wolfe, 2023b).

These groups collectively argue that the Olympic Agenda 2020 reforms do little to change the exclusionary nature of mega-event-led urban development, which continues to prioritise elite decision-makers over meaningful local participation, failing to serve the broader public interest. While reforms have reduced some direct costs, they have not fundamentally altered the top-down nature of decision-making. Activists highlighted contradictions between sustainability claims and actual impacts, citing concerns such as greenwashing, hidden costs, gentrification, and displacement. They argue that the Olympics merely serve as a pretext for implementing pre-planned projects without democratic inclusion, benefiting primarily wealthier social classes.

More broadly, opposition groups challenged the governance model behind the Games, contending that they intensify struggles over urban governance and the right to the city. Until Olympic planning includes genuinely representative and democratic decision-making, they assert, resistance will persist (ibid).

Additionally, Paris 2024 became a focal point for broader social and political protests, with various movements leveraging the Games' visibility to amplify their struggles and demands. Opposition to pension reforms, for instance, directly targeted Olympic infrastructure, with activists cutting power to Olympic sites and later storming the Paris 2024 headquarters. Olympic venues also became symbolic battlegrounds for wider opposition, as demonstrators blockaded the Aquatics Centre construction site and damaged the Aubervilliers swimming pool during riots following a fatal police shooting. These actions illustrate how the Olympics can be instrumentalised to highlight broader social struggles, making the Games a high-profile target for dissent.

Finally, opposition to the 2028 Olympics in Los Angeles has been led by NOlympics LA, a grassroots movement that emerged in 2017. Framing the Games as a catalyst for gentrification, displacement, and the prioritisation of private development over public welfare, the group linked Olympic-driven urban changes to broader issues such as social inequality, housing unaffordability, the criminalisation of homelessness, and the increased surveillance and militarisation of urban space. Following the official awarding of the Games, NOlympics LA launched a decade-long campaign using media outreach, direct action, and coalition-building to contest its impact. Beyond local resistance, the movement has engaged in transnational solidarity, aligning with anti-Olympic groups in past and future host cities. By embedding its activism within a global urban justice framework, NOlympics LA presents opposition to the Games as part of a wider struggle for housing rights, public accountability, and alternative urban governance. Rather than merely rejecting the Olympics, it seeks to challenge the political and economic structures that enable mega-events to reshape cities in ways that primarily benefit elites (Andranovich and Burbank, 2021).

What this historical records shows is that, from the early beginnings of localised and issue-specific opposition to the Games, public opposition has significantly evolved over time. In cases like Los Angeles 1984, Atlanta 1996, and Salt Lake City 2002, Burbank et al. (2000) highlight that opposition was clearly piecemeal in nature, with citizen groups focusing on specific developments or locations rather than forming broad, unified anti-Olympic coalitions against Olympic-related development. Most opposition efforts aimed to divert development or mitigate negative impacts in particular areas, with tactics such as publicity, negotiation, and public protest being the most common. Broader strategies, such as lawsuits or petition drives, were less frequently employed and referendums were rare. Moreover, opposition patterns were shaped by the political and social contexts of each city. Furthermore, Olympic bid and organising committees strategically managed opposition by modifying plans, relocating venues, or making minor concessions to mitigate controversy.

Lauermann (2019) has observed how this has been changing to more organised and impactful campaigns against mega-events, identifying two critical trends: growing scepticism among urban stakeholders about the promises of mega-events and the emergence of targeted protest movements. Public scepticism, once largely limited to activist groups, now extends to city leaders and the general public, fuelled by the repeated failure of mega-event legacies to deliver widespread benefits. Concerns over cost overruns, social displacement, environmental harm,

and elite-driven agendas have eroded trust in the narratives promoted by organisers, such as promises of urban regeneration and economic growth.

One of the drivers of this growing scepticism is the increasing public awareness of the negative impacts of hosting the Olympics. Hiller and Wanner (2018) highlight the role of public opinion polls, which have become a required component of the bid process under the IOC's guidelines. While these polls are intended to gauge public support, they often provide overly simplistic results, failing to account for nuanced concerns such as financial burdens and social displacement. Therefore, positive public opinion polls during the bid stage does not always translate into lasting support, as opposition often grows during the preparation phase, when the tangible impacts become more evident.

At the same time, protest movements have become increasingly proactive, often mobilising even before cities secure hosting rights. Unlike earlier cases of resistance, which were largely localised and specific, contemporary campaigns frequently challenge the legitimacy of hosting mega-events altogether. These movements usually address the same range of urban issues, while leveraging tools like online activism to expand their reach. Furthermore, these campaigns foster coalitions that unite diverse groups under a shared opposition to mega-events, making resistance more coordinated and impactful (Lauermann, 2019). Lenskyj (2020) attributes this to several factors, including the growth of social media, independent Olympic news sources, and critical Olympic research.

The Anti-Olympic Movements in Bidding Cities: Public Opinion, Referendums and Withdraws

Since the 1980s, international networks were established to enable opposition groups to communicate, share resources, and coordinate strategies. Alongside investigative journalists who scrutinised the ethics of bid processes and other Olympic social and political controversies, these activists monitored the Games' negative impacts and started producing publications to document their findings. As media interest in Olympic critics grew, activists were increasingly invited to participate in panel discussions, elevating public awareness about the real costs of the Games and directly challenging Olympic rhetoric and ideals (Boykoff, 2017; Lenskyj, 2020).

These concerns become more pronounced as modern society grew increasingly globalised, diverse, and digital, demanding greater accountability, equity, and attention to sustainability. With the rise of social media, platforms like Facebook and Tweeter provided instant communication among protesting groups and journalists, expanding the reach of opposition to global audiences, engaging local communities in hosting or bidding cities and mobilising local activism. Consequently, especially during the 2010s, urban protest campaigns directly contesting mega-event bidding, planning, and hosting gained momentum (Lauermann, 2019).

These groups leveraged Olympic-related media exposure not only to oppose the event but also to raise awareness about its opportunity costs, drawing attention to local issues neglected in favour of Olympic priorities. Given that almost every aspect of the Olympics is covered by global media, provides a prime opportunity to highjack the Olympics for other political purposes (Boykoff, 2017; Andranovich and Burbank, 2021; Hiller, 2020; Bourbillères et al., 2023). Moreover, significant numbers of non-governmental organisations and environmental groups – Greenpeace, Friends of the Earth, Rainforest Action Group, Human Rights Watch, Amnesty International, Freedom House, Transparency International, and Reporters Without Borders – have investigated political controversies, human rights abuses, and environmental destruction,

serving as an invaluable contribution for global anti-Olympic movements by calling for greater accountability (Boykoff and Mascarenhas, 2016; Hiller and Wanner, 2018; Lenskyj, 2020; Chappelet, 2023).

Anti-bid activism has played a crucial role in undermining institutional confidence in the concept of "legacy", which is often used to justify linking temporary mega-events to long-term urban development claims. This growing scepticism has contributed to the rejection of Olympic bids in cities such as Boston, Toronto, Calgary, Denver, Copenhagen, Hamburg, Budapest, Turin, Munich, Krakow, Bern, Sion, St. Moritz/Davos, Graz, and Innsbruck – many of which were halted through referendums (Lauermann, 2017; Lenskyj, 2020). Lauermann (2017) identifies two primary strategies employed by anti-bid activists. The first is advocating for participatory governance in the bidding process, with decisions to hold referendums serving as a major victory for social movements. The second involves demanding greater accountability and transparency, pressuring bidders to provide realistic cost projections and independent economic impact assessments.

Several high-profile cases illustrate these strategies in action. In Quebec, public pressure led to a referendum being scheduled for the city's 2002 Winter Games bid, though the bid failed before the vote could take place. In Bern, a referendum decisively rejected a 2010 Olympic bid. In Berlin, the Anti-Olympia-Komitee mobilised opposition to the city's 2000 bid, damaging its reputation and prompting corruption investigations by opposition parties at the local and national levels. Similarly, Bread Not Circuses, a Toronto-based movement, was unable to prevent the city's bids for the 1996 and 2008 Games but generated enough negative publicity to weaken support for the proposals. Parisian activists had a comparable effect on bids for the 2008 and 2012 Olympics, casting doubt on the claims made by organisers (Lauermann, 2017). In Tokyo, the No Olympic Tokyo 2016 Network was able to join politicians, architects, journalists and community groups and had the support of several political parties in the Tokyo Metropolitan Assembly (Zervas, 2012).

One of the most notable cases of bid resistance concerns the Chicago 2016 candidature, where two main sources of opposition emerged: No Games Chicago and neighbourhood activists. No Games Chicago was the most prominent, a grassroots coalition of activists and community organisers who challenged the affordability of hosting the Games and openly accused the mayor and bid committee of corruption and authoritarianism. The group demanded that Olympic funds be redirected to healthcare, schools, infrastructure, and the city's budget deficit. Gaining momentum in 2009, the group strategically aligned its protests with key moments in the bid process, such as the IOC's candidate city visit, the Lausanne bid presentation, and the final host city selection vote. The movement effectively leveraged media coverage and digital platforms like Facebook, Twitter, and MySpace to mobilise public support, even attracting secret members from within the Chicago 2016 team who provided inside information (Zervas, 2012; Andranovich and Burbank, 2021) .

Chicago activists travelled to Lausanne, where they distributed a Book of Evidence to IOC members outlining the financial and social risks of hosting the Games. Their campaign framed the bid as an irresponsible project, reinforcing public scepticism. A Chicago Tribune poll in August 2009 revealed that 84% of respondents opposed using public money for the Games, and 75% rejected the mayor's promise of an unlimited financial guarantee. As opposition peaked in the weeks leading up to the IOC's final decision, No Games Chicago organised high-profile protests, including a rally at the City Hall and a parody campaign. Activists also travelled to Copenhagen, met with Tokyo activists, and distributed materials highlighting public opposition

strategies. Despite its favouritism and strong backing from global celebrities, the bid was overshadowed by these efforts and, in a surprising outcome, Chicago was eliminated in the first round of IOC voting. The group eventually disbanded, but its impact endured through knowledge-sharing with activists opposing future bids in cities such as Boston (Andranovich and Burbank, 2021).

While the bid process for the 2020 Summer Olympics also saw the withdrawal of Rome as a strong potential candidate, the most notable case of cascading withdrawals, which ultimately weighed heavily on the development of Olympic Agenda 2020, concerns the competition to host the 2022 Winter Games. Munich, St. Moritz/Davos, and Krakow all held referendums that failed to support bids that had already been mounted. Lviv and Stockholm also withdrew their bids. In Oslo, a referendum narrowly approved the bid but, a year later, the city withdrew, even after being shortlisted by the IOC and ranking highly in evaluations. This left the IOC with only two candidates, Almaty and Beijing, just nine months before the final host selection (Hiller and Wanner, 2018).

Munich's bid was abandoned even before being formalised. The initiative faced substantial opposition, culminating in a referendum in November 2013, where all four voting regions rejected the proposal despite strong backing from major political figures. Public scepticism stemmed from concerns over financial risks, environmental damage, and fears of displacing regular tourism. Notably, resistance was strongest in communities with high levels of support for the Green and Leftist parties, which actively opposed the bid. While areas directly benefiting from Olympic events showed slightly higher support, concerns over economic trade-offs and local environmental preservation outweighed potential benefits. Additionally, the tourism sector expressed fears of crowding out regular visitors during the Games (Coates and Wicker, 2015).

In Switzerland, a referendum also rejected the St. Moritz/Davos bid before the city could formalise its application. Differently, Stockholm withdraw after applying. In January 2014, the city government decided not to proceed, with the ruling Moderate Party citing financial risks and the need to prioritise housing development over Olympic investments. Stockholm did not hold a formal referendum, but opinion polls suggested a weak but positive public sentiment. However, the Swedish national government showed little interest in providing financial backing, further weakening political momentum. The lack of coordination between the Swedish Olympic Committee and national policymakers also contributed to the bid's downfall, as there was no strong coalition advocating for the Games (Paulsson and Alm, 2020).

Following Stockholm, Krakow became the next city to withdraw. Its bid initially had strong institutional backing, with financial guarantees provided by local and national authorities. Proponents argued that hosting the Games would bring much-needed infrastructure improvements, particularly in Zakopane, a major Polish ski resort requiring investment to meet Olympic standards. However, public opposition, led by the grassroots movement Krakow Against Olympics, gained traction early, effectively using online platforms to campaign against the bid. Concerns centred on financial risks, potential mismanagement, and doubt over long-term benefits. In contrast, the Krakow City Council's pro-Olympic campaign was launched late and failed to counter the growing resistance. A referendum held alongside the 2014 European Parliament elections saw a turnout of 35.96%, with an overwhelming 69.72% of voters rejecting the bid. Around the same time, due to Ukraine's economic and political instability, the IOC announced in June 2014 that another candidate, Lviv, should instead focus on applying for the 2026 Games, rejecting its bid initiative (Kozłowska, 2014).

The Oslo 2022 Olympic bid was the next to collapse, falling victim to political fragmentation, financial concerns, and growing scepticism toward the IOC. Although a 2013 referendum showed majority support for the bid, opposition at the national level proved decisive. Politicians from northern Norway, across both the Conservative and Labour parties, opposed the proposal, arguing that state resources should not be concentrated in the capital. Furthermore, controversy over the IOC's demands, including tax exemptions and VIP privileges, further eroded political will. By October 2014, the Conservative Party formally withdrew its support, leading the government to deny the required financial guarantees, effectively ending Oslo's candidacy (Paulsson and Alm, 2020).

The bid process for the 2024 Summer Olympics was highly contentious as well, with four candidate cities – Rome, Hamburg, Budapest, and Boston – ultimately withdrawing. In Rome, the bid's collapse was closely tied to political instability, as a mayoral candidate capitalised on public dissatisfaction with corruption, debt, and mismanagement to campaign against the Games, arguing they would impose an unsustainable financial burden on the city. Further opposition was largely driven through social media, as mainstream Italian media overwhelmingly supported the bid. Political party leaders used online platforms to highlight past economic failures tied to mega-events and advocate for prioritising local urban concerns, generating significant public engagement. This resistance was framed not as anti-sport but as opposition to the unchecked influence of private interests in urban planning, particularly in construction and real estate. Shortly after taking office in 2016, the newly elected mayor formally withdrew Rome's candidacy, reinforcing the perception that her victory was, in itself, a public mandate against hosting the Olympics. Rome's case illustrates how Olympic bids can become highly politicised and serve as rallying points for electoral campaigns, with opposition movements benefiting from existing political structures rather than building influence from the ground up. Ultimately, the bid collapsed due to a fragile pro-Olympic coalition and a politically integrated opposition that leveraged public dissatisfaction to reshape the debate (Bourbillères et al., 2023).

Hamburg's bid, initially promoted as a transformative urban project, faced growing public scepticism over financial risks, particularly given past cost overruns from large infrastructure projects. Critics argued that Olympic-driven regeneration would primarily benefit private developers rather than local communities. Concerns intensified amid Germany's refugee crisis, with opponents questioning whether resources should prioritise pressing social needs over the Games (Lauermann and Vogelpohl, 2017, 2019). Despite efforts to increase transparency, opposition remained strong. While the Green Party initially raised environmental and financial concerns, its leadership later backed the bid in favour of "ecological Games", creating internal divisions. Other parties remained opposed, aligning with NOlympia Hamburg, a citizen-led movement that framed the Games as a burden on taxpayers, highlighting issues of urban development, private interests, and doping in elite sports. Lacking financial resources to counter the strong media support for the bid, opponents relied on petitions, grassroots activism, and digital platforms to challenge pro-bid narratives. Their strength came from uniting multiple smaller movements, including residents, students, activists, and trade unions, forming a decentralised coalition (Bourbillères et al., 2023). Opposition was particularly strong in lower-income areas, where fears of gentrification and displacement outweighed potential benefits (Maennig, 2017). In the November 2015 referendum, 51.6% of voters rejected the bid, demonstrating that promises of economic and urban renewal were insufficient to override concerns about costs, displacement, and governance failures (Lauermann and Vogelpohl, 2019).

Differently, Budapest's bid, framed as a long-overdue opportunity for the city to finally host the Games after multiple failed attempts, was initially championed by Hungary's political elite. However, opposition emerged from outside mainstream politics through the grassroots movement Momentum Mozgalom, which mobilised public dissent and gathered over 266,000 signatures for a referendum. While official bid polls reported rising public support, independent surveys suggested growing opposition, with some indicating that 62% of Hungarians opposed the Games. The movement, driven by social media and student activism, framed the bid as a misallocation of resources in a country facing systemic issues. Fearing a referendum defeat similar to Hamburg's, the government pre-emptively withdrew Budapest's candidacy in early 2017, avoiding a public vote. Unlike Rome, where opposition was politically integrated, Budapest highlighted how bottom-up mobilisation could challenge elite-driven Olympic projects even in political contexts with minimal institutional opposition. Momentum's campaign also marked a turning point in Hungarian politics, as it transitioned from an activist group into a formal political party, leveraging the anti-Olympic campaign to build broader political credibility (Bourbillères et al., 2023).

Unlike the other cities, Paris faced minimal opposition to its bid, largely due to a strong pro-Games coalition among political leaders, the media, and sports institutions. The government strategically avoided a referendum, while officials actively promoted the bid's economic and legacy benefits, ensuring that dissenting voices remained marginal. Although a small opposition group, "NON aux JO 2024 à Paris", was founded in early 2017, it struggled to gain traction. Attempts to mobilise resistance, including a petition with 32,000 signatures and calls for a referendum, were largely ineffective. The late start, lack of coordination with other anti-bid movements, and the overshadowing of Olympic debates by the French presidential election weakened the opposition's impact. Additionally, with other cities withdrawing, Paris became the frontrunner, creating a sense of inevitability around the bid. Unlike movements in Boston or Budapest, which built broad-based coalitions, the Parisian opposition remained confined to a small group of academics, activists, and elected officials with limited media and political influence. While they engaged in transnational exchanges with other anti-Olympic activists, these interactions did not translate into an organised, large-scale resistance. The bid committee's well-orchestrated public relations strategy, featuring prominent athletes and high-profile demonstrations of support, reinforced the narrative that the Games would be beneficial for France, leaving little space for opposition to gain momentum (ibid).

After the bid withdrawals for the 2022 and 2024 Winter and Summer Olympics, the 2026 Winter Games also saw the withdrawal of bids from Calgary, Innsbruck, and Sion (Bourbillères et al., 2023). Collectively, all these cases highlight key factors that scholars have identified as critical in Olympic bid failures. First, referenda on Olympic bids have become increasingly common in recent decades, particularly in Western democracies. Their use varies by national regulations: some countries hold them only when a project's legitimacy is contested, while others are legally required to do so if public petitions reach a certain threshold. Notably, there is often a stark contrast between public opinion polls and actual referendum results. This discrepancy is partly due to social desirability bias, where respondents feel pressured to express support for high-profile projects but vote differently in private. Additionally, political and urban development anxieties – particularly aligning with NIMBY (Not In My Backyard) tendencies – play a role, as opposition tends to be strongest in communities expected to bear the immediate costs of hosting the event. Therefore, the scale at which referenda are held also influences outcomes; while a national vote might favour hosting, local referenda often intensify opposition by concentrating on immediate concerns. Moreover, referenda frequently serve as broader protest

mechanisms, allowing voters to express dissatisfaction with local governments beyond the specific Olympic bid. Unlike early Olympic referenda, recent votes have generally been unfavourable for bid proponents, reflecting broader public scepticism on hosting mega-events (Maennig, 2017; Bourbillères et al., 2023).

Second, media and digital platforms have played a crucial role in the anti-Olympic movement. Traditional media often align with pro-bid narratives, as seen in Hamburg, where newspapers supported the bid despite strong public scepticism. This is partly due to close ties between journalists and national Olympic organisations, economic incentives linked to sports coverage, and the prestige of hosting mega-events. However, opposition movements have increasingly turned to social media to counter these narratives, particularly where traditional media were unresponsive to dissent. In Rome, Hamburg, and Budapest, digital platforms were instrumental in amplifying criticism, mobilising opposition, and providing spaces for organising and disseminating alternative narratives. While traditional media shape public discourse by legitimising or suppressing opposition, social media offer grassroots movements a powerful tool to challenge dominant narratives and influence referendum outcomes (Bourbillères et al., 2023).

Third, as Paulsson and Alm (2020) highlight in the cases of Stockholm and Oslo, political and institutional fragilities have played a decisive role in bid withdrawals. Unlike other failed bids driven primarily by grassroots opposition or referenda, these cases were shaped by governance weaknesses and political dynamics. The slow nature of democratic decision-making clashed with the fast-paced Olympic bid process, making it difficult to secure long-term financial and political commitments. Alongside Rome's withdrawal and in contrast to Paris' successful bid, these examples demonstrate that even without a direct public rejection through a referendum, internal political fragmentation and a lack of institutional cohesion can derail Olympic aspirations. They also illustrate that hosting the Games is not inherently desirable for all cities; instead, bids often become entangled in broader political debates, reflecting divergent policy priorities, ideological divides, and leadership disputes (Hiller and Wanner, 2011; Bourbillères et al., 2023).

Fourth, traditional urban development strategies, relying on alliances between business leaders, politicians, and media to push through large-scale projects, have become more vulnerable due to shifting economic conditions and increasing political fragmentation (Oliver and Lauermann, 2017). In several cities, internal fractures emerged within these coalitions, as different business sectors and political actors diverged on how hosting the Olympics aligned with their interests. Lauermann and Vogelpohl (2017) call these "fragile growth coalitions".

Fifth, this failure to secure broad elite consensus left bids more susceptible to public opposition, particularly as growth agendas became harder to legitimise amid rising demands for participatory decision-making, increased public scrutiny, and heightened awareness of the economic risks associated with mega-events. Olympic bids, once seen as prestigious urban development tools, now provide a platform for protest, enabling activists to frame alternative urban futures prioritising social equity, affordability, and sustainability over speculative economic benefits. With opposition groups effectively contesting legacy narratives, traditional mechanisms for securing public consent for large-scale projects have been disrupted. This has demonstrated that top-down approaches to Olympic planning are no longer viable, as cities can no longer rely solely on elite endorsements – grassroots support has become equally critical (Lauermann, 2017, 2019; Lauermann and Vogelpohl, 2017; Bourbillères et al., 2023).

Finally, recent urban protest campaigns against Olympic bids have taken the form of "fast activism", characterised by their strategic timing and rapid mobilisation. Given the compressed timelines of mega-event planning, fast activism operates within equally tight policymaking cycles, using strategic interventions – such as referenda or bid evaluations – to challenge elite-driven projects before commitments become irreversible. These movements frame opposition around concerns such as gentrification, environmental impact, and financial risk, while also drawing on the language and debates of the international mega-event industry. Furthermore, while these coalitions are often rooted in leftist movements, they frequently unite a broad ideological spectrum, including business leaders, sceptical politicians, fiscal conservatives, and academic experts, all brought together by concerns over accountability and urban development priorities (Lauermann, 2019; Lauermann and Vogelpohl, 2019).

Strongly supported by these other scholars' observations, Kassens-Noor and Lauermann (2018) resume that Olympic bid failures stem from organisational, technical, fiscal, and political factors that challenge local elites while fostering democratic participation. They distinguish between endogenous failures – scandals, overbidding, mismanagement, failed mega-projects, inadequate legacy planning, white elephants, and transparency issues – and exogenous pressures, including anti-bid protests, strained city-Olympic relations, financial crises, continental rotation policies, negative media coverage, unfavourable referenda, public scepticism, and political leadership changes. Beyond these aspects, bidding processes increasingly serve as a proxy for broader political grievances, with opposition movements extending beyond the Games themselves. Moreover, legitimacy narratives have shifted; opposition groups now frame mega-events as threats to urban equity, affordability, and sustainability, making it harder for bid committees to justify their projects without widespread public backing (Bourbillères et al., 2023).

Interestingly, the failure of Boston's 2024 Olympic bid exemplifies many of these aspects in action. Internal missteps, lack of political consensus, and broader governance issues all contributed to its downfall, with weaknesses largely exposed by well-organised, locally driven resistance (Andranovich and Burbank, 2021).

Initially, the bid was developed behind closed doors by city elites without meaningful public consultation, reinforcing the perception that the Games would primarily benefit developers and business leaders rather than ordinary residents (Lauermann, 2016b; Kassens-Noor, 2019a). This lack of transparency fuelled public scepticism and led to the emergence of two distinct yet complementary opposition groups: No Boston Olympics and No Boston 2024. No Boston Olympics, composed of policy-oriented professionals, focused on financial transparency and governance concerns, while No Boston 2024, a grassroots movement from working-class neighbourhoods, highlighted issues of displacement, inequality, and the exclusion of community voices from the decision-making process. Despite differences in leadership and approach, both groups strategically coordinated their efforts, leveraging media exposure, social media engagement, and public records requests to challenge the bid's legitimacy (Boykoff, 2017; Lauermann and Vogelpohl, 2019; Andranovich and Burbank, 2021).

Their activism was particularly effective because it engaged early in the bidding process and aligned with key moments in the Olympic selection process, allowing them to influence public discourse, pressure decision-makers, and prevent the bid from gaining momentum. Through town halls, media campaigns, and investigative efforts, they framed the Olympics as an unjustifiable financial burden on taxpayers, exposing contradictions in Boston 2024's claims of full private financing. By uncovering redacted budget details suggesting a reliance on public

funds, they reinforced concerns about potential cost overruns and economic risks. This caught bid leaders off guard, leaving them ill-prepared to counteract growing dissent. In response to increasing public scrutiny, the bid committee attempted to regain support by promising greater transparency and community engagement, but these efforts were widely perceived as reactive and insufficient. The late disclosure of financial details, combined with a failure to clearly communicate the long-term benefits of Olympic-driven infrastructure projects, further fuelled doubts (Lauermann, 2016b; Lauermann and Vogelpohl, 2017, 2019; Kassens-Noor, 2019a; Andranovich and Burbank, 2021).

The growing opposition was reflected in declining public support, with approval for the bid dropping from 51% in January 2015 to just 36% by March. The movement gained further legitimacy when key political actors began to distance themselves from the bid. The Cambridge City Council and Brookline's Town Meeting formally opposed the proposal, while Massachusetts Governor commissioned an independent financial analysis, signalling scepticism and delaying any firm commitment. Boston's mayor, initially a supporter, later refused to sign a financial guarantee for cost overruns, further eroding confidence in the bid. With public support plummeting and no strong political consensus, the United States Olympic Committee withdrew its endorsement of Boston's candidacy in July 2015, shifting its support to Los Angeles 2024 instead (Lauermann and Vogelpohl, 2019; Andranovich and Burbank, 2021).

Kassens-Noor (2019a) argues that Boston 2024 failed due to its inability to learn from past Olympic bids and adapt to shifting political and social realities. Rather than developing innovative strategies to address local concerns, the bid committee relied on outdated Olympic playbooks that had once been successful but were no longer effective under heightened public scrutiny. It leaned heavily on IOC knowledge networks, which supported past winning bids but failed to account for the growing influence of organised opposition. Instead of securing broad-based community backing, Boston 2024 focused on gaining support from business leaders and political elites, reinforcing the "David vs. Goliath" narrative that opposition groups used to mobilise resistance. Furthermore, Kassens-Noor (2019b) highlights how the organising committee's attempts to adjust to public concerns inadvertently backfired. For example, the bid committee initially framed major transport infrastructure improvements as a key Olympic legacy. However, opponents questioned whether these upgrades were genuinely tied to the Games or could be pursued independently without the financial risks of hosting. In an effort to address these concerns, Boston 2024 scaled back its transport plans, but this only weakened public enthusiasm and deepened disbelief about the credibility of its promises.

As Hiller (2020, p. 24) highlights, "perhaps never before has the Olympics been under attack on so many fronts at once". Opposition groups effectively challenged the Olympic narrative, maintained message clarity, and mobilised local concerns to undermine bids. Their influence extended beyond individual cities, fostering transnational resistance through shared strategies and networks (Andranovich and Burbank, 2021). The 2024 bid cycle further solidified these connections, with European groups adopting "NOlympic" tactics inspired by Boston's campaign. This growing movement culminated in the 2019 "NOlympics Anywhere" declaration, uniting activists worldwide against the Games (Bourbillères et al., 2023). With only Paris and Los Angeles remaining as candidates, the IOC took an unprecedented step by awarding both the 2024 and 2028 editions simultaneously, buying time for the implementation of Olympic Agenda 2020 in hopes of restoring cities' interest in hosting.

2.6. The Academic Lens on the Olympic Agenda 2020 Framework

The Olympic Agenda 2020 promised radical changes to enhance sustainability within the Olympic Movement. Experts widely recognise its significance as a policy framework, but express scepticism about its practical outcomes (Schnitzer and Haizinger, 2019; Bazzanella et al., 2022; Lopes dos Santos and Delaplace, 2024). Indeed, using a simulation model based on surveys, Elisabeth et al. (2024) demonstrate that, if the Agenda's recommendations were implemented effectively and perceived as credible by the public, they could hypothetically shift public opinion, such as turning the rejected 2026 Innsbruck Olympic referendum into a positive result. The authors highlight reduced environmental damage, increased trust in the IOC, and decreased infrastructural costs and investment delays as key variables influencing this change. Despite this optimism, academic assessments of the Agenda's effectiveness remain mixed.

A focus area of academic studies has been the Agenda's impact on candidature processes for the 2024/2028, 2026, and 2032 Games. The Agenda marked a shift from imposing rigid conditions on host cities to allowing greater flexibility and accommodating each city's unique characteristics and needs (Gold and Gold, 2021). MacAloon (2016) argues that while the IOC's core business model was maintained, other changes were introduced to better ensure shared responsibility and risk between the IOC, bidding and organising committees, host cities, and national governments. Notably, the reformulated candidature process has reportedly reduced the cost and complexity of bidding (Schnitzer and Haizinger, 2019).

According to Tham (2022), benefits of the new preferred host candidature process include longer planning timelines, reduced competition-related resource demands, strengthened collaboration between the IOC and organising committees, and the facilitation of more inclusive and tailored legacy planning. Yet, the election of Brisbane as the host for the 2032 Olympics raised concerns about the transparency of the process as several interested cities were not afforded the opportunity to present their bids. This sparked debates about fairness and potential conflicts of interest, particularly given the influential role of Australian IOC Vice-President John Coates in shaping the new process.

Nevertheless, there is general agreement that the Agenda has encouraged bid concepts tailored to hosting territories, prioritising sustainability and legacy. Candidate cities have increasingly optimised venue masterplans by decentralising competitions, reducing the number of venues, maximising the use of existing or temporary facilities, repurposing abandoned structures, and leveraging infrastructure projects already underway. Lopes dos Santos et al. (2021b) further observed that Paris 2024, Los Angeles 2028 and Milan-Cortina 2026 effectively utilised venue sharing for these purposes, even with additional events included in the Olympic Programmes, demonstrating significant progress compared to previous editions (as illustrated in **Fig. 15**).

Favouring post-event use of infrastructures, these measures contribute to mitigate environmental impacts, lower costs, and minimise dependence on public funding (Schnitzer and Haizinger, 2019; Bazzanella et al., 2022; Tham, 2022; Lopes dos Santos and Delaplace, 2023; Nicoliello, 2024; Raco and Di Vita, 2024). In particular, the 2026 Winter Olympic bid process exemplifies the flexibility enabled by the Agenda, with proposals incorporating smaller venue capacities, hosting ceremonies across multiple locations, and expanding the geographical scope to avoid constructing oversized facilities (Schnitzer and Haizinger, 2019). As **Fig. 16** shows, this spatial expansion was also noted for other candidatures and venue masterplans of other editions. Lopes dos Santos and Condessa (2021) further highlight, through a hypothetical case

study in Portugal, how the possibility of the country bidding for the Olympics would have significant potential to increase the availability of urban resources and reduce the need for new constructions, compared to Lisbon.

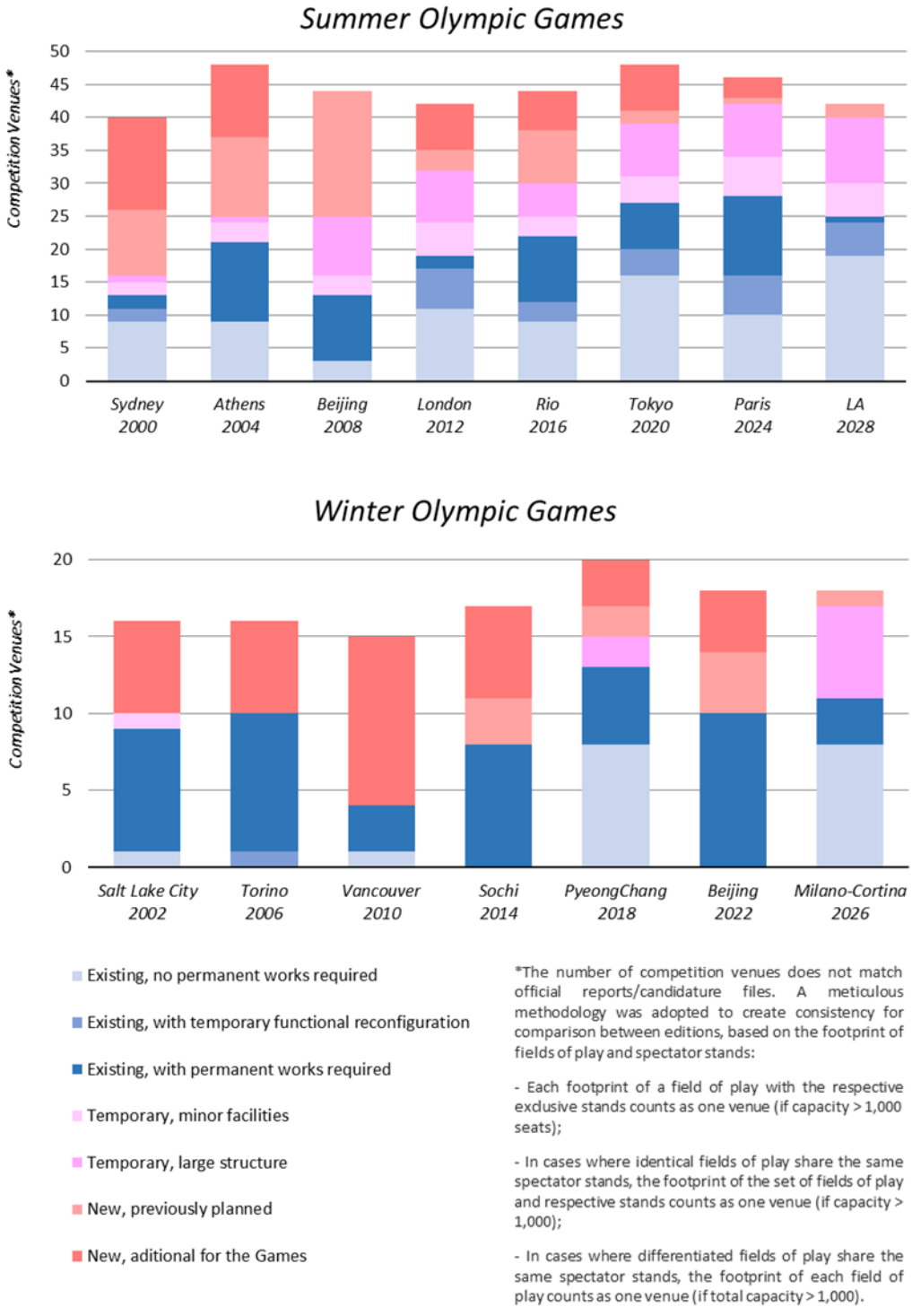

Fig. 15 Number of venues for each edition of the twenty-first-century Olympic Games.[3] (Source: Lopes dos Santos et al., 2021b).

[3] Data for Paris 2024, Milan-Cortina 2026, and Los Angeles 2028 dates back to early 2021. The venue masterplans for these editions have since undergone modifications.

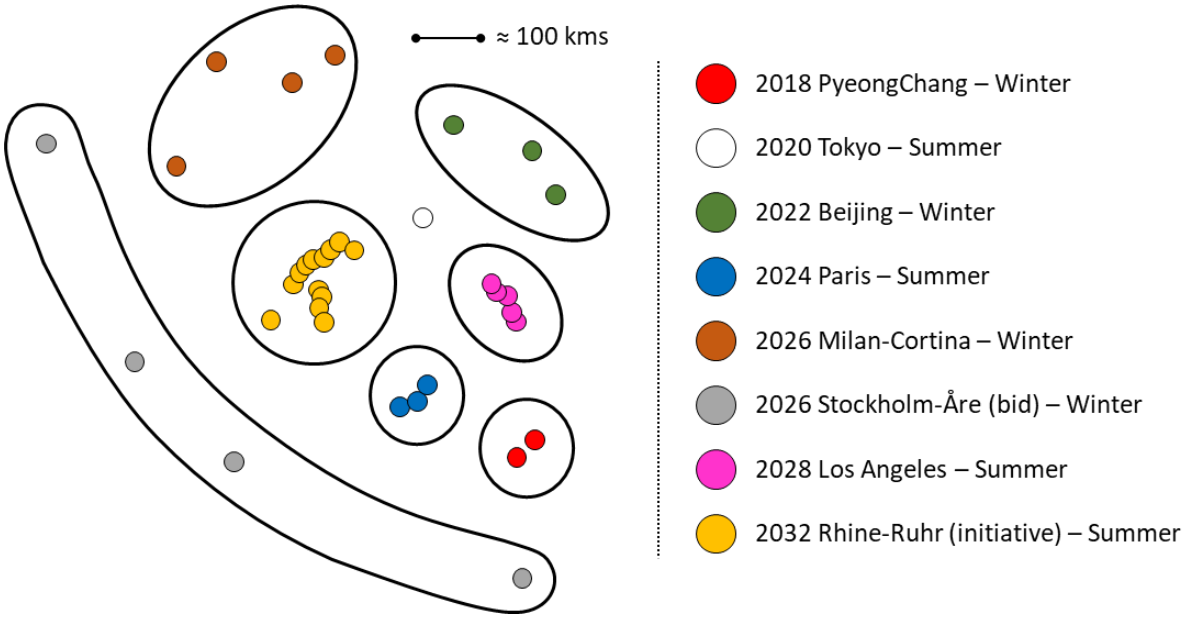

Fig. 16 Schematic comparison of the spatial distribution of Olympic Games venue masterplans post-Olympic Agenda (including bids and the 2032 Rhine-Ruhr initiative).[4] (Source: Lopes dos Santos et al., 2021b).

Additionally, bids under the Olympic Agenda framework have reportedly enhanced transparency and accountability, strengthened partnerships, and fostered collaborative efforts (Nicoliello, 2024). For Brisbane 2032, Tham (2022, p. 543) highlights how the preferred host approach was effective in "quickly collat[ing] the relevant stakeholders (…) and put[ting] in place the necessary dialogues, objectives and timelines in order to deliver a centralised approach to bringing outcomes to fruition". The bidding and planning processes for Paris 2024 further illustrate how sport has been effectively leveraged to rally public support for metropolitan policies. The Games facilitated metropolitan dialogue and multi-institutional negotiations across various political scales, prioritising the long-term trajectory of the Paris region through the Games rather than adapting the region to the event (Geffroy et al., 2021).

Similarly, Raco and Di Vita (2024) note increased cohesion and consistency in the governance system of Milan-Cortina 2026. However, they caution that this cohesion remains mostly rhetorical. Bazzanella et al. (2022) echo this concern, emphasising that, from a tourism perspective, the regional model of Milan-Cortina 2026 presented significant challenges. The large network of stakeholders required both coordination across regional boundaries and collaboration at the local level, complicating the clear definitions of roles and the relationships among organisations with diverse motivations and objectives.

Schnitzer and Haizinger (2019) recognise that, while the perceived innovations in the candidature processes are promising, theoretical commitments can only be realised if they support and are deeply integrated into host territories' long-term strategies. Moreover, Jones and Ponzini (2018) hypothesise that the Agenda's reforms could result in Games that are either more

[4] The figure does not include stand-alone venues in co-host cities, such as football venues across the host country or exceptional cases like the Paris 2024 surfing venue in Tahiti and the sailing venue in Marseille.

seamlessly integrated into the existing urban fabrics or distributed across regional networks. In this regard, case study approaches reveal varying outcomes for both scenarios.

Yan et al. (2022) highlight how Beijing 2022 was successfully incorporated into the national development strategy of the Beijing–Tianjin–Hebei Region and the construction of the Beijing–Zhangjiakou Sport, Culture, and Tourism Belt. The Games provided a significant opportunity for the development of the involved cities and regions, and the country as a whole. Similarly, Wolfe (2023b) observes that Paris 2024 projects were strategically aligned with the Grand Paris plan, while Los Angeles 2028 designed its Games relying on existing infrastructure. These approaches positioned both editions as benchmarks for sustainable Olympic planning. In these instances, the flexibility introduced by the Agenda allowed host cities to align the Games more effectively with their local or regional long-term agendas.

Indeed, Geffroy et al. (2021) further stress that urban projects for Paris 2024 were not conceived specifically for the Games but rather consisted of previously planned initiatives that had been suspended due to financial constraints. The Games provided an opportunity to revive these projects, with the candidature frequently referencing the Grand Paris project. The use of venues in the northeastern suburbs of Seine-Saint-Denis further reinforced the concept of the "Grand Paris Zone". The authors also underscore how the political momentum generated by Paris 2024 served as a flagship example of Olympic Agenda, showcasing how bid cities can pursue legacy objectives that encourage multi-scalar urban policy coordination.

For Milan-Cortina 2026, Lopes dos Santos et al. (2022) also emphasise how the macro-regional concept facilitated alignment with territorial development plans. Projects primarily aimed to improve interurban transport performance and incorporated previously planned initiatives for enhancing transport cohesion and sustainability over medium and long distances. Additionally, Bazzanella et al. (2022) point to the Agenda's potential for boosting tourism destination branding and development of the macro-region, arguing that the "Milan-Cortina" brand fosters collaboration across various destinations, enabling the sharing of resources and expertise for the pursuit of mutual goals.

Differently, Wolfe (2023b, p. 1) evokes the concept of Potemkinism – defined as "a dynamic between the superficial and the substantive, predicated on obfuscation or concealment" – to critique how Olympic Agenda measures, despite achieving certain successes, continue to perpetuate fundamental issues within the Games. Wolfe argues that these issues are now more diffuse and obscured under a façade of local responsibility and care. Specifically, he highlights how Paris 2024 and Los Angeles 2028 projects use the language of long-term legacy and environmental sustainability to mask significant harms, particularly to vulnerable populations near intervention sites, ultimately exacerbating social and spatial inequalities.

Raco and Di Vita (2024) also provide a critical perspective on how the spatial distribution of Milan-Cortina 2026 has created its own difficulties. They argue that the macro-regional concept, rather than fostering cohesive plans promoting territorial integration, has instead led to a fragmented collection of isolated, pre-existing regional and municipal projects driven by political agendas. According to the authors, these fast-tracked initiatives, often relying on abstract development methods that prioritise private capital investment for facilities and infrastructure designed primarily for the Games, have overlooked established policy frameworks, the complexities of investment dynamics, and the specific needs of local territories, ultimately deepening existing socio-spatial disparities.

Specifically concerning the social sustainability sphere, most academic studies focus on human rights. With Olympic Agenda 2020, the IOC acknowledged its responsibility to protect human rights for the first time, modifying the sixth Fundamental Principle of Olympism accordingly and adding explicit human rights obligations to the host contract – namely addressing anti-discrimination and labour rights. While these measures represent a step in the right direction, they are, however, still considered unsatisfactory and uncertain. Their effectiveness depends heavily on the enforceability of human rights within the host country and is sometimes subordinated to commercial self-interests. Furthermore, these obligations cover only contexts directly linked to the Olympics, such as athletes' participation or venue construction (Grell, 2018; Chappelet, 2022a; Byrne and Lee Ludvigsen, 2023). This narrow scope contrasts with Tham's (2022) observation that Brisbane 2032's candidature concept offers fresh perspectives on broader issues like affordable housing, homelessness, and social marginalisation.

In the realm of environmental policy and practice, Olympic Agenda 2020 has introduced changes in the candidature process and host contract, focusing on areas such as biodiversity protection, climate change management, compliance with environmental ISO standards, sustainable development strategies, and related governance arrangements. However, scholars argue that the Agenda lacks effective incentive or sanction mechanisms to ensure compliance with these environmental sustainability standards. Moreover, while these measures reduce discretionary interpretation, the concept of (Olympic) sustainable development remains ambiguous, with unclear goals and methodologies (Geeraert and Gautheir, 2018; Karamichas, 2019; VanWynsberghe et al., 2021). For example, for Brisbane 2032, Forth et al. (2022) highlight a disconnection between the bid's climate-positive commitments and the host consortium's focus on conventional economic growth models, suggesting that the Agenda may struggle to shift attitudes towards truly sustainable development.

VanWynsberghe et al. (2021) also argue that the Agenda fails to establish universally acceptable standards of sustainability within the hosting process and that greater accountability is needed to ensure that environmental sustainability benchmarks are both meaningful and measurable. Additionally, by requiring hosts to adhere to applicable national environmental legislation, the Agenda overlooks the variability in national standards and how laws may be amended to facilitate compliance (Geeraert and Gautheir, 2018). Nevertheless, Karamichas (2019) notes the Agenda's potential to function as an enhanced "engrenage" to embed environmental standards within the IOC's institutional framework and address flaws in the Olympic Games Impact mechanism that led to failures in Sochi and Rio.

Minor adjustments in requirements to editions already in preparation at the time of the Agenda's adoption, such as Pyeongchang 2018, Tokyo 2020 and Beijing 2022, yielded tangible benefits, including significant cost savings. Pyeongchang 2018, for instance, reported an operational surplus (Kobierecka and Kobierecki, 2019). For Beijing 2022, initiatives such as an enhanced transfer of knowledge program and delegating broadcasting responsibilities to the Olympic Broadcasting Services (OBS) helped to reduce the burden on organising committees, allowing them to focus on other priorities (Yan et al., 2022). Regarding Milan-Cortina 2026, van der Borg et al. (2021) suggest that, from the perspective of public finances, the Games appear sustainable. However, these conclusions may need re-evaluation in light of recent global events such as the COVID-19 pandemic, geopolitical conflicts, and rising inflation.

In fact, some authors argue that Olympic Agenda has proven ineffective in addressing unforeseen events when constrained with fixed deadlines. They highlight that the framework does

little to support strategic and adaptable planning under such circumstances, exposing a persistent gap in the Games' planning capacity to manage external shocks (Raco and Di Vita, 2024). This issue is particularly pronounced in regional hosting models, such as Milan-Cortina 2026, which often involve larger and more prolonged infrastructure projects that carry heightened risks related to budgets, timelines, and unpredictability (Lopes dos Santos et al., 2022). In these cases, stronger collaborative governance across various levels and sectors, while ensuring meaningful local representation, is deemed crucial to enhance resilience (Bazzanella et al., 2022).

Academic studies also suggest measures to enhance the Agenda's effectiveness. Operational recommendations include outsourcing services such as transport, accommodation, security, and hospitality to improve cost efficiency and reduce the burden on organising committees and host cities (Tham, 2022; Yan et al., 2022). Regarding environmental preservation, Geeraert and Gauthier (2018) and VanWynsberghe et al. (2021) advocate for the IOC to exert greater control over hosts and involve qualified, independent third parties in the host selection process. Similarly, Grell (2018) recommends applying these measures to human rights, citing the limited capacity, expertise, and independence of IOC bodies and commissions to fulfil this role. Grell also proposes that each bidding city present a comprehensive human rights strategy as part of its candidature.

Furthermore, implementing more effective communication strategies is considered essential to increase awareness of the Agenda's objectives and achievements, while reducing negative media coverage, as many stakeholders, experts, and members of the public remain largely unaware of its detailed goals (Bazzanella et al., 2022; Yan et al., 2022). Improved communication with local stakeholders and communities is also emphasised, particularly to provide clear information about the potential benefits and risks of hosting the Games (Schnitzer and Haizinger, 2019). The lack of such engagement may explain the persistent public opposition faced by post-Agenda editions, which has, in some cases, significantly complicated preparations (Wolfe, 2023a, 2023b).

Finally, VanWynsberghe et al. (2021) point to a significant gap in the IOC's approach: although academic researchers have voluntarily submitted ideas for the Agenda's development, there is no evidence of formal consultation with the academic community or consideration of their extensive research findings. The authors argue that integrating researchers and their expertise into policy formulation would have been instrumental in enhancing the legitimacy and effectiveness of Olympic Agenda 2020.

Chapter 3

The Conceptual Implementation of Olympic Agenda 2020

The Olympic Agenda 2020 was unanimously adopted during the 127th IOC Session in Monaco on December 8-9, 2014. At the Session's opening ceremony, IOC President Thomas Bach delivered a speech emphasising its significance and the transformative impact it aimed to achieve:

> *In our world – changing faster than ever – the success of yesterday means nothing for today. The success of today gives you only the opportunity to drive the change for tomorrow. (…) We have together started to anticipate the upcoming challenges. (…) If we do not address these challenges here and now we will be hit by them very soon. If we do not drive these changes ourselves others will drive us to them. We want to be the leaders of change, not the object of change. (…) We need to change because sport today is too important in society to ignore the rest of society. (…) If we want our values of Olympism (…) to remain relevant in society, the time for change is now. (…) The less people believe in the future the more they want to know about the future. (…) they want to know more about the sustainability of Olympic Games and all our actions; (…) about our governance and finances; (…) how we are living up to our values and our social responsibility. This modern world demands more transparency, more participation, higher standards of integrity.* (IOC, 2014a, p. 2–3).

Fig. 17 displays the most frequently used words in this speech, revealing a strong emphasis on action-oriented discourses. Commitment words such as “change”, “want”, “progress”, “development”, and “dialogue” dominated the speech, underlining a call for action and the necessity for ongoing improvement and adaptation. The “IOC” and the “Olympic Movement” emerged as pivotal entities, tasked with leading various stakeholders – “society”, “people”, and “athletes” – towards ambitious and positive outcomes. Key goals highlighted in the speech included developing “sport”, promoting “peace”, fostering “diversity”, upholding “respect”, ensuring “credibility”, supporting “solidarity”, and enhancing “sustainability”. These terms indicated a broad and inclusive vision for the future, driven by the core values of Olympism. Additionally, the repeated use of temporal words such as “now”, “today”, and “future” reflected a sense of urgency and a clear timeline for action. The speech not only called for immediate changes but also emphasised the need for sustained effort and long-term commitment to these goals. This was clearly to summon a collective movement under the leadership of the IOC.

Under the motto “to change or to be changed, that is the question” and grounded on three fundamental pillars – sustainability, credibility, and youth – Olympic Agenda 2020 is a guiding policy aimed at protecting “the uniqueness of the Games and strengthen Olympic values in society” (IOC, 2014a, p. 1). It consists of 40 recommendations that were developed through an inclusive and collaborative process that involved discussions among all Olympic Movement stakeholders, external experts, and the public. The IOC invited these groups to submit suggestions on issues that required further attention, ensuring a wide range of perspectives and expertise. These issues were grouped in 25 themes and ranked according to the number of submissions, with the “bidding process” ranking first and “sustainability and legacy” ranking eighth. Notably, the public was the largest group of contributors, accounting for 22% of the submissions. The academic community also played a significant role, contributing 10% of the submissions. NOCs (and related organisations) and IFs contributed 18% and 16% of the

submissions, respectively, reflecting their crucial role in the Olympic Movement governance network and their vested interest in the successful implementation of the Olympic Agenda 2020. The IOC itself accounted for 9% of the submissions. Other entities from the commercial and business sectors contributed 7%, indicating the relevance of commercial interests and business perspectives in shaping the future of the Olympic Games. Additionally, IOC recognised organisations contributed 5%, NGOs and unions made up 6%, and governments and authorities provided 1% of the submissions (IOC, 2014b). These contributions underscore the diverse range of stakeholders involved in the Olympic Movement, each bringing unique insights and priorities to the table.

Fig. 17 Most frequently used words in IOC President Tomas Bach's speech during the presentation of Olympic Agenda 2020. (Source: Lopes dos Santos et al., 2021b – created using Wordle, based on IOC (2014a, p. 2–6)).

Overall, the varied contributions from these stakeholders intended to ensure that the Olympic Agenda 2020 recommendations were well-rounded and reflective of a broad spectrum of interests and expertise, theoretically facilitating the development of robust and comprehensive reforms. Indeed, the recommendations cover a wide range of topics including sports, marketing, governance, management and operational aspects of the Olympic Games. Together, they provide a vision, being positioned in a strategic level of decision. However, they do not offer detailed guidance for practical implementation.

To bridge this gap, after the adoption of the Olympic Agenda 2020 the IOC undertook several key initiatives. That included the revision of Olympic Movement regulatory frameworks, namely the Olympic Charter, the IOC Collection of Ethics Texts and the Host City Contract (HCC) (renamed the Olympic Host Contract). It also developed specific guidelines addressing some of the recommendations, namely the IOC Sustainability Strategy (published in October 2017), the Legacy Strategic Approach (December 2017) and the New Norm (February 2018). These documents and updates were designed to translate the strategic recommendations and goals of Olympic Agenda 2020 into more actionable and practical guidelines. They move from high-level strategic decisions to more tactical, operational, and implementation-focused guidance, facilitating the practical realisation of the Agenda's broad vision.

In particular, the IOC Sustainability Strategy highlights the organisation's commitment to sustainability through a structured approach that encompasses three distinct spheres of responsibility. First, the IOC as an organisation, pertaining to the internal operations of the IOC itself. Second, the IOC as the owner of the Olympic Games, relating to its role of overseeing the planning and delivery of the event and providing guidelines and frameworks for host cities to follow. And finally, the IOC as the leader of the Olympic Movement, acting as a global leader of stakeholders within the sporting world (IOC, 2017a). This layered conceptualisation recognises the varying degrees of control, impact, and influence the IOC has within each sphere. For instance, within its own operations, the IOC has direct control and can implement changes unilaterally. In the context of the Olympic Games, while the IOC sets the strategic framework and guidelines, the execution depends significantly on the collaboration with a wide network of external stakeholders, including local and national governments, organising committees, sponsors, and the community. At the broader level of the Olympic Movement, the IOC's role is more about leadership and influence rather than direct control. Within this structure, assessments of the IOC's sustainability initiatives must consider the specific context and scope of action relevant to each sphere, recognising that the Olympic Games are influenced by a multitude of factors and stakeholders, namely sponsors and other financiers that introduce significant constraints, where the IOC is one part of a larger decision-making network (Chappelet, 2023; Lopes dos Santos et al., 2021a).

Thus, the outcomes of Olympic Agenda 2020 include a variety of initiatives, many of which are not directly related to the hosting of the Olympic Games or their impact on host cities and communities. This chapter aims to scan and systematise the policy initiatives stemming from Olympic Agenda 2020 that pertain specifically to the "urban domain". The "urban domain" is here perceived as all aspects influencing urban planning and environments, whether directly or indirectly, and concerning how the event's planning, delivery, or legacy influence the hosting territories and communities. Thereby, the chapter answers the following research question: within the broad Olympic Agenda 2020 framework, what are its specific urban-related goals, strategies, and implications and how are they supposed to be achieved? The outcome of this chapter is the systematisation of urban-related *Reforms* representing what the IOC committed to do through its own policies, gathering various goals, strategies, measures or actions undertaken, and which relate to specific challenges and opportunities presented by hosting the Olympic Games. This approach offers a comprehensive overview of how Olympic Agenda 2020 aims to influence host cities, setting the groundwork for the research developed in Chapter 4. It also helps clarifying the Agenda's broader implications on urban environments, providing valuable insights for future host cities to enhance their planning and legacy strategies.

3.1. Scanning and Systematising the "Urban" Olympic Agenda 2020

To achieve its main goal, this chapter starts by selecting and collecting data from official sources detailing initiatives introduced as part of the Olympic Agenda 2020 strategy. It further organises and categorises such initiatives to create a structured framework outlining Olympic Agenda 2020 urban-related *Reforms*, organised by urban-related *Objectives*.

Strategic and Regulatory Frameworks of Olympic Agenda 2020

A document analysis was conducted to set the context of the research, provide data, and track the conceptual implementation of the Agenda. This method proved advantageous due to its simplicity and the availability and accessibility of IOC official documents, allowing for a focused

examination of policies and strategies. It is important to acknowledge that relying on documents provided by organisations can introduce biased selectivity, as these documents often reflect the organisation's perspective and may omit critical views (Bowen, 2009). However, for the purpose of this chapter, such bias does not undermine the proposed analysis. In fact, the objective is to understand what the IOC has formally committed to do and, thus, these documents are the most relevant sources for such an analysis. By focusing on the organisation's official commitments, the analysis captures the Agenda's designed strategies and intended goals.

The document selection process is illustrated in **Fig. 18**. This process was primarily conducted using the Olympic World Library[5], the database of the Olympic Studies Centre. This platform includes all official Olympic publications and is thus the most appropriate source for collecting data for the intended document analysis. To ensure comprehensiveness, the initial search utilised automated engines with three filters only: author (IOC), year of publication (2014 to 2021), and language (English). This search returned 232 results. The list of documents was then manually reduced by analysing the titles and abstracts to exclude those unrelated to the urban domain, cutting the list to 80 documents.

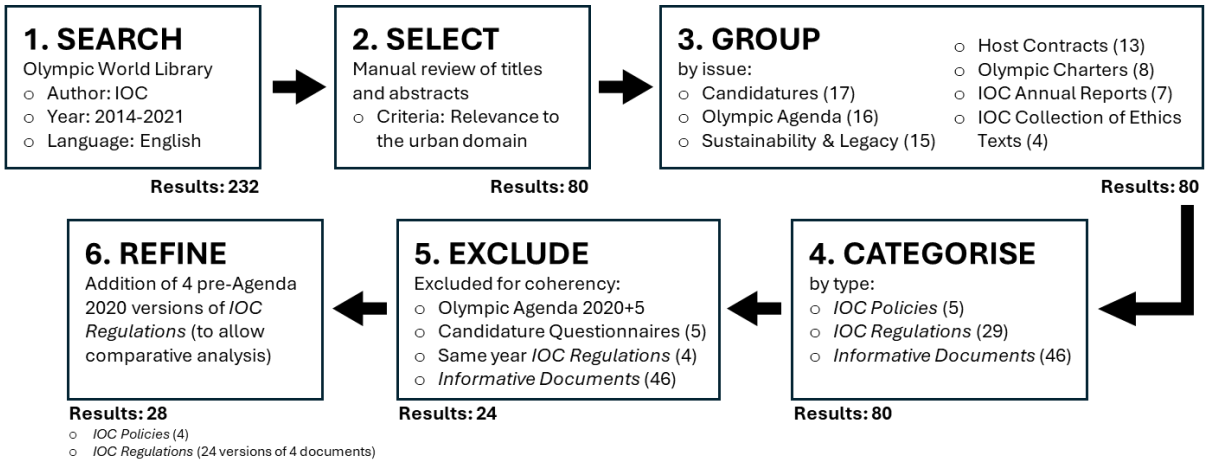

Fig. 18 Document selection process for data collection to systematise urban-related *Reforms* and *Objectives*.

Documents were then grouped by issue. The groups included 17 documents related to host candidatures, 16 directly associated with Olympic Agenda 2020 and related initiatives, 15 addressing sustainability and legacy, 13 related to Host Contracts, eight versions of the Olympic Charter, seven IOC Annual Reports, and four versions of the IOC Collection of Ethics Texts. These were categorised by types: the *IOC Policies* (five documents directly derived from Olympic Agenda 2020 and clearly detailing objectives and strategies); the *IOC Regulations* (a total of 29 versions of five documents which regulate the Olympic Games and Movement); and the *Informative Documents* (reports, guides and sheets on various issues, including on the advancements of the implementation of *IOC Policies* and respective results).

The *Informative Documents* proved important as explanatory and complementary data to recognise the progress of the Agenda's implementation but did not provide additional information and, therefore, were excluded from the analysis. Furthermore, other documents were excluded

[5] https://library.olympics.com/

for coherence, namely the Olympic Agenda 2020+5, since it was only published in March 2021 and was not meant to significantly impact the case studies addressed in this research, and the Candidature Questionnaires, due to inconsistent structure across versions, which did not allow to systematically assess modifications driven by Olympic Agenda 2020. For simplicity, four same-year versions of *IOC Regulations* were also excluded, keeping only the latest version. This updated the list to 24 documents. Finally, to understand the influence of Olympic Agenda 2020 on *IOC Regulations*, four versions of these regulations dated immediately prior to it had to be included. This refinement resulted in 28 documents totalling 2,869 pages.

Additionally, during document and case study analysis, additional searches were conducted for collecting data on specific initiatives taken by the IOC to implement Olympic Agenda 2020 and its outcomes. This included online news and sheets for complementary information and minutes of IOC Sessions related to the Agenda's conception, provided to the author by the Olympic Studies Centre.

The document selection resulted in the identification of eight relevant documents used for the development of the Olympic Agenda 2020 urban-related *Reforms*, four of them being *IOC Policies* and the remaining four consisting of *IOC Regulations*. The documents of the first group are positioned in different levels of decision-making and present guidelines developed by the IOC. They serve as the foundation for guiding the overarching principles and long-term objectives of the Agenda for the Olympic Movement to follow. These include the own Olympic Agenda 2020, the IOC Sustainability Strategy, the Legacy Strategic Approach and the New Norm.

Differently, the *IOC Regulations* establish the legal framework of the Olympic Movement and set forth the instructions governing the organisation of the Olympic Games. In this group are included the Olympic Charter, the IOC Collection of Ethics Texts, and the Principles and the Operational Requirements of the Host City Contract. Each of them has undergone several revisions after the adoption of Olympic Agenda 2020, reflecting evolving priorities. These revisions often stem from the implementation of the Agenda or subsequent *IOC Policies*, representing the incorporation of these strategic guidelines into the legal and operational frameworks of the Olympic Movement. **Table 2** lists and describes all the selected documents, also indicating the versions considered for the analysis.

With the exception of the Principles and Operational Requirements of the Host City Contract, all other documents directly concern only the stakeholders of the Olympic Movement, which include some of the most relevant entities in the organisation of the Olympic Games, such as the IOC, the IFs, and the organising committees. However, host cities also become bound by these documents upon signing the Host City Contract, which warrants compliance with all presented *IOC Policies* and *IOC Regulations*. This ensures that hosts adhere to the established guidelines and legal frameworks, integrating the broader strategic and regulatory objectives of the IOC into their local planning and execution of the Games. Additionally, hosts, in collaboration with the organising committees, are responsible for ensuring that other local entities also comply with these guidelines.

Thus, analysing both the *IOC Policies* and the *IOC Regulations* ensures a comprehensive understanding of the frameworks guiding the implementation of the Olympic Agenda 2020. This dual approach allows for a nuanced assessment of how strategic objectives were translated into practical regulations, that is, how the goals and strategies outlined in the *IOC Policies* were implemented through the detailed legal and regulatory mechanisms found in the updated *IOC Regulations*. This integration thus recognises the interconnected nature of strategic planning and

operational execution within the Olympic Movement and how it translates into the organisation of the Games, namely within the urban domain. That facilitates the systematisation of coherent and effective urban-related *Reforms*.

Table 2 Documents selected for the development of the urban-related *Reforms*.

Document		Description	Versions	pages
IOC Policies	Olympic Agenda 2020	"The 40 detailed recommendations are like individual pieces of a jigsaw puzzle, which when put together give us a clear picture of what the future of the Olympic Movement will look like. They give us a clear vision of where we are headed and how we can protect the uniqueness of the Games and strengthen Olympic values in society" (IOC, 2014a, p. 1).	2014	27
	IOC Sustainability Strategy	"To effectively respond to Olympic Agenda 2020, it was deemed imperative to address Recommendations 4 and 5 in a holistic manner, rather than approaching them separately. Therefore, the need to compile a Sustainability Strategy that would provide objectives, timelines and parameters in which to work, became evident" (IOC, 2017a, p. 19).	2017	54
	Legacy Strategic Approach	"Covers the various ways in which the IOC intends to further encourage, support, monitor and promote legacy in partnership with its stakeholders" (IOC, 2017b, p. 2).	2017	51
	New Norm	"(...) reimagining the value proposition of organising the Olympic Games. The reforms address many challenges of hosting and seeking to host the Olympic Games. The changes give more flexibility to designing Games that meet long-term development plans and ensure that cities seeking to host the Olympic Games receive more support and assistance from the Olympic Movement" (IOC, 2018a, p. 3).	2018	58
IOC Regulations	Olympic Charter	"Governs the organisation, action and operation of the Olympic Movement and sets forth the conditions for the celebration of the Olympic Games" (IOC, 2024b, p. 6).	2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021	962
	IOC Collection of Ethics Texts	"Framework of ethical principles (...), based upon the values and principles enshrined in the Olympic Charter" (IOC, 2020a, p. 4).	2013, 2015, 2016, 2018, 2020	275
	Principles of the Host City Contract	"Describes the main deliverables and other obligations to be performed by the Host City, the Host State (...), the Host NOC and the OCOG, as part of their responsibility for planning, organising, financing and staging the Games" (IOC, 2021a, p. 8).	for the Games in: 2020 (2013), 2022 (2015), 2024 (2017A), 2026 (2019), 2028 (2017B), 2032 (2021)	342
	Operational Requirements of the Host City Contract		for the Games in 2022 (2015A), and 2015B, 2016, 2018	1100

Cataloguing Urban-Related Initiatives of Olympic Agenda 2020

Following the document selection, the systematisation of the urban-related *Reforms* employed a thematic analysis. This qualitative method is well suited for a variety of research topics, allowing for the flexible identification, analysis, and reporting of patterns within the data, ultimately creating explanatory themes to represent it. According to Braun and Clarke (2006, p. 82), a theme "captures something important about the data in relation to the research". In this

context, the resulting themes consisted of the *Reforms*, forming the theoretical basis for the empirical assessment of case studies in Chapter 4.

The analysis adhered to the six-step guide presented by Braun and Clarke (2006), characterised by several specific approaches. Firstly, it was theoretical, meaning it was analyst-driven, which allowed for a more detailed examination of particular aspects of the data. Secondly, the analysis was semantic. This means that the method focused on superficially identifying themes within the data without delving into underlying meanings or assumptions. This approach was appropriate given that the primary objective was to identify clear and explicit themes related to the urban domain, namely concerning urban planning and its impact on the hosting territories and communities. Lastly, the analysis was essentialist. This approach involved theorising the meaning of the data through a straightforward examination of the language used. By doing so, the analysis provided clear and direct insights into the intentions and implications of the initiatives.

The analysis began with the assessment of the *IOC Policies*, which, as indicated in **Appendix I**, are structured as lists of specific numbered items, referred to here as *topics*. These *topics* are differently named across documents: the Olympic Agenda 2020 is structured by recommendations; the IOC Sustainability Strategy by objectives and focus areas; the Legacy Strategic Approach by objectives; and the New Norm by specific measures. Since these *topics* cover a broad range of issues, the analysis focused on extracting those relevant in the urban domain.

Following this, the analysis was extended to the *IOC Regulations*, also structured as lists of specific *topics*: the Olympic Charter is structured by rules and bye-laws to rules; the Collection of Ethics Texts by articles and principles; and the Host City Contract by principles and operational requirements. Unlike the *IOC Policies*, the analysis of these documents involved a semi-systematic review, only paying attention to meaningful modifications from one version to another. This approach was necessary to identify the influence of *IOC Policies*, as these regulations predated Olympic Agenda 2020 and, thus, much of their content already existed beforehand.

The outcome of the previous step was a list of *topics* representing the IOC's initiatives for implementing the Agenda within the urban domain. Once extracted, these *topics*, or parts of them (hereinafter addressed to as *codes*), were coded according to certain subjects to organise the data into meaningful groups. The coding was assisted by MAXQDA software.[6] Also resorting to MAXQDA, the resulting *codes* were then listed and grouped through an iterative process merging some *codes* while splitting others. This step produced candidate reforms, categorised into five groups. These groups were identified as the five broad urban-related *Objectives* of the Olympic Agenda 2020, clustering initiatives with common general purposes.

After compiling the initial list of candidate reforms, it became clear that some overlapped, as certain codes fit multiple themes. Additionally, some were too broad, while others were too narrow. These issues were addressed by reorganising the *codes* within the groups into coherent *Reforms* that better represented the entire data collection. Naming the *Reforms* presented similar challenges, as ensuring representability and avoiding overlapping names proved difficult. Definitions for each *Reform* were also developed to provide clarity, as well as a further explanation and their contextualisation within the research topic.

[6] MAXQDA is a software to assist in data, text and multimedia analysis in qualitative and mixed methods research (https://www.maxqda.com/).

3.2. The Olympic Agenda 2020 Urban-Related *Objectives* and *Reforms*

The thematic analysis resulted in the categorisation of 22 urban-related *Reforms*, grouped into five urban-related *Objectives* representing overarching goals within distinct approaches identified as broad action fields where the IOC operates to implement Olympic Agenda 2020. Regarding their impact on the territory, they were recognised as indirect or direct.

Indirect urban-related *Objectives* shape impacts without having an explicit effect on the territory but rather through influencing organisations, processes, and decisions. These entail: "Ensure best practices", meaning adopting methods reliant on ethically correct and effective approaches for tasks or decisions; "Improve the governance system", shaping the organisational structure to consolidate and define the network of stakeholders and their functions within it; and "Leverage specialised knowledge", by utilising the experienced skills acquired over time from entities dedicated to certain matters.

Direct urban-related *Objectives* are those that generate observable effects on the territory. These encompass: "Contain urban-related costs", achieved through methods aimed at reducing and managing the Games' different types of costs and minimising their footprint; and "Enhancing urban sustainability", by implementing measures to guarantee and boost the sustainability of actions undertaken for hosting the Games, thus affecting the territory.

Within the *Objectives*, the urban-related *Reforms* target specific issues with the aim of effecting change and improvement. Put simply, these *Reforms* provide precise insights into what the IOC intended to alter through the implementation of Olympic Agenda 2020 within the urban domain. They are comprised of *codes*, which serve as their "DNA". A *code* is a selected excerpt from the *IOC Policies* or *IOC Regulations*, that is, essentially a direct quotation from these documents that may encompass an entire *topic* or parts thereof. In the case of revisions to *IOC Regulations*, a *code* may also consist of a group of excerpts from the previous and subsequent versions of a document, illustrating changes to that *topic*. For *IOC Policies*, all *codes* denote additions of content, as they are new, whereas with *IOC Regulations*, *codes* may consist of eliminations of content. For instance, an existing *topic* in one version of a document omitted in the subsequent version can signify a relaxation of requirements.

The developed urban-related *Objectives* and *Reforms* are organised and presented in **Fig. 19**, which also indicates the number of *codes* used to create them. Afterwards, each *Objective* and *Reform* is individually presented and briefly explained and discussed. The complete list of *codes* used to formulate them is further provided in **Appendix I**.

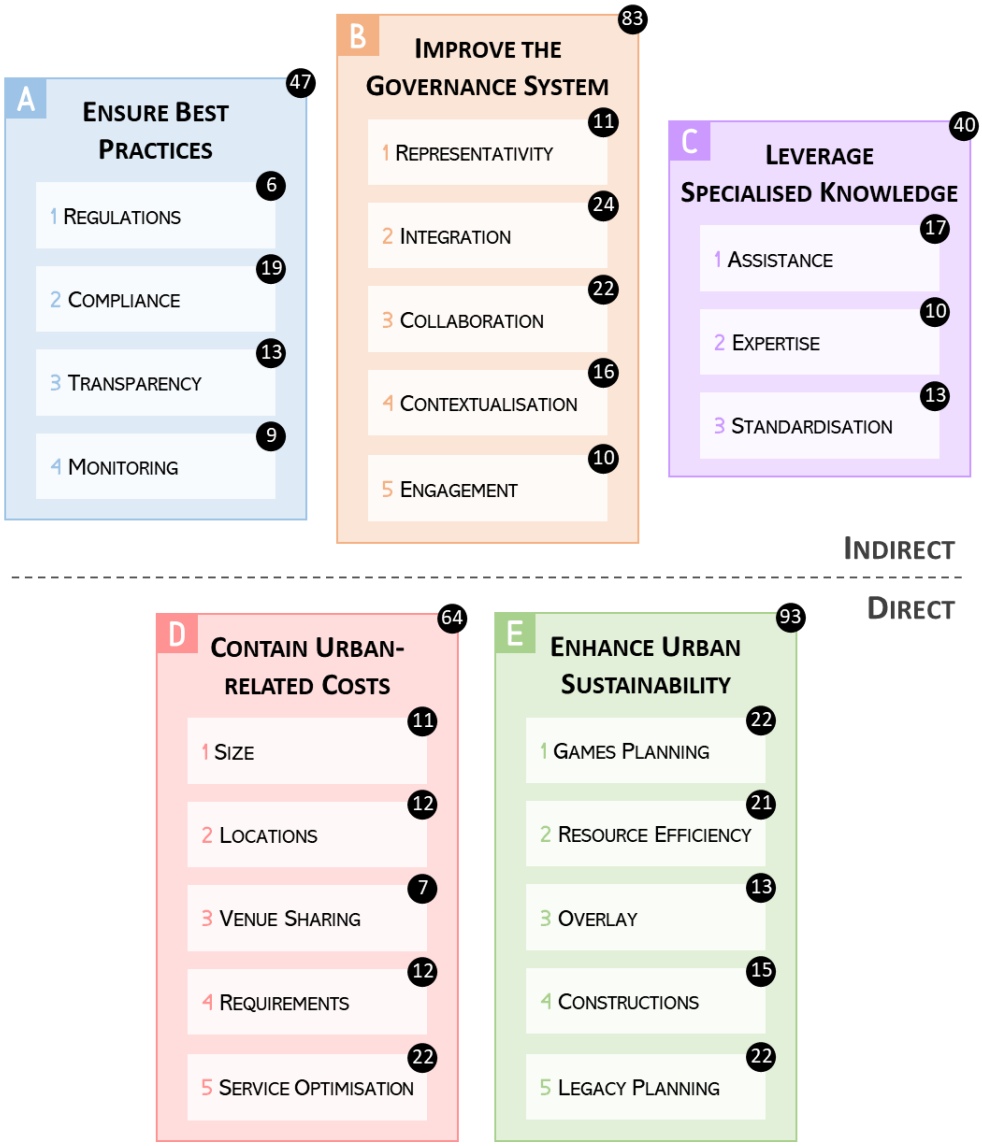

Fig. 19 Urban-related *Objectives* and *Reforms* and number of *codes* used.

Ensure Best Practices

Regulations *Update the Olympic regulations to align with and support the pursuit of the new goals*. Olympic Agenda 2020 recognises the importance of updating Olympic regulations to ensure best practices in Games organisation, fostering integrity commitments. This *Reform* advocates for the revision of key regulations, including the Code of Ethics, the Principles of Good Governance, and the Host City Contract.

Compliance *Enhance the enforcement of national and international laws, as well as Olympic regulations and policies. This enforcement is applied on a case-by-case basis to stakeholders within the Olympic Movement, organisers of the Olympic Games, and development projects, venues, and infrastructures associated with the event*. This *Reform* aims to ensure accountability among all stakeholders, also in terms of development projects and infrastructure. Key aspects include requiring consultants to formally accept the IOC Code of Ethics and reinforcing ethical commitments across IFs. Moreover, it emphasises compliance throughout the bidding and

hosting processes, addressing various facets including planning, construction, environmental protection, and venue safety.

Transparency *Ensure transparency and integrity within the Olympic Movement, particularly within the IOC, regarding organisational matters and the bidding for and hosting of the Olympic Games*. To promote transparency, the Olympic Agenda 2020 emphasises the early public accessibility of key documents such as the Host City Contract throughout the bid process. Additionally, it calls for the establishment of transparent procedures for implementing changes in Olympic Games requirements. It also aims to enhance clarity regarding financial contributions by issuing annual activity and financial reports, securely maintaining records, and delineating Olympic Games budgetary elements. This *Reform* further reinforces the IOC's commitment to political neutrality and ethical conduct.

Monitoring *Consistently monitor policy implementation progress, proposing new measures to continually enhance their effectiveness or corrective actions as needed*. Effective monitoring is essential to ensure the successful implementation of policies. This *Reform* aims to ensure continuous oversight of policy implementation by evaluating compliance with governance principles and mandating regular self-evaluation reports from organisations, further encouraging the proactive proposal of new measures when necessary. It also calls for a continuous review of services required for the Olympic Games to effectively manage costs and complexity, as well as the monitoring of sustainability commitments and legacy planning.

Improve the Governance System

Improve the representativity and participation of stakeholders and the interrelationships between them, clearly define roles and responsibilities, consider the diverse contexts, and seek engagement opportunities with external communities. The *Objective* of improving the governance system within the Olympic Movement acknowledges the importance of considering diverse contexts and actively seeking engagement opportunities beyond the traditional boundaries of the Olympic Movement. The associated reforms focus on ensuring that the composition of organisational entities is representative and inclusive, integrating clear roles and responsibilities, and enhancing collaboration with various stakeholders, including host cities, IFs, and other relevant parties. By doing so, the Olympic Movement aims to create a governance structure that can adapt to contemporary challenges and opportunities.

Representativity *Refine the composition of organisations and their processes for selecting members, or establish new entities as needed to address gaps in expertise or the representation of the stakeholders, particularly concerning the hosting of the Olympic Games or the structure of the Olympic Movement*. To enhance representativity, this *Reform* centres on ensuring that the diverse needs and perspectives of stakeholders are adequately addressed. By integrating a broad range of expertise and promoting balanced membership within key bodies such as the IOC, it seeks to improve decision-making processes. The establishment of entities with representation from various local authorities ensures that all relevant voices are included, fostering a more effective governance framework of the Olympic Games and improving oversight and implementation of policies.

Integration *Define the roles and responsibilities of each entity, especially regarding the selection of IOC members, ethical conduct during candidature processes, and the hosting of the Olympic Games*. Olympic Agenda 2020 emphasises the importance of clarifying roles, ensuring ethical conduct, and improving the overall governance, decision-making and operational

effectiveness of the Olympic Movement by defining clear guidelines for certain operations, including managing the Olympic Games. By delineating roles and responsibilities, this *Reform* seeks to foster better integration among various stakeholders, including the IOC, OCOGs, IFs, NOCs, and public authorities.

Collaboration *Strengthen collaboration among the Olympic Movement, interested cities or hosts, and other relevant third-parties to develop solutions, agree on requirements, and participate in decision-making processes related to candidatures for and the hosting of the Olympic Games*. This *Reform* focuses on strengthening the interrelationships between stakeholders within and outside the Olympic Movement. It involves collaborative efforts such as defining core requirements with stakeholders or facilitating discussions during candidature processes. There is an emphasis on compliance with international regulations through cooperation with host country authorities, and measures like the dialogue stage in candidature processes for technical expert engagement.

Contextualisation *Take into account local and contemporary contexts, especially when selecting hosts, establishing entities, and formulating rules for organising the Olympic Games*. This *Reform* emphasises the necessity of adjusting rules and governance systems to local contexts and contemporary needs, adapting to the distinct characteristics of each host. Among others, it includes more flexibility to define hosts, allowing multiple cities or countries to host the Olympic Games, and additional signatories to the Host City Contract, where appropriate, to better suit local circumstances. It also turns the Olympic Programme event-based, allowing for adaptation, while organising committees can propose the inclusion of specific additional events.

Engagement *Extend efforts beyond the Olympic Movement to forge valuable partnerships and opportunities for public engagement*. Olympic Agenda 2020 highlights some engagement initiatives with external partners and the public. This *Reform* encourages the IOC to team up with other sports organisations to shape sports programs, or to explore opportunities to reuse Olympic facilities. Moreover, it considers hosting congresses to discuss sports' societal impacts. Integrating interactive discussions with external experts on key topics into IOC Sessions or building alliances with expert organisations on specific themes is also considered relevant to foster strategic dialogue.

Leverage Specialised Knowledge

Offer specialised support to stakeholders, drawing on expertise and past experiences, while integrating Olympic-specific and internationally recognised standards into the framework of the Olympic Games and Movement. The *Objective* of leveraging specialised knowledge within the Olympic Movement aims to provide access to stakeholders to the necessary information, guidance, and tools for effective Games planning, sustainability, and legacy management and to better inform decision-making. It involves harnessing the knowledge and experience of stakeholders and learning from previous host cities, while adopting recognised certification norms and clear guidelines.

Assistance *Share information and provide guidance to Olympic Games organisers regarding Games planning, sustainability, and legacy. Offer tools and processes to Olympic Movement stakeholders to ensure their adherence to standards and promote good governance*. Olympic Agenda recognises the IOC and its controlled entities as crucial players in guiding and supporting the organisers of the Olympic Games. This *Reform* includes assisting newly elected OCOCs in establishing effective governance structures that integrate sustainability principles and providing

them, and other stakeholders, with various tools and processes to help organisations comply with good governance principles. This support includes providing repositories of information, tailored learning opportunities and facilitating exchanges between stakeholders to promote knowledge sharing.

Expertise *Rely on the know-how of the Olympic Movement and domain-specific experts, along with insights from past Olympic host cities, to shape candidature proposals, facilitate informed decisions during host city selections, and enhance the efficiency of Games delivery.* This *Reform* intends to draw on experiences and expertise of stakeholders to provide comprehensive assistance and guidance to cities bidding or hosting the Olympic Games. It highlights the importance of independent third-party advice to assess various aspects such as social, economic, and political conditions, with a special emphasis on sustainability and legacy considerations. Turnkey solutions are favoured for areas requiring specific Olympic expertise and, for certain purposes, the development of detailed reports and feasibility analysis is encouraged.

Standardisation *Adopt recognised norms and standardise and clearly define other Olympic guidelines and documents to provide clarity on, and better establish the requirements and commitments to be followed.* With this *Reform*, the IOC aims to establish consistent guidelines and requirements to enhance clarity and trustworthiness in the organisation of the Games. It involves clearly defining core hosting requirements, as well as procedures to amend subsequent technical manuals and guidelines. Sustainability is a key focus, with strategies aligned to IOC and international standards to promote sustainable urban development and environmental protection, in line with the UN SDGs. Standardisation measures also apply to financial reporting and auditing.

Contain Urban-Related Costs

Decrease the necessity for constructions and upgrades by easing venue requirements and making them more flexible, optimising service levels, and relaxing regulations. By containing urban-related costs, Olympic Agenda 2020 seeks to mitigate the financial burden associated with hosting the Games, namely by reducing the number of new facilities needed and minimising constructions and upgrades. Easing venue requirements, enhancing flexibility, optimising service levels and relaxing regulations allows organisers to allocate resources more efficiently. Through these measures, this *Objective* not only addresses immediate budgetary concerns but also promotes sustainability and legacy by fostering a more prudent and resource-conscious approach.

Size *Reduce and contain the scale of the Olympic Games by establishing limits on the number of events and participants and by eliminating the necessity for certain venues, facilities, or services.* Olympic Agenda 2020 clearly promotes simplifying organisation processes, decrease costs, and minimise negative impacts associated with the Games. Measures such as limiting the number of athletes and officials and efforts to control the overall number of events included in the Olympic Programme contribute to this goal.

Locations *Allow sport competitions to take place outside the host city or, in exceptional circumstances, outside the host country, particularly regarding mono-functional venues. Enhance flexibility concerning the location of other essential facilities such as media and broadcasting centres, or doping control laboratories.* This *Reform* aims to optimise the use of existing venues and infrastructures and, consequently, minimise costs associated with the

Games. It allows preliminary competitions or entire sports disciplines to be organised outside the host city or country, underscoring the importance of sustainability in determining the location of Olympic events.

Venue Sharing *Minimise the total number of venues needed by hosting competitions before the opening ceremony, optimising the competition and training schedule, adjusting event format, and resorting to modular fields of play. Explore possible turnkey solutions.* Venue sharing is considered as an effective approach to reduce the demand for constructions and upgrades while still ensuring the smooth operation of the Games, aligning with the principles of Olympic Agenda 2020, which emphasise the importance of sustainability and cost-efficiency. Similar to other *Reforms* it highlights the importance of exploring turnkey solutions to enhance venue sharing and minimise unnecessary expenditures.

Requirements *Review, adapt and enhance the flexibility of certain facility requirements and ancillary spaces utilised across various areas. Specifically for competition venues, ensure that requirements do not exceed those established for each sport's respective World Championships.* Olympic hosts are obliged to follow certain requirements to ensure quality levels of service for, for example, athletes, media or spectators. This *Reform* focuses on simplifying venue designs and requirements, for both competition and support infrastructures, namely regarding venue access and flows, facilities in the Olympic village(s), and media and broadcasting centres. Sports technical requirements shall also align with the standards established for each sport's respective World Championships.

Service Optimisation *Enhance resource utilisation during the Olympic Games by reassessing and adjusting service levels according to actual needs and to opportunities for legacy and sustainability.* This *Reform* encourages prioritising essential elements over less critical aspects to eliminate unnecessary expenditures and improve efficiency. It highlights the importance of employing more efficient delivery methods that enhance long-term benefits, utilising the latest technologies to minimise resource consumption, aligning transport and accommodation services with actual needs and implementing alternative solutions to reduce operational costs and maximise the value of resources invested.

Enhance Urban Sustainability

Organise the Olympic Games with a strong emphasis on sustainability, aligning legacies with long-term development objectives of hosts. Make maximum use of existing resources and temporary solutions. If necessary, construct and/or upgrade facilities with careful consideration for their long-term effects on the territory and community. The *Objective* to enhance urban sustainability embodies a commitment to responsible and forward-thinking planning that prioritises the long-term well-being of host cities and communities. By placing a strong emphasis on sustainability, this *Objective* seeks to align the legacies of the Games with the enduring development goals of host cities, ensuring positive and lasting impacts. Central to this is the efficient utilisation of existing resources and the implementation of temporary solutions whenever feasible, minimising the need for new constructions and upgrades that may have adverse effects on the territory and community in the long run. Additionally, it emphasises careful consideration of the environmental, social, and economic implications of any necessary constructions or upgrades, with a focus on maximising benefits and minimising negative impacts. Overall, this *Objective* strives to promote sustainable urban development, preserve resources, and leave a positive legacy for future generations.

Games Planning *Ensure an effective planning process for the preparation and staging of the Olympic Games, prioritising sustainability and leveraging opportunities to enhance it, particularly in terms of environmental factors*. This *Reform* involves developing a comprehensive sustainability strategy that integrates economic, social, and environmental considerations at all stages of the Olympic projects. From establishing robust governance structures to oversee the integration of sustainability to engaging with relevant stakeholder groups, organisers can ensure that sustainability objectives are embedded into key planning frameworks, timelines, and milestones. Specific measures include addressing water quality at natural bodies where athletes compete, optimising environmental performance of Olympic venues, developing sustainable transport solutions, promoting sustainable tourism, and minimising carbon emissions associated with the Games. By implementing these measures, Olympic Games hosts can contribute to international efforts aligned with climate change goals while conserving biodiversity and cultural heritage.

Resource Efficiency *Maximise the use of existing urban resources, namely of facilities, infrastructure and services*. By actively promoting the maximum utilisation of existing facilities and infrastructure, this *Reform* aims to reduce the need for new constructions and upgrades, thereby conserving resources and minimising disruption to local communities. Maximising the use of existing resources also contributes to cost-efficiency and facilitates alignment of the Games projects with the long-term development objectives of the host city or region, minimising the footprint of the Games.

Overlay *Utilise temporary solutions for facilities and services when existing resources are insufficient, and when there is no long-term need or legacy justification for permanent constructions or upgrades*. This *Reform* reflects a commitment to minimising impact by prioritising temporary and demountable structures where feasible, namely for sports venues, accommodation, and media facilities. Temporary solutions offer flexibility and adaptability, allowing organisers to meet the immediate needs of the Games while avoiding unnecessary permanent constructions that may not align with the long-term development objectives of the host and can burden the territory and community in the future.

Constructions *Ensure that both temporary and permanent constructions adhere to sustainability standards. Develop temporary constructions cost-effectively, and permanent ones only when supported by viable legacy plans.* Olympic Agenda 2020 underscores the importance of cost-efficiency and impact when opting to build facilities for the Games. For temporary constructions, this *Reform* requires weighing the costs of technical solutions against the revenue-generating potential for the events they will host. Additionally, it advocates for the construction of new permanent venues only when supported by viable business plans detailing post-Games demand, funding, sustainability, and future operational usage. The use of previously developed or degraded land over greenfield sites is highlighted, as well as the importance of avoiding displacement and adverse impacts on locals, with a commitment to fair consultation and compensation where unavoidable. It also promotes the integration of recognised “green building” standards.

Legacy Planning *Develop a comprehensive legacy plan integrating sustainability considerations, encompassing action plans, funding sources, and clearly defined roles and responsibilities for all involved entities.* Legacy planning concerns the development of a comprehensive and forward-thinking strategy to ensure a positive and lasting impact on host cities and communities. This *Reform* includes initiatives such as developing a high-level legacy plan early in the process, embedding legacy discussions throughout the candidature process,

and establishing resilient governance structures for the effective implementation of sustainable legacies. Additionally, it promotes the allocation of financial surplus resulting from the Games to legacy projects and activities. Overall, this *Reform* underscores the importance of leveraging the Olympic Games as a catalyst for positive change, enhancing the well-being of host communities in the long term.

3.3. Reviewing the Olympic Agenda 2020 Urban Strategy

This chapter explored the initiatives deriving from the Olympic Agenda 2020 as part of the efforts by the IOC to enhance the urban sustainability of the Olympic Games. A thematic analysis allowed for an exploration of official *IOC Policies* and *IOC Regulations*, to systematise the various goals, measures, and strategies into a catalogue of *Reforms* within *Objectives*. The catalogue highlights the IOC's ambitions to transform the Games urban planning paradigms and enhance the event's urban sustainability. As an outcome of this research, it was designed to be easily updated and user-friendly and can serve as a valuable reference for future studies. Moreover, its *Objectives* and *Reforms* provide a clear theoretical framework as a foundation for empirically analysing how the Agenda's strategic goals translate into practical, urban-focused initiatives, serving to assess outcomes in case studies.

The identified *Objectives* represent broad action fields where the IOC is active in implementing the Olympic Agenda 2020 while the *Reforms* are action-specific and gather the IOC initiatives pertaining to certain issues. Each *Reform* was developed based on *codes*, which are direct quotes from IOC official documents. Thus, this approach does not introduce new content but systematises the strategy adopted by the IOC to implement the Agenda in the urban domain and within the context of the Olympic Games. A potential further development of the *Reforms* is to better organise and structure their *codes* according to specific subjects. This would allow for a more comprehensive understanding of all strategies concerning particular subjects, such as procedures like the candidature process, or specific stakeholders like athletes, IFs or organising committees. Additionally, it seems important to consider methods to include changes induced by Olympic Agenda 2020 on candidature questionnaires, as these directly affect the concept of the Games. However, the methodology adopted in this research was not compatible with the significant reductions and modifications of contents in these documents.

Regarding their effect on the territory, *Objectives* and respective *Reforms* were categorised as indirect or direct. Indirect *Reforms* intend to shape impacts by influencing organisations, processes, and decisions. In contrast, direct ones aim to generate observable effects on the territory. In practice, it is expected that direct effects are more straightforward to observe and assess, while indirect effects, resulting from various decisions, are certainly more challenging to quantify.

Ultimately, the Olympic Agenda 2020 urban-related *Reforms* collectively represent an effort to transform the Olympic Games urban sustainability, striving for urban innovation and environmental stewardship. By promoting best practices through enhanced transparency, adaptive regulations, strict compliance, and continuous monitoring, the IOC aims to uphold integrity and maximise public trust. It also intends to improve the governance system of the Olympic Movement through stakeholder representativity, clearly defining roles, fostering collaboration, adapting to local contexts, and engaging with external communities to create an inclusive and adaptive governance structure. Furthermore, it recognises the importance of leveraging specialised knowledge and providing stakeholders with guidance, tools, and

standardised norms based on experiences and recognised standards. These indirect *Reforms* can benefit effective planning and management of the event, fostering sustainable deliveries and legacies.

Directly in the urban domain, Olympic Agenda 2020 aims to contain urban-related costs through measures like controlling the size of the Games, minimising new constructions, optimising service levels, and allowing venue sharing and flexible locations. To enhance urban sustainability, it prioritises the efficient use of existing resources, temporary solutions, sustainable constructions, and comprehensive Games and legacy planning to align the event with the long-term development goals of host cities.

But despite these intentions, a more critical view over the developed *Reforms* and, more precisely, their *codes*, detects an inconsistent duality between hard and soft measures, challenging the effectiveness of their implementation. Some initiatives seem to be very strict, requiring rigid implementation, while others are very flexible, consisting of soft measures to be framed within contexts. This contrast might derive from trying to find a right balance between the event's attractiveness and sustainability goals, but leaves unclear the exact trajectory to which Olympic Agenda 2020 intends to drive the organisation of the Games.

Furthermore, as the Games evolve to meet the trends of the twenty-first century, several challenges can hinder the practical implementation of the Agenda's urban-related *Reforms*. Particularly, the scale and complexity of the event might make it difficult to track and enforce all regulations and policies effectively, compromising consistent application and accountability across various stakeholders. The initiatives can also conflict with their different interests, and political changes, differing priorities, and bureaucratic inefficiencies can impede their timely and effective implementation. Moreover, many host cities may lack the necessary existing infrastructure to comply with Olympic Agenda and adapting facilities can be both technically challenging and cost-prohibitive. That is also the case for implementing sustainable practices and high standards, as they require the integration of new systems, trained personnel, or additional resources.

In addition to these challenges, negative environmental and social impacts might be inevitable, despite the best intentions. Moreover, aligning Games requirements with sustainability goals of hosts may not always be feasible. While Olympic Agenda 2020 promotes legacy planning from as early as the candidature stage, legacy management demands long-term commitment and funding, relying on continuous support from local authorities and communities. Stakeholder resistance also poses a significant threat, as local communities, business interests, and other groups may have concerns over disruptions and displacement and feel differently the impacts of the Games. Managing the interests of these diverse groups and ensuring broad-based support might prove a complex and sensitive process.

Furthermore, market fluctuations and economic instability can significantly impact funding and resource allocation for the Games. Economic downturns or financial crises can force host cities to compromise on sustainability and cost-containment goals. Unforeseen global events, such as pandemics, natural disasters, or geopolitical tensions, can also disrupt plans, necessitating rapid changes to originally intended strategies and diverting focus and resources away from long-term objectives. These factors collectively highlight the challenges that can hinder the successful implementation of the *Reforms* and for which the Olympic Movement must be prepared.

To conclude, it is important to emphasise that, while Olympic Agenda clearly focuses on optimising the organisation of the Games and mitigating direct negative impacts, it refrains from addressing the event's broader relationship with the host territories – how Olympic-related developments could improve urban quality or resolve local dysfunctions – leaving such matters entirely to local authorities. While respecting this division of responsibility, the inclusion of urban planning best practices in the Olympic Agenda framework could strengthen the commitment to sustainability and extend its impact beyond the immediate Olympic sites. This broader approach is essential, as the effects of the Games – such as housing pressures and tourism-driven transformations – often spread through the host city or region, as previous examples have demonstrated. Such reflections, even if nuanced and contextualised, are critical to expanding the conversation on the urban sustainability of the Olympic Games.

Chapter 4

The Practical Implementation of Olympic Agenda 2020

Adopted at the end of 2014, Olympic Agenda 2020 had an intended implementation and accomplishment time horizon of approximately six years. On March 10, 2021, during the 137th IOC Session held virtually from Athens, the IOC published the Olympic Agenda 2020 Closing Report. The report indicated that 88% of the recommendations had been achieved, while others had been "mostly achieved", and a few had been "partially achieved" (IOC, 2021b).

This demonstrates the extensive time required to implement significant changes to the Olympic Games. The process is particularly lengthy given that it typically takes close to a decade from the beginning of the bid planning to the delivery of the Games. Thus, efficient and full implementation of change requires multiple Olympic cycles. The lag between the adoption of new policies and their visible effects on the Games is justified by the complexity and scale of organising such a global event. The necessity for long-term planning and sustained effort in implementing transformational changes reflects the challenges of adapting processes, plans, and practices to evolving global standards while informing, engaging, and coordinating with various stakeholders of the Olympic Movement, including bidding and host cities.

For this reason, the editions of the Olympic Games immediately following the adoption of Olympic Agenda 2020 were not expected to be significantly impacted by the new recommendations. When the Agenda was adopted, Rio 2016 was close to being delivered, Pyeongchang 2018 was halfway through its preparation period, Tokyo 2020 had been elected nearly a year before and Beijing 2022 bid was about to be chosen. Nonetheless, the Olympic Agenda 2020 induced some changes to these edition's plans.

For Rio 2016, the test event program was restructured to prioritise critical functions and reduce budget constraints. Some Olympic Movement stakeholders also undertook new financial and operational roles. The Pyeongchang 2018 Winter Olympics benefited from reducing mountain temporary venues to simplify operations. A temporary MPC was cancelled in favour of utilising existing resources and plans for the IBC were revised to reduce costs, including the cancelation of some constructions. Regarding Tokyo 2020, a review of the master plan maximised the utilisation of existing venues, increasing their number from 16 to 24, while decreasing the count of new venues from 12 to nine and temporary venues from 11 to 10. Moreover, removing venue location restrictions facilitated the relocation of the athletics marathon and race walk events to Sapporo in response to IOC concerns about high temperatures in Tokyo. Finally, the Beijing 2022 bid already reflected many of the Agenda's principles, but the adoption of the New Norm in 2018 brought significant adjustments. This included cancelling plans for temporary venues, reviewing venue capacities and optimising transportation logistics. The venue masterplan made use of several existing venues inherited from Beijing 2008 and many of the new permanent venues were already planned, contributing to regional development goals in the city and in the Beijing-Tianjin-Hebei area (IOC, 2018a, 2020b; Lopes dos Santos et al., 2021b).

In contrast, Paris 2024 and Milan-Cortina 2026 were advertised as the first Summer and Winter Olympic Games, respectively, to fully embrace the principles of Olympic Agenda 2020, even if the Paris 2024 candidature process did not benefit from the Agenda's simplification measures. Regardless, both editions served as flagships of the new principles and the IOC has focused

extensively on showcasing its commitment to sustainability through these Games. Notably, these editions have significantly reduced the number of new venues compared to previous Games, employing distinct strategies: Paris 2024 utilised temporary facilities across the city and the Île-de-France region, whereas Milan-Cortina 2026 expanded its venue masterplan geographically across a macro-region, maximising the use of existing venues alongside temporary facilities.

However, for being innovative and ambitious, the urban-related *Reforms* introduced by Olympic Agenda have proven challenging to implement in practice. During the preparations for the Paris 2024 and Milan-Cortina 2026 Olympic Games, various contextual difficulties emerged that potentially compromised the initial goals set by the IOC. This chapter focuses on identifying those specific situations which could compromise alignment with the Agenda's strategy. It aims to answer the following question: what challenges have emerged during the preparation phases of the Olympic Games that hinder the implementation of the Agenda's goals? To address this question, the chapter compares the previously systematised *Reforms* with the preparations for the Paris 2024 and Milan-Cortina 2026 Olympic Games. It develops a *Research Agenda* that poses critical *Questions* challenging the alignment of certain aspects of these editions with the commitments made under Olympic Agenda. This exploratory research aims to highlight situations that warrant further investigation, setting the stage for the confirmatory research conducted in Chapter 5.

4.1. Defining the Case Study Analysis

To investigate the practical implementation of Olympic Agenda 2020, this research employed a case study analysis, recognising it as the most appropriate approach to test whether the theoretical commitments made by the IOC are being implemented in practice and successfully integrated into real-life contexts. As Yin (2002, p. 1) highlights, case studies "are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context". They provide a particularly valuable and robust method for an in-depth examination and have been recurrently employed in evaluating the outcomes associated with the Olympic Games' preparations and deliveries. The approach perfectly aligns with the objectives of examining the Agenda's implementation since its initiatives involve changes and innovations across various dimensions of the Olympic Games, all of which can only be empirically assessed. Furthermore, the method allowed to observe the dynamics and outcomes of the IOC's strategies as they unfolded, offering a real-time perspective on the challenges and successes of the implementation process.

The research focused on specific instances of Paris 2024 and Milan-Cortina 2026, leveraging these case studies to delve into the operationalisation of the Olympic Agenda. These editions were chosen because they consist of the first Summer and Winter Olympic Games, respectively, to fully benefit from the Agenda's principles, making them ideal subjects for studying the real-world application of the IOC's strategic commitments. While Summer and Winter Games differ significantly in type, providing valuable variety in their contexts, they also share core similarities in planning and governance processes, enabling meaningful associations within a longitudinal methodological approach. Moreover, the longitudinal aspect of the case studies method allowed for the observation of changes and adaptations over time. This is crucial for understanding the iterative nature of large-scale projects like the Olympic Games, where initial plans often undergo significant modifications due to various unforeseen factors. By examining the evolving preparations for Paris 2024 and Milan-Cortina 2026 while they were underway, the research

captured how adaptive the IOC's strategies are and how well they respond to real-world complexities.

The analysis began with exploratory research on the preparations for these editions, focusing on their alignment with the previously identified *Reforms*. Exploratory research is a crucial initial step in qualitative research, particularly when analysing complex global events like the Olympic Games. It provides a deeper contextual understanding, which is vital for assessing how well theoretical commitments translate into practical realities, identifying potential barriers to implementation, such as local opposition, financial constraints, or logistical challenges. It helps in identifying and clarifying the key variables and concepts that need to be further examined, generating formal *Questions* not yet clearly defined at the outset, but which become more precise as the exploratory phase progresses, guiding subsequent stages of research (Jaeger and Halliday, 1998). This process led to the development of a *Research Agenda* to guide the following methodological stage.

The *Research Agenda* focused specifically on situations where misalignments were detected between the case studies and the previously developed urban-related *Reforms*. This approach was deliberately chosen to provide insights and lessons crucial for refining future policies and strategies. While acknowledging that Olympic Agenda has brought, indeed, significant advancements in the sustainability of the Games, this research addresses the limitations and obstacles that still need to be overcome. Highlighting these shortcomings enables the formulation of actionable recommendations to enhance effectiveness and encourages continuous improvement in the ongoing optimisation process.

To develop the *Research Agenda*, the analysis of the case studies was initially based on the candidature files of the respective Games' edition. This allowed an understanding of the context of each edition and the identification of aspects related to the urban domain relevant to the research, including their venue masterplans and other planned interventions, the expected impacts on the territory, and, to some extent, the reasons for their realisation.

Given the long preparation period for the Olympic Games, unexpected changes to plans are common, and the final implemented concepts often differ from the original candidature proposals. Furthermore, the implementation of the Olympic Agenda 2020, which was new, untested, and being rolled out simultaneously with the preparation of the selected case studies, added complexity and triggered last-minute changes. Consequently, it was necessary to continuously update the analysis with the latest developments. Official websites of organisations involved in the event's preparation were used to track these updates, but the primary sources of data for this step were online news, leveraging their immediacy and broad coverage. Online news provides valuable sources to keep up with contemporary subjects that unfold while the research is being carried out, offering real-time updates and diverse perspectives from various sources (Lowry, 2016). However, disadvantages such as potential biases and the variable quality of information underscore the importance of verifying data. Nevertheless, this approach was considered appropriate for developing the *Research Agenda* as it allowed for continuous monitoring and synthesis of evolving developments, facilitating the identification of patterns and emerging issues. It was not intended for drawing final conclusions, as these require more comprehensive analysis and validation across multiple data sources and methodologies, as conducted in the next chapter.

The collected data was juxtaposed with the urban-related *Reforms* to corroborate the implementation of Olympic Agenda 2020. This comparative analysis aimed to pinpoint specific

discrepancies between the decisions made in the case studies and the IOC's theoretical commitments. This process was crucial in shaping the *Research Agenda* with targeted *Questions* for the subsequent methodological stage, aimed not at validating alignment with the *Reforms* but at identifying potential shortcomings in their implementation. Most of these *Questions* are tailored to each decision, reflecting the organisers' strategic choices in various contexts.

4.2. Questioning the First Games Under Agenda 2020

The *Research Agenda* resulting from the adopted methodology comprises 35 *Questions*, each pertaining to either Paris 2024, Milan-Cortina 2026, or both. **Fig. 20** associates each *Question* with the urban-related *Reforms* leading to their formulation, while **Appendix II** further indicates the contexts they address and the *Reforms' codes* they potentially diverge from. In the following subsections, each case study is individually addressed and the formulated *Questions* are presented.

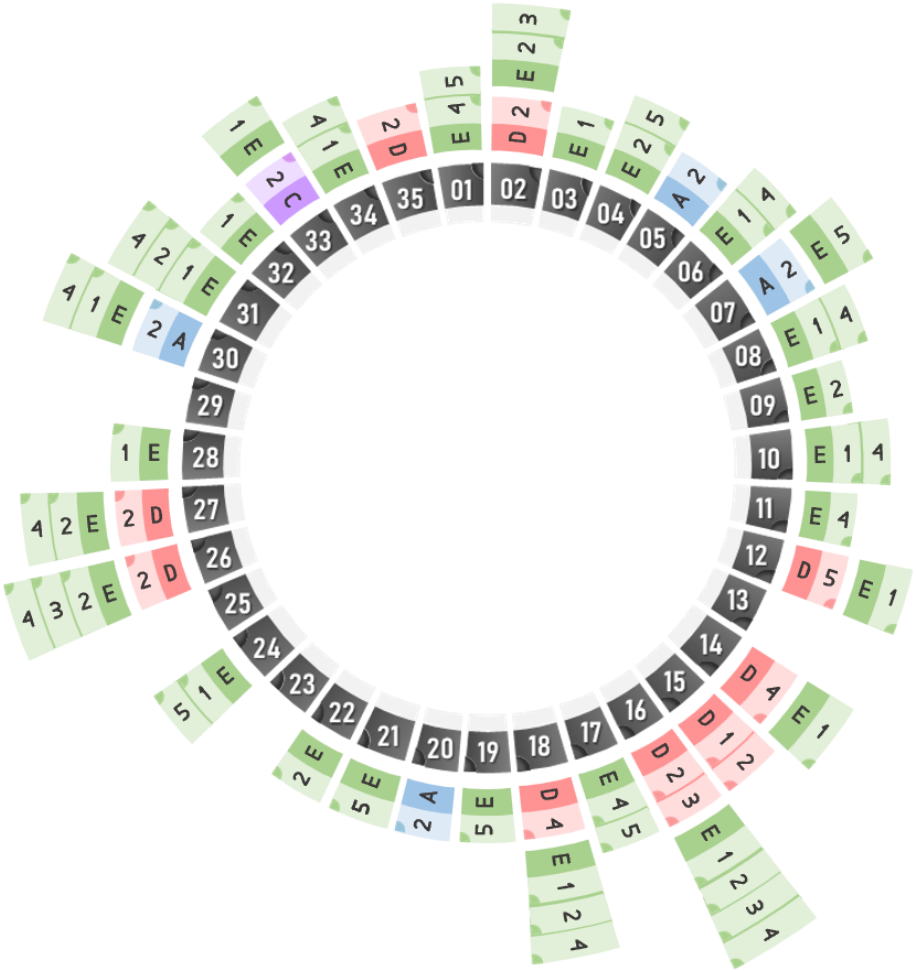

Fig. 20 *Questions* of the *Research Agenda* and *Reforms* leading to their formulation (cf. **Fig. 19**).

Paris 2024 Summer Olympic Games

Paris has a rich Olympic history, having hosted the summer Games three times (in 1900, 1924 and 2024) and bidding for four other editions (1972, 1992, 2008, and 2012). In particular, the Paris 2012 bid, like London's successful 2012 bid, greatly emphasised legacy and sustainability. However, the differences between the Paris 2012 and Paris 2024 candidature concepts are

significant, with the latter showing an increased concern for resource efficiency, environmental awareness and social inclusion. Designed alongside the development of Olympic Agenda 2020, Paris 2024 aimed to be the most sustainable Olympic Games in history.

A cornerstone of Paris 2024's sustainability strategy was the use of 95% of existing or temporary venues for competitions, minimising costs and avoiding the creation of "white elephants". The city itself was integrated into the Games' stage, with several temporary venues strategically placed against iconic urban backdrops. The River Seine also played a central role, hosting open-water competitions and the opening ceremony.

Few permanent constructions were undertaken for sports venues. Furthermore, significant revisions to the venue master plan in 2018 and 2020 reduced the number of venues by leveraging opportunities for venue sharing. Innovative solutions such as repurposing the temporary Grand Palais Éphémère and installing a swimming pool in La Défense Arena helped streamline logistics and cut costs. Furthermore, relaxed venue location restrictions facilitated strategic reallocations, eliminating the need for additional temporary structures (Lopes dos Santos and Delaplace, 2023).

Environmental sustainability was another pillar of Paris 2024's urban planning. Organisers initially committed to hosting the first carbon-neutral Olympic Games, focusing on reducing carbon emissions, increasing energy efficiency, and maximising renewable energy use. The Olympic Village exemplifies this commitment with its eco-friendly design, incorporating energy-efficient features, sustainable materials, and green spaces (Paris 2024, 2021).

For all these reasons, Paris 2024 stood out as a pioneering model for urban planning and innovation in mega-events, setting new standards for future Olympic Games. However, while touted as the first edition fully aligned with the Olympic Agenda 2020, critical discussions are warranted regarding its claims to urban sustainability. Despite notable achievements, some practical implementations require further scrutiny and refinement (Lopes dos Santos and Delaplace, 2024).

Looking at the edition's candidature files, Paris 2024 proposed a new permanent Aquatics Centre in Seine-Saint-Denis specifically built to host swimming, synchronised swimming, and diving competitions, with seating for up to 17,000 spectators, reduced to 5,000 in legacy mode. The Aquatics Centre was also part of the Paris 2012 bid. However, unlike other proposed venues, after the bid was lost it was not built due to concerns over high maintenance and opportunity costs, lacking a sustainable legacy plan. At the time, local decision-makers prioritised investments in swimming education over facilities for high-level competitions, reflecting the deep community needs (Schut et al., 2020). Given this historical context, the first *Question* of the *Research Agenda* challenges the *Reforms* "Constructions" and "Legacy Planning", which stipulate that new constructions should only proceed if supported by viable legacy plans. *Question 1: Did the Aquatics Centre have a viable legacy plan justifying its construction?*

If not supported by a viable legacy plan, the *Reforms* "Locations", "Resource Efficiency", and "Overlay" suggest using existing or temporary solutions, even if located outside the host city or country. Therefore, the second *Question* pertains to whether there was a viable alternative option to host the aquatic competitions. *Question 2: Was there a viable alternative option to host the aquatic competitions in an existing or temporary venue?*

Additionally, Paris 2024 initially planned to host water polo events at an existing swimming pool in Marville, requiring permanent upgrades and temporary seating for 6,500 spectators.

However, in October 2018, following the first venue masterplan review, this pool was removed from the Games' concept. Renovation plans remained, repurposing the pool for training instead of competition. Water polo events were relocated to the Aquatics Centre, downsized to 5,000 seats. Other aquatic competitions moved to a newly proposed temporary Aquatics Stadium nearby, seating 15,000. Government budget concerns about rising Aquatics Centre costs due to underestimations during the candidature phase prompted these changes, resulting in a costlier solution but reduced public sector risk (Rowbottom, 2018). These unexpected budgetary issues raise a *Question* regarding the *Reform* "Games Planning", aimed at ensuring an appropriate planning process. *Question 3: Was a proper construction plan developed for the Aquatics Centre?*

Eventually, the second masterplan revision cancelled plans for a temporary Aquatics Stadium, relocating swimming competitions from Seine-Saint-Denis to La Défense Arena. Concerning the Marville swimming pool, it was decided to build a new facility adjacent to it, instead of upgrading the existing one. While one might argue that if a swimming pool already exists the legacy of one that replaces it is not at risk, replacing the original facility's function could compromise its sustainability, even with potential alternative uses. This situation prompts questions about "Resource Efficiency" and "Legacy Planning" for the previously existing facility: *Question 4: Did constructing a new swimming pool in Marville waste existing resources and compromise the function of an existing facility for which a legacy plan was not previously developed?*

Furthermore, constructing a new facility contrary to the bid proposal raises questions about the credibility and reliability of the candidature commitments, which are integral to the host contract. While there may be justifications, this is not an isolated example: nine other Olympic training venues in the Grand Paris area underwent permanent works not mentioned in the candidature files, including swimming pools, stadiums, sports centres, and gymnasiums, totalling 81.6 million euros (SOLIDEO, n.d.). These investments in local-scale facilities, regularly used by the population and especially young people, may offer significant social benefits, yet they contradict the *Reform* "Compliance". Therefore, the question is less about the sustainability of the outcomes and more about the integrity of commitments. Even if these outcomes turn out to be successful, the issue of compliance with the candidature commitments must be addressed. *Question 5: Were some investments in certain venues not properly disclosed in the candidature process?* Alternatively, it could be the case that these unplanned investments were only triggered by hosting the Games, thus raising an alternative formulation to *Question 5: Did hosting the Olympic Games lead to impulsive investments with rushed planning and deliberation?*

Linked to the first formulation of this *Question*, there is an issue regarding the venue status classification of Elancourt Hill, designated to host the mountain bike events. Originally classified as an existing venue requiring permanent works, the hill was essentially a natural site with minimal human intervention. It lacked any sporting facilities or designated mountain bike trails, presenting only a tarred road leading to the top, pedestrian trails, and wild vegetation. This classification appears misleading given the venue's natural state and extensive need for permanent works, challenging the purpose and accuracy of such classifications. This issue will be further explored alongside similar examples in the context of the Milan-Cortina 2026 case study.

In addition to these concerns, there was significant controversy surrounding the construction of a new training swimming pool in Aubervilliers. The original plan in the candidature files proposed using the previously developed but obsolete land of Fort d'Aubervilliers to build it.

However, the location was changed to an adjacent parking lot/bus stop, while a new residential project began in the fort. This change required the destruction of part of the Aubervilliers gardens, evicting long-established community gardeners. These gardens were originally illegal, but they evolved into a crucial green space with dense vegetation and biodiversity (L-A F. and AFP, 2021). Despite some project modifications following a successful court dispute by the gardeners, the new location still led to the displacement of some gardeners and environmental destruction, with decision-makers prioritising the use of green space for construction over previously developed land. These actions contradict the *Reforms* "Games Planning" and "Constructions", raising *Question 6: Did the change of location of the new Aubervilliers swimming pool disregard social and environmental sustainability?*

Besides this, other court appeals were filed by environmental associations against the construction of the Media Village in Dugny, Seine-Saint-Denis. The project utilised a plot of land called Aire-des-Vents, adjacent to the Georges-Valbon Park, a Natura 2000 area. Although Aire-des-Vents was not an environmentally protected area, it featured vegetation and biodiversity and was identified in local and regional development plans for the creation of quality green areas and ecological corridors. Regional planning regulations had to be modified to permit the construction of the Media Village (European Commission et al., 2011; Conseil Régional d'Île-de-France, 2019). Thus, this project does not align with the *Reforms* "Compliance", which requires conformity with applicable regulations, and "Legacy Planning", which calls for aligning any Olympic projects with the host city's plans. *Question 7: Was the Media Village project compatible with long-term plans?*

Court appeals also claimed irregularities in the project's impact study, allegedly underestimating the effects of the "artificialisation" of the site on the environment and climate (AFP, 2021). The *Reforms* "Games Planning" and "Constructions" stipulate that new projects for the Games should contribute to the preservation of biodiversity and not be located adjacent to statutory nature. *Question 8: Did the Media Village project disregard environmental considerations?*

Finally, the *Reform* "Resource Efficiency" calls for the maximum use of existing facilities and requires new media village projects only when the host city's hotel infrastructure is insufficient. The IOC deemed Paris's hotel infrastructure sufficient and advised organisers to reconsider the Media Village project (Le Parisien, 2018). Moreover, the capacity of the Media Village for Games time was significantly reduced due to cost cuts from the COVID-19 pandemic and other budgetary concerns (Coquard and Pretti, 2020), indicating it was initially over-dimensioned. *Question 9: Was the Media Village necessary for the Games?*

In the Pleyel neighbourhood, another area of Seine-Saint-Denis, several interventions were carried out nearby the Olympic Village, including the reorganisation of highway traffic flows in the Pleyel Interchange. This reorganisation was justified by security concerns for athletes' transport to the Stade de France and the Aquatics Centre. However, the construction of new ramps faced public opposition from local groups due to the proximity of a school group for children aged 3 to 12, which ended up surrounded by heavy traffic roads (Ibelaïdene and AFP, 2020). This raised concerns about the children's physical safety, noise pollution affecting their learning environment, and increased air pollution in the neighbourhood. UNICEF France has expressed concern about the future of these children, highlighting the issue in a report on the impacts of children's exposure to air pollution (Da Veiga, 2021). *Reform* "Constructions" requires new projects to bring long-term benefits to local communities and contribute to sustainable cities, while *Reform* "Games Planning" promotes low carbon solutions in the host country. This leads to

Question 10: Did the reorganisation of the traffic flows in the Pleyel Interchange harm local communities and contribute to the intensification of unsustainable transport solutions?

Additionally, *Reform* "Constructions" requires ensuring a healthy and safe environment during constructions, protecting all stakeholders from environmental health and safety risks. However, reports from civic groups indicate that the construction works have compromised safety and comfort for the local population, neglecting the inhabitants' quality of life (Lacroux, 2022). *Question 11: Did the construction works in the Pleyel Interchange put local inhabitants, and specifically children, at health and safety risks?*

Furthermore, *Reforms* "Service Optimisation" and "Games Planning" advocate for transport solutions that minimise dedicated services and promote public transport and active travel modes. While the interventions at the Pleyel Interchange undoubtedly improved the transport comfort and safety for athletes, the proximity of the Olympic Village to the Stade de France or the Aquatics Centre – just 1.5 km – may not justify extensive road infrastructure projects. This prompts *Question 12: Could athletes' transport justify the reorganisation of Pleyel traffic flows, or could it be delivered through other more sustainable mobility solutions?*

In addition to these transport-related interventions, the Pleyel neighbourhood also underwent a significant urban regeneration effort, including the construction of the new multimodal Pleyel Station as part of the Grand Paris Express project, the rehabilitation of the Pleyel Tower, and the development of a new neighbourhood adjacent to both. These projects were not directly linked to the event and some of them were not completed by 2024, but they were accelerated by the Games and raised concerns about gentrification, especially as Seine-Saint-Denis is the poorest department in the Île-de-France region (Writing Ile de France, 2022). While the *Reform* "Constructions" addresses displacement, stating it must be avoided and compensated where unavoidable, the broader issue of gentrification in relation to Games' projects remains unaddressed by the Olympic Agenda *Reforms*. Nevertheless, an additional *Question* was raised to address this issue. *Question 13: Did the construction of the Olympic Village, together with other projects accelerated by the Games but not directly associated with them, contribute to gentrification and, consequently, to indirect displacement?*

In the southwest of Paris, in Saint-Quentin-en-Yvelines, the BMX cycling competitions were hosted in an existing stadium. The candidature files identified the need to carry out permanent construction works, including the removal of the roof to broadcast aerial imagery and meet OBS requirements. Nevertheless, in the context of the Olympic Agenda 2020 (and to reduce costs), OBS has agreed to waive this requirement. Contrarily, the IF for cycling required the general layout of the track to be reconstructed to eliminate any advantage that the home team (in this case, the French team) could have from already knowing the track. This requirement is specific to Olympic competitions and not aligned with the *Reform* "Requirements", which aims to align Games requirements with those of the respective sport's World Championships. This brings into question the flexibility of IFs in adhering to the Agenda's principles. *Question 14: Did International Federations adapt venue requirements in a flexible manner?*

The BMX Stadium is not an isolated example. Due to venue changes for aquatic competitions, several other sports required relocation. Basketball was proposed to be moved to South Paris Arena 6, at Paris Expo Porte de Versailles, but this relocation faced opposition from the International Basketball Federation and athletes due to the venue's low ceiling, despite meeting the IF's 9-meter regulation (Berkeley, 2022). As a solution, basketball preliminaries were moved to Pierre Mauroy Stadium in Lille, forcing the relocation of handball preliminaries to South Paris

Arena 6, while keeping finals in Lille. This shift required duplicated resources and increased carbon footprint from additional travel between Paris and Lille, contradicting the goals of *Reform* "Games Planning". Similarly, boxing preliminaries moved from Court Suzanne Lenglen at Roland Garros to Villepinte Exhibition Centre due to technical requirements, although this relocation was also driven by political matters. This might also have complexified logistics and increased overlay costs.

The *Reform* "Contextualisation" introduces a significant innovation to the Games: organising committees can now propose events that are popular in the host country and appeal to young audiences to be added to their specific editions of the Olympic Games. The Olympic Agenda 2020 *Reforms* do not specify the event's selection criteria, but data from the *Informative Documents* suggests that considerations should include the pre-existence of required venues or the potential for temporary solutions, as well as associated costs (IOC, 2019a). For Paris 2024, the chosen sports were breaking, skateboarding, sport climbing, and surfing. Breaking and skateboarding were hosted in a temporary venue at Place de La Concorde, sport climbing in a new permanent venue built for the Games, and surfing in an existing venue requiring permanent works. Skateboarding, sport climbing, and surfing were also featured in Tokyo 2020 and will be included in Los Angeles 2028. It is also likely that they will be part of the Brisbane 2032 Olympics and eventually be added to the core Olympic Programme. This would free up slots for new sports added by organising committees, potentially requiring more venues (Wharton, 2021; see **Fig. 21**). These developments raise a question about how the selection of additional sports may conflict with the *Reform* "Size", which aims to limit the number of athletes and events. *Question 15: Did the process for the selection of additional sports risk compromising efforts to downsize the event?*

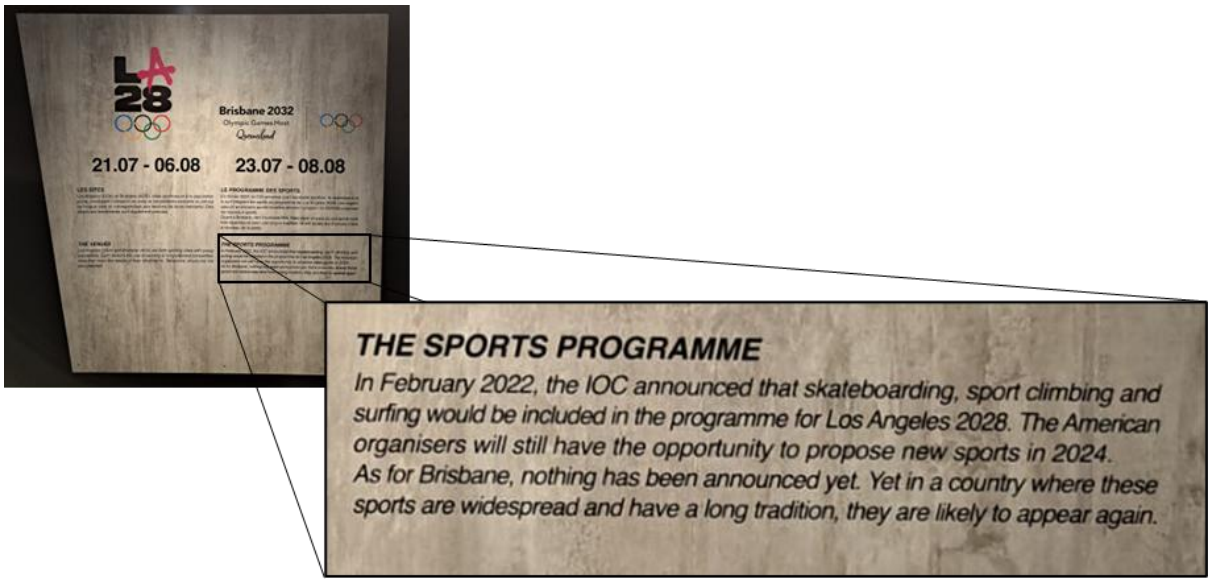

Fig. 21 Information displayed at the Olympic Museum, Lausanne. (Source: author, September 17, 2022).

The decision to host sport climbing in a new permanent venue in Le Bourget, Seine-Saint-Denis, needs to be understood in a broader context. Initially, the sport was to be hosted at Place de La Concorde alongside breaking, skateboarding, BMX freestyle, and basketball 3x3. However, it was moved to Seine-Saint-Denis as a political "compensation" for the numerous events and construction projects that were relocated, cancelled, downsized, or postponed in Seine-Saint-

Denis: due to cost cuts and budget optimisations (partially deriving from the COVID-19 crisis) the sizes of the Olympic and Media Villages were reduced and the planned metro extensions to Le Bourget were postponed; swimming and water polo finals were moved from the Aquatics Centre to La Défense Arena; the projects for two temporary pavilions in Le Bourget for volleyball and badminton were cancelled, relocating these competitions elsewhere in Paris; and the opening ceremony was moved from Stade de France to the River Seine. These changes significantly reduced the role of Seine-Saint-Denis in the Games, which was initially considered crucial for the bid's success (Coquard and Pretti, 2020; NC and AFP, 2020; Bontink, 2020). Given that there was already a temporary solution in a shared venue for sport climbing events, this decision compromises the *Reforms* "Resource Efficiency", "Overlay", and "Constructions", which advocate for the maximum use of existing and temporary venues, especially for mono-functional venues like climbing walls. It also contradicts the *Reform* "Venue Sharing", intended to reduce the overall number of venues.

A similar situation occurred when shooting events were moved from Terrain des Essences in Seine-Saint-Denis to Châteauroux for operational and sustainability reasons. To compensate for this, boxing preliminaries were moved from Roland-Garros and the fencing ranking rounds of modern pentathlon from Château de Versailles, both to the existing Villepinte Exhibition Centre in Seine-Saint-Denis (Palmer, 2022). Like the sport climbing venue, these changes compromised the *Reform* "Venue Sharing" and possibly required duplicating resources. Both situations might contradict the *Reform* "Games Planning", which stipulates that any venue changes must enhance the legacy, sustainability, and cost-efficiency of the Games concept. Thus, the following *Question* addresses the conflicting interests of the Games' organisers and the host cities' political agendas. *Question 16: Were less sustainable and more expensive solutions adopted due to political reasons?*

Concerning the construction of a new venue for sport climbing, it also required the development of a rushed legacy plan, challenging the *Reforms* "Constructions" and "Legacy Planning". This raises a *Question* regarding the viability of the venue's legacy plan, similar to *Question 1*. *Question 17: Was there a viable legacy plan to support the construction of the sport climbing venue?*

Finally, the last two *Questions* regarding the Paris 2024 case study concern the hosting of surfing events in Teahupo'o, a small town in Tahiti, French Polynesia, known as a sacred place for surfing. Teahupo'o was chosen through a national contest due to its reputation for surfing, having hosted the World Surf League (WSL) since 1999. This suggests that Olympic surfing could leverage existing local resources and experience, in line with the *Reform* "Requirements", which advises that Olympic requirements should not exceed those of the sport's World Championships.[7] However, leaked files revealed potentially destructive construction plans for the environment and the harmony of the natural site, raising local opposition and risking damage to the Teahupo'o wave and coral reef (Guet, 2020). Skipping initial public consultation processes, these plans were justified by insurance issues (Delaplace et al., 2024).

Although these plans were downsized, significant interventions were still carried out, including constructing a new judges tower, renovating Teahupo'o marina, constructing a pedestrian bridge, and extending the optical fibre network. Given that Teahupo'o already hosts

[7] The governance of surfing has specific particularities relevant to this case. The WSL is not the IF for surfing and, therefore, is not the "official" Surfing World Championship. However, it is a competition of the highest level and qualifies nearly half of the athletes participating in the Olympics.

the WSL, the necessity of these interventions can be questioned, potentially compromising the *Reforms* "Games Planning", "Resource Efficiency", and "Constructions", particularly regarding urban upgrades for supporting services like energy, transport, and parking, as well as environmental risks. *Question 18: Were the urban upgrades in Teahupo'o necessary for the surfing competitions, and did they further threaten the environment? Could Olympic surfing have been hosted using the existing resources, like the WSL?* Furthermore, a *Question* must be raised regarding the *Reform* "Legacy Planning", specifically concerning the viability of upgrading the Teahupo'o marina and the optical fibre network. *Question 19: Was there a viable legacy plan to support the upgrades in the Teahupo'o surfing venue?*

This case also raises concerns about the criteria used by the organising committee for choosing additional events, complementing *Question 15*, namely regarding the *Reform* "Locations". The choice of Teahupo'o did not have the IOC's initial endorsement and appears to have been influenced by political reasons related to the inclusion of overseas French territories (Morgan, 2019). Other candidate cities, such as Biarritz and Lacanau, were closer to Paris and experienced in hosting high-level competitions, though with smaller and less reliable waves in August. Their proposals required minimal urban infrastructure and disruption and offered higher spectator capacity with fewer environmental risks. Thus, this also supports *Question 16*, concerning the *Reforms* "Locations" and "Games Planning", particularly due to the potentially higher carbon footprint resulting from traveling to the chosen location (Franceinfo, 2019; Iveson, 2020).

Milan-Cortina 2026 Winter Olympic Games

Milan-Cortina 2026 marks a historic milestone as the first Olympic Games to span a macro-regional scale, with competition clusters spread up to 400 kilometres apart by car. According to the candidature files, the Italian edition is rooted in a vision of regional partnership within the Alpine macro-region, supported by the regions of Lombardia and Veneto, and the two Autonomous Provinces of Trento and Bolzano/Bozen. Milan and Cortina will serve as the primary hosts, but the event extends its reach across multiple clusters and stand-alone competition sites. Besides these cities, the candidature venue masterplan included Val di Fiemme, Valtellina, Antholz, and Baselga di Pinè. Verona and Venice were identified as pivotal transport hubs, with Verona also proposed to host the closing ceremony of the Olympics and the opening ceremony of the Paralympics.

This city-region partnership underscores a polycentric urban model with a strong dependency of Milan at its core, necessitating robust mobility strategies to ensure seamless connectivity across the expansive venue network. Central to this approach is the emphasis on enhancing inter-urban mobility through planned transport interventions connecting all host locations. This strategic approach highlights the logistical and financial implications of expanding the geographic spread of Olympic venues, necessitating significant investments in transport infrastructure. Overall, it represented a strategic integration of Olympic ideals with regional planning imperatives, showcasing Italy's commitment to hosting a more sustainable and inclusive winter Olympics while experiencing the complexities of a dispersed venue layout and extensive transport network (Raco and Di Vita, 2024).

Aligned with the Olympic Agenda 2020 and the New Norm guidelines, Milan-Cortina 2026 rhetoric emphasises the use of existing or temporary venues to foster sustainable legacies. Of the 14 competition venues proposed in candidature files, three were temporary, while only one permanent construction was planned, in Santa Giulia, Milan. The remaining competition venues,

along with accommodation and transportation solutions, emphasised the use and upgrade of existing or already planned facilities and infrastructure, minimising environmental impact and optimising resource utilisation (Lopes dos Santos et al., 2022).

In Milan, three multipurpose arenas were proposed to host figure skating and short track speed skating (Forum di Assago), and Ice Hockey (PalaItalia and PalaSharp). The Forum di Assago is an existing facility with a capacity of around 12,000 people. PalaSharp closed in 2011 falling in significant disrepair, requiring extensive renovations. PalaItalia is a new, planned venue with a capacity of approximately 15,000 spectators. Both the PalaSharp renovation and PalaItalia construction projects have been subject to court disputes initiated by ForumNet, the company owning Forum di Assago.

The dispute over PalaSharp's redevelopment and management tender claimed lack of transparency and violation of “competition principles” due to the pre-emption right granted to the company TicketOne (Affaritaliani, 2020). ForumNet won the dispute and tender, but TicketOne exercised its right of first refusal and was awarded the project (Pisa, 2022). Differently, the court appeal concerning PalaItalia challenged the benefits granted to the developer by the municipality of Milan and its classification as a privately owned facility of "public or general interest", arguing that such benefits would unfairly disadvantage ForumNet (Tribunale Amministrativo Regionale per la Lombardia, 2022). These cases raise concerns about the “Compliance” of these projects with applicable laws, justifying the formulation of *Question 20: Were the tenders for the renovation of PalaSharp and the construction of PalaItalia biased, and did they jeopardise existing businesses?*

ForumNet's concerns about its business highlight a potentially more worrying issue regarding the future of Milan's arenas. Currently, ForumNet, with Forum di Assago, holds the business monopoly on large events. Another arena in Milan, the publicly owned Allianz Cloud, has a much smaller capacity of 5,000 people. The construction of PalaItalia and the proposed renovation of PalaSharp would double the number of major arenas, likely sparking intense competition that could lead to some venues becoming "white elephants". The spectator capacities of the proposed arenas are similar to the existing ones, implying they would serve similar purposes. This would have been particularly relevant for PalaSharp and the nearby Allianz Cloud, distancing only 1.5 kilometres from each other. Given its smaller size and public ownership, Allianz Cloud would likely face more inconsistent business prospects.

This situation raises two *Questions*. The first concerns the *Reform* “Legacy Planning”, specifically regarding the viability of Milan’s post-Games venue offer, as the new arenas could threaten the viability of the existing ones. *Question 21: Was there a viable legacy plan including the business plans of all Milan’s arenas, thus mitigating risks of obsolescence triggered by market competition?* Since Allianz Cloud was excluded from the Games’ concept, the second *Question* concerns the *Reform* “Resource Efficiency”, specifically regarding the maximum use of existing venues. *Question 22: Could the competitions proposed for PalaSharp be hosted in the Allianz Cloud without significant losses for the event, thereby reducing the Games’ risks related to funding, construction, and legacy?*

Also in Milan, the San Siro Stadium, owned by the municipality and home to Milan and Inter Milan football clubs, was chosen to host the opening ceremony. This ceremony would mark the final event at the stadium before its planned demolition as part of a "green" urban redevelopment project including a new stadium. However, the decision-making process for the construction of the new stadium was contentious. The football clubs have accused the municipality of delaying

the process and have threatened to build their own stadiums elsewhere (Palmer, 2021; Burke, 2022). Although it was not the main cause of delays, the hosting of the ceremony contributed to it, as the stadium must remain intact until the Olympic Games. In case the clubs decided to proceed with relocation, the situation could undermine the promised redevelopment, compromising private investment for a project considered to significantly contribute for the city's long-term development (Giannattasio, 2022). While the described situation does not conflict with any of the Olympic Agenda 2020 urban-related *Reforms*, it is a case worth mentioning since similar conflicts between Olympic requirements and local interests may arise in the future, potentially negatively affecting territories. *Question 23: Given its lengthy preparation period, demanding requirements, and strict contracts, is the Olympic Games format resilient enough to adapt to unforeseen changes and emerging stakeholders' interests?*

Milan-Cortina 2026 candidature proposed hosting speed skating at the existing Ice Rink Pinè, in Baselga di Pinè, classifying it as an existing venue requiring permanent works. The planned renovation included constructing a roof and a spectator area for 5,000 people, approximately the population of Baselga di Pinè. Concerns over the venue's legacy arose, as it could incur operational losses exceeding half a million euros annually. In response, the IOC has urged organisers to explore alternative solutions, highlighting that binding agreements for the long-term operation of the venue were still lacking (Pavitt, 2021). This dispute raises questions about the adherence of the plans to the *Reforms* "Games Planning" and "Legacy Planning". *Question 24: Did the Milan-Cortina 2026 candidature develop viable legacy plans for existing venues requiring significant upgrades?*

This lack of a viable legacy plan could have stemmed from the fact that Ice Rink Pinè was classified in candidature files as an existing venue. Despite being categorised as so, the venue would need substantial investments for permanent upgrades. This pattern extends to other facilities like the Eugenio Monti Sliding Centre in Cortina d'Ampezzo and the previously addressed Paris 2024 venue of Elancourt Hill. More than 10 other Milan-Cortina 2026 venues classified as existing or temporary were also estimated to receive some investment for permanent works, with a collective budget amounting to close to 25 million USD. Not related with any specific *Reform*, this prompts a *Question* about the appropriateness of this venue classification system. *Question 25: Is the venue classification system used by candidate cities flawed and inconsistent, potentially leading to negligent or deliberate misrepresentation of venue conditions and required upgrades?*

In the case of Ice Rink Pinè, the upgrading cost was initially estimated at 37 million USD, but later estimates exceeded 50 million USD. With such a budget, classifying Ice Rink Pinè in the same category as other existing venues requiring significantly less costly permanent works seems misleading. Moreover, in cases of significant infrastructure investment like this one, *Reforms* "Locations", "Resource Efficiency", "Overlay" and "Constructions" suggest that existing or temporary facilities should be prioritised. *Question 26: Were there feasible alternatives, such as utilising existing or temporary solutions, to avoid expensive permanent upgrades at the Ice Rink Pinè?*

For some time, organisers rejected relocating the competitions in Ice Rink Pinè but, eventually, speed skating ended up being moved to the existing Fiera Milano, in Milan, thus giving an answer to *Question 26*. Before this decision, one final issue concerning Ice Rink Pinè arose: whether it was necessary to construct a roof at all. *Reform* "Requirements" indicates that the standards for the Olympic Games should not exceed those of the respective World Championships, and Ice Rink Pinè hosted the World Championships in 1995 without a roof. Additionally, the 2018 World

Championship took place at the Olympic Stadium in Amsterdam, an outdoor venue. Thus, this case also supports *Question 14*, concerning the role of IFs in implementing Olympic Agenda.

Similarly, the Eugenio Monti Sliding Centre in Cortina, proposed to host bobsleigh, skeleton, and luge events, was a significant point of contention. Closed since 2008 and falling into disrepair, it was classified in candidature files as an existing venue requiring substantial renovations. Initially budgeted at 54 million USD, the cost has escalated to over 85 million USD. Moreover, a viability study projected annual post-Games operational losses running into hundreds of thousands (DBA PRO. S.p.A., 2021). This aligns with concerns raised in *Questions 24* and *25*.

Additionally, the local population voiced opposition to this renovation and, in line with Olympic Agenda 2020, the IOC suggested using alternative existing sliding centres in Innsbruck, Austria, or St. Moritz, Switzerland, which have a history of hosting major events and are within reasonable travel distances. These issues raise concern about the sustainability and practicality of renovating the Eugenio Monti Sliding Centre, particularly considering that, like for *Question 26*, Olympic Agenda *Reforms* emphasise the use of existing or temporary venues to minimise costs and environmental impact, especially when concerning mono-functional facilities. *Question 27: As a mono-functional venue, could existing alternatives be used to avoid permanent upgrades to the Eugenio Monti Sliding Centre?*

One last *Question* must be raised regarding the construction works proposed for the Ice Rink Pinè and the Eugenio Monti Sliding Centre, also pertaining to the case of PalaSharp. Comparing the costs of permanent works for these competition venues estimated in the candidature dossier (2019) with the costs later revealed in 2022, **Fig. 22** shows how these venues have experienced significant cost overruns. In part, these overruns might be attributed to the lack of an appropriate plan, as addressed by the *Reform* "Games Planning". *Question 28: Was an accurate plan for the upgrades of the existing venues properly developed?*

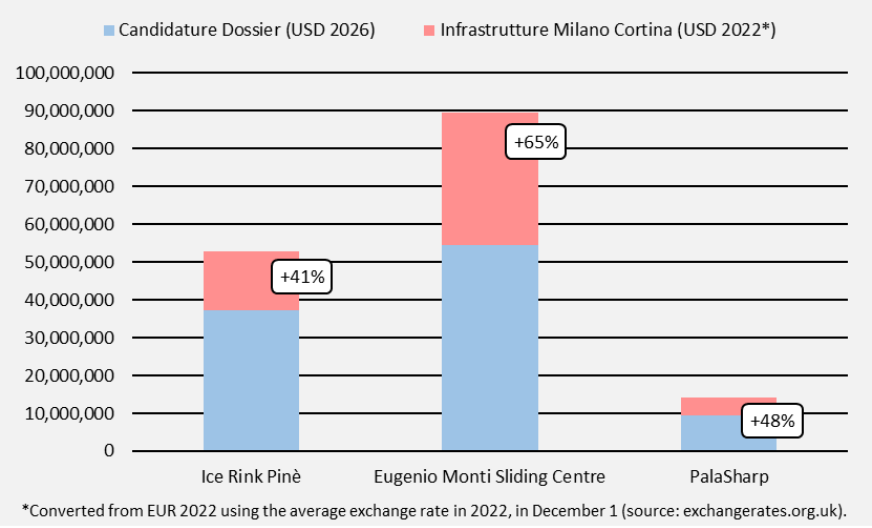

Fig. 22 Cost overruns of Ice Rink Pinè, Eugenio Monti Sliding Centre and PalaSharp upgrades (Data Source: Milano-Cortina 2026 Candidate City Olympic Winter Games (2019) and Bollettino Ufficiale della Regione del Veneto (2022)).

Cost overruns are a long-standing problem in Olympic preparations. While underestimations have certainly contributed to these overruns, the global context in which this edition of the Games

was prepared is also highly relevant, particularly the COVID-19 crisis and the energy crisis resulting from the war in Ukraine. Supporting the formulation of *Question 23*, although in a different context, these cost overruns also highlight the lack of resilience of the Olympic Games preparation when faced with unexpected changes.

The alternative formulation of *Question 5*, which, for Paris 2024, examines the differences between the interventions proposed in candidature files and those actually implemented, is also applicable to the case study of Milan-Cortina 2026. The selection of competition venues for this edition was based on maximising the use of existing facilities and on their experience in hosting high-level competitions, thus justifying the wide spatial distribution of the venue masterplan (Milano-Cortina 2026 Candidate City Olympic Winter Games, 2019). The Stelvio Stadium in Bormio hosted the men's competitions of the Alpine World Ski Championships twice (1995 and 2005) and has been part of the World Cup circuit since 1993. In Val di Fiemme, the Giuseppe Dal Ben Ski Jumping Stadium in Predazzo and the Lago di Tesero Cross Country Stadium in Tesero hosted the Nordic World Ski Championships in 1991, 2003, and 2013, and have been part of World Cup circuits for multiple editions since 1995. Similarly, the Arena Alto Adige in Rasen-Antholz hosted six Biathlon World Championships (most recently in 2020) and has regularly hosted events on the World Cup circuit since 1971.

Leveraging this event-hosting experience and utilising existing venues were strengths of the Milan-Cortina 2026 candidature, offering a high-quality sports experience without necessitating significant construction works, thus eliminating concerns about legacy. Moreover, this approach fully complied with the *Reform* "Requirements" regarding the capability of previous World Championship venues to host the Olympic Games. However, following the election of Milan-Cortina 2026, additional public investments were announced for the upgrade of these facilities. As shown in **Fig. 23**, these investments range from 500% to 2100% of the initially proposed budgets. The figure also includes data for permanent works at the Mottolino temporary venue in Livigno, which ended up being proposed to additionally host the competitions originally planned for Sitas-Tagliede (which was removed from the venue masterplan), and at the Azzurri d'Italia Stadium in Valdidentro, Valtellina, initially proposed to host Biathlon Paralympic competitions (also removed from the venue masterplan). In total, the additional investment for these venues was estimated at close to 115 million USD. Forum di Assago will also receive investment that was not mentioned in the candidature dossier. Unlike the cases illustrated in **Fig. 22**, these are not cost overruns but rather deliberate additional investments, thus applying to *Question 5*.

Besides the competition venues, the Milan-Cortina 2026 Olympics prompted substantial infrastructure investments, totalling close to 2 billion USD. Infrastrutture Milano Cortina 2026 S.p.A., established under the extraordinary "Olympic law", oversaw these projects. These works were categorised as essential for the Games' realisation or as related/contextual, indicating they were linked to the Games but not strictly necessary. Some of these projects have been shelved for years and were not outlined in the candidature dossier. Moreover, several contextual projects were not expected to be finished before the Games (Brignolo, 2022).

Infrastructure projects of this type are susceptible to cost overruns, public opposition, and environmental impacts, especially in mountainous regions. Being carried out under the Olympics' legal extraordinary status adds risk to the Olympic project, possibly compromising the success of Olympic Agenda 2020. The following *Question* was formulated to address this issue.
Question 29: Do host cities exploit the exceptional conditions granted by the Olympic Games, such as the "Olympic law", to undertake unnecessary projects that increase the event's economic, social, and environmental risks?

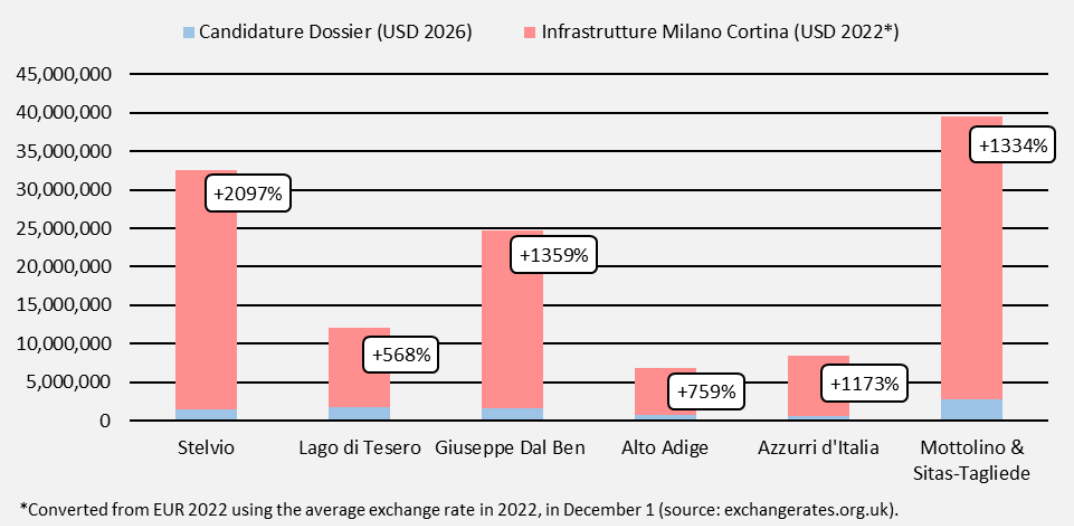

Fig. 23 Additional investments for Milan-Cortina 2026 venues (Data Source: Milano-Cortina 2026 Candidate City Olympic Winter Games (2019) and Bollettino Ufficiale della Regione del Veneto (2022)).

One of the infrastructures proposed to be constructed before the Games was the Bormio bypass, situated on the site of an agricultural field known as Alute. This project, dating from two decades ago upon the hosting of the Alpine World Ski Championships in 2005, aimed to alleviate heavy traffic during peak seasons in the city. Additionally, it was seen as a crucial component of the transport plans for competitions at the Stelvio Stadium. This planned road, less than 2 kilometres long, spans directly from Bormio's main access to the venue, running nearly parallel to the previously existing route. However, the project sparked significant environmental concerns, particularly due to its impact on the Regional Ecological Network and becoming a barrier between biodiverse natural areas and the river, hindering fauna access to water.

This gave rise to local opposition, with residents also questioning the road's effectiveness in addressing city traffic problems (Tarabini, 2022; Deri, 2022). Addressing these issues, the following question is framed within *Reforms* "Compliance", which requires adherence to regional legislation, "Games Planning", which emphasises respect for the interests of various stakeholder groups and the conservation of biodiversity, and "Constructions", which calls for sustainability measures in infrastructure projects. *Question 30: Did the plans for the construction of the Bormio bypass adhere to environmental regulations, respecting biodiversity and aligning with the local community's interests?* Additionally, *Reforms* "Games Planning", "Resource Efficiency" and "Constructions" recommend implementing sustainable, low carbon transport solutions that utilise existing networks, particularly when outside the host city and for short distances. *Question 31: Did the construction plans for the Bormio bypass promote unsustainable mobility, and could it be justified by Games' needs?*

In Livigno, the Mottolino Fun Mountain was selected to host snowboard and most freestyle skiing competitions. Mottolino is a prominent bike and snow park in Europe, known for amateur sports and professional training. It hosted the Snowboard World Cup in December 2022. Selecting Mottolino for the Olympics was justified by the venue's expertise and specialisation in these sports, with temporary facilities seasonally installed on the top of the mountain. However, for the Olympic Games, the temporary facilities were proposed in a different location, a green field at the bottom of the mountain. This was likely due to the more demanding requirements of

the Games, which demand a stadium and different slopes (big air jump, cross track, halfpipe, slalom track and slopestyle track) for the several sports. At the same time, as shown in **Fig. 23**, there were additional investments for permanent works in this venue, probably stemming from this change of location. This situation raises the question if this was always the plan or a needed change resulting from more detailed planning, thus challenging the *Reform* "Games Planning" in what concerns the viability of the developed candidature plans. *Question 32: Were the candidature plans detailed enough to ensure the viability of the proposals?*

This *Question* is crucial given that simplified candidature processes implemented by the IOC in the context of Olympic Agenda may overlook technical details, leading to unforeseen feasibility issues or higher costs (economic, social, or environmental). Mottolino ended up requiring permanent construction works, including excavations and interventions in forested areas. Therefore, the chosen location prompts another *Question* related to the *Reforms* "Expertise", which focuses on leveraging the experience of venue operators and local event organisers, and "Games Planning", which promotes the environmental sustainability of the adopted solutions. *Question 33: Did the choice of relocating Mottolino's facilities decrease the opportunity to leverage local experience, thereby increasing environmental impacts?*

Besides the main Olympic Village in Milan, two other temporary Olympic villages were planned: one in Fiames, Cortina d'Ampezzo, and one near Aquagranda, Livigno. The latter also included a permanent component aligned with city plans. According to the candidature files, after the Games all these temporary facilities were to be provided to the National Civil Defence Department for use in emergency situations. However, these plans were subject to discussion. The temporary component of the Village in Livigno was cancelled due to environmental impacts, although the permanent component remained unchanged. New plans proposed athletes' accommodation in existing hotels in Teola, with the new permanent buildings serving only to house staff. Additionally, Aquagranda, a nearby wellness and sports centre, has received significant funding for upgrades to become an Olympic training centre (Di Marco, 2022). This project has not been proposed in the bid and does not appear to be required for the Games, thus complementing the issue under research in *Question 29*.

In Cortina d'Ampezzo, local hoteliers requested that the Village be built permanently to house seasonal workers after the Games. The proposed site, in Fiames, was already developed land, formerly an airport, but surrounded by natural landscape along the Boite riverbank. A possible hydrogeological risk was identified at the site, which makes *Question 32* also applicable to this case. Furthermore, environmental associations expressed concerns about the environmental impact of the temporary project, also fearing that the Village was instead built permanently for the benefit of the tourism industry (Grottolo, 2022; Dibona, 2022).

The venue for the closing ceremony of the Olympics and the opening ceremony of the Paralympics, Arena di Verona, is a historic monument built in 30 AD, located in a UNESCO World Heritage Site. It regularly hosts opera concerts and other shows. However, accessibility within the venue required improvement, especially to host the Paralympics ceremony. Therefore, construction works were proposed to remove architectural barriers and make it accessible for all (Corradi, 2022). While these works aim to enhance accessibility and inclusivity, intervening in such an ancient and protected building is complex and risky. The *Reforms* "Games Planning" and "Constructions" emphasise the conservation of cultural heritage and stipulate that no permanent constructions should occur in cultural protected areas or World Heritage Sites. This raises *Question 34: Did the option to use Arena di Verona for ceremonies increase the risks of compromising the conservation status of the cultural protected building and World Heritage Site?*

The situation described in the previous *Question* exemplifies a broader issue. The *Reform* "Contextualisation" introduces a new definition of host, allowing multiple cities, regions, states, or countries to host the Olympic Games. This change is primarily driven by sustainability purposes, as further confirmed by the *Reform* "Locations", which emphasises that this flexibility is justified by reasons of legacy, sustainability, and cost-efficiency. At first, the Milan-Cortina 2026 concept appears to adhere to this approach, utilising existing venues experienced in hosting high-level competitions. However, as highlighted by many *Questions* in this case study, this concept seems unnecessarily complex, comprising economic risks and additional governance and mobility challenges.

Potential alternatives could have been considered. For instance, Cortina d'Ampezzo's involvement could be unnecessary if: instead of Olympia della Tofane, women's alpine ski competitions were held in Santa Caterina di Valfurva, near Bormio, which hosted the 1995 and 2005 World Championships; instead of Cortina's Olympic Stadium, curling was hosted in Allianz Cloud or other venue in Milan; instead of Eugenio Monti Sliding Centre, bobsleigh, skeleton, and luge were hosted in St. Moritz or Innsbruck, as suggested by the IOC. Furthermore, as confirmed by later changes to the venue masterplan, Ice Rink Pinè could be replaced by existing venues in Milan. All ceremonies could also be hosted in San Siro Stadium instead of using Arena di Verona. Additionally, existing venues in Turin, built for the 2006 Winter Olympics and closer to Milan, could have been utilised. This "overcomplication" issue raises the last *Question* of the *Research Agenda*. *Question 35: Was the concept of Milan-Cortina 2026 an overcomplication, and was it really designed for reasons of legacy, sustainability, and cost-efficiency?*

4.3. Interpreting the Case Studies *Research Agenda*

This chapter developed a *Research Agenda* comprising 35 *Questions*. These *Questions* were derived from an analysis of the previously systematised Olympic Agenda urban-related *Reforms* and their practical implementations in the contexts of the preparations for the Paris 2024 and Milan-Cortina 2026 Olympic Games. They were formulated to pinpoint situations where the actions and outcomes of the Games' preparations may not align with the principles set forth by the *Reforms*. As a notable strength of this approach, areas where further research and corrective actions might be necessary were identified. However, it is important to note that by focusing on cases of misalignment, the *Research Agenda* overlooks other aspects where Olympic Agenda 2020 is driving significant positive change and outcomes in terms of urban sustainability. These will be briefly presented in Chapter 7.

The analysis highlighted the importance of contextualising and framing the implementation of the *Reforms* within the local settings of host territories. It revealed that stringent measures might not always align with local goals, creating a potential conflict between the standardised requirements and the unique needs of each host territory. Conversely, more flexible, softer measures were often left to the interpretation of the organisers. This flexibility, while allowing for adaptation to local conditions, also introduced variability in implementation, sometimes leading to decisions that could compromise the Agenda's goals.

As part of exploratory research, the *Research Agenda*'s *Questions* were primarily formulated based on online news sources. This inevitably shaped the research discourse towards critical issues of public sentiment and potential areas of contention. On the positive side, by following media reports that focused on issues raising public opposition the methodology captured critical concerns and community perceptions, aligning with the Olympic Agenda's goal to mitigate

negative public opinion and enhance the event's transparency. By incorporating a wide range of viewpoints – from local communities, activists, and experts – the research shed light on conflicting interests and concerns, revealing instances where the implementation of measures may have fallen short in addressing the critical concerns of host cities and communities.

However, relying on online news sources carries inherent risks. News coverage often tends to be sensationalised or biased, driven by editorial agendas or the need to attract readership. This bias can distort how issues are framed and may exaggerate the importance of certain controversies over others. Therefore, despite efforts to maintain objectivity, using online news as a primary source introduced a limitation to this *Research Agenda*: it cannot guarantee comprehensiveness. Thus, while online news provided a valuable starting point for identifying critical issues and public perceptions, its use as a research methodology necessitated a balanced approach. This included additional primary research, as seen in Chapter 3, and stakeholder engagement, as will be developed in Chapter 5. These measures were essential to ensure a robust analysis and to draw informed conclusions.

Conducting the research during the ongoing preparations for the Paris 2024 and Milan-Cortina 2026 Olympic Games proved beneficial for staying updated and identifying the solutions organisers adopted to address emerging challenges. As the *Research Agenda* was developed in early 2022, many of the issues it highlights were already being addressed during the interviews and field research period described in the next chapter. Some solutions emerged during or after this timeframe, such as the relocation of competitions initially planned for PalaSharp or Ice Rink Piné in the case of Milan-Cortina 2026. These decisions often reflect the principles of Olympic Agenda, serving as examples of how this strategy is driving significant changes in mentality and sustainability within Olympic Games planning and execution. In any case, the fact that solutions were meanwhile found to resolve the issues highlighted does not diminish the value of raising these *Questions*. They continue to provide valuable insights into the origins of contentious decisions and the evolution of solutions over time. This approach not only enhances understanding of the complexities involved in Olympic Games preparations but also underscores the importance of continuous scrutiny and adaptive management throughout the event lifecycle.

It is also crucial to acknowledge a methodological weakness related to the formulation of these *Questions*. Some of them draw upon *Reforms* that include *codes* extracted from very recent documents compared to the development of the case studies' candidatures and subsequent implementation. For instance, the *codes* used may originate from recent updates to the Olympic Charter or host contracts, which may not necessarily bind the analysed case studies. Additionally, some of these recent *codes* appear to have been created in response to specific situations arising during the preparations of the case studies. For example, *Question 34*, addressing the adaptation of Arena di Verona to accessibility parameters, was formulated from a *code* extracted from the Brisbane 2032 host contract, dated 2021. This *code* aims to protect World Heritage Sites by prohibiting construction in such areas, a provision that did not exist in the Milan-Cortina 2026 contract and might have even been influenced by recommendations from Olympic Agenda 2020+5.

This weakness does not undermine the exploratory research's objective of guiding confirmatory research. This is because the aim of the confirmatory research carried out in Chapter 5 is not to answer these *Questions* and determine whether the case studies align with Olympic Agenda, but rather to investigate the rationale behind decisions made in instances where alignment might be lacking. Since Olympic Agenda 2020 has been implemented through ongoing improvements and aims to steer the Games in a certain direction, the specific edition of

the Games that particular measures are intended to affect is irrelevant for driving the Agenda's further enhancement. From the organisers point of view, it can be considered unfair to assess their decisions based on commitments made for other editions, but from the IOC point of view, it remains pertinent to explore these *Questions*, even if the origins of their formulation do not directly pertain to the respective case study. This approach helps clarify the broader implications of Olympic Agenda's influence and highlights areas where further improvement is needed for future Games editions.

Despite its weaknesses, this *Research Agenda* contributes to a broader understanding of the complexities involved in hosting mega-events and the ongoing efforts to balance international standards with local contexts. While it identified numerous instances where Paris 2024 and Milan-Cortina 2026 diverged from Olympic Agenda 2020, it also underscored the dynamic nature of Olympic preparations. Looking ahead, the *Questions* raised can serve as a foundation for future studies aimed at delving deeper into the reasons behind the observed conflicts. Furthermore, they provide a historical record for post-Games studies focusing on the actual impact of the decisions made and how they affected the future Games' legacies for host cities and communities.

Chapter 5

The Shortcomings of Olympic Agenda 2020

As reported in the previous chapter, translating the ambitious objectives of Olympic Agenda 2020 into practice presents significant challenges. These challenges stem, in part, from the varying perspectives and expectations of the diverse stakeholders involved in the organisation of the Games. From the IOC to organising committees, public authorities (at different scales), private sector sponsors, and community groups, each stakeholder approaches Olympic projects with differing priorities and visions, engaging with the Agenda from a specific perspective. This divergence leads to varying interpretations of goals and outcomes.

In this context, the concept of “wicked problems" becomes particularly relevant. The Olympic Agenda *Reforms*, while well-intended, were bound to encounter such challenges during their application. Each city and country that hosts the Olympic Games operates within its unique context, meaning that Olympic policies and planning efforts are subject to specific interests and objectives.

As Byers et al. (2020) point out, mega-sport events like the Olympic Games often face deeply rooted structural challenges that are difficult to address with top-down policy recommendations. The real-world delivery of the Games is influenced by hidden and generative forces – such as political structures, economic constraints, and social dynamics – that shape how policies are interpreted and enacted. Therefore, while the Agenda provides strategic guidelines, it may lack the capacity to address the deeper, systemic issues that ultimately determine the success or failure of its objectives. A key aspect of this misalignment lies in the varying scopes and consequences of decisions made during the planning and execution phases. What might seem like a rational decision for the Games' success may generate unintended consequences and negative externalities for local communities or broader sustainability goals.

For example, promoting “Olympic sustainability” has been a central goal of Olympic Agenda 2020. Yet, stakeholders interpret "sustainability" differently, often prioritising certain aspects while neglecting others. The IOC’s overarching objectives often emphasise global sustainability, inclusivity, and good governance. In contrast, host cities may focus more on local, short-term economic development and infrastructure improvements. Sponsors may prioritise brand visibility and corporate social responsibility, while civil society groups may seek long-term environmental protection, social equity, and transparency. These competing interests transform “Olympic sustainability” into a wicked problem that lacks a clear solution and requires ongoing negotiation. The IOC, as the global leader of the Olympic Movement, can set the strategic direction, but it relies on the cooperation of other stakeholders to implement these strategies on the ground.

Paris 2024 and Milan-Cortina 2026, while promoted as flagships for the Olympic Agenda 2020, reveal that the theoretical frameworks provided by the Agenda do not always translate into the anticipated results. Although some relevant changes have been initiated, the implementation of the Agenda’s urban-related *Reforms* in a meaningful and comprehensive way has encountered challenges. This chapter seeks to identify the reasons behind these challenges – referred to as Olympic Agenda *Glitches*. It aims to answer the following question: what underlying factors and decision-making processes by stakeholders contributed to the challenges encountered? In

exploring these *Glitches*, this chapter builds on the exploratory research of the previous chapters and conducts confirmatory research through field visits and interviews to understand the deeper social and structural forces at play, as well as the complex web of stakeholder interests. As an outcome, it identifies a list of 10 Olympic Agenda *Glitches* presenting a critical view over inefficiencies and mismatches in the Agenda's practical application. This provides a deeper understanding of the limitations of the Olympic Agenda's urban-related *Reforms* in the face of real-world constraints, as well as how competing interests, shifting priorities, and unforeseen circumstances can compromise their realisation.

5.1. Identifying Obstacles to the Olympic Agenda 2020

After conducting exploratory research, it is crucial to employ methods that provide findings to the questions formulated during the initial stages of investigation. As Nilsen et al. (2019) suggest, confirmatory research provides the necessary framework to validate or refute these preliminary insights by systematically testing them against empirical data, bridging the gap between initial observations and validated conclusions, between theory and practice. This is especially relevant in policy-oriented studies where real-world implications are significant. Confirmatory research enhances the credibility, reliability and robustness of findings by subjecting theoretical assumptions to empirical scrutiny and ensuring that propositions are based on solid evidence drawn from direct engagement with real-world conditions rather than speculative insights (Yin, 2002; Trochim et al., 2015).

In this study, confirmatory research was conducted through targeted field visits to sites of interest, as well as in-depth and semi-structured interviews with key stakeholders, including event organisers, governmental bodies, environmental associations, and civic groups. The *Questions* of the *Research Agenda* formulated in the previous chapter were crucial for guiding the research process, namely to identify relevant sites and issues to observe and define the interview scripts. Field visits enabled first-hand observations of, among others, infrastructure development, site conditions, environmental value, and community habits and lifestyles. Interviews provided a window into the decision-making processes, revealing how priorities were set, challenges managed, and the extent to which the Olympic Agenda's principles were integrated into planning and execution. This approach enabled a thorough examination of specific instances where the implementation of Olympic Agenda 2020 was encountering challenges and provided the opportunity to verify whether the perceived misalignments between the Agenda's *Reforms* and the preparations for Paris 2024 and Milan-Cortina 2026 were genuinely problematic.

Additionally, these field visits and interviews served a dual purpose: they were not only tools for validation but also a means to gather nuanced data that could only be obtained through direct interaction and observation. Moreover, while the primary objective was to address the pre-defined *Questions* regarding potential misalignments, this abductive methodological stage led to the emergence of new *Questions*. These arose from the newly acquired data, often revealing complexities that were not apparent during the initial exploratory phase. This iterative process of generating and refining questions added significant value to the findings. According to Maxwell (2013), this type of process enhances the depth of exploration, uncovering subtle complexities and enriching the understanding of implementation challenges.

By immersing in the physical and operational environments and interacting with both the environment and stakeholders, field visits reveal context-specific issues and nuances that

secondary data alone cannot uncover. Such insights might be missed through desk-based research or document analysis (Parson and McKay, 1985; Creswell and Plano Clark, 2017). Indeed, the field visits to sites of interest for both the Paris 2024 and Milan-Cortina 2026 case studies provided invaluable additional insights. This firsthand engagement allowed for unique opportunities to observe on-the-ground realities and learn through direct experience, offering a clearer picture of how concepts were applied in practice and enhancing the depth and validity of the findings.

For the Paris 2024 case study, 12 site visits were conducted between March 2, 2022, and April 8, 2022. The Milan-Cortina 2026 case study involved 15 visits from May 25, 2022, to July 2, 2022. During these visits, over 100 Olympic-related sites were visited, including competition venues, training facilities, and non-competition locations. A comprehensive list of the visited sites is provided in **Table 3**. While some sites were observed only from the outside, others allowed entry. Some visits included participation in tours organised for the public or specially arranged with venue operators for the purpose of this study. These tours facilitated interactions with tour guides and other participants, providing additional insights.

Additionally, for the Milan-Cortina 2026 case study, four meetings were attended with public stakeholders from the Valtellina region, organised by Politecnico di Milano for PhD students. These stakeholders included representatives from Provincia di Sondrio, Comune di Bormio, Comune di Livigno, and Comune di Sondalo. Although these meetings did not meet the formal standards required for interviews and did not adhere to the ethical guidelines typically associated with them, they provided valuable supplementary data. This data contributed to a deeper understanding of local realities, expectations, and the impacts of hosting the Games, and was therefore included as part of the local stakeholder engagement component of the field visits.

Findings from the field visits were compiled using a variety of methods, including notetaking, photography, video recording, and occasional conversations with local stakeholders. Additionally, materials collected at the field sites, such as informational flyers and other informal forms of written and visual information, were used to support the analysis. Some visits were conducted with other researchers in Olympic studies, which facilitated discussions and the exchange of ideas, aiding in the identification and analysis of key issues. This approach is consistent with established field research practices that emphasise the importance of direct observation and contextual data collection (Phillips and Johns, 2012).

Appendix III links to comprehensive technical reports that were produced and published online in the weeks following each trip (see Lopes dos Santos, 2022a, 2022b). These reports offer detailed accounts of the observations made during the field visits and provide insights into the sites' preparation for the Olympic Games. Each report includes maps detailing the routes taken and public transport used, as well as descriptions providing both general information and personal perspectives of the sites, supported by visual elements such as photos to enhance the validity of the findings. The reports are integral to this study.

In addition to field visits, interviews were conducted with key stakeholders involved in the organisation of the Olympic Games. Interviews are a well-established method in qualitative research within social sciences, providing detailed descriptions of events and processes that are not easily observable, and offering access to insider knowledge that would otherwise be difficult to obtain (Alshenqeeti, 2014). This is particularly crucial when examining decision-making processes and complex organisational dynamics that involve internal deliberations, challenges, and diverse stakeholder perspectives, making interviews an indispensable tool in this study. Their

flexible and adaptive nature allows researchers to explore participants' experiences, viewpoints, and motivations in depth, facilitating a richer understanding of the research topic. Moreover, the interactive aspect of interviews helps to build rapport, which encourages open and honest communication and can lead to the revelation of sensitive or critical information that might not surface in more structured data collection methods (Creswell and Poth, 2018).

Table 3 List of sites visited during field trips for Paris 2024 and Milan-Cortina 2026.

Paris 2024	Competition	Aquatics Centre - Bercy Arena - BMX Stadium - Champs de Mars - Château de Versailles - Elancourt Hill - Esplanade des Invalides - Grand Palais - Grand Palais Éphémère - Golf National - La Défense Arena - Le Bourget School Group - Parc des Princes - Paris Expo Porte de Versailles (South Paris Arena 1, 4 and 6) - Place de la Concorde - Pont d'léna - Porte de La Chapelle Arena - Stade-de-France - Stade Olympic Yves-du-Manoir - Stade Pierre de Coubertin - Stade Roland Garros - Terrain des Essences - Vaires-sur-Marne Nautical Stadium - Velodrome National.
	Training	Aubervilliers Swimming Pool - Auguste-Delaune Sports Park - Bertrand-Dauvin Sports Complex - Colombes Sports Complex - Colombes Swimming Pool - Georges Valbon Park - Grand Nef Ile-de-Vannes - Gymnase Guy Moquet - Gymnase Pablo-Neruda - Ile-de-Vannes Sports Complex - La Courneuve Sports Park - La Villette Great Hall - Marville Futsal Complex - Marville Swimming Pool - Poissonniers Sports Centre - Saint-Denis Sports Centre - Stade Jean Bouin - Stade Max-Rousié.
	Non-competition	Athletes' Village (including Ecoquartier Fluvial) - Canal Saint-Denis - La Villette Live Site - Le Bourget Exhibition Centre - Media Village - PRISME - Trocadero Live Site.
	Others	A1 Crossing - Aubervilliers Gardens - Basilica of Saint-Denis - DIJOP Headquarters - Fort d'Auber - Marville Old Swimming Pool - Paris 2024 Headquarters - Pleyel Interchange - Pleyel Station - Pleyel School Group - Pleyel Tower - Porte de Paris Interchange - SOLIDEO Headquarters - Village's Project House - ZAC Saulnier.
Milan-Cortina 2026	Competition	Carosello 3000 - Cortina Olympic Stadium - Cortina Sliding Centre - Mediolanum Forum - Mottolino - PalaItalia - PalaSharp - Stelvio Ski - Tofane-Olympia.
	Training	Agorà Milano - Rho Fiera Milano.
	Non-competition	Arena di Verona - Cortina Olympic Village - Cortina Mountain Media Centre - Cristallo Luxury Collection Resort & Spa - Darsena - De Rigo Stadium - Fiera Milano City - Grand Hotel Savoia - Parco Tre Torri - Piazza Castello - Piazza del Duomo - Piazza della Repubblica - Piazza Gae Aulenti - Porta Romana Olympic Village - Stadio Meazza/San Siro - Teola Olympic Village.
	Others	Agenti Climatici-San Cristoforo - Allianz Tower (Fondazione Milano-Cortina 2026 Headquarters) - Alute-Tangenzialina - Aquagranda - Arena Civica di Milano - Brescia Railway - Cortina Olympic Square - PalaLido/Allianz Cloud - PalaSesto - Palazzo delle Scintille - Parco dei Capitani - MIND-Expo2015 - Piazzale Loreto - Railway Connection Venezia Mestre-Marco Polo Airport - Santa Giulia - Sitas-Tagliede - Social Music City & Parco Porto di Mare - Stadio A.R. Apollonio - Trampolino Italia - Velodrome Maspes-Vigorelli - Villagio dei Fiori (Project Corba).

Semi-structured and in-depth interviews were particularly chosen for their balance of structure and flexibility, enabling the interviewer to follow a guided set of questions while also exploring unexpected themes as they emerged during the conversations. This approach is advantageous as it encourages a conversational flow that can uncover nuances and details not captured in more rigid interview formats, thereby enhancing data richness (Bryman, 2016). However, it is important to acknowledge that this type of interview can also have limitations, such as potential biases introduced by the interviewer or interviewees, which can influence the data collected. Additionally, there may be challenges in interpreting responses, particularly when interviews are not conducted in the native languages of the interviewer or interviewee, leading to potential miscommunication or misunderstanding (Kvale and Brinkmann, 2009). Efforts were

made to mitigate these challenges through careful question design, interviewer reflexivity, and ensuring accuracy in the transcription and validation process.

A total of 21 semi-structured and in-depth interviews were conducted with 26 interviewees, either in person, online, or in written form, between March 4, 2022, and October 28, 2022. They followed the guidelines proposed by Alsaawi (2014) and all steps were conducted in accordance with the ethical standards of the European Commission (2021). The research protocols were also approved by the Ethics Commission of Instituto Superior Técnico.[8] In-person and online interviews were recorded and transcribed, with transcripts subsequently sent to the interviewees for review, editing, and approval. This step was crucial for maintaining data accuracy and fostering trust between the researcher and participants, as it allowed the interviewees to clarify or expand on their responses.

Table 4 provides a list of the conducted interviews, specifying each interviewee's department within their respective organisation, while **Appendix IV** provides further details from the sessions. This level of detail aims to enhance the credibility, transparency, and overall quality of the research results. Nonetheless, to protect the interviewees' anonymity, the interviews have been categorised into four groups representing the diverse roles, competencies, perspectives, and interests of the organisations involved in the Olympic Games and, hereinafter, references to interview data will be attributed to these groups rather than individual interviews.

The four interviewee groups are event organisers, governmental bodies, environmental associations, and civic groups. Group A, event organisers, includes entities specifically created for the Games and those directly responsible for their planning, such as designing and delivering the Games' concept. Interviewees within this group belong to various departments of the organising committees of both case studies. Group B comprises governmental bodies, which may have been established specifically for the Olympic Games or represent pre-existing public entities with specific roles in the event organisation, delivery, or oversight. This group includes SOLIDEO (the delivery agency for Paris 2024 venues), as well as local, municipal, intermunicipal, and national councils. Group C consists of environmental associations that predate the Games and are committed to environmental preservation and enhancement, contesting some impacts of Games-related activities. Finally, Group D encompasses civic groups, most of which were formed specifically to oppose the Games or certain Games-related interventions.

In addition to these interviews, and for specific issues related to the surfing venue for Paris 2024, located in Tahiti, French Polynesia, some information was obtained from additional research conducted by Delaplace. From May to June 2022, Delaplace carried out field visits in Tahiti and conducted 19 interviews with stakeholders from various sectors, including tourism, surfing, institutional bodies, and local inhabitants, which complemented the data gathered in this study.

Interview data treatment was facilitated using MAXQDA, employing the same methodology outlined in Chapter 3. This process involved a thematic analysis, as described by Braun and Clarke (2006), where the objective was to systematically organise interviewees' responses according to specific questions and issues. Relevant sections of the responses were categorised based on their alignment with each question and other pertinent topics. Subsequently, questions related to both case studies where findings shared commonalities were grouped together. This

[8] Resolution "Ref. n.º 27/2021 (CE-IST) Date: 25/10/2021", available online at https://etica.tecnico.ulisboa.pt/en/pareceres-e-decisoes/2021-2/.

approach aimed to identify issues that undermine the objectives of the Olympic Agenda, whether within a single case study or both, and that are considered to share identical decision-making roots, are predicted to result in similar outcomes, or reveal issues that require analogous approaches. This process resulted in the identification of the Olympic Agenda *Glitches*, defined as critical practical challenges that hinder the implementation of the Olympic Agenda *Reforms* and compromise the associated urban sustainability goals.

Table 4 List of interviews conducted to stakeholders of Paris 2024 and Milan-Cortina 2026.

Group	Case study	Organisation	Department	Date dd.mm.yyyy
A – Event Organisers	2024	Paris 2024	Planning and Information Knowledge Management	04.03.2022
		Paris 2024	Impact and Legacy	18.03.2022
		Paris 2024	Sustainability	09.09.2022
	2026	Fondazione Milano-Cortina 2026	Impact and Legacy	20.06.2022
		Fondazione Milano-Cortina 2026	Project Management	05.07.2022
		Fondazione Milano-Cortina 2026	Sustainability	12.09.2022
B – Governmental Bodies	2024	SOLIDEO – Société de Livraison des Ouvrages Olympiques	Executive Board Public Affairs and Communication	16.03.2022
		DIJOP – Délégation Interministérielle aux Jeux Olympiques et Paralympiques	*Not Applicable* *Not Applicable*	04.04.2022
		Plaine Commune	Mission for the 2024 Olympic and Paralympic Games	06.04.2022
		Seine-Saint-Denis Department	Delegation for the Olympic and Paralympic Games	10.05.2022
		DRIEAT – Direction Régionale et Interdépartementale de l'Environment, de l'Aménagement et des Transports	Departmental Unit of Seine-Saint-Denis	30.08.2022
	2026	Comune di Bormio	Executive Board	30.06.2022
		Comune di Livigno	Sport Public Works	28.10.2022
C – Envr. Associations	2024	MNLE 93 – Mouvement National de Lutte pour l'Environnement	*Not Applicable*	31.03.2022
	2026	Mountain Wilderness	*Not Applicable*	04.07.2022
		CIPRA Italia – International Commission for the Protection of the Alps	*Not Applicable*	05.07.2022
D – Civic Groups	2024	Saccage 2024	*Not Applicable*	14.03.2022
		Collectif de Défense des Jardins D'Aubervilliers	*Not Applicable*	31.03.2022
		Comite de Vigilance	*Not Applicable*	31.08.2022
	2026	Peraltrestade	*Not Applicable*	18.07.2022
		Bormini per l'Alute	*Not Applicable*	06.09.2022

5.2. THE OLYMPIC AGENDA 2020 URBAN-RELATED *GLITCHES*

The findings related to each *Question* outlined in the *Research Agenda* of Chapter 4 are summarised in **Appendix V**, which includes data gathered from field visits, interviews, and other available sources. This comprehensive dataset served to identify 10 Olympic Agenda *Glitches*, discussed in this section. These *Glitches* are listed in **Fig. 24**, which also indicates the *Questions*

that led to their identification. While most of the *Glitches* are derived directly from the *Questions* in the *Research Agenda*, some stem from other discussions that emerged during interviews.

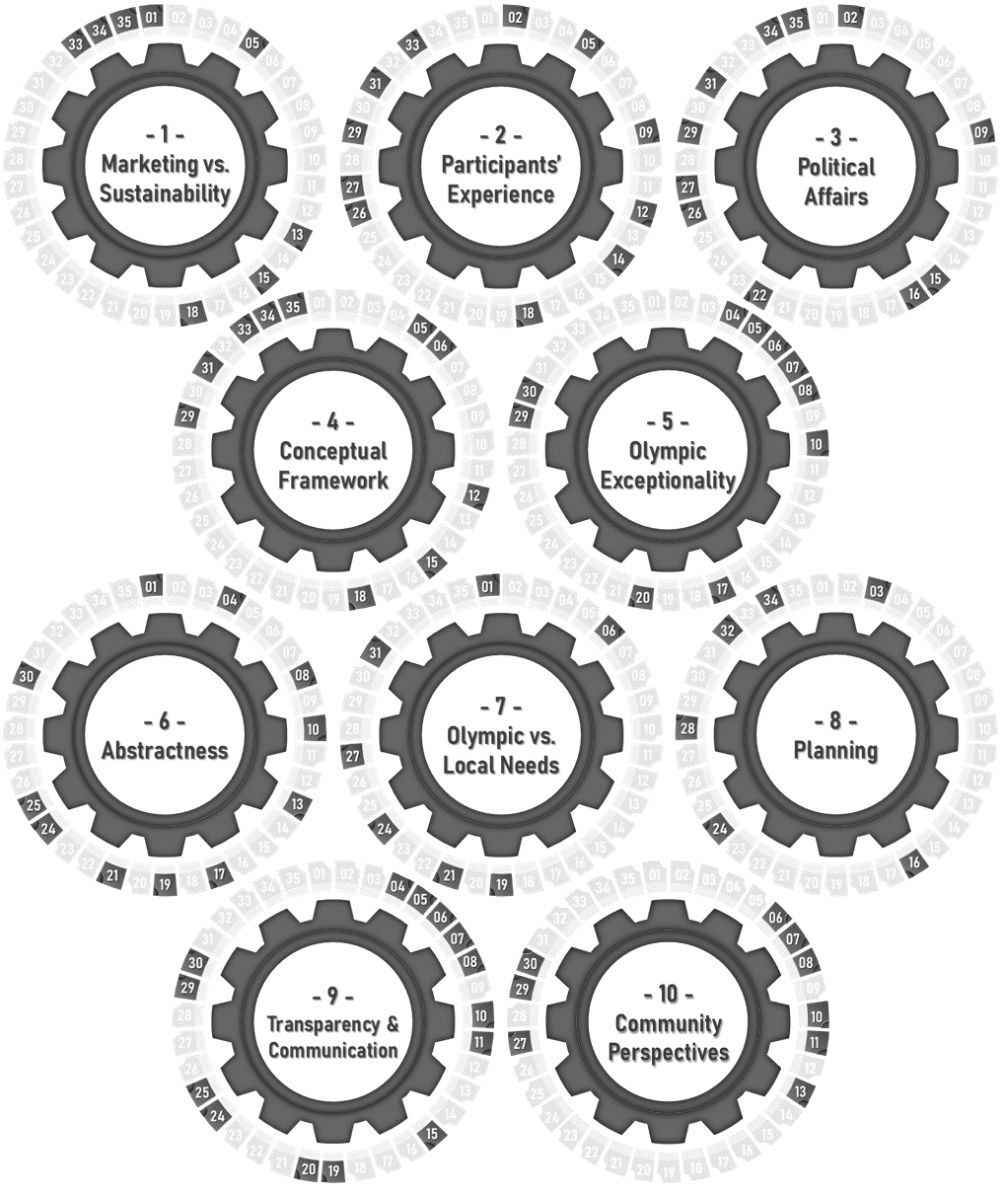

Fig. 24 Olympic Agenda *Glitches* and *Questions* leading to their identification (cf. **Fig. 20**).

It is important to note that not all *Questions* could be answered objectively. Many addressed complex issues involving diverse stakeholder interests and decision-making processes. The subjective nature of these decisions, compounded by various external factors, meant that some *Questions* remained only partially answered. Despite this, the process of identifying difficulties in the implementation of the Olympic Agenda was not compromised. The aim was not solely to answer the *Questions* but rather to use them as a framework to navigate the challenges of effectively implementing the Olympic Agenda *Reforms*.

Marketing vs. Sustainability

The first identified *Glitch* only indirectly impacts urban planning but concerns a fundamental aspect of the Olympic Games: the inherent relation between sport and the public, or more specifically, between athletes and audiences. This connection is central to the Olympic Games

and underpins the motivations of key stakeholders, particularly those who finance the event. Sponsors and broadcasters, as the primary financiers of the Olympic Movement, expect a spectacular show to meet their corporate marketing goals. Similarly, host cities, as the major financiers of the Games, seek to leverage the spectacle for place marketing, showcasing their city on a global stage. This emphasis on marketing through spectacularism, therefore, becomes a cornerstone of the event's financial viability. However, to some extent, the Olympic Agenda's drive towards sustainability poses a potential threat to this model.

One of the most significant challenges of the Agenda is enhancing the sustainability of the Games without diminishing their appeal to key financiers. Many Olympic Agenda *Reforms* aim to mitigate risks by promoting sustainable practices, which often end up reducing the perceived spectacle of the event – and vice-versa. This tension is evident in several decisions taken by organisers that prioritise marketing over sustainability, such as the choice of location of the opening and closing ceremonies of Paris 2024 and Milan-Cortina 2026, respectively. Instead of hosting these ceremonies in the main stadiums – locations that would have simplified operations and leveraged existing knowledge – organisers opted for more dramatic settings: the River Seine for Paris 2024 and the Arena di Verona for Milan-Cortina 2026. While these choices undoubtedly increase the visual appeal and marketing value of the Games, they also complexify logistics, elevate costs, and increase risks, challenging sustainability efforts (*Question 34*).

In interviews, stakeholders often highlighted the delicate balance between sustainability and the need to maintain the Games' appeal:

> *There is a balance to be found because, of course, you also need to have a show that is extraordinary, that is the showcasing of the Games, that is unique, you know... but it can't be a bill too high for the population. It can't be like this anymore and we are working on that very carefully.* Interviewee group A

This tension can greatly impact urban planning when host cities prioritise marketing objectives over sustainability. This is particularly apparent in decisions related to venue selection and upgrades. For example, while some venues such as the surfing site for Paris 2024 (*Question 18*) and the mountain venues for Milan-Cortina 2026 (*Question 5*) were chosen for their established reputations in hosting major events, organisers still pushed for facility enhancements to further elevate their status for the Games. This approach often extends to other construction projects that, although not essential, are pursued to enhance the event's market appeal. Such actions sometimes challenge sustainability goals, as seen in the extensive regeneration initiatives in Saint-Denis (*Question 13*).

In particular, the new Aquatics Centre for Paris 2024 further exemplifies this intersection. Stakeholders expressed that it was designed not only to serve the population and the Games but also to contribute to the city's branding objectives, with hopes that the venue would spur regional development, similar to the impact that the construction of Stade de France had decades ago (*Question 1*). Such investments are driven by a desire to create lasting landmarks that bolster the city's international profile, aligning more with marketing aspirations than with the Olympic Agenda's sustainability goals. In any case, it remains important to consider the positive urban effects that such projects can generate, as proven by the case of the Stade de France and the urban renovation it spurred in a socially disadvantaged area of Paris.

Additionally, the Olympic Agenda *Reform* "Contextualisation", allowing organising committees to add new sports to the Olympic Programme, serves as another direct strategy to

amplify the marketing appeal of the Games. While this reform has proven successful in boosting spectator interest and media engagement it also results in additional venues and, consequently, in increased costs, impacts and operational challenges (*Question 15*). As an interviewee acknowledged, this approach highlights the struggle to align marketing-driven initiatives with the broader goals of sustainable event management, running counter to other Olympic Agenda goals:

> *If I get to be completely transparent, if you were to follow completely Olympic Agenda 2020, you wouldn't propose any additional sports. It doesn't make any sense. Because it will always have an impact.* Interviewee group A

Thus, the balance between marketing and sustainability underscores a critical challenge within Olympic Agenda. While marketing aims to maximise financial gains, it must not compromise sustainability efforts. The primary issue lies in ensuring that decisions made to enhance sustainability do not inadvertently undermine the Games' marketability, and vice-versa. Addressing this *Glitch* requires a strategic alignment between marketing initiatives and sustainability goals to ensure that neither is sacrificed for the other.

Participants' Experience

Analysing the business nature of the link between sport and the public reveals the critical roles of two groups of stakeholders: athletes, who serve as the core product, and accredited media, who act as the intermediaries connecting the product to the consumer. Athletes' and media experiences are therefore prioritised when developing bids and selecting host cities.

The focus on enhancing athletes' and media experiences manifests in various aspects of the Games, including their accommodation, transport, and the conditions provided to fulfil their roles effectively. This emphasis translates into high expectations for Olympic and media villages, reliable transport with short travel times, and top-tier competition, training, and media facilities – all of which place significant demands on urban planning and infrastructure. For example, the construction of the Media Village for Paris 2024 was justified by enhancing the media experience, situating accommodation near media facilities despite the existing availability of accommodation options elsewhere (*Question 9*). Important to note is that the complexity of delivering this type of facilities, particularly Olympic villages, is seen by some stakeholders as a major reason why the overall scale of the Games must be managed carefully:

> *It's not that the number of athletes is the true cost but, at least from our point of view, the village is a massive challenge.* Interviewee group A

> *The athletes' village (…) is oversized, is overly complicated. So, it's not only a problem of time but also a problem of size. You do not deliver 300,000 square meters of buildings at the same time.* Interviewee group B

These challenges extend beyond the villages, affecting numerous other aspects of Games planning. For example, transport infrastructure upgrades, such as the reorganisation of traffic flows at the Pleyel Interchange in Paris 2024 (*Question 12*) and the Bormio bypass in Milan-Cortina 2026 (*Question 31*), were aimed at elevating the overall participants' experience. These actions highlight how participant requirements can drive extensive urban interventions.

This issue is further illustrated by the case of the Marville swimming pool, which was initially included in the Paris 2024 venue masterplan but later removed due to concerns about

transportation of spectators and overall venue capacity (*Question 2*). This decision led to more complicated arrangements for the venues of the aquatics sports, reflecting how spectators' needs also clash with logistical considerations that can lead to less sustainable solutions. A similar challenge was faced in Mottolino, where facilities needed to be installed in different areas than usual to better accommodate spectators, requiring permanent construction works in an environmentally sensitive location (*Question 33*).

IFs also play a crucial role in shaping these decisions, driven by a strong determination to ensure their sports are hosted in optimal venues. This insistence was clear in various cases, such as the change of the basketball venue in Paris 2024 in response to demands from both the athletes and the International Basketball Federation. Similarly, the International Skating Union refused to consider outdoor alternatives for speed skating, and the International Bobsleigh and Skeleton Federation refused to consider the use of the natural sliding track in St. Moritz due to specific requirements (*Question 14*).

Renovations in Tahiti, for instance, were driven by the desire to provide an optimal experience for surfing athletes, reflecting a broader trend of urban interventions that are not strictly necessary for the Games but are expected for an event of their size:

> *At the WSL in Tahiti (...) the surfers stay with local people (...) [and it] probably could have been done for Paris 2024. But the IOC and, indeed, our own Athletes' Commission were quite keen on saying: no, we need to give [the surfing athletes], not exactly the same experience, but we need to have a village. (...) Generally speaking, there are higher expectations for the Olympic and Paralympic Games, that we would have for a top-level event of an IF. And we are trying very hard to manage those (...) high expectations in the most sustainable way we can.* Interviewee group A

As one interviewee reflected, these expectations challenge the goal of creating responsible Games:

> *When you look at the transport, the constructions... How can we make the Olympics eco-responsible? It is still difficult. I think we need to review the concept of the Games (...) for reasons of sustainability.* Interviewee group C

Particularly for athletes, the Olympic Agenda *Reform* "Representativity" emphasises that the athletes' experience should be a criterion placed "at the heart of the Olympic Games" in the evaluation of candidate cities. While essential, this can sometimes contradict broader urban sustainability goals. It is not to suggest that these experiences should not be valued; rather, the challenge lies in ensuring that they are balanced with existing resources and align with sustainable development objectives. They need to be carefully managed to avoid expanded footprints and placing undue pressure on urban resources.

The "Participants' Experience" *Glitch* emerges from the burden that these heightened expectations place on urban resources. Olympic Agenda aims to promote inclusivity and representation, which can lead to increased expectations and complications in sustainable planning. To address this *Glitch*, it is essential to effectively balance stakeholder expectations with feasible resource allocation.

Political Affairs

Having public organisations as hosts and financiers of the link between sport and the public inevitably turns the Olympic Games into an object of national, regional, and especially local political agendas. The involvement of multiple public stakeholders often brings a unique benefit: enhanced coordination among governmental bodies that are typically fragmented. According to interviewees from group B, one of the key advantages of hosting the Games is that it forces these stakeholders to collaborate and make rapid decisions on projects that would otherwise face lengthy delays:

> *You know when you say that all the planets are well aligned? It's really that expression. It means that the State will put some money, the local authorities will align with each other, (...) you have the region, you have the supra-municipal level, you have the municipality, you have the local administration... It's quite complicated to put everybody working together. (...) That's what the Games allow. To find the money at the right moment and to put all the upper levels of decision working together.* Interviewee group B

> *The high standards demanded by the public actors and Olympic Agenda 2020, and the desire and acceptability of the Games by the inhabitants, allow a qualitative leap in the interventions in terms of public policies, synergies and innovation.* Interviewee group B

One interviewee further connected this phenomenon to the significant marketing potential of the Games, as previously discussed in the context of the *Glitch* "Marketing vs. Sustainability":

> *The Olympic Games are intended to be a showcase that will be seen by the whole world. This characteristic has motivated the various actors to build quality and innovative constructions, which might not have been the case without the Olympic Games.* Interviewee group B

The Olympic Games' allure as a global showcase creates an incentive for public officials to push forward ambitious and high-quality projects that would otherwise lack momentum. But while these synergies bring stakeholders together for a broad common goal, at the local level the Games often become fragmented, with each public entity primarily concerned with how the event can benefit its own territory and political agenda. This phenomenon is reflected in several key situations of the Paris 2024 and the Milan-Cortina 2026 case studies.

For example, the political commitment to build a new Aquatics Centre in Seine-Saint-Denis for Paris 2024 overshadowed other less risky alternatives found by organisers, like constructing a temporary Aquatics Stadium (*Question 2*). Similarly, the choice to develop the Media Village instead of using existing hotels highlights the preference for more ambitious projects, despite the risks and expenses involved (*Question 9*). The controversial selection of Tahiti as the surfing venue for Paris 2024 was acknowledged as a politically motivated decision, adding complexity to the Games' logistics and sustainability (*Question 16*). For Milan-Cortina 2026, a similar dynamic delayed moving the speed skating events from Ice Rink Pinè, ignoring, for long, more sustainable options in other cities (*Question 26*). Another example is the decision to rebuild the Eugenio Monti Sliding Centre instead of considering alternatives outside Italy, further demonstrating the influence of local politics and national pride (*Question 27*).

Two specific situations within the case studies clearly illustrate this *Glitch*. The first relates to Paris 2024, where several events were relocated to Seine-Saint-Denis to compensate for those that were removed (*Question 16*). This reflects the local governments' desire to maintain a strong presence in the Games, despite potentially more viable options elsewhere:

There is a symbolic dimension of participating in the Games' project. Losing events presents an image risk and may suggest that the territory is considered less attractive. (…) Furthermore, the municipalities are involved in the governance, financing and support of the Games on the basis of an initial project. Whether it is "downgraded" or, at the very least, changing, may present elected officials with a political risk and/or acceptability risk for the inhabitants who will be the most impacted by the works and the operation of the sites. Interviewee group B

Thus, although the Olympic Agenda *Reform* "Games Planning" mandates that changes to key venues should enhance the original proposals, political interests are also factored into decisions. The second situation concerns the macro-regional concept of Milan-Cortina 2026, where the spread of venues reflects a series of political compromises made to satisfy multiple regions (*Question 35*). One interviewee highlighted the need to find a balance for this type of situations:

You know, once you have two main investors, two main shareholders, you should give some things to one and some other things to the other one. Otherwise, it will not work. It's like when you merge two families: you always have to spend winter holidays with one family and summer holidays with the other one. It's a matter of balance. Interviewee group A

This makes it clear how the Games often advance broader governmental projects that align with political interests beyond the event's immediate needs. Organisers are frequently pressured not to compromise these interests, even when more sustainable or cost-efficient solutions exist from a purely Games perspective:

You have to deal with different authorities (…) and there is a sort of balance and equilibrium to be found between their requests and proposals. Interviewee group A

Nevertheless, in democratic countries, elected bodies are crucial to the feasibility of such global events. Negotiation among local stakeholders, the IOC, and organisers is a normal part of building compromise, even if it requires sacrificing more desirable technical solutions. Thus, the "Political Affairs" *Glitch* highlights the significant role of local political ambitions on the implementation of the Games, with political interests sometimes prioritising local benefits over the event's sustainable goals. To address this *Glitch*, it is necessary to smooth political pressures carefully while striving to maintain the integrity of the Games' sustainable objectives.

Conceptual Framework

When it comes to the local implementation of conceptual plans, a significant issue that emerges is the disconnection between local entities and the overarching Olympic framework. Often, local authorities are unfamiliar and inexperienced with the complexities of hosting the Olympic Games, leading to a mismatch between expectations and execution. An interviewee from group D commented on this issue:

I spoke with many elected officials and clearly understood that the Olympics are something not suited for the career of politicians. (…) It's very fruitless to talk about the Olympics with elected officials (…). They have more interest, I think, in other issues for their career. (…) They know absolutely nothing about the Olympics. They don't even know what the IOC is! Interviewee group D

Some interview findings in group B indicate that, while this comment may seem exaggerated, its core message holds true. Local authorities, particularly those outside the main host city or cities, often do not form part of the host contract, and the lower their level of administration, the

later they become involved in the Games' project. This late involvement creates gaps in understanding and coordination:

> *When the current administration got elected (…) they never talked about this project, which is a huge project… many millions of euros. (…) So, it's going to be the biggest thing that they will do in their five years of administration, and they never talked about it when they got elected. I can probably add that it was maybe because they really had no idea what they were going into. Probably, this is something that has been pushed from above and they just accepted it because they really didn't have any choice.* Interviewee group D

Some comments from interviewees in group B further sustain these observations:

> *The complete history of how it happened is very complicated and we don't know exactly how it grew because it was developed by other agencies.* Interviewee group B

> *We were not part of the committee that proposed it so, actually, it was something that came from outside, not exactly from inside.* Interviewee group B

The process of planning the Games often bypasses local administrations, resulting in decisions that do not fully consider local contexts. While their late involvement might be justified by the argument that the Games are primarily national or regional events rather than local ones, it makes little sense from an urban planning perspective to not include the entities most familiar with the territory and the population that will be directly impacted. Furthermore, some interviewees in group B were not even aware of what Olympic Agenda 2020 is, and even those who were familiar with it noted that its implementation was not their primary concern:

> *Everything we're doing is based on the bidding file. (…) And we don't interact directly with the IOC. So, Olympic Agenda 2020 is not directly in our frame. It's a problem for the OCOG. It's not our problem. We expect that they translated Olympic Agenda 2020 to the bidding phase. But I'm not sure and, in a way, I don't care. Our key issue is to abide by the country's general policies on sustainability. (…) Not by Olympic Agenda 2020. That is an issue for the OCOG.* Interviewee group B

As the preparation process develops, this disconnection becomes more and more evident and problematic, creating a gap between goals of different entities, each extrapolating the candidature vision and commitments into their own purposes. For example, although the candidature proposals for the case studies often emphasised simple renovations of existing facilities to align with sustainability goals, once preparations started and new stakeholders become involved, the scale of these renovations frequently escalated (*Question 5*), or new infrastructure projects were initiated (*Question 29*). A notable case is the change of location of the new Aubervilliers swimming pool for Paris 2024 (*Question 6*). Originally proposed in the bid to be constructed on previously developed land, as Olympic Agenda *Reform* "Constructions" requires, local authorities later moved it to an area that required environmental damage, contradicting the sustainable ambitions of the original plan.

Another example concerns the selection of venues for additional sports chosen by the organising committee, for which the IOC's guidelines require using existing facilities to manage costs and environmental impacts. For the case of Paris 2024, none of the venues chosen for additional sports existed previously; instead, organisers opted to build temporary venues for some sports within the city to align with their concept of showcasing Paris and even building a new permanent one to guarantee funding for unrelated development projects (*Question 15*).

Similarly, the constructions carried out in Tahiti for the surfing competitions were driven by the local authorities' desire to create legacies, even though Olympic Agenda suggests that the requirements for Olympic competitions do not exceed those of the typically required for world-class international competitions, like the WSL (*Question 18*).

This fragmentation further complicates the integration of sustainability principles, as projects become tailored to regional aspirations rather than the cohesive, unified vision initially outlined in the candidature. This conceptual disconnection begins when Olympic bids are developed for specific territories without involving the respective local administrations and is further aggravated when these bids transition from the Olympic Movement's governance network into broader issues of urban governance. The "Conceptual Framework" *Glitch* reflects this fragmentation. To rectify it, all stakeholders and decision-making levels must be integrated into a cohesive framework from the bidding stage through local implementation, ensuring alignment with the original vision and sustainability principles.

Olympic Exceptionality

The IOC and the Olympic Movement, including organising committees, exert significant control over the narrative and scope of Games projects until these projects turn into an issue of urban governance, at which point they fall under the jurisdiction of public entities. This is why the host contract requires the host country to implement extraordinary laws that ensure public authorities can efficiently meet the Games' requirements. As previously addressed, these "Olympic laws" designate the Games as a matter of public interest, thereby facilitating the suspension of standard urban planning regulations to expedite event preparations, if necessary. An essential element of this framework is the establishment of a public authority with special legal status, known as the delivery authority, such as SOLIDEO for Paris 2024 and Infrastrutture Milano Cortina 2026 for Milan-Cortina 2026, tasked with turning commitments into reality, particularly within the urban domain. Notably, the name of this authority always reflects its Olympic association.

While this exceptional legal framework is designed to support the timely delivery of the projects outlined in the candidature files, it often enables hosts to advance construction projects that might otherwise face significant hurdles. The Media Village for Paris 2024 serves as a prime example: despite its location being designated as a natural space in regional planning documents, construction was permitted due to the Games. Despite objections from environmental groups, in court the "Olympic law" ruled in favour of the construction, backing the project's public interest status, even though some interviewees from group A argued that it was not needed for the Olympics (*Question 7*). Similarly, in Milan-Cortina 2026, the court appeals to the tenders for the construction of the arenas were ruled under the same "public interest" argument (*Question 20*).

This exceptional use of the "Olympic law" often leads to conflicting legal interpretations. As one interviewee evidenced:

> *It is very complex from the law point of view, with laws that are contradictory. For instance, the judge said to us, 'it's very difficult for me to determine my position because I'm teared between the Olympic law (…) and other existing laws. They are contradictory'. (…) So, we have a problem of jurisprudence.* Interviewee group C

From the perspective of the IOC, these laws are safeguards to ensure key projects are completed as planned. However, this legal protection can be exploited to advance local development agendas that might otherwise struggle to gain traction:

This project is certainly the project that wouldn't have been possible without the Games. Interviewee group B

This project is also linked to the Olympics but it's a project that would have been done without the Olympics. And, in fact, the Games don't need it. The municipality took the opportunity... and it's normal to say, like, 'we want to build it for a long time, and we can use the dynamics, and sometimes the financing of the Games to do it'. But it's not made for the Games. Interviewee group B

These developments, while occasionally aligned with Olympic needs, often represent longstanding ambitions of local authorities that predate the Olympics. They are usually projects that were previously shelved, pursued under the rationale of benefiting the Games:

It is a project which is wished by the local authorities for 30 or 40 years. It's important to know it because it's not due to the Games. It will help during the Games, but it's not made for the Games. Interviewee group B

It's actually 20 years from the beginning of the story. Now it's like either you do it, or you will never do it again. Interviewee group B

This raises significant sustainability and legacy concerns, as many of these projects were not identified or assessed during the candidature phases. Consequently, they might be carried out without proper integration into *IOC Policies* or sustainability frameworks, potentially contradicting Olympic values. As highlighted by interviewees from group A, organising committees have minimal control over these interventions, thereby limiting their ability to ensure the sustainability and legacy of the projects:

It is not a project of the OCOG. This is a project of the municipality that will, probably, if it's built on time, be used for the Games and, even so, it's not a project under our control. So, we have no decision on anything of the project whatsoever. (...) That's important. The only thing that the Games have provided was financing... and that is not even ours, it's from the delivery authority. Interviewee group A

Yes, we try every day to be involved in the decision about the design phase for the construction (...). But the problem is that we have no ownership of it. So, we have to ask to the contracting authority that has to put in place the construction design phase to let us know and to work with us to reduce the environmental impact. (...) But we have to do what others decide, so... of course we will work on the materials, we will work on the auto sufficiency, in energy consumption, for example, so we can reduce the environmental impact and amplify a positive legacy. Interviewee group A

The association of these projects with delivery authorities and "Olympic law" often results in them being perceived as "Olympic constructions", even if they were primarily driven by local agendas. This perception impacts the event's image, as explained by an interviewee from group A:

In fact, the decision was not taken by the OCOG. It was the municipality which decided the concept. We were just there to say 'OK, we can contribute to finance your renovation'. But we

didn't design the concept. In fact, we can do the Games without it. (…) But it has been a difficult situation for us because we were not the ones that decided this concept and we were accused to do it. That was a tricky situation. But we're the Games and it's easier to have a responsible within the Games than within a local administration. Interviewee group A

This quote also highlights another common challenge: the lack of clarity about accountability. This confusion over who is responsible for different aspects of the projects complicates public perception and fosters mistrust and frustration:

[The OCOG was] not willing to listen to the observations of citizens and local committees on important issues, always stating that the competences were in the hands of someone else, with whom, however, it was impossible to get in touch. Interviewee group D

[The OCOG] discussed with the national environmental associations (a must) but only to talk about the sustainability of non-central topics such as, for example, how many times to wash towels during the 15 days of the Games or the commitment to replace the use of plastic with recycled materials. A fig leaf that does not change the substance of things. Interviewee group D

Moreover, the opportunistic use of Olympic statuses further highlights concerns about transparency in decision-making processes. It undermines public perception of the Olympics, especially in relation to controversial constructions that involve high costs, significant impacts, or are executed through unconventional procedures:

So, the Games come, and the Olympic logo can be used to enforce exceptional procedure. In every aspect, this cannot be! Interviewee group D

Unfortunately, experience shows that attractive promises are always in the foreground of the candidatures, but they are illusory and are never kept. Today the Olympic Games are not a sporting event that unites people, but a big business that uses the event to pass projects that could hardly be approved under normal conditions, also bypassing laws and regulations (…) without regard for the territories. Interviewee group D

Further complicating public perception, beyond the strictly Olympic-related projects, other potentially harmful and less related projects are often pursued by various entities to leverage the momentum of the Games. Interviewees in group C highlighted these issues:

There are other infrastructures that were proposed in new plans connected to these plans but not officially. And this is worrisome to us, rather than only the candidature plans. So, it depends on what you want to assess. If you want to assess the difference between the candidature and the reality strictly related to the infrastructures that were mentioned, then it's one point. If you want to assess the overall impact of the Olympics, then it's another issue. Interviewee group C

It was planned 10 years ago, but no environmental assessment has been done until now. And now a lot of people that want to develop it in this area are saying 'we have the Olympics, we have to build it'. (…) And we are fighting against it because it's not useful for the Olympics at all and it will destroy a protected area. Interviewee group C

These issues further affect the perceived sustainability of the Games. An interviewee from group A noted that incorrect associations of projects with the Games can obscure the true costs:

You can put up very different budgets and then say that these Olympic Games costed a lot, but I think that you have to look at the real competition and non-competition venues that you need to renovate or build in order to count the real budget of the Olympic Games. Otherwise, if we start including also transport infrastructures that can be also built for different purposes which are not only for the Olympic Games, then obviously you never get to an end of how much your event costed. Interviewee group A

Ultimately, the misuse of the "Olympic law" and the momentum generated for new projects undermines the standards and integrity of the Games and jeopardises their credibility. The "immunity" provided by the "Olympic law" to developments that were neither originally presented in candidature phases nor developed in line with Olympic sustainability values adds risks to both the Games' sustainability and reputation. This situation is aggravated when these constructions were not part of the original candidature phases or when their association with the Games is unclear.

The "Olympic Exceptionality" *Glitch* emphasises the challenge of ensuring that constructions introduced under "Olympic laws" align with the Agenda's sustainability values and are transparently communicated. Addressing this *Glitch* involves strict adherence to sustainability standards in the use of Olympic exemptions and clear communication about the projects and their processes and purposes.

Abstractness

The Olympic Agenda *Reforms* often emphasise that the concept of the Games should align with the long-term plans of the host and that the legacy of any constructions must be justified by a genuine local need. However, the concept of legacy is inherently abstract, as shown by the IOC's own definition: "long-term benefits initiated or accelerated by the hosting of the Olympic Games/sport events for people, cities/territories and the Olympic Movement" (IOC, 2017b, p. 13). This abstractness often transfers from paper to implementation, where vague notions replace detailed, actionable plans.

For example, when asked about the legacy of a specific venue, one interviewee stated:

To build our strategy, to decide what we're going to do, we decided to answer to the needs of the population and the needs of the city. It means that everything we are contributing, because we are financing, is because it's a need for someone or a community. Interviewee group A

While this statement reflects a general intention to meet local needs, it lacks specifics on how these needs translate into long-lasting, beneficial legacies. Another interviewee justified sport venues' legacies by saying:

The fact that we have these kinds of facilities in the area where the sport has been already practiced for long it's a crucial point for us to say that these venues will have a legacy. Because the area where these venues are built are the heart of these sports. Interviewee group A

Here again, the assumption that an established sports culture justifies the construction lacks a concrete plan for future use. While proximity to sporting traditions might offer some reassurance of legacy, tradition without a concise plan does not guarantee sustainable usage. This type of approaches, with focus shifting from precise planning to theoretical alignment, raises concerns about the long-term viability and sustainability of the venues.

In theory, these statements reflect the core intention behind legacy projects – addressing local needs and integrating long-term urban strategies. However, the concept of "need" can be poorly defined or overly optimistic, making it difficult to assess the long-term viability of these facilities. The examples of the Aquatics Centre (*Question 1*) and the sport climbing venue for Paris 2024 (*Question 17*) illustrate this issue. Their legacy seems to rest more on general aspirations than actionable plans, leaving questions about how these facilities will function and thrive after the Games.

It is also important to note that *IOC Policies* and *IOC Regulations* and, consequently, Olympic Agenda *Reforms*, further sustain this abstractness by frequently using vague terms like "sustainable" or "viable" to supplement legacy requirements. Since the IOC does not present its definition of sustainability, the concept of "Olympic sustainability" remains ambiguous. Organisers themselves admit that there is no clear definition to follow or way to guarantee it:

> *What is sustainable? I mean, I think nobody can say that something is sustainable. Sustainability is a continuous improvement. So, we can always say, eventually, we are more sustainable than other things... than what it was previously, you know... but certainly (and hopefully) less sustainable than tomorrow. Otherwise, we have a problem.* Interviewee group A

This ambiguity leaves the term open to interpretation and overpraising, sometimes diluting its meaning. Organisers often point to incremental improvements, but the bar for what qualifies as a "sustainable" project remains undefined:

> *What I always say is 'an event cannot be sustainable'. An event has an environmental impact and it's huge, let me say, for these kinds of events. So, for me, sustainability is to work every day to put in place action that helps us to reduce the environmental impact and at the end try to compensate it.* Interviewee group A

Thus, while sustainability is difficult to define, it is often applied in objective contexts. This creates challenges when assessing the true sustainability value of Olympic projects. For example, although Paris 2024 and Milan-Cortina 2026 are often labelled as sustainable, projects like the Media Village (*Question 8*) and the Pleyel Interchange in Seine-Saint-Denis (*Question 10*), or the Bormio bypass in the Italian Alps (*Question 30*), carry known negative environmental impacts. Their sustainability claims are tenuous at best, with environmental and social concerns acknowledged but largely overlooked or downplayed.

When it comes to new sports facilities, their legacy "viability" is also often defined broadly, focusing on potential generic benefits rather than actionable business plans. This makes their long-term financial and operational viability questionable. The following interviewee quote illustrates this issue:

> *All these facilities are developed because they were already in the long-term development plan of the city. They have been already planned before the Games were assigned and before the idea to bid. So, the main point [of viability] doesn't exist in this kind of situation.* Interviewee group A

Additionally, legacy ambitions often neglect indirect impacts. For instance, the cases of the new Marville swimming pool for Paris 2024 (*Question 4*) and the new arenas for Milan-Cortina 2026 (*Question 21*) raise concerns about their potential effects on existing infrastructure with similar functions. A viability plan for the older facilities, which may be displaced or rendered

obsolete by the new developments, was not considered under the new scenario where these new facilities exist. Ultimately, this lack of an integrated strategy stems from the absence of clear definitions for the overarching terms discussed here.

This vague discourse, where the terms “legacy”, “sustainability”, “viability”, and “needs” are differently used throughout time and without clear definitions, confuses both organisers’ beliefs and public perception. It leaves room for diverse interpretations, undermining the credibility of genuine sustainability efforts:

> *People, if they hear of sustainable Olympic Games, for them those works with cranes and so on… there is nothing differentiating them as sustainable or unsustainable. They told us these would be the ‘first sustainable Olympic Games!’… Where?* Interviewee group C

> *I think that the problem is that these Olympics were supposed to be sustainable and (…) I don't see how they are going to be sustainable in the general sense. (…) It's not clear how the infrastructure they’re planning (…) is going to actually help these Olympics to be sustainable.* Interviewee group C

Ultimately, the “Abstractness” *Glitch* reveals the inadequacy of vague terms in enforcing strict obligations related to legacy, sustainability, and viability. To address this issue, it is crucial to define terms clearly and tie them to measurable outcomes. This approach ensures that commitments are not merely rhetorical but translate into concrete, impactful actions throughout the Games' planning and execution.

Olympic vs. Local Needs

There is also an existential inconsistency in aligning the long-term legacies of Olympic venues with the actual needs of local communities. While the Olympic Games cater to high-level, professional athletes, local requirements for sports facilities often centre on amateur activities or learning sports skills. This divergence becomes particularly evident in the construction and post-Games use of these venues. One interviewee noted:

> *What we did realise quite early on was that: yes, there is a need for this facility but there is no business case for one with a big capacity after the Games. I mean… you can do the math, it doesn't work*. Interviewee group A

The grandeur required by the Olympics often clashes with the practicality of serving a smaller, local community. Interviewees from civic groups often raised concerns about this issue:

> *My position is we don't need this kind of facility. No. Just a small one. It is so much cheaper. Instead of an Olympic facility we can build three small facilities so… why don’t we do that?* Interviewee group D

This remark illustrates the mismatch between local expectations and Olympic planning. For example, the construction of the Paris 2024 Aquatics Centre was justified by the need for teaching kids how to swim, while at the same time meeting the need for a world-class venue for professional athletes and international events (*Question 1*). From an urban planning perspective, these are two facilities with completely different demands, reflected in their size, design, functional characteristics, operationalisation, and funding models, as planning and providing a sports facility for an international competition is entirely different from doing so for mass participation. Similar issues arise with venues like the Ice Rink Piné and the Eugenio Monti Sliding Centre, where, besides that, economic viability estimates are negative (*Question 24*).

For a particular new venue, an interviewee commented:

It is not efficient on the business plan. Just speaking business, it doesn't fit the need. There is no relation between the cost of maintaining it and the resources of the city. (...) It will be very, very expensive in terms of local taxes for the citizens. If I was an entrepreneur, I would say that this is a bad business model. Too big, too big! Interviewee group D

This underscores how the grand scale of Olympic venues might place a perceived unnecessary financial burden on local communities and may be misaligned with local demands. Eventually, a city or country might need a high-level competition facility, but it cannot always be justified by local needs. While different needs can be integrated, this requires a well-defined strategy. However, certain facilities such as Olympic stadiums, swimming pools, velodromes, whitewater courses, or sliding centres, may not be able to respond simultaneously to both types of demand:

No, I think it is not possible to have a sustainable legacy for this venue. We know this. We tried to avoid this project. Again, we have to organise the Olympic Games and unfortunately, we have no ownership of the entire project... so, yeah... we have to do what we can. Interviewee group A

Two other examples highlight concerns about differing interpretations of local needs. In Tahiti, residents questioned the benefits of urban upgrades proposed by authorities to host surfing (*Question 19*), while in Bormio, the population expressed scepticism about the new road's ability to address traffic issues, being convinced that its environmental costs will outweigh its minimal benefits (*Question 31*). Moreover, residents worry not only about the scale of the interventions but also about missed opportunities to address real local needs – opportunity costs. Some interviewees voiced disappointment that the resources allocated to the Olympics could have been better used to address community problems:

They have a lot of billions that they could invest to protect the environment and the people and to have, really, the first, or one of the first sustainable Olympic Games. Interviewee group C

On this road, there was this big banner, and it was written on it 'first the hospital and then the Olympics'. It's because in the last four years there's been a big problem with the only hospital that we have, and they don't have the funds to keep it operational. (...) And that banner... I think it perfectly explains the general feeling, that is, we have many problems here and the Olympics are not solving any of them. Interviewee group D

The "Olympic vs. Local Needs" *Glitch* highlights the need for better alignment between Olympic-scale projects and local necessities. The challenge is to ensure that Olympic facilities serve both the Games' needs and the local community without imposing undue financial burdens. Addressing this *Glitch* requires a balanced approach that integrates the local scale into the planning of Olympic projects to effectively deliver legacies.

Planning

Somewhat related to the "Abstractness" *Glitch*, the lack of more detailed planning in the candidature phase is one of the key issues identified in the implementation of Olympic Agenda, particularly concerning construction and urban development plans. Although a more simplified bidding process was introduced by the Agenda to reduce the workload and encourage more cities

to bid, this has led to unintended consequences, where plans are left underdeveloped, and critical risks are overlooked:

> *I think one of the biggest challenges you have during a bid, even if the plan has been in preparation for much longer than the actual official candidature phase, is that there is only so much you can do in terms of planning. So, what happens is, when you start planning into a little more detail and the plans become more and more detailed (…) sometimes you discover things that you had not discovered before and you need to adapt your plan. So, I think, unfortunately, when you are planning for an event 10 years in advance, there are things that will happen… there are risks and opportunities. (…) Could it have been foreseen? Maybe, but it is always about how far you go in planning when you are still in the bidding phase and it's still not certain that you get the Games. You don't always have the time and resources to do all the planning that needs to be done.* Interviewee group A

For a specific situation, one interviewee acknowledged this lack of planning:

> *Yes, probably we didn't go so deep into that. (…) We could have gone deeper into it. We knew and we proposed some ideas to cope with the problems that we had already detected*. Interviewee group A

This gap in planning can have significant repercussions, with several cases illustrating that. For example, cost underestimations for constructing the Paris 2024 Aquatics Centre, deriving from competition in the bidding process, led to a revision of its design and a downgrade from the original concept, also driving extensive adaptations to the overall venue masterplan (*Question 3*). Insufficient space, transportation difficulties, and other technical challenges were part of the reasons for relocating some Paris 2024 events such as shooting, sport climbing, boxing, and modern pentathlon (*Question 16*). Similar operational challenges required the development of a venue concept for the Milan-Cortina 2026 events in Mottolino that differs entirely from the usual setup for such type of events at this location, entailing additional construction costs and environmental risks (*Question 32*). The need for accessibility improvements at Arena di Verona for the Milan-Cortina 2026 closing ceremony was also identified late in the process, requiring additional planning and action (*Question 34*).

When questioned about the consequences of the lack of more detailed planning, interviewees in both groups A and B were quick to highlight that accountability must be shared with the IOC:

> *Another point that people don't understand, in my opinion, is that, in the bid it was written that we were going to build it. And that has been voted [by the IOC].* Interviewee group A

> *There is a key problem with, not only the underestimation, but with the immediate approval of the IOC. Remember that the bidding documents are completely reviewed by the IOC and the IOC said 'yes'. So it is not only the OCOG, but it is also the IOC, who was so delighted to have the bid that just said yes to anything.* Interviewee group B

Broad planning and approval were at the roots of issues related to venues like Ice Rink Piné and the Eugenio Monti Sliding Centre, for which alternative solutions were sought and proposed by the IOC. In the case of the sliding centre, plans were even changed from a "simple" renovation to a complex reconstruction, leading to financial, environmental and technical challenges (*Question 28*). One interviewee in group B acknowledged that a more detailed planning during the candidature phase would have simplified the delivery of the Games:

The bidding documents were not very developed on the permanent venues and infrastructures part, for reasons which would be very interesting to understand. (…) If the bidding documents were more documented, maybe we would have less pressure… we would have done in seven or eight years (…) what we are doing now only in six. Interviewee group B

Another issue to highlight is that many existing venues requiring permanent works have undergone extensive upgrades largely exceeding those mentioned in the candidature files (*Question 24*). However, since these venues were classified as "existing" in the bid, they were not subject to the same level of analysis or legacy planning as new constructions, even though the scale and risks of these renovations are comparable to new builds, entirely altering the facilities' scale and purpose. This is a significant oversight in ensuring that the Games deliver on their promises of sustainability and long-term benefits, deriving whether from negligence, and thus related to the "Abstractness" *Glitch*, or the lack of more detailed planning.

These issues also increase public mistrust, as it becomes evident that many proposals were overly simplified during the bidding process. This sentiment was highlighted by interviewees in both groups C and D:

The candidature phase was, for us, a theatre performance. (…) They looked at the main lines, the main sites. If we consider the two sites we're interested in, they weren't specified in the application file. Only later. (…) And each time the projects changed and expanded, they didn't go far enough in detail. (…) When we have specific information, detailed information, on which we can make our judgement, it is generally very late. And at the stage of public consultation, usually the information spread to people is very general, with pictures and plans at a very large scale. The municipality is 3 cm wide and that is the detail we are given. Interviewee group C

We discovered very late that the site was threatened by a project. It was not very clear at the beginning, but we finally understood that it was a facility partially financed by the Olympic Games. Interviewee group D

Before Olympic Agenda 2020, candidate cities were required to deliver much more detailed plans and maps of the proposed venues. While simplifying the candidature process is understandable and praiseworthy, ensuring the robustness of the plans is essential. The "Planning" *Glitch* thus underscores the necessity of thorough planning in the early stages of Olympic candidatures. Simplifying the process should not jeopardise the robustness of the plans. To address this, it is essential to ensure detailed and realistic planning from the outset to maintain credibility and feasibility throughout the Games' implementation.

Transparency and Communication

Flaws in transparency and communication have been a persistent problem throughout the implementation of Olympic Agenda, reflected in various aspects of the case studies. This issue is rooted in how candidature concepts are designed and is then transferred to implementation phases.

One notable example is the lack of a comprehensive approach when identifying the necessary constructions for delivering the Games. Information about some facility investments is not clearly communicated in candidature phases, leading to a perception among the public that there is a disconnection between the promised concept and the reality being delivered (*Question 5*). The venue classification system used in the candidature files complicates this issue further. It classifies venues as "existing/ready for the Games", "existing/requiring permanent works",

“new/previously planned”, “new/additional for the Games”, and “temporary”. As previously discussed, although this system aims to differentiate between the readiness of the proposed venues, it fails to adequately reflect the reality of the infrastructure’s state. For instance, budgets for permanent constructions are sometimes allocated to venues labelled as “existing/ready for the Games” or “temporary”, although they are typically much lower than the costs of new venues (*Question 25*). This misrepresentation may be seen as an attempt to present the candidature in a more favourable light rather than providing clear, realistic assessments.

Some may argue that the venue classification system is meant to focus on legacy planning rather than resource needs. In this view, “new/additional” venues would be the only ones requiring legacy planning since “existing” and “new/planned” venues already have current or planned post-Games uses, and “temporary” venues are to be dismantled. However, this argument is challenged by cases like the Paris 2024 Elancourt Hill and the Milan-Cortina 2026 Eugenio Monti Sliding Centre (*Question 24*). Although these venues were classified as “existing”, they underwent significant construction works that altered their functions, implying they should require updated legacy and sustainability plans.

This lack of transparency extends from the candidature phase into the preparation phase, creating conflicts between event organisers and local populations, as reflected by interviewees in groups C and D:

> *The other problem that I see is that there is no transparency. So, the ministries are not involving the civil society, and they're not stating clearly which infrastructures are going to be funded through which funds*. Interviewee group C

> *All these projects… they didn't show them to us before. It was impossible to go into the projects (…). We asked and nobody informed us. From time to time, there’s something we can hear, we can get from friends (…) but they don't voluntarily show them*. Interviewee group D

An interviewee from group B emphasised that communication between stakeholders is, indeed, a difficult challenge to overcome:

> *There are some people that are a bit worried about the impacts of the Olympic Games (…). The difficulty we have is to explain exactly how the Games will work, what will be the impact of the Olympic Games, because there are aspects that are not simple to explain (…)*. Interviewee group B

Another interviewee from group B acknowledged that, in a specific situation, communication efforts might not have been sufficient:

> *I think that we didn't, maybe, give good explanation to the population. Maybe we should have explained better why and what was the economic equation and, maybe, make public consultation specifically about that*. Interviewee group B

A good example of this lack of transparency and inadequate communication involves the relocation of the Aubervilliers swimming pool, which occurred without prior public notice (*Question 6*). Civic groups criticised the process, voicing frustration over the absence of public debate and the perceived manipulation of information. Similarly, environmental associations contested the environmental impact study for the Media Village in Aires-des-Vents, claiming that key details were lacking (*Question 8*).

This communication gap was exacerbated by instances where the information provided to the community was perceived as inadequate or even offensive, especially given the evident immediate impacts of construction, such as in the case of the Pleyel Interchange (*Question 11*). Moreover, measures meant to compensate environmental damage were often viewed as trivial, as interviewees from group D explained:

> *In two days, very old trees were cut and all the politicians say 'well, but we can plant new ones'. (...) But the big tree is more efficient than the little tree. And they still say 'there's no problem, we destroyed it but we will compensate'. (...) We don't want this kind of justice.* Interviewee group D

> *We have been said that those buildings will be built according to the upper environmental standards in the country. Ok. But the environmental price is to have around 18 hectares of woods, of forest, destroyed. So, what is the final balance? For us it is not a good balance. (...) it's impossible to prove that the balance is positive for the environment.* Interviewee group C

Additionally, civic groups often found themselves excluded from decision-making processes. Despite their efforts to present alternative plans, their proposals were frequently dismissed without substantive explanations:

> *We presented an alternative project designed by an architect to show that it could be built differently, and they told us 'it's too complicated'. We didn't understand. The answer wasn't much precise. It was 'complicated'?* Interviewee group D

> *They said it was not possible, a crazy solution, not a good one. Because we didn't have the data to talk about this subject. This dissymmetry between the citizens and the administration is a big problem. The administration says 'we have the technician, we have the engineer, we have the data. You don't have the technician, you don't have the engineer, you don't have the data. So, you shut up'. However, we are in the place, we have a better vision of the area than these people that don't know our daily life.* Interviewee group D

There is, however, a clear divergence in perspectives between different groups. Interviewees in groups A and B emphasised that public consultation processes were carried out and efforts were made to involve the local population:

> *We are trying to have dialogue and discuss with the opposition. To explain the programme we had lots of public meetings. We also tried to explain the real impact and what we are going to do.* Interviewee group A

> *One of the things you must know is that we've done all the regulatory consultations. And then we've done, like, more than 150 public meetings with the locals to present the projects.* Interviewee group B

In contrast, interviewees in group D expressed frustration with the few meetings they had with organising committees and public administration offices. They noted that the meetings were not public discussions but presentations of already finalised plans:

> *The local citizens are never consulted and rarely listened to. Only the national associations are invited to participate in public consultation, when required by law, but most of the time the involvement is formal in the face of decisions already taken.* Interviewee group D

> *The problem is that the Olympic Games, at least here, are not democratic. You have little public consultation about very, very, very little issues within the bigger project. And when meetings*

with the citizens are held, the project is already finalised; all the decisions are taken, and the citizens have the right to say nothing. We just contemplate the decision (...) and we can ask some questions about it: about the works, about the construction site, about the noise... but we cannot say anything about the bigger picture. Interviewee group D

The discrepancies between the public's perception and the official stance on transparency and communication foster a growing atmosphere of mistrust. This mistrust is amplified by the belief that communication barriers are deliberately created to obscure the true nature of the projects and their impacts:

I know all the governance processes, how they act politically and how there is a mismatch from the technical level of these infrastructures and what is then implemented on the territories. And, in this case, I know that there are strategies to confuse the civil society and not tell us exactly what the plans are so that we don't get to act on anything. Interviewee group C

These issues are not exclusive to Olympic Games projects, as they are commonly found in urban governance processes. However, interviewees from groups C and D emphasise that the Olympic Games appear to exacerbate these problems, primarily due to the scale of financial investment and the strict time constraints of event preparations:

In the case of the Olympic Games, I think it's more difficult because, of course, you have different levels of decision and there is a lot of money involved in these types of events. So, everyone is trying to get what they can from the Olympic Games, which is a good thing on some levels. Interviewee group C

The Olympic Games involve a lot of money but with some time limitations. And that is why all the politicians told us 'no, we can't discuss with you because the Olympic Games calendar is very constrained. We have no time'. Interviewee group D

In conclusion, the "Transparency and Communication" *Glitch* highlights how inadequate communication and transparency contribute to public mistrust. The challenge is to provide clear, timely, and accessible information and engage civic voices meaningfully. Addressing this *Glitch* involves improving communication strategies and ensuring that public concerns are addressed through transparent processes.

Community Perspectives

Public opposition to the Olympic Games is one of the most critical concerns within the framework of Olympic Agenda 2020, being one of the main reasons which triggered its development and implementation. However, while many Olympic Agenda recommendations indirectly aim to reduce opposition by promoting sustainability, credibility, and youth appeal, none directly address it.

Interestingly, many of the situations addressed in this research were, at some point, subject to public pressure, with some even sparking organised opposition. In Paris 2024, this was evident in the construction of the Aubervilliers swimming pool (*Question 6*), the Media Village (*Question 8*), and the new developments in Saint-Denis (*Question 13*), which include the Pleyel Interchange (*Question 10*). Each of these projects became a focal point for disputes between organisers and specific opposition groups, whether environmental associations or civic groups. For Milan-Cortina 2026, the Bormio bypass faced similar resistance (*Question 30*), while opposition to

projects like the Eugenio Monti Sliding Centre (*Question 27*) and other major infrastructure developments (*Question 29*) was less intense and more dispersed.

In both the Paris 2024 and Milan-Cortina 2026 case studies, the interviews reveal that these opposition groups are highly organised, each focusing on specific concerns related to the Games. These concerns touch all aspects of sustainability – environmental damage, societal challenges like inequality and gentrification, and economic burdens and opportunity costs.

Some interviewees in group D admitted that, initially, they were not ideologically against the Olympic Games. However, as they became more involved in fighting for their causes, they realised the complexity and often hidden consequences of hosting such a massive event. One interviewee noted how their view transformed over time:

> *I had no opinion about the Olympic Games at the beginning, even if I heard about the problems in Rio de Janeiro, in Sochi… But I thought it was a kind of an apex, a kind of problem that emerged, that was not structurally linked to the Olympic Games. But with time, I became much more sceptical because I saw that the way the Olympic Games are managed cause some structural divisions that creates this kind of impossibility of dialogue.* Interviewee group D

Differently, the concerns raised by interviewees in group C are rooted in a desire for true sustainability, not only for the Games, but also for their lives in general, which they believe has not been adequately achieved:

> *We are not against the Olympic Games. (…) The association would be in favour of sustainable, really sustainable Olympics but, so far, the study cases here and in other countries are not that good, let's say.* Interviewee group C

> *Usually, our voices are not really considered because we are environmental associations. And, you know, the politicians do not understand very much our position. We are not against everything, but we want to have a really sustainable life. And this is difficult for them to understand*. Interviewee group C

Interviewees in groups C and D highlighted that, within each group, their position regarding the Olympic Games is not entirely consensual. What unites them is not a shared stance on the Games themselves, but rather the common perception of the event as a threat to the places where they live. Moreover, those environmental and civic groups, despite having different priorities, have often joined forces in opposition, recognising that unity is necessary to make their voices heard. They understand that this brings the risk of being perceived as ideologically opposed to the Games, but they emphasise that such collaboration is essential to attract media attention, which is viewed as crucial for their success:

> *When a group or association gains media attention or succeeds to create an important movement around something, it can no longer be ignored and can influence decisions. This way we managed to win important battles.* Interviewee group D

One interviewee from group B confirmed this pressuring role from the media, noting that it actively seeks to discredit the Games by looking for controversial cases:

> *A lot of journalists want to know if there is any irregularity. (…) They come and ask and, until now, they have nothing. (…) All journalists are looking at us and all of them want to write a paper saying 'it's not good, they didn't do it well' or something like this.* Interviewee group B

From their standpoint, all decisions were made according to legal frameworks. They also highlighted that when appeals were filled against the projects, the court still decided in their favour:

Some people, they said that there were irregularities (...) but we only respect the laws. When you are a public office like us, you have the law to respect and that's what we did. Interviewee group B

The justice decided that there was no room for their request. Interviewee group A

Yet, the reliance on legal processes can be seen as flawed due to "Olympic law's" inherent biases, as previously discussed. In any case, while the courts may dismiss concerns, this does not eliminate the underlying issues that fuel public mistrust.

When questioned about public opposition, most of the interviewees in group B minimised its significance due to three primary reasons. First, they believed that opposition was minimal. Second, they argued that public opposition is a common feature of any major development project today. Lastly, they were convinced that many opponents have an ideological bias against the Games as a whole, using specific urban projects as a vehicle for their broader critique:

The level of opposition is very low. (...) It's so low... definitely. (...) I mean, last Sunday we had something like 300 opponents marching... 300 and that's all. OK, it was raining but, whatever... on the social media there was a lot of calls for this manifestation and there were only 300 people there. And it's always the same. Interviewee group B

We think that they will oppose everything. For now, just this project, but they can be against other things. Because it is an attitude... it's not really a content to discuss, just a position. Interviewee group B

All projects... not specifically Olympic projects but all development projects... urban development, industrial development, whatever they are... all projects raise ecological oppositions. Interviewee group B

If you want my point of view, there are people that oppose the projects because they oppose the Games. But they don't want to say that they are against the Games. So, they try to find some project that has issues, and they try to build opposition on these little issues because they cannot just say 'we don't want the Games'. Interviewee group B

In contrast, interviewees from groups C and D emphasised the significant personal toll that opposing the projects took on them. Fighting against the projects required substantial financial and emotional investment, which they claimed undermines the idea that their resistance is merely ideological. For many, the costs of legal battles were prohibitive:

For us, to pay only a 'few' thousand euros for the trial was very complicated. (...) And we had a lawyer that was an activist, quite a good one, and he accepted to be paid very little. And he said to us that the second phase of the procedure (...) could last several years (...) and that he was not trained for such procedure. If we wanted to pursue the procedure, we had to look for other lawyers specialised in it. But it was very expensive. Interviewee group C

We went to them to talk, with a project alternative, with an architect, with experts... and they forced us... who are simple citizens, we have our jobs, our families... to work and to go to court. It's a kind of despise... Interviewee group D

Nevertheless, some interviewees in groups A and B recognised the constructive role that opposition groups play in raising the bar for sustainability. While conflicts between local organisers and these groups are inevitable, their presence encourages greater scrutiny and adherence to environmental commitments:

I guess it's physiologic and it's good to have different ideas. Even if it's difficult to work together. So, sometimes you can try to explain, but they don't listen because they are very radical in their positions. But I guess it's good if you have a positive exchange. Sometimes that is not the case. But every player has to do its role. They have a role! Interviewee group A

I would say that it is the classic position almost each time you make an innovative project. And they have some good reasons, or at least you can say that they also have good reasons. It's important since the environmental responsibility is a big part of the commitments that have been made, so that's something we really worry about. And each time we have a situation like that, we try to minimise the problems and the effects. Interviewee group B

In line with these observations, one interviewee in group C commented that, even if their requests are not fulfilled, opposition serves as a check on organisers, forcing them to be more attentive to the concerns of local populations:

It serves as an example for future projects. We are vigilant and that makes them think a little more to account for the inhabitants and their wishes. (...) They feel that we are watching. Interviewee group C

This last *Glitch*, "Community Perspectives", thus reflects the failure of Olympic Agenda to directly address public concerns. Insufficient community engagement undermines the credibility of the Olympic legacy and sustainability claims. To address this *Glitch*, it is essential to enhance engagement with affected communities and address opposition concerns proactively, ensuring that the Games' implementation is more inclusive and responsive to public feedback.

5.3. Analysing the Persisting Threats to Olympic Urban Sustainability

The confirmatory stage of research, through field visits and interviews, was essential for identifying *Glitches* in the implementation of Olympic Agenda 2020. Focusing on the case studies of Paris 2024 and Milan-Cortina 2026, this stage revealed 10 Olympic Agenda *Glitches*. Building on the verification of initial assumptions, this procedure enabled a deeper analysis of the decision-making processes behind each observed situation. The findings highlighted the reasons behind misalignments between the implementation of these two case studies and the goals of Olympic Agenda 2020, contributing to a clearer understanding of the main challenges and informing the research conducted in Chapter 6.

A key strength of this approach is its reliance on real-world engagement to ensure that findings are both credible and actionable. Direct observation and interaction through field visits and interviews provided invaluable insights, validating early assumptions and laying the groundwork for more in-depth analysis. However, this approach also came with challenges that must be considered when interpreting the results. Resource and logistical constraints, such as time and cost, limited the scope of the inquiry. Recruiting a diverse sample of interviewees also proved particularly challenging, making it difficult to ensure the representation across different stakeholder roles in the implementation of the Games' concept.

For example, in the case of Milan-Cortina 2026, it was particularly hard to recruit interviewees from municipal and regional public administration (group B). Given the spatially dispersed nature of this edition of the Games, involving multiple levels of governance, perspectives from these stakeholders were essential. This gap was partly mitigated by participation in a PhD workshop in the Valtellina region, organised by Politecnico di Milano, which facilitated informal in-person interactions with lower-level government officials and helped with interview recruitment. In contrast, for Paris 2024, it was more challenging to reach the lower levels of public administration, although overall, stakeholders from Paris 2024 were more responsive than those from Milan-Cortina 2026. This discrepancy may have been due to the different stages of preparation that the two case studies were in when the research was conducted.

Some questions remained underexplored due to difficulties in securing interviews with the specific stakeholders involved. Interviews with additional key figures, such as members of IFs or IOC bodies like the Coordination Commissions, would have further enriched the findings. Additionally, time limitations constrained the interviews, preventing all relevant issues from being fully addressed. In some cases, interviewees from groups A and B also expressed frustration with the focus of the questions on challenges and less successful aspects of their work, preferring to discuss their achievements. Balancing questions about misalignments with those highlighting successes became necessary. This was a consequence of the defined research objectives and methodology, which sought to identify areas where the implementation of the Agenda diverged from its intended goals.

Despite these challenges, the identified *Glitches* reflect critical issues that compromise the goals of Olympic Agenda. These issues were either inadequately addressed or, in some cases, not addressed at all by the Agenda. Their identification and systematisation, as developed here, can be useful for both academics and practitioners. For academics, they provide a valuable framework for analysing both previous and future editions of the Games, helping to better recognise and characterise these systemic problems, while exploring their causes and consequences in greater depth. For practitioners, the *Glitches* represent urgent areas requiring attention to mitigate the risks they pose to the sustainability and credibility of the Games and other mega-events.

Some of the Glitches, such as “Political Affairs”, “Conceptual Framework”, and “Olympic Exceptionality”, stem from local implementation and governance strategies aimed at leveraging the event. These are often rooted in political dynamics and governance issues, areas where Olympic Agenda does not intervene directly. Instead, the Agenda attempts to address them indirectly by adapting event requirements and anticipating trickle-down effects. However, findings indicate that in many cases, these adaptations have not produced the anticipated results.

For example, the “Political Affairs” *Glitch* is defined by the local political interests that overshadow or conflict with the goals set by the IOC, creating tensions that can lead to suboptimal solutions from an event perspective. Similarly, “Conceptual Framework” reflects strategic gaps between the high-level objectives of the Agenda and the realities on the ground, highlighting how differing visions among stakeholders may not fully align.

“Olympic Exceptionality” underscores how the exceptional status of the Games within the governance structures of host cities allows certain stakeholders to bypass standard procedures under the guise of Olympic-related urgency. While the Agenda may have succeeded in reducing the scope of these governance loopholes – particularly by limiting the number of large-scale

construction projects – it has yet to address their root causes, such as political opportunism or governance inefficiencies.

Interestingly, some of the other *Glitches* result directly from measures introduced by the Olympic Agenda itself. These include the "Marketing vs. Sustainability", the "Participants' Experience", the "Abstractness", and the "Planning" *Glitches*. They highlight gaps in different aspects of the planning and execution of the Games, including the candidature process and the definition of the Olympic Programme, where contradictions between goals are evident.

For instance, the "Marketing vs. Sustainability" *Glitch* reveals tensions between the commercial interests of the Games and the Agenda's sustainability objectives. While the Agenda encourages more conscious decision-making, the reality is that some marketing strategies can be compromised by it, leading to contradictions in execution. Similarly, the "Participants' Experience" *Glitch* emerges from the burden that heightened expectations deriving from the Olympic Agenda's emphasis on broad stakeholder representation in decision-making place on urban resources.

The "Abstractness" *Glitch*, meanwhile, highlights the vagueness of some of the Agenda's goals. Although the Agenda promotes flexibility, allowing hosts to interpret guidelines according to their local context, this often leads to inconsistent or incomplete implementation. The lack of clarity can result in superficial compliance or poor alignment with the Agenda's overarching goals. Somewhat related, the "Planning" *Glitch* emphasises how Olympic Agenda's simplification of the bidding and planning processes, aimed at making bidding more accessible, sometimes comes at the expense of thorough and realistic planning.

The final set of *Glitches* – "Olympic vs. Local Needs", "Transparency and Communication", and "Community Perspectives" – arise from gaps within the Agenda's scope. These reflect difficulties in local contextualisation, communication strategies, and managing public sentiment. For example, the "Olympic vs. Local Needs" *Glitch* highlights the failure to adjust the top-level demands of sports with the down-to-earth, specific needs of host cities. Local authorities often struggle to balance these conflicting priorities, leading to compromises that favour the event's needs over those of the local population.

The "Transparency and Communication" *Glitch* exposes weaknesses in how decisions are communicated to the public stakeholders. A lack of clear and transparent dialogue often fuels public scepticism or opposition, complicating the successful implementation of Olympic projects. The "Community Perspectives" *Glitch*, in particular, stems from the absence of a robust strategy to engage the population and mitigate negative perceptions of the Games.

Olympic Agenda 2020 has led to reductions in the magnitude of some problems, but their fundamental nature remains unsolved. These *Glitches* not only affect the sustainability of the Games but also undermine their credibility. While some of them can be tackled locally by organising committees and host cities, others demand global intervention by the IOC as the event owner. In fact, several of these problems appear to have already been recognised by the IOC, as evidenced by updates in host contracts and adjustments introduced through Olympic Agenda 2020+5, which seem aimed at addressing some of these shortcomings.

In any case, it is very important to recognise that certain *Glitches* might not be perceived as problems by all stakeholders. For example, "Olympic Exceptionality" might actually serve the interests of host governments, which may see such tool as a valuable incentive for endorsing bids. In these cases, constraining the use of the "Olympic law" too much might reduce the event's

appeal to potential hosts. As a result, even if the IOC is aware of the negative consequences of granting these privileges, it may be reluctant to impose stricter limitations, preferring to maintain flexibility in order to attract future bids.

In conclusion, while the Olympic Agenda 2020 and its related policies have driven meaningful changes in some areas, significant gaps remain. The identified *Glitches* represent critical misalignments that require attention to ensure the long-term sustainability and credibility of the Olympic Games.

Chapter 6

Urban-Innovating Olympic Agenda 2020

The Olympic Games present a unique tension between global ambitions and local realities, where the grandeur and visibility of the event often collide with the challenges of urban planning, governance, and sustainability in host cities. The 40 recommendations of Olympic Agenda 2020 were introduced as a strategic response to smooth these tensions, recognising the need for a more sustainable and responsible approach to hosting the Games. This was also the pragmatic move to safeguard the Games' viability amidst a decline in bids to host them and growing public opposition to large-scale events, amplified by media coverage.

As previously highlighted in Chapter 3, the IOC encouraged diverse stakeholders to contribute to the development of these recommendations, receiving "more than 43,000 emails and 270 more formal contributions [that] resulted in 1,200 new ideas" (IOC, 2015, p. 17). These ideas were then shared with the 14 working groups responsible for developing the recommendations. The composition of these working groups brought together a wide range of perspectives:

> *The composition of the Working Groups added new viewpoints to the reform effort by combining Olympic expertise with expertise from related fields. In addition to representatives from NOCs, IFs, The Olympic Partner sponsors and athletes, the Working Groups consisted of experts from the United Nations, Google/YouTube, Transparency International, WPP, the Victoria and Albert Museum and other business, academic, cultural and non-governmental entities. (...) Further consultation occurred at two Olympic Summits that brought together the leaders of major Olympic stakeholders, including the Association of National Olympic Committees, the Association of Summer Olympic International Federations and the Association of International Olympic Winter Sports Federations. Special attention was given to the views of Olympic athletes in discussions with the IOC Athletes' Commission*. (IOC, 2015, p. 17)

However, while the working groups encompassed key stakeholders of the Olympic Movement, the field of urban planning was underrepresented. The focus leaned more toward sports organisations and athletes, who often have interests that differ from those of host cities and communities. Therefore, it is not surprising that, despite its forward-looking vision, the Agenda's implementation has encountered significant challenges in urban planning terms, as highlighted by the *Glitches* discussed in Chapter 5. These *Glitches* reveal critical gaps in areas such as conceptualisation, planning, regulatory frameworks, governance, transparency, and engagement, ultimately compromising local urban environments and communities. Addressing these gaps through the lens of urban planning is thus essential, not only to safeguard the Games' long-term sustainability but also to restore public trust and ensure that host cities are left with a meaningful and positive legacy.

This chapter develops *Proposals* to address these key weaknesses identified in the implementation of the Agenda. The objective is to answer the question: what strategic measures can be proposed to address the encountered challenges and their causes and prevent similar issues in future Olympic editions? The focus is not solely on resolving technical challenges; it also involves reshaping the relationship between the IOC, the organising committees, and local authorities to foster a more collaborative and resilient Olympic planning framework. To this end,

a policy-making approach through research by design is employed. The outcome is a set of six *Proposals* seeking to ensure that the Games contribute positively to the urban fabric of host cities while preventing the misalignment that leads to public opposition and erodes trust in the long-term benefits of the Games.

6.1. Crafting Policy for Urban Olympic Sustainability

In this chapter, research by design integrates analytical and creative methods into a policy-making approach to craft *Proposals* aimed at mitigating the identified Olympic Agenda *Glitches*. This combined approach balances analytical rigor with creative propositions, recognising both the structured and adaptive nature of addressing complex problems, like wicked problems.

Policy-making involves more than simply formulating goals; it is a deliberate and structured process grounded in the application of logic, knowledge, and past experience to solve societal and governance challenges. It analyses "the effects of policy tool use on policy targets to the development and implementation of policies aimed at the attainment of desired policy ambitions" (Howlett et al., 2015, p. 291).

A structured policy-making approach, as described by Linder and Peters (1984), consists of three essential models: causation, evaluation, and intervention. The model of causation attempts to establish a clear link between concerning issues and their roots, associating certain outcomes with specific initial states. This adds clarity to the understanding of previous policy's direct and indirect effects, contributing to more targeted and effective solutions. In the context of this research, this model was employed in Chapter 4, where the *Questions* concerning the implementation of Olympic Agenda in the case studies were raised, serving as an initial state associating specific urban outcomes with the application of the policies established for the Games, namely the Olympic Agenda *Reforms*.

Following this, the model of evaluation assesses these outcomes within the context of the policy, based on pre-established goals or societal norms. This provides a benchmark for assessing success or failure, as well as the effectiveness of policies. One challenge of this model relates to its subjectivity, as goals may evolve over time and depend on stakeholders' viewpoints. In this research, the model of evaluation was employed in Chapter 5, where the *Questions* raised were evaluated in the specific contexts of the case studies, clarifying where the actual results of the Olympic Agenda *Reforms* observed on the ground diverged from the intended goals of the original policy. The underlying motives were identified as the Olympic Agenda *Glitches*.

Finaly, the model of intervention moves beyond problem identification to guide interventions aimed at influencing ongoing societal processes and future planning to correct the identified problems. It offers an action-oriented roadmap with direct applications in practice to achieve the new desired ambitions. These interventions require careful consideration of the competing interests of many stakeholders, whose different priorities may render the policies inefficient. For this research, the model of intervention is developed in this chapter with the aim of generating *Proposals* to address the identified *Glitches*.

This model of intervention was employed through research by design. Research by design uses expressive and systematic tools to link these two processes, using design-based thinking to generate new knowledge from the practitioners' methods, consistent with experience in practice (Hauberg, 2011). It is especially relevant for addressing wicked problems, where uncertainties,

conflicting objectives, and unique local conditions requiring constant monitorisation and adaptation make traditional, linear planning methods ineffective (Roggema, 2016).

A key element of research by design is the application of the knowledge and expertise of the researchers involved. According to Cross (2001), that is fundamental to effectively bridge the gap between theory and practice. Furthermore, research by design is not just about creating solutions, but also using the researcher's expertise to generate knowledge, contributing for solutions that are both innovative and practically applicable (Hauberg, 2011).

Research by design produces critical inquiry that is responsive to the evolving nature of challenges, fostering creative, innovative, and, sometimes, unconventional solutions. It enjoys a holistic approach, not treating problems in isolation but viewing them in relation to the broader system to generate new possibilities that merge the desires and probabilities of stakeholders into a concept. Although uncertain, the result is expected to suggest how the future should be projected (Roggema, 2016).

The flexibility of research by design is one of its core strengths, allowing for ongoing revisions and adaptations as new information becomes available or as circumstances change, which is vital when case studies develop while the research is conducted. It usually encourages stakeholder involvement throughout the process to better align the propositions with the needs and expectations of all relevant parties. Since the outcomes are discussable, they shall be validated through peer review by panels of experts who collectively cover the range of disciplinary competencies addressed by the work. While this peer-review process can also be a limitation due to its resource and time-intensity, it maintains the credibility and practical applicability of the outcomes (Hauberg, 2011).

Planning for the Olympic Games presents precisely these kinds of challenges, where urban planning, sustainability, and stakeholder expectations intersect. The integrated approach of policy-making and research by design provides a comprehensive methodology for developing effective *Proposals*. Policy-making offers the structured analysis needed to understand causes and evaluate outcomes, while research by design provides the flexibility and creativity required to address complex, wicked problems.

This approach was applied using insights from the interviews in Chapter 5 concerning the issues under analysis. Six *Proposals* were developed by the author and further refined through discussions with his supervisors. These *Proposals* aim to create a robust yet adaptive framework, grounded in thorough urban planning analysis, while remaining flexible enough to address the primary concerns of stakeholders within the Olympic framework. By integrating urban planning expertise with event stakeholders' expectations and desires, the *Proposals* offer a roadmap for more sustainable and adaptable urban planning for the Olympic Games, ultimately contributing to the achievement of the Agenda's main goals.

6.2. Further *Proposals* for the Olympic Agenda 2020

This section presents the six comprehensive *Proposals* developed to address the 10 Olympic Agenda *Glitches* identified in the previous chapter. These *Proposals* target multiple stakeholders and range from interventions in Olympic sports frameworks and participant experience criteria to planning strategies, political considerations, and community engagement. Each *Proposal* addresses various *Glitches* simultaneously, offering integrated solutions rather than focusing on

individual issues. The *Proposals* and the *Glitches* they directly and indirectly address are represented in **Fig. 25**.

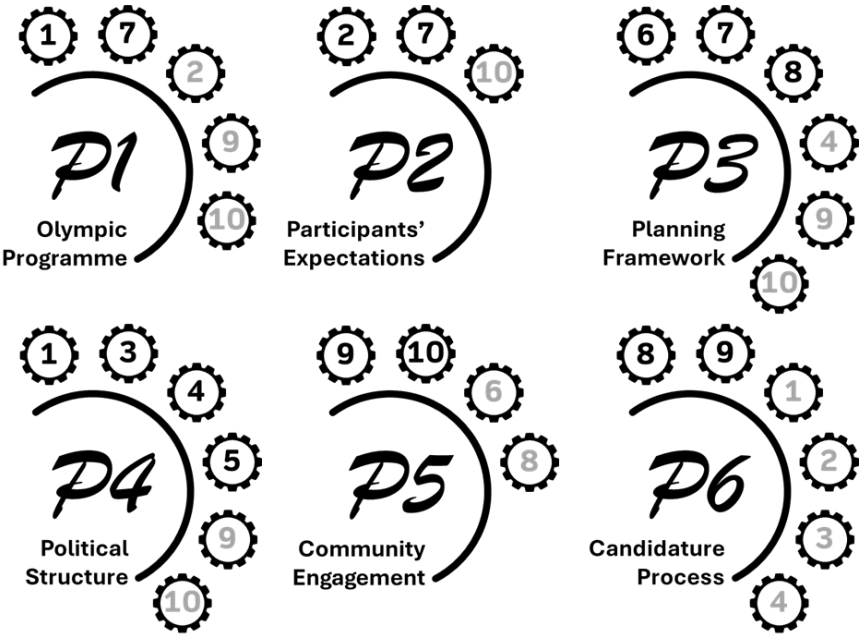

Fig. 25 *Proposals* and the *Glitches* they directly (dark) and indirectly (light) address (cf. **Fig. 24**).

Make the Olympic Programme Adaptable to Host City Characteristics

Proposal 1 centres on making the Olympic Programme context dependent, following a place-based approach. It proposes dividing the Programme into "core", "supplementary", and "additional" events based on the facilities they require and the host city's urban context. The *Proposal* calls for an evaluation process to determine which events align best with sustainability goals. It also encourages the involvement of neighbouring cities in hosting events and introduces a flexible maximum size of the Games, depending on the type of facilities required and taking specific urban contexts into account. By tailoring event selection to the host city's strengths, this approach aims to minimise urban impact while maintaining the appeal and diversity of the Games.

Review the Olympic Programme to increase flexibility and better align with each host's unique characteristics:

1. Define a "core" Olympic Programme based on:
   - The popularity and marketing value of the events.
   - The type of venues required and the likelihood that host cities have multiple high-quality facilities of that type (e.g., stadiums, indoor arenas, exhibition centres).
   - The feasibility of using temporary, cost-effective venue solutions (e.g., scaffolding, modular Fields of Play (FOPs), street events).
   - The potential to temporarily repurpose commonly available but underused facilities during the Games (e.g., stadiums).
   - Data from previous Games to support these criteria.
2. Define a "supplementary" Olympic Programme with candidate events. For each edition, select supplementary events based on the characteristics of the host city:
   - Prioritise events that align with the host city's existing facilities, long-term development plans for new or upgraded facilities, or the feasibility of temporary solutions at specific sites.

- Include options for using existing facilities or temporary venues in co-host cities, even if they are geographically distant from the main host city.

3. Establish an evaluation process to add or remove events from the "core" and "supplementary" Programmes, considering a balanced set of criteria that integrates sustainability with other relevant aspects, such as marketing value, youth appeal, and good governance.
4. For each edition, allow an “additional” Programme to enhance marketing appeal without compromising sustainability by:
   - Selecting events based on the availability of existing or temporary facilities in the host or co-host cities.
   - Considering proposals from IFs that make use of existing facilities in the host city not needed for other Olympic events or that share venues with “core” or “supplementary” events.
5. Set a flexible maximum size for the Olympic Games depending on the Olympic Programme:
   - Limit the number of athletes, officials and events in the “core” Programme.
   - Encourage more “supplementary” and “additional” events in line with the principles outlined above.

The core principle of this *Proposal* is that, while the number of Olympic events may not inherently threaten urban sustainability, the requirements of certain venues might. A good example is the Paralympic Games, which feature nearly double the number of events but roughly half the athletes, requiring significantly fewer venues. The *Proposal* thus emphasises the importance of leveraging existing high-quality facilities, already served by efficient transport networks capable of handling large crowds, and reconsidering events that require less common, specialised venues.

The *Proposal* also encourages co-hosting with neighbouring cities when specialised facilities are lacking in the primary host city but exist nearby. This avoids unnecessary duplication of facilities that have large catchment areas, preventing the creation of “white elephants”. Additionally, it boosts regional marketing potential, extends the reach of the Games, and reduces the need for new, resource-intensive construction.

Further, this *Proposal* suggests that sustainability should be a core criterion to evaluate events, in addition to their sport or marketing values. This could foster healthy competition among IFs, motivating them to adapt their events to meet sustainability goals, much like they already do for commercial considerations. IFs might consider reducing athlete numbers, changing competition formats, minimising preliminary rounds, or adjusting technical requirements to encourage venue sharing and reduce costs and impact. Events failing to align with sustainability goals could ultimately be excluded from the Programme, while emerging sports could seize the opportunity to be included by establishing more sustainable formats.

Five Olympic Agenda *Glitches* are addressed by this *Proposal*. It directly targets the “Marketing vs. Sustainability” *Glitch* by balancing sports’ marketing value with urban sustainability. It addresses “Olympic vs. Local Needs” by adjusting Olympic requirements to fit the host city’s resources and long-term plans. Indirectly, it helps manage stakeholder expectations by tailoring the “Participants’ Experience” to local contexts while maintaining the integrity of sport through a well-planned venue strategy that protects both the experiences and resources. The “Transparency and Communication” *Glitch* is addressed by ensuring clear communication about event and venue selection, with a transparent system rewarding sustainability. Ultimately, this reduces the need for new, potentially controversial constructions, mitigating negative “Community Perspectives”.

However, implementing this *Proposal* may be complex. Convincing IFs to adjust event formats, particularly when they may perceive it as undermining their sport, could face resistance. Spreading events across multiple cities introduces logistical complexities regarding transportation, security, and maintaining a cohesive Olympic experience, also compromising economies of scale. Moreover, balancing the marketing value of centralising events with the benefits of decentralisation could lead to tensions.

Despite these challenges, making the Olympic Programme reliant on host cities' existing infrastructure and co-hosting strategies can significantly reduce the Games' impact and leave more positive legacies. It can also foster a more inclusive and resilient model for future Games, reinforcing the Olympic Movement's commitment to sustainability and establishing a new norm where urban sustainability drives Olympic planning.

Adjust the Participants' Expectations to Align with the Host City's Urban Resources

Proposal 2 aims to align participants' experience criteria, particularly accommodation and transport for athletes and other accredited people, with the host city's urban resources. It proposes revising these criteria by prioritising decentralised solutions for accommodation and services, reducing the strain on urban resources while adapting public transport to meet participants' needs.

Adjust participants' expectations considering the anticipated outcomes of *Proposal 1*:

1. Lower athletes' accommodation expectations:
    - Determine the capacity of the Olympic village(s) for each edition of the Games considering the city's needs and development plans.
    - Establish eligibility criteria for accommodation in the Olympic village(s), prioritising athletes (and delegations) who:
        - Compete in events of the "core" Programme hosted in the city.
        - Compete in events of the "supplementary" or "additional" Programmes held in nearby venues.
        - Compete in other events for which more efficient accommodation solutions are not available.
    - Promote the use of existing hotels and other facilities near competition venues to serve as satellite Olympic village(s) for the remaining athletes (and delegations).
2. Eliminate strict travel time requirements for athletes:
    - Maximise the use of existing public transport services and infrastructure, which *Proposal 1* is expected to facilitate, by adapting specific routes between the Olympic village(s) and other key venues to meet safety and comfort.
    - Provide first and last-mile dedicated services when necessary, on a case-by-case basis.
    - If existing public transport services are deemed unsuitable for certain routes, or if athletes' transport cannot be effectively managed without compromising the balance between the city's supply and demand, consider:
        - Creating dedicated routes between the Olympic village(s) and specific venues.
        - Accommodating the concerned athletes in satellite Olympic village(s).
3. Evaluate the feasibility and cost-effectiveness of establishing smaller media and broadcasting hubs, strategically located near clusters of competition venues, to complement the services provided at the MPC/IBC. This would reduce the pressure on urban resources regarding the need for large media facilities, concentrated accommodation for media, and dedicated media transport services.

The Olympic village has historically been a flagship of the Olympic Games and a key part of the athletes' experience. It provides centralised accommodation and essential services like hospitality and security, benefiting from economies of scale. Athletes value the sense of community and tradition it fosters. However, constructing and operating a village of this size is resource-intensive and adds significant pressure on transportation logistics. Additionally, in some cities, the development of an Olympic village has led to long-term negative issues like gentrification, often displacing local residents.

Building on *Proposal 1*, which is expected to decentralise competition venues, this *Proposal* simplifies accommodation and transport solutions by housing athletes closer to their respective venues. Although on a different spatial scale, this approach mirrors models from other major events, such as the FIFA World Cup, where the accommodation burden is spread across multiple areas rather than concentrated in one location. With this model, the Olympic Games can still deliver a satisfactory participant experience while avoiding excessive investment in infrastructure that risks long-term challenges. It also reduces the need for large, short-lived, and costly transport solutions, instead prioritising smaller public transport upgrades with lasting benefits for urban mobility.

This *Proposal* addresses three Olympic Agenda *Glitches*. First, it directly tackles the “Participants' Experience” *Glitch* by adjusting expectations to match local realities, ensuring participants’ needs are met without excessive demands. Second, it addresses “Olympic vs. Local Needs” by advocating for housing and transport solutions tailored to the host city’s context, reducing the imposition of large-scale Olympic projects on local communities. Finally, by promoting scaled-down, adaptable approaches that easily align with long-term plans, it helps reduce potential negative construction impacts, indirectly addressing the “Community Perspectives” *Glitch*.

Challenges in implementing this *Proposal* include overcoming athletes’ and delegations' attachment to the Olympic village. Reducing its size and decentralising accommodation may face resistance from those who feel that a single, centralised village is integral to the Olympic spirit. Additionally, ensuring new accommodation models remain accessible, efficient, and in line with Olympic standards, without compromising the athletes' experience, may be challenging. Decentralised accommodation, while more resource-efficient, complicates planning for other services, increasing the risk of logistical issues.

However, by following this *Proposal*, host cities can mitigate long-term urban issues like gentrification and better align new developments with broader urban goals. Decentralising accommodation also spreads transport demand, making it easier to integrate the Games’ needs with existing public transport services. Necessary upgrades to public transport will likely be smaller and easier to implement, yet still result in more efficient, sustainable infrastructure that benefits the city beyond the event. Ultimately, this *Proposal* seeks to balance preserving Olympic traditions while preventing unnecessary urban interventions.

Improve Planning to Mitigate Risks that Compromise Urban Sustainability and Legacy

Proposal 3 seeks to enhance the planning processes for the Olympic Games, with the dual aim of mitigating risks to urban sustainability and ensuring a lasting positive legacy. It underscores the importance of providing clear, precise definitions for key terms such as "legacy" and "sustainability", while also advocating for detailed, robust planning that aligns with these

definitions. By improving both the conceptual and practical aspects of mega-event planning, this *Proposal* aims to counteract potential risks associated with large-scale constructions and urban interventions, promoting a more thoughtful and transparent approach.

Develop clear definitions of concepts and require cities interested in hosting the Olympic Games to present more detailed plans in certain circumstances:

1. Define and review key concepts:
   - Define “sustainability” for new constructions related to the Olympic Games:
     - Incorporate economic, social and environmental considerations.
     - Use existing standards from internationally recognised organisations (e.g., ISO, UN, OECD, Greenpeace, Amnesty International, etc.) for sustainability certification, or collaborate with them to develop Olympic-specific standards.
   - Review the definition of “legacy” and differentiate it from “impact”:
     - Define “impacts” as immediate, short-term positive or negative effects.
     - Define “legacies” as extended, long-term positive or negative effects and changes.
   - Differentiate “needs” from “benefits” in relation to long-term development:
     - Define “needs” as specific gaps in facilities/services or other requirements of the population.
     - Define “benefits” as broader, additional gains expected for the territory and population.
2. Require detailed viability and impact assessments, as well as legacy plans, for new facilities and infrastructure proposed in candidature processes:
   - Viability plans should address feasibility issues, including site suitability, land acquisition, methods, materials, schedule, financing, environmental and social compensations, potential risks, expected opposition, and alternative solutions.
   - Impact assessments must evaluate the “impacts” and the “sustainability” of the proposed construction.
   - Legacy plans must consider “sustainability” and long-term “needs”, including a detailed operational business plan, which should also address potential effects on similar existing facilities.
3. Establish criteria (e.g., budget limit) defining when hosts must present detailed viability plans, impact assessments, or legacy plans for permanent works in existing facilities or sites selected for temporary venues. Data from previous editions can help establish these criteria.
4. Develop methods for post-Games adaptation of certain types of facilities needed for the “core” Olympic Programme (e.g. swimming pools, velodromes, skating ovals) to make them more compatible with everyday needs. Collaborate with IFs to identify the technical requirements that complicate this adaptation and explore flexible alternatives. Legacy data from previous Olympic venues provided by venue operators can aid in this process.
5. Consider the potential to enhance the resilience of the Olympic Games in the face of unexpected events when adopting the measures in this *Proposal*.

One of the key promises of the Olympic Agenda was to reduce the financial and administrative burden of bidding, partly by simplifying planning requirements. While this *Proposal* calls for a more rigorous approach, particularly in cases where new constructions are deemed necessary, it aligns with the broader Olympic Agenda framework, which already emphasises maximising the use of existing and temporary venues, thus reducing the need for new constructions. However, this *Proposal* advocates the development of a robust mechanism to define the statuses of venues, ensuring informed and transparent communication. In instances where new developments are still required, this *Proposal* advocates for a rigorous justification process based on clear and transparent criteria. This approach ensures that such projects are not misinterpreted or misused and that they serve a clear, long-term purpose aligned with the host city's urban sustainability goals, ultimately preventing "white elephant" structures.

Proposal 3 addresses six Olympic Agenda *Glitches*. It directly tackles the "Planning" and "Abstractness" *Glitches* by calling for comprehensive, transparent planning that covers all essential details, particularly when new constructions are involved. At the same time, it clarifies vague terminology that, if left open to interpretation, could undermine the effectiveness of planning efforts. The *Proposal* also confronts the "Olympic vs. Local Needs" *Glitch* by promoting plans that ensure the Games align with the host city's existing infrastructure and long-term urban objectives. Furthermore, by demanding clear and rigorous justifications for new developments, it improves "Transparency and Communication", ensuring that the public stays informed and engaged throughout the planning process. Indirectly, it addresses the "Conceptual Framework" *Glitch* by establishing clear, enforceable terms that guide stakeholders toward common goals. Finally, the *Proposal* mitigates negative "Community Perspectives" by better aligning plans with the host city's long-term vision, which is likely to reduce backlash from local communities.

However, pushing for more detailed planning could be perceived as a burden for bidding and hosting cities. Additionally, enforcing strict definitions and measurement techniques for terms like "legacy" and "sustainability" might prove challenging, especially in the early stages of planning. Some stakeholders may resist such efforts, preferring to keep these terms vague due to competing interests. They might also argue that the flexibility needed to pursue goals and communicate achievements is compromised. Overly detailed requirements could stifle innovation or increase costs. Thus, finding the right balance between providing flexibility and ensuring accountability is crucial.

Despite these potential challenges, better planning is essential for minimising the risk of overbuilding or creating infrastructure that fails to serve long-term community needs. This approach strikes a thoughtful balance between the temporary demands of the Olympic Games and the long-term viability of urban development. Ultimately, it helps ensuring that venues and facilities contribute positively to the city's future, with Games-related investments enhancing resilience and adaptability.

Recognise the Role of the Olympic Games within Political Structures and Formalise it Accordingly

Proposal 4 aims to formalise the role of the Olympic Games within political structures, particularly when it comes to urban planning and construction. This *Proposal* recognises that the Olympic Games, as a global mega-event, inherently interact with national political systems, raising questions about how much power should be granted to political entities when leveraging the Games for urban developments. While the creation of an "Olympic law" may be controversial, it is often necessary to ensure smooth preparations and collaboration between stakeholders. Such laws can accelerate stalled projects, catalyse large-scale urban developments, and provide critical guarantees to the IOC – a benefit highlighted by several interviewees. However, this approach also comes with significant risks, especially when governments use the event to push forward unrelated projects under the Olympic umbrella, sometimes bypassing normal planning processes, including environmental impact assessments and public consultations.

Ensure that hosts leverage the Olympic Games in alignment with event needs, while respecting national, regional, and local governance structures:

1. Involve relevant public administrations early in the Games' concept design and preparation, as needed on a case-by-case basis:
    - Ensure that public administrations that will be involved in decision-making on key Olympic-related constructions (as per *Proposal 3*) participate in planning or, at minimum, approve and support these plans.

- Provide relevant public administrations with IOC policies and relevant information for construction works in their jurisdiction.
- When appropriate, require lower-level public administrations to sign the Host City Contract, particularly if they are expected to play a significant role in decision-making related to construction processes. Alternatively, create a specific contract for these administrations.
- Ensure that contracts account for unexpected changes to the Games concept, balancing event needs while recognising the Olympic Games' influence within political governance frameworks.

2. Ensure collaboration between hosts and the IOC to establish the "Olympic law" and delivery authority:
   - Require hosts to consult the IOC when creating the "Olympic law" and deciding which works will be managed by the delivery authority.
   - Hosts should present a comprehensive provisional list of construction works expected to be overseen by the delivery authority. The IOC should approve and endorse this list, ensuring alignment with Olympic values and goals.
   - Communicate the relevance of these works clearly and transparently (as per *Proposal 5*).
   - The IOC Coordination Commission should participate in decisions about these works to ensure adherence to IOC policies, alignment with *Proposal 3*, and respect for Olympic ideals.
   - Include all construction costs overseen by the delivery authority in the overall Olympic Games' capital budget.
   - The IOC to share responsibility for any negative "impacts" and "legacies" from these works and collaborate with hosts and other relevant authorities to mitigate them, ensuring clear accountability for each project.
3. Avoid involvement in non-Olympic projects:
   - Clearly distinguish IOC-endorsed projects from unrelated ones.
   - Ensure that non-Olympic projects do not use the services of the delivery authority.
   - Prevent any other exceptional laws from referencing the Olympic Movement, IOC, OCOG, the Games, or the edition's marketing name.
4. Use the Host City Contract to implement this *Proposal*.

In urban planning, this flexibility often results in fast-tracked projects, with governments capitalising on the opportunity to implement long-desired constructions. "Olympic laws", along with political ambitions framed as beneficial for the Games, facilitate developments that may be controversial. These constructions become direct representations of the Olympic event itself. This political freedom, while beneficial in some respects, can easily lead to constructions that do not align with Olympic goals, which can amplify negative reactions from the public.

Therefore, *Proposal 4* emphasises the need for host cities to leverage the Olympic Games in alignment with event requirements while respecting national, regional, and local governance structures. It calls for early involvement of relevant public administrations in the Games' concept design, particularly those responsible for key Olympic-related constructions. These administrations should be given access to IOC policies, participate in planning, and potentially sign or have specific contracts to ensure accountability. The *Proposal* also advocates for collaboration between hosts and the IOC to establish the "Olympic law" and delivery authority, ensuring that all construction works align with Olympic values and are transparently communicated. Additionally, it stresses the importance of avoiding involvement in non-Olympic projects and ensuring clear distinctions between IOC-endorsed works and unrelated developments.

Proposal 4 directly addresses the "Marketing vs. Sustainability", "Political Affairs", "Conceptual Framework", and "Olympic Exceptionality" *Glitches* by seeking to formalise and limit how governments leverage the Olympics to pursue construction projects. It balances local

political ambitions, which are often marketing-driven, with the sustainable goals of the Games, preventing the Games from being used as a cover for politically motivated constructions. A key goal of this *Proposal* is to mitigate the misuse of "Olympic laws" through formalisation, ensuring that only necessary, Games-related projects are implemented. It also calls for the involvement of all relevant stakeholders in early planning, highlighting the role of lower-level public administrations in identifying local needs and serving as the interface with communities. Indirectly, all these measures help to improve "Transparency and Communication" by ensuring clearer messaging and decision-making, reducing the likelihood of negative "Community Perspectives" to controversial projects, as communities will have a clearer understanding of the event's goals.

Yet, restricting political freedom around the Games may make the event less attractive to potential host cities, which often bid with the intention of promoting urban transformations. Additionally, it may face resistance from governments, as there is a slippery slope between controlling the use of the "Olympic law" and interfering in national political and legal frameworks. Moreover, the involvement of more stakeholders in early stages might complicate planning processes.

Nevertheless, by formalising the political role of the Games and curbing the misuse of "Olympic laws", this *Proposal* would help ensure that only necessary projects are linked to the event. This would reduce the negative impacts of overdevelopment, prevent unsustainable construction, and protect the Games from political exploitation. Furthermore, limiting the use of the Olympic brand for unrelated projects can foster greater public trust, as communities will see the event as less of a vehicle for unchecked development and more as a contributor to the city's long-term sustainability.

Engage with Local Communities

Proposal 5 is designed to fill an important gap in the Olympic Agenda, addressing a critical aspect that reflects its origins and the reasons for its implementation. It focuses on engaging local communities and fostering transparency, aiming to bring the Olympic Games and their preparations closer to the public. It recognises the exceptional nature of the Games, including their fixed deadlines and unique governance challenges, but emphasises the importance of involving the public in a meaningful way. While it does not propose a fully participatory governance model, it suggests that a transparent, well-structured approach can bridge gaps between organisers and the public, creating a more inclusive planning process.

Ensure collaboration between the IOC, OCOG, host, co-hosts, delivery authority, and relevant public authorities to develop strategies for engaging with local communities and ensure smooth Olympic preparations and delivery:

1. Ensure accurate, clear and transparent communication of candidature concepts:
    - Develop a transparent venue classification system based on specific criteria.
    - When relevant, require candidate hosts to address expected negative "impacts" and "legacies", and mitigation strategies, considering "sustainability" concerns. Ensure alignment with *Proposals 3* and *4*.
    - Interested hosts must develop a communication strategy to engage with local communities.
2. Control the narrative on Olympic constructions:
    - Ensure official sources are the first to disseminate information to prevent misinformation.
    - Tailor communication methods and styles to suit target audiences, avoiding condescension.

- The IOC should assist hosts in explaining the necessity of constructions, addressing local "needs" and "benefits", "sustainability" considerations, expected challenges, and strategies to mitigate negative effects. Clearly communicate the temporary effects of construction and their duration.
- Publicly share viability plans, impact assessments, and legacy plans where relevant (as per *Proposal 3*).
- Utilise OBS and the Olympic Channel to create innovative multimedia content and use non-traditional communication channels to reach broader audiences.
- Partner with NGOs and activist groups (as per *Proposal 3*) to enhance communication efforts.

3. Create a "public engagement commission":
   - Consider forming a commission within OCOGs to address concerns from environmental and civic groups.
   - Include representatives from the IOC, OCOG, host, delivery authority, and relevant public authorities, when needed.
   - Engage with the public and discuss, in good faith, opportunities to adjust projects based on feedback from environmental and civic groups.
   - Transparently communicate the commission's deliberations, successes, failures, and reasons for unresolved agreements.
4. Foster public involvement and a feeling of belonging through targeted initiatives:
   - Explore ways (e.g., voting models) for the public to contribute to selecting events for the "supplementary" and "additional" Olympic Programmes (as per *Proposal 1*).
   - Promote initiatives that expand throughout the entire host country, creating legacy projects addressing long-term "needs". Explore opportunities to utilise delivery authority services (in alignment with *Proposal 4*).
   - Use data from previous successful initiatives to identify transferable strategies (e.g., Paris 2024's Terre de Jeux and Generation 2024, Milan-Cortina 2026's Project Corba).
5. Recognise and engage with the growing anti-Olympic Movement:
   - Use their concerns to adapt the Games to contemporary sustainability paradigms.
   - Engage in constructive dialogue with these groups to explore strategies for mitigating opposition.
   - Provide platforms for engagement to discuss their concerns (e.g., forums, channels).

Proposal 5 is rooted in the empirical observation that local opposition to Olympic-related projects often stems not from ideological differences but from concerns over specific developments and a lack of clear communication. Contrary to some assumptions, findings show that opponents are not necessarily seeking conflict; instead, they often find the legal and social battles around Olympic construction stressful and difficult. By increasing collaboration and giving these groups a voice in the process, the *Proposal* seeks to reduce public opposition, avoid costly and time-consuming legal battles, and foster a more harmonious relationship between organisers and the communities they affect, reducing the social tensions that typically accompany large-scale Olympic developments.

The *Proposal*'s core strategy is to ensure collaboration between the IOC, organising committee, host cities, delivery authorities, and public authorities, facilitating meaningful public engagement in Olympic planning and delivery. Transparent communication from the outset – covering aspects such as venue classification, expected impacts, and sustainability concerns – is essential to control the narrative around Olympic constructions. This approach aims to prevent misinformation by ensuring official sources are the first to disseminate information, tailored to the needs of different audiences. A proposed "public engagement commission" would address concerns from environmental and civic groups, fostering transparent dialogue and public feedback. Additionally, the *Proposal* extends beyond local communities, aiming to communicate on a broader scale to involve wider public engagement with the hosting of the Olympic Games,

including initiatives like public voting on Olympic Programme events or expanding long-term legacy projects. It also highlights the need to recognise and engage constructively with the growing anti-Olympic movement.

This *Proposal* is tailored to the "Transparency and Communication" and "Community Perspectives" *Glitches* by ensuring that each stage of Olympic preparations is clear and accessible to the public, reducing misunderstandings and conflicts that stem from poor communication. By rebuilding trust, especially in relation to large-scale development, the Games can avoid many common points of contention. Indirectly, this *Proposal* also addresses the "Abstractness" and "Planning" *Glitches*. Increased public scrutiny will push for more concrete, well-established plans, while a more engaged and informed public will contribute to refining and optimising those plans, particularly by drawing attention to overlooked local issues.

The main challenge in implementing the *Proposal* lies in balancing transparency with the need for efficiency. The Olympic Games operate under tight deadlines, and fully participatory processes can complicate and slow decision-making. Additionally, despite efforts to engage communities, not all stakeholders will be satisfied with the final decisions. Broader ideological opposition, particularly from groups focused on global political or environmental issues, may persist despite local-level engagement.

Nonetheless, by fostering greater community involvement, this *Proposal* ensures that Olympic-related projects are more aligned with local needs and concerns, reducing the risk of losing community support. Transparency not only improves public trust but also facilitates knowledge transfer, educating the general public and professionals about the complexities of Olympic planning and execution. This engagement can lead to more responsible, accountable urban development, leaving behind a legacy of cooperation and trust that can be valuable for future projects.

Utilise the Two-Staged Candidature Process to Implement the Proposals

Proposal 6 suggests utilising the two-staged candidature process introduced by Olympic Agenda 2020 to implement the other *Proposals* effectively. This new process allows for a more flexible and adaptive bidding procedure and can be leveraged to ensure that host cities are thoroughly prepared and committed to meet the sustainability and planning requirements outlined in previous *Proposals*. By focusing particularly on the second stage of the candidature process, the logic behind this *Proposal* is that once a city is selected as a "preferred host", it has a greater incentive to develop comprehensive, robust deliverables that better guarantee both the short- and long-term success of the Games.

Leverage the two-staged candidature process to implement the *Proposals* gradually and effectively, avoiding unnecessary workload by requiring deliverables at each stage:

1. *Proposal 1*: Make the Olympic Programme adaptable to host city characteristics.
    - Continuous Dialogue: present a venue masterplan for both the "core" and proposed "supplementary" Programmes.
    - Targeted Dialogue: refine the "supplementary" Programme and define strategies for selecting events in the "additional" Programme.
2. *Proposal 2*: Review the participants' experience criteria to align with the host city's urban resources.
    - Continuous Dialogue: identify locations for the Olympic village(s), suggest capacities, and indicate existing facilities to serve as satellite villages; identify media hubs; define key transport routes while assessing potential challenges in adapting the public transport system for the event.

- Targeted Dialogue: confirm the capacity of the Olympic village(s) and assess the need for additional satellite villages; evaluate the viability of the proposed media hubs; develop end-to-end transport solutions.

3. *Proposal 3*: Improve planning to mitigate risks that compromise urban sustainability and legacy.
   - Continuous Dialogue: identify the facilities and infrastructure subject to permanent works, specifying where viability plans, impact assessments, or legacy plans are required.
   - Targeted Dialogue: present detailed plans for these facilities and infrastructures, ensuring alignment with "sustainability" considerations.
4. *Proposal 4*: Recognise the role of the Olympic Games within political structures and formalise it accordingly.
   - Continuous Dialogue: present a list of construction works planned for the Olympic Games, specifying those under the responsibility of the delivery authority.
   - Targeted Dialogue: assess the need to involve other public authorities contractually; discuss the role of the "Olympic law" and define strategies for ensuring alignment with IOC policies while identifying potential construction challenges and mitigation strategies.
5. *Proposal 5*: Engage with local communities.
   - Continuous Dialogue: ensure candidature proposals are clear, transparent and accurate.
   - Targeted Dialogue: develop a communication strategy to address potential disputes with local communities stemming from construction works; explore opportunities to foster public engagement and a sense of belonging.
6. Continuously monitor the implementation progress of the *Proposals*, suggesting corrective measures to better align with stakeholder needs and increase resilience in the face of unforeseen events.
7. After the host city is selected, continue monitoring decision-making regarding Games preparations. Maintain open communication among the IOC, OCOG, host, and relevant public authorities to assess the need for further adjustments to agreements, fostering collaboration in good faith.

This approach not only capitalises on the competitive nature of the candidature process but also introduces an element of accountability. Once awarded preferred status, a city is expected to put forth additional efforts to refine its plans, particularly regarding urban sustainability, legacy and stakeholder engagement. The second stage provides an opportunity to implement sustainability-focused changes suggested by the *Proposals*, such as developing more detailed plans that align the Games with local resources, while carefully considering environmental, social, and economic impacts.

Proposal 6 addresses several Olympic Agenda *Glitches*. First, it directly tackles the "Planning" *Glitch* by pushing for more specific and well-justified deliverables, ensuring that candidate cities provide thorough, actionable plans. It also strengthens "Transparency and Communication" by clarifying the proposals' concepts and goals during the second stage, fostering a clearer dialogue with stakeholders. This, in turn, indirectly helps mitigate the "Conceptual Framework" *Glitch* by creating a more cohesive framework that aligns the efforts of various stakeholders, ensuring better coordination from bid to execution. Additionally, the *Proposal* addresses the "Marketing vs. Sustainability", "Participants' Experience", and "Political Affairs" *Glitches* by requiring clearer, more transparent plans early on, reducing chances of last-minute adjustments driven by marketing, participant or political demands that could compromise urban sustainability.

However, some challenges may arise. Candidate cities might push back against the increased demands and detailed deliverables required during the second stage, citing resource constraints or tight timelines. This could lead to reluctance to fully engage with the additional workload. Moreover, more stringent candidature requirements may discourage some cities from bidding at all, reversing the effects of Olympic Agenda in increasing interest in bidding. There is also the risk

that once a city secures preferred candidate status, it might become complacent, lessening the competitive drive that typically leads to higher-quality deliverables.

Nonetheless, by gradually integrating the *Proposals* into the two stages of the candidature process, cities can avoid excessive resource expenditures until they become preferred hosts. At that point, when their chances of selection significantly increase, it is reasonable to expect more detailed planning efforts. Ultimately, this *Proposal* strengthens the framework for sustainable Olympic planning by reducing the likelihood of poorly planned developments and increasing transparency in how the Games are awarded through this updated candidature process.

6.3. Reflecting on Empirical Applications

The six *Proposals*, while distinct in their individual focus, collectively form a comprehensive strategy to address the *Glitches* identified in the implementation of Olympic Agenda. Each *Proposal* targets critical areas where the Agenda has faltered, addressing specific *Glitches* to improve the sustainability of the Olympic Games and rebuild public trust. Together, they provide a path forward to establish a more holistic, community-cantered approach to hosting the Games. By addressing the complex intersection of urban planning, governance, and Olympic-specific challenges, the *Proposals* suggest rethinking how the Games can be planned, communicated, and executed, fostering long-term benefits and ensuring better alignment with the needs of host cities and their communities.

However, the *Proposals* are not exhaustive. Instead, they should be combined with other strategies that may emerge in practice and be seen as a foundation upon which additional strategies and measures can be built. These strategies must be adaptable and responsive to the unique needs of each host city, ensuring that the opportunities presented by the Games are maximised, and the threats are minimised. Their success depends on careful implementation, collaboration among stakeholders, and ongoing refinement.

The *Proposals* were designed to be ambitious, intentionally echoing the strategic-level of decision-making found within the Olympic Agenda 2020. However, they differ in their level of specificity, offering slightly more detailed pathways for change through tactical and operational actions, yet still needing more specific approaches for their full implementation. While this level of detail is essential for clarity, it requires thoughtful consideration when translating into practical action. In doing so, it is also important to acknowledge the academic nature of these *Proposals*. Developed from a research perspective with a focus on urban planning, their feasibility may encounter unforeseen challenges outside the scope of this study. While the academic rigor provides a strong conceptual foundation, these *Proposals* should be seen as dynamic suggestions, subject to peer review, particularly in areas beyond urban planning, such as law, sports management, marketing, communication, and politics. Input from practitioners in these fields is crucial to refine the ideas and ensure their practical applicability.

Despite potential limitations, the *Proposals* aim to comprehensively address the key issues reflected in the *Glitches*. For instance, *Proposals 1* and *2*, which focus on making the Olympic Programme and participants' experience criteria more context-dependent, address several core issues that, while rooted in sports and marketing needs, have a significant impact on urban sustainability. By aligning the Games' requirements more closely with local resources, these *Proposals* aim to prevent Olympic projects from being perceived as disconnected from or

burdensome to host cities. This approach is essential for reducing public opposition, as it signals a commitment to mitigating the negative impacts on local communities.

In contrast, *Proposals 3* and *4* shift the focus to risk mitigation in planning and implementation, directly addressing *Glitches* more closely linked to urban planning. These *Proposals* emphasise and reevaluate the role of politics and governance, specifically concerning different levels of decision-making and reinforcing the need for collaboration when managing complex, large-scale projects.

Proposals 5 and *6*, meanwhile, focus on process rather than content. Opposition to the Games often arises from the perception that communities are not adequately informed or involved in decision-making. By ensuring local voices are heard and that the public is well-informed, *Proposal 5* seeks to reduce conflicts stemming from a lack of communication and consultation. *Proposal 6*, by promoting flexibility in planning, allows cities to assess risks and refine strategies before formal commitments are made. This encourages host cities to adapt their approach as circumstances evolve, while maintaining a firm commitment to sustainability and urban resilience.

The *Proposals* offer pathways for improvement, but they also acknowledge the inherent difficulty for the IOC to act effectively within highly localised political contexts. The IOC's influence is largely confined to the strategic level of decision-making, and its ability to shape tactical and operational decisions is limited by its role as the owner of the Games, not the direct organiser. This structural limitation constrains its ability to directly address many of the identified *Glitches*, particularly those related to political and social dynamics. While the IOC can guide host cities through the candidature and preparation phases, its role in ensuring positive impacts and legacies is often secondary. Thus, ultimately the success of these *Proposals* – and the broader goal of improving sustainability and public trust – depends on how well they are integrated into the local governance and planning processes and on the collaboration and engagement of all relevant stakeholders.

The role of practitioners, therefore, is to absorb these theoretical contributions and assess their viability within the specific contexts of their projects. This requires balancing the ambitious goals outlined in the *Proposals* with the practical constraints of time, resources, and political realities. By doing so, the Olympic Games can continue to evolve, addressing both the challenges of today and the legacy demands of the future, while ultimately enhancing urban sustainability and fostering greater community engagement.

Chapter 7

Conclusions and Discussions for the Future of Olympic Urban Planning

This research has shed light on the challenges and shortcomings in implementing the urban-related strategies of Olympic Agenda 2020, particularly during the preparations for the Paris 2024 and Milan-Cortina 2026 Olympic Games. By examining critical flaws that undermine certain goals, the study provides a focused analysis of specific issues that merit attention and action. However, before discussing the main takeaways, it is equally important to situate these findings within the broader achievements of Olympic Agenda 2020. While this research concentrates on areas where the Agenda has faced difficulties, it does not aim to present a comprehensive evaluation of the Agenda's entire effect, including the potential for uncovering additional flaws or recognising further innovations. In fact, the case studies reveal evident innovations and transformative contributions made by the Agenda, which have enhanced the urban sustainability of the Games and are integral to its legacy. These contributions, some of them briefly mentioned throughout the document, deserve recognition as an integral part of the larger narrative.

For example, the case studies reveal how Olympic Agenda has been instrumental in reshaping the event's concept, particularly in its adaptability to the unique characteristics of host cities. Some key achievements include reducing the reliance on new permanent infrastructure by optimising the use of existing and temporary venues, reducing the overall number of venues used, avoiding new constructions, and repurposing facilities. Paris 2024 exemplifies this approach, actively revising its venue masterplan several times to minimise urban-related costs and environmental impacts. Meanwhile, Milan-Cortina 2026 has embraced a decentralised model, spreading events across a wide geographical area. This innovative approach not only mitigates the pressure on any single urban centre but also sets a potential precedent for future Games, demonstrating that, even if with mobility challenges, the Olympics can be hosted through collaborative use of regional resources.

Furthermore, both case studies highlight increasing efforts to enhance the sustainability of Games management and operations. These efforts have fostered the development of new, innovative solutions – whether technical, planning-related, or governance-focused – that can be replicated not only in future editions of the Games but also in broader urban planning contexts. Additionally, the Agenda has preserved the event's ability to generate the "Olympic Effect", encouraging stakeholder collaboration and facilitating the implementation of plans and ideas previously stalled for various reasons. When aligned with long-term goals and supported by appropriate methodologies, this process helps address persistent urban issues in host cities that might otherwise remain unresolved without the Games. All these examples underscore the Agenda's success in fostering more flexible and sustainable Games, even as challenges remain.

With this in mind, this research can be understood as a magnifier, zooming in on localised, often overlooked issues that, while not immediately disastrous to the Games' sustainability, can reveal significant challenges depending on the stakeholders' perspective. By connecting these localised tensions, the research further reveals broader foundational problems underlying substantial concerns, supported by an integrative literature review that provided in-depth interpretations of key complexities in mega-event planning. Guided by the four research

questions outlined below, which subsequently shaped the methodology, this study provides valuable insights into the Agenda's urban goals, the challenges encountered, the gaps in its conception, and the prospects for improvement.

Within the broad Olympic Agenda 2020 framework, what are its specific urban-related goals, strategies, and implications and how are they supposed to be achieved? Chapter 3 demonstrated that Olympic Agenda 2020 introduced an ambitious vision for urban sustainability. Modifications to Olympic regulatory frameworks were implemented to address, either directly or indirectly, the specific challenges and opportunities associated with hosting the Games. However, while the Agenda provided a strategic foundation for innovation, its practical application was largely left to local interpretation and implementation. This resulted in tensions between rigidity and flexibility, highlighting the difficulties of designing policies that are both adaptable to local contexts and robust enough to ensure the consistent delivery of the Games. These challenges are further compounded by the scale and complexity of the event, as well as the varying capacities of host cities to meet its demands.

Additionally, achieving positive outcomes requires a sustained commitment to monitoring strategies during the legacy phase, rather than relying solely on how the Games are planned and organised. While the Olympic Agenda places a clear emphasis on optimising event organisation and mitigating immediate negative impacts, it offers limited guidance on adapting its strategies to unique urban contexts. This leaves host cities with significant responsibilities but limited support in balancing the requirements of the event with the long-term needs of their local environments.

What challenges have emerged during the preparation phases of the Olympic Games that hinder the implementation of these goals? Chapter 4 demonstrated that various contextual difficulties arose during the preparations for the analysed case studies, potentially compromising the initial goals set by the IOC and challenging the alignment of certain aspects of these editions with their stated commitments. Paris 2024, for example, faced public backlash over controversial projects with significant social and environmental implications, while Milan-Cortina's decentralised model presented substantial logistical, transportation and spatial planning challenges. These examples illustrate the tension between the ambitious sustainability objectives of the Agenda and the realities of local constraints. They reveal that stringent measures often fail to align with local goals, creating potential conflicts between standardised requirements and the specific needs of each host territory. Conversely, more flexible, less prescriptive measures were frequently left to the organisers' interpretation, resulting in inconsistent implementation.

This dissonance reinforces the observations from Chapter 3, which highlighted that while the Agenda provides a broad framework for sustainable urban development, its practical application remains highly variable and subject to context-specific pressures. Nonetheless, the fact that solutions to several issues were identified early in the process suggests that the Agenda is fostering a shift in mentality, driving progress in incorporating sustainability strategies into the planning and execution of the Olympic Games.

What underlying factors and decision-making processes by stakeholders contributed to these challenges? Chapter 5 revealed a range of issues within decision-making processes that frequently resulted in misalignments with the commitments of Olympic Agenda 2020. Some of these issues were inadequately addressed by the Agenda, while others were overlooked entirely. Certain challenges arose from local implementation and governance contexts and strategies

employed by host cities to leverage the event for development. These challenges were often rooted in political dynamics and governance structures – areas where the Agenda intervenes only indirectly, primarily through adaptations to event requirements that are then expected to drive trickle-down effects. Other issues stemmed directly from measures introduced by the Olympic Agenda itself, exposing gaps in its approach to planning and executing the Games. Additionally, some challenges reflected broader omissions within the Agenda, including insufficient attention to local contextualisation, communication strategies, and the effective management of public sentiment.

These findings highlight the need for greater coherence and alignment among stakeholders, particularly in balancing the requirements of the Olympic Games with the specific needs and contexts of host cities. They also raise pressing questions about the IOC's role in addressing structural inefficiencies and ensuring that decision-making processes are both inclusive and geared towards achieving sustainable outcomes.

What strategic measures can be proposed to address these challenges and their causes and prevent similar issues in future Olympic editions? Chapter 6 outlined a series of alternatives aimed at enhancing the implementation of Olympic Agenda 2020, addressing the key challenges identified in Chapter 5. Some measures focus on issues intrinsic to the event itself but with significant implications for urban sustainability, which often lead to a perception of disconnect between Olympic projects and the realities of host cities. Others emphasise risk mitigation in planning and implementation, directly tackling urban planning concerns while reevaluating the role of politics and governance across various levels of decision-making. Additionally, some measures prioritise process improvements rather than content, highlighting the importance of engaging local communities and adopting flexible planning approaches. These steps aim to reduce conflicts arising from insufficient communication and a lack of resilience in decision-making frameworks.

The successful implementation of these measures, however, does not rest solely with the IOC, which plays a limited strategic role in navigating the complexities of highly localised political contexts. Consequently, providing clear guidance to host cities throughout the candidature and preparation phases becomes essential. Ensuring positive impacts and legacies will ultimately depend on how effectively global and local strategies, goals, and processes are integrated into cohesive governance and planning systems.

Particularly, the academic and practical significance of this work can be summarised into four key contributions:

- Framework of urban-related efforts: Chapter 3 clarifies and systematises the Agenda's urban-related measures into *Objectives* and *Reforms*. This framework provides a historical record and practical tool for future assessments of urban processes in the context of the Games or other mega-events.
- Local lens on preparations: as Wolfe (2024) highlights, Olympic urban studies often focus on global narratives. Differently, Chapter 4 takes a place-based approach, examining local contexts to raise broader questions about the effectiveness of Olympic Agenda. By "thinking through the minor", as Wolfe describes it, this chapter's *Research Agenda* challenges institutional sustainability rhetoric, spotlighting overlooked issues and offering a more grounded understanding of the relationship between global objectives and local realities.

- Cross-cutting assessment for transferable insights: Chapter 5 identifies systemic issues that persist across contexts by analysing localised challenges in two distinct case studies, supported by insights from stakeholders spanning diverse roles, organisations, and spatial scales. These recurring *Glitches* thus offer lessons for future mega-event planning of common problems that transcend individual interests or specific editions of the Games.
- Urban-centred approach balancing event needs: Chapter 6 presents *Proposals* that prioritise urban considerations while acknowledging the Games' operational demands. By grounding these solutions in both urban contexts and event-specific characteristics, the research provides a fresh and practical framework for enhancing planning and better aligning the Games with urban sustainability.

These contributions aim not only to advance academic knowledge on Olympic Agenda 2020 and the hosting of the Olympic Games but also to offer actionable insights for practitioners involved in mega-event urban planning. Additionally, they lay a foundation for further research that could explore the *Reforms* in greater depth, investigate the specific causes and consequences of the issues highlighted by the *Questions*, examine the *Glitches* through alternative perspectives to identify additional mitigation strategies, or refine and validate the *Proposals* to enhance their practical applicability. These efforts can contribute to a more nuanced understanding of the Olympic Agenda 2020 and the complex dynamics it triggered, helping to establish a more sustainable pathway for the planning and execution of the Olympic Games.

Within this methodological framework, the objective of this thesis – uncovering the urban implications and inefficiencies of Olympic Agenda 2020 while offering insights to support the development of more effective approaches – has proven particularly valuable. By shifting the focus from superficial observations of the consequences of Games planning to a deeper analysis of the decision-making processes behind them, this research has illuminated key points of contention arising from both operational and tactical challenges and strategic choices. Through the identification and examination of recurring foundational issues, parallels have been drawn to better understand how Games-related decisions shape host territories and, conversely, how these decisions can be reshaped to achieve desired outcomes for urban environments.

Strategic choices must therefore be designed to transform constructive visions into tangible realities, moving beyond abstract utopias to realities rooted in intended structural changes. These changes shall form the foundation for sustaining the "Olympic Effect", rather than accepting them as end-of-event legacies. Here, effective planning is essential to, while adequately fulfilling event demands, leveraging the existing characteristics of the host city to target long-term outcomes. A critical pathway to achieving this lies in strategic planning that fosters effective stakeholder collaboration while enabling sufficient flexibility for stakeholders to independently pursue their diverse objectives. In this context, the Olympic Games should only serve as a unifying anchor, providing a framework for coordination and cooperation. By maintaining a balanced approach to the collection and distribution of resources, organic collaboration between stakeholders at different spatial scales can be encouraged, naturally driving and amplifying more pragmatic, context-sensitive legacies that address the specific needs of host cities.

Building on these insights, the first section of this chapter critically highlights key considerations for future Olympic Games, situating this research within broader discussions of

the “Mega-event Strategy” and its implications for urban environments and host populations. The second section critically examines the IOC’s reflections on the conclusion of Olympic Agenda 2020 and explores its efforts to continue enhancing the Games’ sustainability through Olympic Agenda 2020+5. By cross-referencing these new initiatives with the findings of this research, the section reflects on the event’s future trajectory.

7.1. Broadening the Limitations of Olympic Agenda 2020 in Mega-Event Planning

Like other mega-events, the Olympic Games disrupt normal life in the host cities or regions. This disruption arises not only from the significant pressure placed on transport systems and accommodation facilities during the Games but also from the need to construct or adapt specialised sports venues, media facilities, and other infrastructure. These developments are sometimes not previously planned or aligned with long-term urban strategies but are instead prioritised by public authorities to support Olympic bids.

In addition to these logistical challenges, the high costs associated with hosting the Olympics have become a critical issue. Both national and local authorities bear significant financial burdens, which frequently provoke opposition from civil society regarding the use of public funds and associated opportunity costs. Critics often highlight the allocation of vast resources to an event of relatively short duration, especially when the long-term benefits remain unclear or unconvincing. These concerns are further aggravated when the negative impacts on hosting communities and local environments become evident, even if at a micro scale. Together, these issues have sparked public controversy in past editions of the Games, exposing fundamental flaws in the Olympic hosting model.

The IOC’s Olympic Agenda was developed as a response to these persistent challenges. It introduced a strategic framework aimed at redefining the methodological approach and implementation norms for organising the Games. As outlined earlier, the Agenda’s primary objectives were to enhance the sustainability, credibility and youth appeal of the Olympic Games and the broader Olympic Movement, ultimately striving to mitigate public opposition to the event. However, despite its implementation, several problems persist. These issues were explored in depth through fieldwork and interviews with diverse stakeholders involved in the preparations for the Paris 2024 and Milan-Cortina 2026 editions. In alignment with the findings presented in Chapter 5 – where the Olympic Agenda *Glitches* are identified – the main weaknesses of the Agenda’s implementation are attributed to the following:

- Lack of a system of checks and balances: limited stakeholder engagement often leads to misalignment between Olympic projects and local priorities, fostering public dissatisfaction. A more inclusive and participatory approach could better integrate local goals and reduce opposition.
- Inadequate governance model: centralised decision-making excludes local expertise, leading to delays, disputes, and misaligned projects. A phased, participatory approach could improve collaboration and align Olympic plans with local needs.
- Limited integration with local development strategies: Olympic infrastructure and amenities often fail to align with pre-existing urban development plans. Recent hosts have increasingly favoured smaller, targeted urban interventions but still leverage the Games to drive broader development that can compromise urban sustainability.

- Centralised financial structure: the Olympic financial model assigns operational costs and revenues to the Olympic Movement while placing the burden of capital infrastructure costs on the host city and its government. A more balanced approach, with shared funding between public authorities and Olympic revenues, could reduce complexity, improve collaboration, and enhance public trust in the Games' financial governance.
- Scale and complexity of the Games: the structure of Olympic Games competitions significantly impacts urban sustainability, with factors like the number of events and athletes influencing resource demands. However, a more nuanced approach to evaluating event size, considering factors like venue characteristics, event formats and calendars, and location proximity, can help reduce urban pressure and improve sustainability by promoting venue sharing and decentralising events.

The following sub-sections explore these issues in greater detail, critically reviewing key determinants, examining their practical implications, and drawing lessons for future editions of the Games.

System of "Checks and Balances"

Organising and implementing the Olympic Games involves a complex array of stakeholders and significantly impacts the daily lives of residents in host cities or regions. These processes are often constrained by tight timelines, strict regulations, and norms that may conflict with the routine practices of local public authorities. This combination of pressures frequently results in a lack of transparency in decision-making, particularly regarding the infrastructure and services to be developed, which can intensify public mistrust and foster scepticism or resistance. While such challenges are not uncommon in democratic societies, especially in the context of large-scale urban projects with diverse and sometimes conflicting interests, the key question lies in how to effectively manage this complexity without compromising the successful realisation of the Games.

Fieldwork and analyses of the preparations for Paris 2024 and Milan-Cortina 2026 identified several recurring sources of contention. Many disputes arise from a misalignment between Olympic-related developments and pre-existing urban development plans. These misalignments may concern the location, scale, or compatibility of projects with long-term urban strategies, creating friction with local stakeholders. At the same time, hosting the Games is often seen by national authorities as a unique opportunity to push forward stalled projects, especially those previously hindered by financial constraints or public opposition. Indeed, the decision to host the Games often becomes a catalyst for mobilising political will and resources at all levels of government, as well as attracting private investment. Projects that might have faced significant obstacles under normal circumstances are fast-tracked under the Olympic framework.

While this can generate enthusiasm and mobilise resources, it also creates criticism when such projects appear opportunistic or misaligned with broader community needs. As decision-making power is concentrated in the hands of the Olympic Movement and higher levels of public administration, it often sidelines local authorities and communities, leading to a perception that decisions are imposed without adequate consultation or consideration of local specificities and goals. This often sparks public dissatisfaction, which is frequently tied not to outright opposition to hosting the Games but rather as criticism of the decision-making process, particularly the timing of local engagement, which is often seen as too late.

Insights from the case studies and stakeholder interviews suggest that addressing these issues requires establishing a robust system of checks and balances. Such a system would facilitate inclusive dialogue by creating a platform for all stakeholders – including the IOC, OCOGs, IFs, public authorities, civil society representatives, and environmental organisations – to engage in open and timely discussions. It would promote co-constructive solutions by enabling stakeholders to share perspectives, evaluate alternatives, and collaboratively design solutions that reflect a balanced integration of local and Olympic priorities.

Indeed, Olympic Agenda shows some intention of moving in this direction. Under the Agenda's *Objective* "Improve the Governance System", *Reform* "Representativity" proposes the creation of a Joint Steering Forum (JSF), "which will include representatives of the IOC, the OCOG and Host Country Authorities [and] (…) co-chaired by the chairperson of the Coordination Commission and the President of the OCOG" (IOC, 2019b, p.28). Yet, this forum still lacks broader representativity of key stakeholders from civil society and continues to limit discussions to the same core entities at the top of hierarchies. *Reform* "Integration" further indicates that "the Joint Steering Forum shall complement the work of the Coordination Commission (…), strengthening the collaboration between the IOC, the OCOG and the Host Country Authorities to ensure the successful planning, organising, financing, staging and legacy of the Games in a cost-efficient manner and in supporting an efficient resolution of major issues pertaining to the Games" (ibid). However, while some online references suggest that such steering groups might have been formed for post-Agenda editions of the Games, no source was found to verify the actual composition of these forums or their roles during preparations for the case studies analysed. Additionally, no references to a Joint Steering Forum appear in the Olympic Agenda 2020 Closing Report.

Thus, a clear checks and balances approach would better ensure that Olympic projects are integrated with local development goals and that public concerns are addressed proactively. A more transparent and inclusive decision-making process would foster trust, build broader public backing, and reduce dissatisfaction, thereby isolating extreme opposition. However, implementing such a system would require a thorough re-evaluation of traditional governance models in Olympic Games planning, including allowing adequate time to engage meaningfully with local communities to create a more participatory framework capable of enhancing the overall credibility of the Games as a platform for sustainable and inclusive development.

Governance Model

The normative governance model applied to the development of Olympic bids is also characterised by centralised decision-making and limited stakeholder involvement. This model predominantly entrusts the IOC and bidding committees with the responsibility to ensure adherence to the program's schedule, financial constraints, and Olympic norms. While this approach promotes the conformity with established Olympic regulations, historical evidence reveals significant budget overruns and timeline deviations in most editions of the Games, often requiring adjustments to originally planned infrastructures, venues, and amenities.

Interviews from the Paris 2024 and Milan-Cortina 2026 case studies emphasise the late engagement of key local stakeholders and insufficient transparency in public communication as two critical governance challenges contributing to these inefficiencies. Indeed, the governance model's centralisation of decision-making authority with a substantial degree of subordination from local authorities excludes local expertise and the nuanced understanding of place-based contexts that local stakeholders can provide. Consequently, when implementation challenges arise, disputes over responsibilities frequently emerge. These disputes are often resolved through

unilateral decisions, creating discomfort among those that should be mobilised towards a common objective, and further generating friction among stakeholders, delaying progress, and potentially increasing costs.

Adopting a governance model that ensures early stakeholder participation throughout the different phases of developing and implementing the candidature proposal, tailored to their specific roles and competencies, can help address these challenges. From the initial vision to the projects that materialise this vision in specific locations, many aspects are evaluated, and alternative locations or project characteristics may emerge as plans become more detailed. At this stage, involving local authorities and community organisations – whether formal or informal – can foster collaboration and add value to the search for more acceptable solutions within the fixed timelines.

Such a participatory governance model also enables adjustments to initial proposals in face of unforeseen circumstances, minimising opposition from those who might otherwise feel excluded. For instance, stalled urban projects, previously delayed due to financial constraints or lack of political or public support, could benefit from the collaborative opportunities created by hosting the Games. A well-structured governance model would ensure such opportunities are harnessed while maintaining alignment with local needs and priorities.

The governance model should consider different stages of stakeholder participation according to the phase of the Games' implementation process. This is because stakeholders' capacity and interest in engaging with the organising entities vary depending on whether discussions concern strategic and structural options or more detailed projects tied to specific locations. For example, in the early stages, engaging all relevant entities responsible for providing the necessary infrastructure, services, and amenities seems critical. If there is insufficient time or capacity to involve the general public or their representative organisations at this stage – or if such involvement is deemed as political choice – comprehensive public information can help address potential opposition during this phase. However, excluding local authorities, environmental NGOs, and community organisations from decisions on detailed projects is likely to lead to misunderstandings and resistance, particularly regarding project characteristics, urban integration, and facility management.

To operationalise this shift, a phased approach to candidature processes and planning could be introduced. In the initial phases, strategic and structural options would be outlined, inventories of existing infrastructures compiled (including any required upgrades), alternative locations for new venues proposed, and preliminary budget estimations provided. This framework could serve as a sufficient basis for an initial evaluation of the robustness and feasibility of a proposal. However, since the implementation of Olympic Agenda 2020 and the consequent simplification of the candidature process, this is typically where bids conclude. Hosts are awarded based on these preliminary plans, leaving more detailed and practical considerations unresolved.

This phased approach would then allow stakeholders to collectively identify potential bottlenecks and inconsistencies early in the process, creating a platform for collaboratively improving proposals across various levels of decision-making. Subsequent phases would involve the development of more detailed plans, ensuring that initial challenges are addressed while facilitating comprehensive engagement with local authorities and public organisations. At this stage, active participation would help avoid misunderstandings, build stakeholder confidence, and allow for iterative improvements to specific projects and their proposed locations.

The implementation of the preferred host approach to the candidature process, encompassing continuous and targeted dialogue stages, suggests that Olympic Agenda has acknowledged some of these concerns. However, it remains unclear whether this process is designed to foster such collaborative approaches. Instead, it appears primarily aimed at reducing bidding costs and increasing flexibility in securing hosts. Moreover, as discussed in Chapter 2, early applications of this process have led to perceptions of reduced transparency, particularly regarding the election of Brisbane 2032. As of this writing, two additional hosts have been selected for the Winter Olympics: the French Alps 2030 and Salt Lake City-Utah 2034. Available candidature questionnaires and subsequent IOC evaluation reports for these cases continue to lack specifics regarding implementation. Hosts are being selected without sufficient guarantees of their plans' viability, while utopian rhetoric around sustainability often takes precedence over addressing practical details.

Local Development Integration

It is both common and understandable to encounter contradictions between existing local and urban development plans and the content and requirements of an Olympic Games proposal. Typically, these local plans are established well before a candidature is considered, meaning their main objectives and propositions rarely align by chance with the infrastructural and amenity needs of the Games. Nevertheless, hosting the Games represents an opportunity that local authorities and governments are unlikely to overlook. This raises a fundamental question: how should such situations be managed within a democratic society, where decision-making processes are distributed across different levels of elected powers and competences? Three main approaches can emerge as potential ways to address these contradictions and mitigate associated challenges.

One approach is the imposition of the approved candidature program by the contract signatories – namely the organising committee and the IOC – leaving another signatory – the host – responsible for accommodating such an imposition. Although seemingly straightforward, experience shows that, more commonly than previously anticipated, this strategy triggers conflicts and opposition among stakeholders during implementation. These disputes often lead to delays, increased costs, and heightened public dissatisfaction with the Games and their governing authorities. What initially appeared to be the simplest solution can ultimately prove to be the most expensive and disruptive one.

While well intentioned, Olympic Agenda's measures to reduce the reliance on public funds – and, consequently, public involvement – have facilitated this model. For instance, Los Angeles 2028 is currently grappling with these challenges under its no-build, mostly privatised model, which heavily relies on the organising committee's capacity to negotiate and impose solutions on the city of Los Angeles and its neighbouring municipalities. This approach has exposed significant governance flaws, as conflicts have arisen between private and public entities tasked with organising the Games. Rather than fostering a collaborative relationship, the organising committee has adopted a fragmented, business-oriented approach, treating the public sector as a transactional partner rather than an engaged ally. This dynamic undermines cohesive decision-making and risks further complicating the operational and governance landscape.

Another approach involves the creation of new development plans that align with the requirements of the Games while fostering urban development. This strategy was notably implemented in the Barcelona 1992 Olympics, where hosting the Games catalysed collaboration among different levels of government – central, regional, and local. The event facilitated the

revitalisation of major urban areas and mobilised substantial financial resources to address long-standing infrastructure deficits, including transport networks and social facilities. However, the success of this approach depends on several critical factors, including the technical capacities of public entities, the availability of financial resources, governance practices, political considerations, and the capacity of stakeholders to collaborate effectively. Most importantly, it also hinges on the time available to complete planning and construction before the Games. When these conditions are not met, the feasibility of this strategy is significantly compromised, as illustrated by the case of Athens 2004.

Since the adoption of Olympic Agenda 2020, hosts seem to be shifting away from this approach. While Olympic villages remain large and complex projects, both Paris 2024 and Milan-Cortina 2026 have steered away from broader large-scale urban regeneration efforts, focusing instead on more targeted interventions. These efforts primarily focused on general urban enhancements rather than the transformative projects directly tied to the Games, reflecting a move towards more modest and incremental urban development approaches. Plans disseminated for future editions suggest that upcoming hosts are likely to follow a similar trajectory.

Theoretically, this aligns with what this research considers the third and most practical approach: negotiating adjustments to accommodate the candidature program while minimising negative impacts and striving for positive outcomes as far as possible. This includes exploring alternative locations or scaling down the size and scope of certain infrastructures. Supported by an appropriate and participatory governance model, this strategy can offer greater flexibility, foster cooperation among stakeholders, and mitigate potential conflicts. By engaging in negotiation, host cities can better balance the demands of the Games with the priorities of local development projects and visions, enhancing both the feasibility of the event and its public perception. This approach offers a more sustainable and democratic pathway, particularly when time and resources are limited.

However, the implementation of Olympic Agenda 2020 reveals a nuanced reality. Within this approach, host cities are leveraging the Games to trigger broader urban interventions that, while smaller in scale compared to earlier editions, are not necessarily tied directly to the event. Whether consciously or not, hosts seem to be using the momentum of the Games to mobilise additional projects with relatively impactful effects, subtly counteracting the Agenda's push for smaller-scale planning. Examples include the array of projects developed next to the Paris 2024 Olympic Village, in the Pleyel area, such as new towers, the station, and the rearrangement of the highway interchange. Similarly, Milan-Cortina 2026 features transport infrastructure and venue upgrades like the Bormio bypass, the Stelvio Stadium renovations, the Ice Rink Pinè project, and the reconstruction of the Eugenio Monti Sliding Centre. These efforts suggest that, despite the Agenda's shift in priorities, host cities continue to try leveraging the Games as a catalyst for meaningful urban development.

Financial Model

Within the previously explored framework of the Olympic Games financial model, the host government's role becomes central. For Paris 2024, significant funding for infrastructure has been provided through SOLIDEO, the agency responsible for managing Olympic-related construction projects. This budget, sourced from national, regional, and local authorities alongside private partners, covered major venues and urban upgrades. Beyond SOLIDEO, additional public funding has been directed toward related projects, such as enhancements to

transportation systems, environmental improvements like cleaning the Seine River, and comprehensive security measures. Local authorities also contribute to planning and development, further highlighting the manifold financial burden on public entities.

This distribution of financial responsibilities, while ensuring the IOC and OCOG remain focused on operational aspects, grants public authorities relative freedom to initiate complementary projects linked to the Games. While these initiatives – such as urban regeneration or environmental schemes – may align with long-term strategic goals, they often blur the distinction between Olympic expenditures and broader public investments. This dynamic increases complexity in delivering the Games and risks amplifying public opposition, particularly when projects are perceived as unnecessary, as misallocations of public funds, or driving negative impacts. It also complicates the definition and measurement of Olympic legacies.

A more balanced financial model, allocating a share of Olympic revenues to national and local authorities, could help address challenges. Providing these authorities with direct funding tied to the Games might encourage a stronger focus on projects that align closely with Olympic objectives, reducing the risk of "scope creep" – the expansion of complementary projects beyond their original goals, which can increase complexity and cause delays. Moreover, shared funding could promote more effective collaboration and accountability among stakeholders, fostering a unified framework for decision-making. This approach might streamline the planning process, enhancing the timely and cost-effective delivery of essential infrastructure while ensuring that resources are directed towards projects with a clear connection to the Games.

These adjustments could also influence public perception by demonstrating a stronger link between shared taxpayer contributions and Olympic-generated revenues, and the tangible outcomes achieved. Such a model could help reduce misconceptions about financial responsibilities and counter narratives of misplaced public spending. By improving transparency and aligning priorities, the Games' financial governance could foster greater trust among the public, although this would depend heavily on effective communication strategies and the practical implementation of these changes.

Games Format

The Games format, that is, the structure of competitions and associated requirements, is crucial in determining the demands placed on urban resources. In Olympic urban studies, this format is often seen as a constraint. However, as discussed in Chapter 6, several aspects of the format could be adjusted to promote urban sustainability. These include the number of events and athletes, the types of events and venues, the events calendar and format, and even the relation of these with the traditional concept of an Olympic city.

Interestingly, some recommendations in Olympic Agenda 2020 related to the Games format, such as reducing the number of events and athletes, echo concerns raised by the Olympic Games Study Commission in 2003. This persistence highlights that while the size of the Games has long been recognised as a sustainability challenge, key issues remain unresolved. However, this research proposes that the size of the Games is not inherently the main problem; rather, the real challenges arise from specific components that contribute to that size. The size should not be evaluated by cumulative numbers alone but by the distinct demands of each event.

For example, taking the numbers from Paris 2024, marathon events involved over 170 athletes but required minimal urban resources. As road events hosted in urban settings and lasting only a few hours, they impose little strain on infrastructure, even if complicating operations. Football,

with the same number of events, involved over 500 athletes and used seven stadiums over 18 days. However, since these stadiums were spread across France, the impact on individual host cities was limited, resembling the strain of hosting a few major matches. In contrast, the five tennis events, also involving around 170 athletes, took place over nine days at Roland Garros, concentrated in three stadiums and nine additional courts, requiring a specialised and big sports complex. Swimming, with 850 athletes competing in 35 events over nine days requires only a single swimming pool.

These examples illustrate that measuring the size of the Games by the number of athletes or events alone is unreliable. A more accurate representation considers both the number of athletes and the types of events. Within event types, factors such as venue characteristics, event calendars and formats, and locations must also be considered. These are the aspects really defining the size, complexity, and impact of the Games in terms of urban sustainability.

While the number of athletes inevitably contributes to the overall footprint, urban pressure cannot be assessed by athlete numbers alone. Impacts on accommodation, transportation, and services depend on the locations of venues where athletes compete. Two factors define this location attribute: the characteristics of the urban area hosting the events and its proximity to other Games' events. For example, football, despite involving many athletes, distributes them across multiple cities, mitigating urban pressure. Cities with large stadiums are often well-equipped to handle such events. Conversely, events concentrated in the main host city create cumulative pressure on accommodation and transport, reflected in the size of Olympic villages and the need for enhanced transport capacity.

The number of athletes is also associated with an event's calendar and format. For example, increasing or decreasing the number of marathon athletes does not affect the calendar since all participants compete simultaneously on the same course. Conversely, swimming events, limited by the lane capacity of swimming pools, can only host a few athletes per race. Adding more athletes requires additional preliminary rounds (heats), which could extend the calendar or necessitate additional venues. On the other hand, reducing the number of swimming athletes reduces the calendar and creates opportunities for venue sharing with other disciplines or sports using swimming pools. For instance, in Paris 2024, the men's 50m freestyle event had 10 heats with over 70 athletes, with only 16 advancing to the semifinals. This raises the question of whether all preliminary rounds are really necessary to ensure that top athletes are at the final rounds, especially given that calendar constraints for events in swimming pools create the need for, at least, two swimming pools. Of course, this would raise broader debates about limiting opportunities for athletes and national delegations, potentially contradicting the values of Olympism. Nonetheless, adjusting the format of certain events could reduce the need for multiple venues of the same type. This is particularly important when, from an urban planning perspective, having two high-quality venues of the same type in close proximity is illogical.

When constructions are needed, either permanently or temporarily, the type of venue also plays a critical role in urban sustainability. For example, building a swimming pool is vastly different from constructing a tennis complex with three stadiums, both in terms of cost and complexity. Legacy management further complicates matters, as some sports venues – such as swimming pools, whitewater stadiums, sliding centres, or ski jumps – often struggle to find post-Games uses. Therefore, events requiring venues prone to becoming "white elephants" exacerbate the perceived size of the Games. Conversely, road or stadium events are often easier to integrate into existing urban resources.

All these aspects must be weighted when developing measures to address the format and control the size of the Games. They raise important questions regarding comparisons between the events' sports or marketing values and their urban sustainability impacts. Thus, it is important to seek strategies that address the size component of the Games effectively. This can be done by controlling the number of athletes – either generally or in specific events, depending on the objective – adopting strategies to adapt calendars and formats targeted at events requiring specific types of venues, promoting the decentralisation of events, or even finding technical solutions for venue design to allow certain short-duration sports to be hosted in the same venues – for example, skateboarding park, skateboarding street, and BMX freestyle require three different, yet very similar, FOPs (and therefore venues) for only two days of competition each. Moreover, other aspects of certain events such as spectator attendance and environmental footprint should also be considered.

7.2. Wrapping Up and Moving Forward

In March 2021, the IOC published the Olympic Agenda 2020 Closing Report showcasing the accomplishments of its policy framework. The report highlights various advancements, including efforts to reduce the cost and complexity of hosting the Games and to integrate sustainability and legacy planning into the early stages of event preparation. A key feature of the report concerns the restructuring of the bidding process, designed to foster more sustainable and cost-effective approaches. The report also celebrates partnerships with organisations such as the UN, which have sought to leverage sport in addressing broader societal challenges, including urban development and environmental conservation.

However, the document adopts an excessively celebratory tone, presenting a polished narrative that, when compared to the findings of this research, appears overly optimistic. Many of the initiatives it praises remain highly rhetoric and underdeveloped in practice. For example, the report asserts that "sustainability and legacy have been positioned as strategic executive priorities from the Continuous Dialogue phase and as a responsibility to be shared by all functions/departments of an Organising Committee and its delivery partners" and that "sustainability and legacy requirements have been strengthened and shared across relevant functional areas and delivery partners" (IOC, 2021b, p. 18). Yet, the case studies analysed here reveal a lack of clear definitions and enforceable measures, leading to inconsistent and often inadequate outcomes. Such discrepancies between stated intentions and observed results risk fostering public perceptions of greenwashing, thereby undermining the credibility of both the Olympic Games and the broader Olympic Movement.

At the same time, the closing report acknowledges that certain objectives of the Agenda remain unmet and require continued efforts. Some of these unresolved issues align with concerns identified in this research, particularly those outlined in the *Glitches* and *Proposals* sections. For example, misconceptions about the costs and funding of the Olympic Games and the persistent challenge of reconciling the Agenda's goals with the interests of IFs, NOCs, and athletes are highlighted. Notably, the report emphasises the need to enhance stakeholder participation in decision-making processes. However, as discussed earlier and further elaborated in this section, this objective must be approached with caution. Effective participation requires a careful alignment of stakeholders' roles with their areas of expertise, ensuring that their contributions remain relevant and impactful.

The report also celebrates achievements that, based on the findings of this research, seem to fall short of their true potential. For instance, it commends the services and support provided by the IOC and other Olympic Movement stakeholders to provide host stakeholders with expertise. However, the lack of awareness of Olympic Agenda among some interviewees in group B reveals inadequacies in how this support is communicated or delivered. Additionally, while the report highlights the establishment of partnerships with several prominent organisations, these alliances primarily advance the IOC's overarching societal mission – leading, promoting, and developing sport – rather than addressing practical issues directly related to the Games' planning and hosting. Similarly, although the report claims progress in community engagement, particularly with the general public, it overlooks the critical need to prioritise meaningful engagement with local communities in host cities, which bear the brunt of the Games' impacts.

To build upon and refine the progress initiated by Olympic Agenda 2020, the IOC published Olympic Agenda 2020+5 in March 2021. This framework comprises 15 new recommendations designed to reinforce Olympic values and address five key trends where Olympism is deemed positioned to turn societal challenges into opportunities: solidarity, digitalisation, sustainable development, credibility, and economic and financial resilience (IOC, 2021c; Nicoliello, 2021). As noted in Chapter 3, this policy was excluded from the research analysis due to its publication being too recent to have significantly influenced the case studies examined in 2022. Nevertheless, several aspects merit discussion and comparison with the findings of this research.

Notably, Olympic Agenda 2020+5 exhibits a diminished focus on the Olympic Games and their urban domain, demonstrating less ambition and precision in driving meaningful change in this regard. Its timeframe also suggests a sense of haste; unlike Olympic Agenda 2020, which allowed time to consolidate its tactical and operational frameworks through supporting guidelines such as the IOC Sustainability Strategy and the New Norm, this new policy seems unrealistic in its aim to deliver significant commitments within a mere four years. Given that Olympic lifecycles span approximately seven to 10 years, the Olympic Movement would benefit from adopting a longer-term approach to sustainability. For instance, aligning with a timeframe such as Agenda 2030 could foster a more progressive and continuous improvement process. This would allow for the monitoring of past policies to identify shortcomings and mitigate them through subsequent, more comprehensive frameworks, perhaps with public involvement in the processes. However, like political systems, Olympic policy appears bound to electoral cycles and the choice of a shorter timeframe for this policy likely reflects strategic considerations related to the 2025 IOC presidential election.

Although not specifically tied to the urban domain, some recommendations from Olympic Agenda 2020+5 deserve attention for their potential to complement, or be complemented by, the *Proposals* outlined in Chapter 6. For instance, Recommendation 8's emphasis on increasing digital engagement aligns closely with the communication strategies suggested in *Proposal 5*. Additionally, as controversial as it may be, the inclusion of virtual sports in the Olympic Programme, as suggested by Recommendations 1 and 9, aligns well with *Proposal 1*. Virtual sports can be easily hosted within existing urban infrastructure, offering significant sustainability advantages in terms of venue selection. On a related note, Recommendation 13 encourages IFs to adopt sustainability strategies, particularly by innovating in sport infrastructure, which could enhance the sustainability value of their events. Similarly, Recommendation 14, which promotes IF compliance with principles of good governance, could also be integrated into the framework of *Proposal 1*.

Other recommendations address the urban domain more directly. Recommendation 1, for example, aims to make the Games more inclusive and engaging by moving sports and ceremonies outside stadiums and into urban settings. As observed in the Paris 2024 case study, hosting events in urban environments can serve city branding objectives while reducing the demand for specialised facilities – although introducing challenges in terms of city management, operations, and security. Recommendation 2 proposes encouraging IFs and NFs to utilise existing facilities from previous Olympic hosts, further contributing for the self-sustainability of sports infrastructure. Similarly, Recommendation 7 calls for harmonising multi-sport event planning across the Olympic Movement, though it leaves the specific objectives and mechanisms for achieving this unclear.

Conversely, two recommendations from Olympic Agenda 2020+5 directly conflict with the findings and *Proposals* of this research, especially when put together. They both regard athletes' rights and experiences. Recommendation 3 seeks to "strengthen effective athlete representation across the Olympic Movement and ensure athlete participation in decision-making" (IOC, 2021c, p. 8). However, it does not delineate the scope of subjects or decisions in which athletes should be involved. As previously discussed, athletes' participation should focus on matters directly relevant to them. Including athletes in deliberations about urban resource allocation risks introducing biases that could compromise the Games' urban sustainability. This concern is especially pronounced when considering Recommendation 1, which calls for the Olympic village(s) to "remain central to the athlete's Olympic experience while aligning plans to the long-term local needs of the Host" (IOC, 2021c, p. 4).

These dual ambitions, besides being misaligned with *Proposal 2*, are inherently difficult to reconcile. Olympic villages are among the most complex and resource-intensive aspects of the Games' urban sustainability, often presenting significant challenges in aligning with both short-term athlete needs and expectations and long-term urban development goals. For instance, the Paris 2024 Olympic Village initially planned to use a water-based geothermal cooling system to maintain comfortable temperatures. However, this approach faced criticism from athletes and NOCs, who expressed concerns about its effectiveness during heatwaves. In response, organisers allowed NOCs to provide their athletes with portable air conditioning units at their own expense. This situation highlighted the tension between environmental sustainability goals and the immediate comfort needs of athletes. Similarly, the alternative venue choice for basketball was heavily influenced by pressure from the IF and athletes, ultimately "snowballing" into a series of decisions that, from an urban sustainability perspective, can be easily contested. In the case of Milan-Cortina 2026, athletes and NOCs also expressed strong criticism regarding the men's and women's skiing events being held in two different cities, several hours apart.

Some gaps identified in Olympic Agenda 2020 persist in Olympic Agenda 2020+5, particularly regarding the importance of considering the local context in planning, policy, and community engagement, as highlighted by *Proposals 3*, *4*, and *5*. Furthermore, in certain areas, Olympic Agenda 2020+5 continues to fall short of its potential. For instance, Recommendation 12, which encourages the Olympic Movement to engage beyond the Olympic community, remains overly focused on reaching the general public and expanding audiences. It neglects the critical need to prioritise meaningful engagement with local communities in host cities, an oversight that undermines its broader goals.

From all the recommendations, Recommendation 2 – Foster Sustainable Olympic Games – is the one most directly related to the urban domain. This recommendation emphasises three main standpoints related to urban planning and impact, building on the advancements of Olympic

Agenda 2020. Interestingly, some of its measures align with the *Proposals* developed in this research, indirectly validating their relevance.

First, it highlights the integration of sustainability principles into every aspect of the Games. It sets a target for the Games to be climate-positive by 2030, requiring host cities to adopt strategies that mitigate climate change while preventing permanent construction in statutory nature or culturally protected areas. However, recent experiences from Paris 2024 suggest that "climate-positive" promises may be overly ambitious and require careful reconsideration. Additionally, the recommendation's emphasis on supply chain oversight and construction workers' rights demonstrates a commitment to embedding ethical and sustainable practices into Olympic urban development.

Second, legacy planning is positioned as a central component both before and after the Games. The recommendation advocates for the establishment of governance structures and long-term funding early in the planning process, supporting hosts in pursuing long-term sustainable development goals. This measure directly aligns with *Proposal 3* of this research, which focuses on improving planning to mitigate risks that compromise urban sustainability and legacy. It further underscores the importance of monitoring and measuring these impacts, fostering collaboration, and enabling knowledge exchange between decision-makers and former hosts. Additionally, the communication and celebration of the Games' legacies are encouraged to strengthen their recognition and value.

Finally, Recommendation 2 prioritises the optimisation of Games delivery. This includes refining stakeholder responsibilities and identifying opportunities for cost savings and revenue generation. Emphasis is placed on exploring turnkey solutions to simplify delivery complexity, streamlining service levels, and promoting remote work to limit on-site accredited personnel, thereby reducing urban demands. In line with *Proposal 1*, it also calls for adapting the event-based Olympic Programme to simplify venue masterplans and reduce the costs and complexity across each sport. Despite these ambitions, the recommendation does not sufficiently recognise the organisation of competitions outside the host city as an opportunity to enhance sustainability and marketing, as suggested in this research (see *Proposal 1*). Instead, it treats this as merely an alternative in case of need.

Sustainability is, of course, an ongoing process requiring constant innovation and adaptation. However, the vagueness of this recommendation suggests it may be a reiteration of earlier efforts, overlooking lessons learned and the need to address less successful aspects. It appears to echo the intentions of Olympic Agenda 2020, which, according to the Closing Report, had already been achieved, raising questions about whether proclaimed successes remain works in progress. More critically, it seems to revisit issues identified by the Olympic Games Study Commission back in 2003, suggesting that prior efforts did not achieve the anticipated outcomes (see Chapter 2). By failing to address these weaknesses, the recommendation risks perpetuating unresolved challenges rather than advancing meaningful progress.

An important dimension of Recommendation 2 highlights the role of Olympic Games legacies in advancing the UN SDGs. Complementing this, Recommendation 10 further underscores the Olympic Movement's relevance in positioning sport as a key enabler for these goals. Relevant to the urban domain, Olympic Agenda 2020+5 recognises the role of sport and the Olympic Games in enhancing access to safe, inclusive and accessible, green and public spaces (SDG 11, Target 11.7). Additionally, it acknowledges their importance in promoting productive, sustainable, and inclusive economic activities (SDG 8, Target 8.3), reducing waste generation (SDG 12, Target

12.5), and integrating climate action into planning processes (SDG 13, Target 13.2). Indeed, in December 2022, the UN General Assembly adopted a new resolution entitled “Sport as an enabler of sustainable development” that affirms “the invaluable contribution of the Olympic and Paralympic Movements in establishing sport as a unique means for the promotion of peace and development” (IOC, 2023, p. 83).

However, findings from this research indicate that while these targets are widely embraced in policy discourse, their translation into actionable urban legacies often faces challenges, with case studies revealing inconsistencies between high-level commitments and on-the-ground realities. This highlights the need for more robust mechanisms to align policy ambitions with practical implementation, as well as transparent monitoring to ensure the Games’ meaningful contribution to these SDG targets.

It is still important to reflect on certain aspects of Recommendation 13, which, among other objectives, aims to strengthen the Olympic Movement’s human rights approach, particularly in the selection of future hosts (IOC, 2023). A notable development under this recommendation is the IOC Strategic Framework on Human Rights, marking a significant shift in the IOC's approach. For the first time, the focus expands beyond traditional concerns about working conditions and the rights of workers involved in preparing the Games (as emphasised in IOC, 2017a), to a broader scope that includes the rights of "Olympic-related communities". Within these, the framework explicitly identifies the local communities potentially affected by the Games, such as those displaced or otherwise impacted through venue construction or gentrification (IOC, 2022, p. 32). This represents a promising step toward addressing social issues of the Games preparation that have historically driven opposition in bidding and hosting cities.

However, having been published in late 2022, the effectiveness of this framework remains to be seen in practice. Moreover, the case studies in this research offer critical insights into the practical challenges of implementing such frameworks. Both events demonstrate significant gaps remaining in effectively addressing public concerns, namely displacement, rising rents, and local opposition tied to urban transformations. These findings suggest that the Strategic Framework’s success will depend on creating enforceable guidelines, ensuring accountability mechanisms, and engaging affected populations more meaningfully throughout the planning process. Without these measures, the framework risks being perceived as a symbolic gesture rather than a transformative tool.

In conclusion, while it is imperative to recognise that Olympic Agenda 2020 has already set important changes in motion, the findings of this research highlight that the journey towards making the Olympic Games genuinely sustainable – both in execution and perception – is far from complete, raising important *Questions*. Local planning processes and urban governance challenges remain significant barriers, often undermining the implementation of the Agenda’s *Reforms* and fuelling persistent public opposition. While Olympic Agenda 2020+5 appears to steer the Games in a more promising direction, the unresolved *Glitches* of Olympic Agenda 2020 cast a shadow over these efforts, leaving the IOC’s initiatives at risk of being perceived as ineffective. To change this narrative, the IOC must confront its shortcomings openly, fostering transparency and embracing diverse theoretical and practical contributions to further advance new innovative *Proposals*. By engaging with the breadth of expertise across disciplines and stakeholders, the IOC has the opportunity to not only address these flaws but also to redefine the Olympic Games as a genuinely inclusive and responsible global event; one that places sport at the service of society for evermore sustainable development.

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Appendixes

Appendix I

Codes Used to Formulate the Olympic Agenda 2020 Urban-Related *Reforms*

This appendix presents the *codes* used to formulate the Olympic Agenda 2020 urban-related *Reforms*. Each *code* is identified by its source, denoted with abbreviations such as OA2014 R32, which are explained in detail in **Table A.1**. *Codes* derived from *IOC Regulations* are indicated by underlining for new content additions and by ~~crossing out~~ for removed content.

Table A.1 Selected documents and respective examples of *codes*.

Document	abbr.	Structured by	Example of code
Olympic Agenda 2020	[OA]	**Recommendations** [R#]	e.g. [OA2014 R1.2]
Sustainability Strategy	[SS]	**Objectives** [O#] and **Requirements** [XXX#] (where "XXX" represents the requirements' scope – see document).	e.g.1 [SS2017 O10] e.g.2 [SS2017 INF1]
Legacy Strategic Approach	[LA]	**Objectives** [O#]	e.g. [LA2017 O1]
New Norm	[NN]	**Specific Measures** [M#]	e.g. [NN2018 M4]
Olympic Charter	[OC]	**Rules** [R#] and **Bye-laws to Rules** [BLR#]	e.g.1 [OC2014 R2.3] e.g.2 [OC2014 BLR2.2]
IOC Collection of Ethics Texts	[CE]	**Articles** [A#] and **Principles** [P#], numbered by **Chapter** [C@] (where "@" is the chapter's starting page).	e.g.1 [CE2018 C11 A1.2] e.g.2 [CE2018 C50 P2.4]
Principles of the Host City Contract	[HC]	**Principles** [P#].	e.g. [HC2017A P1.4]
Operational Requirements of the Host City Contract	[HC]	**Requirements** [XXX#] (where "XXX" represents the requirements' area – see document).	e.g. [HC2016 SUS01]

Ensure Best Practices

Regulations

OA2014 R32: (…) review the Code of Ethics and its Rules of Procedure to be fully aligned with the Olympic Agenda 2020 drive for more transparency, good governance and accountability.
OA2014 R27.3: The "PGG" [Principles of Good Governance] to be updated periodically, emphasising the necessity for transparency, integrity and opposition to any form of corruption.
SS2017 O11: Reinforce sustainability commitments in the Host City Contract so that bidding for and hosting an Olympic Games edition can act as a catalyst for sustainable development (…).
NN2018 M7: The Host City Contract to provide Games organisers with greater flexibility (…) including the further delegation of responsibilities between OCOGs and IFs, the location of venues and other technical requirements.
NN2018 M8: The Host City Contract to ensure greater action is taken with regard to sustainability and legacy by maximising use of existing and planned infrastructure of the cities and to consider temporary and demountable venues where no long-term legacy need exists.

OC2019 R36.2: The Olympic Host Contract shall determine the responsibilities of the NOC, the OCOG and the host concerning the organisation, financing and staging of the Olympic Games as well as the contribution of the IOC to the success of the Olympic Games. (…)

Compliance

OA2014 R3.4: (…) Formal acceptance of the IOC Code of Ethics and Code of Conduct by (…) consultants/lobbyists [is] a prerequisite for listing in the register.
CE2015 C33 A5.1: (…) The purpose of entry in the Register is to ensure that the consultant undertakes (…) to respect the IOC's ethical principles, the Olympic Charter, the IOC Code of Ethics and its implementing provisions (…).
CE2015 C11 Preamble: The (…) International Federations (…) restate their commitment to the Olympic Charter and in particular its Fundamental Principles, and reaffirm their loyalty to the Olympic ideal, [undertaking] to disseminate the culture of ethics and integrity within their respective areas of competence and to serve as role models.
HC2015 P3: (…) The OCOG shall ensure that it remains in good standing under the laws of the Host Country and the various documents governing its constitution (…).
HC2015 P21: (…) take all necessary measures to ensure that (…) projects necessary for the organisation of the Games comply with local, regional and national legislation and international agreements and protocols, applicable in the Host Country with regard to planning, construction, protection of the environment (…).
HC2017A Preamble.A: The Host City Contract (…) [describes] the main deliverables and other obligations to be performed by the Host City, the Host NOC and the Organising Committee of the Olympic Games (…).
HC2017A P13.1: The Host City, the Host NOC and the OCOG undertake to abide by the provisions of the Olympic Charter and the IOC Code of Ethics and agree to conduct their activities (…) in a manner which promotes and enhances the fundamental principles and values of Olympism, as well as the development of the Olympic Movement.
HC2017A P13.2: (…) the Host City, the Host NOC and the OCOG shall (…) refrain from any act involving fraud or corruption, in a manner consistent with any international agreements, laws and regulations applicable in the Host Country and all internationally-recognised anti-corruption standards applicable in the Host Country, including by establishing and maintaining effective reporting and compliance.
CE2018 C11 A15: The behaviour of all entities and persons involved in this candidature process must be in full compliance with the principles and provisions of the Olympic Charter and of the IOC Code of Ethics. (…)
CE2018 C34 A7: All Interested Parties involved in Continuous Dialogue must respect the conditions defined by the IOC for interaction with and potential visits by Future Host Commissions. (…)
CE2018 C41: Rules for the Register of Consultants.
HC2018 HNS02: (…) ensure the safety of all venues in terms of (i) venue infrastructure (…) and their compliance with applicable laws and regulations and internationally-recognised standards. (…)
HC2019 Preamble.I: The IOC, the Host Cities and the Host NOC acknowledge the importance of Olympic Agenda 2020 (…) and intend to cooperate in view of (…) implementing the measures recommended in the "Olympic Games: the New Norm" (…).
HC2019 P5.3: In case any event (…) is organised in a country other than the Host Country: (…) where necessary (…), the provisions of the HCC referring to the Host Country, the Host NOC or the Host Country Authorities shall apply mutatis mutandis to the other country, (…) as applicable and as may be reasonable in the circumstances. (…)
HC2019 P13.2: (…) the Host Cities, the Host NOC and the OCOG shall (…) operate in conformity with, and promote, internationally recognized standards of good governance applicable in the Host Country.
CE2020 C59: These Rules of Conduct apply to the Recognised (…) IFs governing the event submitted by an (…) OCOG for inclusion in the programme of events of an Olympic Games.
HC2021 Preamble.I: the IOC, the Hosts and the Host NOC acknowledge the importance of Olympic Agenda 2020, Olympic Agenda 2020 + 5 as well as of any subsequent editions adopted by the IOC (…).
HC2021 Preamble.N: the IOC has taken note of, and has specifically relied upon, the undertakings of the Hosts and the Host NOC as well as of the government of the country in which the Hosts and the Host NOC are situated (…) to respect the Olympic Charter.
HC2021 P15.1: The Hosts, the Host NOC and the OCOG undertake to carry out all their Games-related activities in a manner that conforms with the IOC Sustainability Strategy and its five focus areas (…).

Transparency

OA2014 R1.6: The IOC to make the Host City Contract (HCC) public.
OA2014 R1.7: The HCC to include details of the IOC's financial contribution to the OCOG.
OA2014 R1.10: The IOC to provide the HCC at the outset of a given bid process.
OA2014 R2.4: The IOC to clarify the elements for the two different budgets related to the organisation of the Olympic Games: long-term investment in infrastructure and return on such investment on the one hand, and the operational

budget on the other hand. Furthermore, the IOC contribution to the Games to be further communicated and promoted.
OA2014 R12.1: The IOC to establish a transparent management procedure for any change of requirements (…).
OA2014 R29.2: The IOC to produce an annual activity and financial report, including the allowance policy for IOC members.
CE2015 C33 A5.1: In order to respect the neutrality of the IOC members, (…) the IOC members must refrain from making any public declaration in favour of one or another of the candidatures.
CE2015 C33 A11: No invitation, to any sporting or other events that includes accommodation and/or transport, may be given to or accepted by an IOC member (…).
HC2013 P14: (…) ~~the IOC may, at its sole discretion, grant a financial contribution (…) to the OCOG (…). The IOC shall be under no binding obligation of any kind towards the OCOG or any third party to grant any IOC contribution. (…) If the IOC decides to grant an IOC contribution, it shall determine (…) any terms or conditions~~ (…).

➥ **HC2015 P14**: (…) the IOC shall make (…) contributions and grant the OCOG (…) benefits and rights (…) [in relation to a] share of the revenues of the International Programme, (…) [a] contribution related to broadcast revenues, (…) services provided by OBS, (…) [and] assistance by IOC's and IOC-Controlled Entities' staff and advisors.

OC2017 R19.3.9: [the IOC] provides for the safe keeping of all minutes, ~~accounts~~ and (…).

➥ **OC2018 R.193.9**: [the IOC] provides for the safe keeping of all minutes, financial statements and (…).
HC2017A P6.1: Unless expressly stipulated otherwise in the HCC, all obligations of the Host City, the Host NOC and/or the OCOG (…) shall be discharged at their expense.
OC2018 R2.5: [the IOC] to take action (…) to maintain and promote [the Olympic Movement's] political neutrality (…).
OC2019 R36.2: (…) The IOC shall have no financial responsibility in respect of the organisation, financing and staging of the Olympic Games other than the contribution determined in the Olympic Host Contract, unless otherwise agreed in writing.

Monitoring:

OA2014 R3.4: The IOC to (…) monitor a register of consultants/lobbyists eligible to work for a bid city. (…)
OA2014 R12.2: (…) systematically review the level of services, Games preparation and delivery, with a view to containing cost and complexity. Regular proposals will be made in this respect.
OA2014 R27.1: (…) compliance [with the "PGG"] to be monitored and evaluated. (…)
OA2014 R27.2: Organisations to be responsible for running self-evaluation on a regular basis. The IOC to be regularly informed of the results of the organisations' self-evaluations. In the event of missing such information, the IOC to request such an evaluation at its discretion.
OC2015 BLR37.1.3: [Coordination Commission's mandate:] (…) to report to the IOC (…) particularly with regard to progress, challenges and risks.
SS2017 O12: Strengthen (…) monitoring of the OCOGs' implementation of sustainability-related bid commitments, Host City Contract requirements and IOC's recommendations (…).
LA2017 O1.3: Legacy planning and delivery are regularly monitored in a transparent way and corrective measures are proposed.
LA2017 O2.1: Report the legacy of upcoming Olympic Games on a regular basis.
NN2018 M16: Regularly monitor the planning and delivery of legacy elements in a transparent way and, if necessary, propose corrective measures. (…)

Improve the Governance System

Representativity

OA2014 R2.1: Introduce into the existing 14 Candidate City evaluation criteria a new criterion entitled: The Athletes' Experience.

OA2014 R18.1: The IOC to put the athletes' experience at the heart of the Olympic Games.

OA2014 R30: The Chair and the members of the IOC Ethics Commission to be elected by the IOC Session.

OA2014 R38.2: The profile of candidates to comply with a set of criteria (…), inter alia: The IOC's needs in terms of skills and knowledge (e.g. medical expertise, sociological expertise, cultural expertise, political expertise, business expertise, legal expertise, sports management expertise, etc.). (…)

OC2013 BLR16.2.3.1: ~~The IOC Nominations Commission is charged with examining each candidature for election to IOC membership in accordance with BLR 16.2.4 and BLR 21.3~~.

➥ **OC2014 BLR16.2.3.1**: (…) the IOC ~~Nominations~~ Commission is charged with preparing profiles and proposing candidates in order to achieve a diverse and balanced membership of the IOC. (…).

➥ **OC2015 BLR16.2.3.1**: (…) the IOC Members Election Commission is charged with (…).

OC2014 R22: (…) The Chair and the members of the IOC Ethics Commission are elected by the Session (…).

OC2018 R2.7: [the IOC] to encourage and support elected representatives of athletes within the Olympic Movement, with the IOC Athletes' Commission acting as their supreme representative on all Olympic Games and related matters.

NN2018 M21: Establish a JSF with representation from the IOC, the OCOG, and the public authorities. (…) The JSF would be jointly led by the IOC Coordination Commission Chair and the OCOG President. (…)

HC2018 GAD04: Establish a JSF (…) with representation from the OCOG, the relevant Host Countries Authorities and the IOC (…).

HC2019 P27.3: The OCOG shall establish a Joint Steering Forum, which will include representatives of the IOC, the OCOG and Host Country Authorities [and] (…) co-chaired by the chairperson of the Coordination Commission and the President of the OCOG. (…)

HC2021 P3.2: The OCOG must include, among the members with full voting rights of its highest executive body (…) at least one member representing, and designated by, the Host State. (…)

Integration

OA2014 R3.4: The IOC to create (…) a register of consultants/lobbyists eligible to work for a bid city. (…)

OA2014 R10.2: The IOC Session to decide on the inclusion of any sport (IF) in the programme.

OA2014 R13.1: The IOC to enhance the role of the International Federations (IFs) in the planning and delivery of the Olympic competitions, including the study of transferring technical responsibilities from the OCOGs to the IFs.

OA2014 R13.2: The IOC to focus the role of the IOC coordination commissions on key issues and validation of service levels.

OA2014 R38.1: The Nominations Commission to take a more proactive role in identifying the right candidates to fill vacancies in order to best fulfil the mission of the IOC.

OA2014 R40.1: The President to review the scope and composition of the IOC commissions, to align them with the Olympic Agenda 2020.

OC2014 R37: (…) ~~[the Coordination Commission]~~ to manage and implement the working relationship between [the IOC, the OCOG, the IFs and the NOCs].

➥ **OC2015 R37**: (…) The Chair of the Coordination Commission manages and implements the working relationship between [the IOC, the OCOG, the IFs and the NOCs].

OC2014 R26.4: ~~[the IFs] express their opinions on the candidatures for organising the Olympic Games, in particular as far as the technical aspects of venues for their respective sports are concerned~~.

➥ **OC2015 R26.4**: [the IFs] support the IOC in the review of candidatures for organising the Olympic Games for their respective sports.

OC2014 R46: ~~Technical~~ Responsibilities of the IFs at the Olympic Games.

➥ **OC2015 R46**: Role of the IFs in relation to the Olympic Games.

OC2014 BLR46.1: ~~Technical arrangements~~ at the Olympic Games (…).

➥ **OC2015 BLR46.1**: Rights and Responsibilities of the IFs at the Olympic Games (…).

OC2015 R46.2: The OCOGs shall (…) agree upon specific responsibilities with the relevant IFs (…).

CE2015 C33 A5.1: All consultants, individuals or companies, participating in or supporting a candidature in any way must be entered in the IOC's Register of Consultants. The NOC and/or the city may use the services only of the consultants entered in the Register of Consultants (…). This entry in the Register must take place prior to any provision of service and/or any consultant being hired for the candidature by the NOC and/or the city. (…)

HC2015B GAM01: Define and implement a Games-wide governance and coordination framework in order to manage the large number of tasks and activities that require integration between [Focus Areas] and delivery partners throughout the OCOG lifecycle.

HC2015 P2: (…) The City and the NOC shall ~~meaningfully consult with the IOC~~ on all matters relating to the structuring and formation of the OCOG. (…)

➥ **HC2017A P3.2**: (…) The Host City and the Host NOC shall keep the IOC informed on all matters relating to the structuring and formation of the OCOG. (…)

HC2017A P3.5: The creation of any subsidiary or other affiliated corporate entity (…) by the Host City, the Host NOC and/or the OCOG (…) is subject to the IOC's prior written approval (…).

CE2018 C11 A15: (…) Therefore, the related NOC is responsible for informing all entities and persons involved and taking all reasonable measures to ensure the respect of (…) [the Olympic Charter and the IOC Code of Ethics].

NN2018 M19: Review and adapt the IOC-OCOG coordination processes to (…) clarify the roles and working relationship of the various entities (…) as well as guarantee reporting to the appropriate levels of governance. (…)

NN2018 M20: Enhance the pivotal role of the IOC Coordination Commission to oversee Games preparation with a focus on stakeholders, including RHBs [Rights Holding Broadcasters] and TOPs on an ad-hoc basis. (…)

NN2018 M21: (…) The JSF would be responsible for facilitating better integration of the various stakeholders involved in the delivery of the Games, clearly defining the roles and responsibilities for each entity, and efficiently resolving any major issues or differences. (…)

HC2018 GAD04: Establish a JSF to complement the role of the Coordination Commission (…).

OC2018 BLR33.2.2: ~~Each Evaluation Commission shall study the candidatures of all candidate cities, inspect the sites and submit (…) a written report [which] shall include an assessment of the opportunities and risks of each candidature, as well as of sustainability and legacy~~.

➥ **OC2019 BLR33.2.1**: The President appoints two Future Host Commissions to explore, create and oversee interest in future Olympic Games following an edition-based approach (…)

OC2019 BLR33.2.4: The Future Host Commissions shall report to the IOC Executive Board on all those interested in hosting the Olympic Games.

HC2019 P27.3: The Joint Steering Forum shall complement the work of the Coordination Commission. Its mission shall consist in strengthening the collaboration between the IOC, the OCOG and the Host Country Authorities to ensure the successful planning, organising, financing, staging and legacy of the Games in a cost-efficient manner and in supporting an efficient resolution of major issues pertaining to the Games. (…)

CE2020 C41 A33: The IOC Ethics Commission supervises the Future Host election, in accordance with the provisions made by the IOC.

Collaboration

OA2014 R2.3: The IOC, in collaboration with Olympic Movement stakeholders, to define core requirements (…).

OA2014 R2.5: The Candidate City Briefing to include an in-camera discussion between the IOC members and the IOC Evaluation Commission.

OA2014 R10.1: Regular reviews of the programme (…) with the involvement of the International Federations (…).

OA2014 R12.2: The IOC with the stakeholders to systematically review the level of services, Games preparation and delivery (…).

OC2015 R46.2: The OCOGs shall work closely with the IFs in the planning and delivery of each sport (…).

HC2015 P16: (…) the OCOG shall develop in collaboration with the IOC (…) [a] "Games Foundation Plan"; and a (…) "Games Delivery Plan".

HC2017A P15.2: (…) the Host City, the Host NOC and the OCOG shall (…) take all necessary measures, where necessary in cooperation with Host Country Authorities and other third parties, to ensure that their activities (…) comply with any international agreements, laws and regulations applicable in the Host Country (…).

NN2018 M1: Introduce a non-committal Dialogue Stage for cities interested in hosting the Games to provide them with the opportunity to engage with the IOC to assess the benefits and requirements of hosting.

NN2018 M2: Interested Cities to work with the IOC and teams of technical experts to develop their Candidature concepts. (…)

NN2018 M15: The legacy entity and other relevant bodies of the host city/country to be (…) present at the main decision-making forums (…).

NN2018 M30: The IOC, IFs and organisers will work closely to optimise the venue masterplan and competition schedule (…).

NN2018 M43: (…) implement a process for early projection of allocation (…) together with the NOCs. (…)

NN2018 M55: The IOC and OBS will continue to cooperate with OCOGs and authorities in developing more cost-effective ways to deliver resilient energy and telecommunications services (…).

NN2018 M56: The IOC will work closely with Candidate Cities/OCOGs and utility companies (…).

HC2018 NRG02: (…) The IOC will work closely with the Games Energy Council from the early stages of planning (…).

HC2018 HNS02: (…) in collaboration with Host Country Authorities (…) ensure the safety of all venues in terms of (…).

HC2018 SPT23: (…) competition schedule is developed [to optimise] the number of competition venues (…). The IOC, the respective IFs and OBS will support the OCOG in this effort.

HC2018 LGY01: Develop in collaboration with the relevant Host Country Authorities, a Legacy plan (…).

HC2018 VEN04: (…) Agree with each relevant IF all technical venue requirements as well as the number and availability of training venues identified for use (…).

HC2018 VIL02: (…) To allow the reduction of required number of beds (…) implement, in collaboration with the IOC/IPC and NOCs/NPCs [National Paralympic Committees], a process (…)

HC2018 VIL05: (…) The [services in or nearby the Olympic Villages] can be adjusted in agreement with the IOC/IPC (…).

HC2019 P15.4: (…) The Parties shall agree in writing, among them and with the Host Country Authorities and other entities (…) on the conditions applicable to the funding, management and delivery of such legacy plan after the closing of the Games.

Contextualisation

OA2014 R1.9: The IOC to accept other signatories to the HCC than the host city and the NOC, in line with the local context.

OA2014 R10.1: (…) the programme to be based on events rather than sports (…).

OA2014 R10.3: The IOC to allow the OCOGs to make a proposal for the inclusion of one or more additional events on the Olympic programme for that edition of the Olympic Games.

OA2014 R40.2: The IOC Executive Board to determine the priorities for implementation of the recommendations.

OC2014 BLR33.3.3: The IOC enters into a written agreement with the host city and the NOC. (…) Other local, regional or national authorities, as well as, if relevant, other NOCs and local, regional or national authorities outside the host country, may also be a party to such agreement. (…)

OC2013 R45.2: The components of the programme are sports~~, disciplines~~ and events. (…) ~~A discipline is a branch of a sport comprising one or several events~~. (…)

➥ **OC2014 R45.2**: The programme consists of two components (…): The sports programme (…) [and] the events programme (…). The events programme must include events from each sport included in the sports programme.

OC2014 BLR45.3.1: The OCOG of a specific edition of the Olympic Games may propose to the IOC the inclusion, for such edition only, of one or more additional events (…).

HC2015 P33: (…) the OCOG may propose to the IOC the inclusion of one or more additional events in the Programme of the Games. Such proposal shall be made in a timely manner (…).

OC2018 R33.2: The IOC Executive Board determines the procedure to be followed until the election by the Session takes place. ~~Save in exceptional circumstances, such election takes place seven years before the celebration of the Olympic Games~~.

OC2019 R32.2: The honour and responsibility of hosting the Olympic Games are entrusted by the IOC, in principle, to a city (…). Where deemed appropriate, the IOC may elect several cities, or other entities, such as regions, states or countries, as host of the Olympic Games.

OC2019 BLR33.1.4: (…) the IOC Executive Board will determine the framework for each Games edition, the timing of the election of the host of the Olympic Games, (…) the rules to be followed (…) [and] the guarantees and other commitments to be provided (…).

OC2019 BLR33.2.3: (…) the Future Host Commissions shall (…) fulfil their mission in a flexible, pro-active and contextualised manner, taking into account geographic, strategic, technological, economic and societal developments and opportunities. These may include the framework and timing of elections by the Session of any candidature of a particular edition of the Olympic Games.

NN2018 M9: During the Candidature Process, a set of guarantees are signed by the host city/country authorities (…) and to ensure flexibility, they shall be adapted to the individual needs of the host city/host country authorities in question.

NN2018 M21: (…) The composition of the JSF would be determined with each OCOG to better reflect the local governance.

HC2019 P27.3: [The JSF] exact composition will be agreed (…) with the objective to ensure an appropriate representation of the IOC, the OCOG and the Host Country Authorities. (…)

OC2020 BLR45.1.1: Upon proposal from the IOC Executive Board, the Session shall decide on the sports programme ~~not later than at the Session electing the relevant host city.~~ (…)

➥ **OC2021 BLR45.1.1**: (…) the Session shall decide on the sports programme of an edition of the Olympic Games. (…) such decision (…) shall occur, in principle seven years prior to the opening of the concerned Olympic Games, or at the Session electing the relevant host of the Olympic Games, whichever occurs later.

Engagement

OA2014 R6.1: The IOC and the International World Games Association to closely cooperate regarding the sports programme composition and their respective evaluations.

OA2014 R6.2: The IOC and the International Masters Games Association to study the possibility for Olympic Games host cities to benefit from an option to organise the Masters Games in the years following the Olympic Games.

OA2014 R39.1: The IOC to study the creation of an "Olympism in Action" Congress that would take the pulse of society every four years: Bring together representatives of the Olympic Movement, its stakeholders and representatives of civil society. Engage in a dialogue with representatives from all walks of life and backgrounds on the role of sport and its values in society. Discuss the contribution of the Olympic Movement to society in fields such as education, cohesion, development, etc.

OA2014 R39.2: The IOC to turn the Session into an interactive discussion among IOC members on key strategic topics, with interventions from external guest speakers.

HC2016 VEN03: (…) In order to contribute to post-Olympic use of venues, other facilities and infrastructure: coordinate with the International Masters Games Association to explore the possibility of the Masters Games to be organised in the Host City in the years following the Olympic Games. (…)

LA2017 O4.1: The IOC to strengthen strategic partnerships with the World Union of Olympic Cities and the Active Well-being Initiative.

LA2017 O4.2: The IOC to build other partnerships with expert organisations on specific themes.

SS2017 O13: (…) build strategic partnerships with relevant expert organisations (…).

NN2018 M3: Organise opportunities for the IOC to engage with local and national stakeholders, for example through Dialogue Forums.

OC2021 R10: The Olympic motto "Faster, Higher, Stronger – Together" (…).

3. Leverage Specialised Knowledge

Assistance

OA2014 R4.2: Assist newly elected Organising Committees to establish the best possible governance for the integration of sustainability (…).

OA2014 R27.1: (…) Supporting tools and processes can be provided by the IOC in order to help organisations become compliant with the principles of good governance, if necessary.

OA2014 R30.1: Advise the IOC members, IOC staff, NOCs, IFs and all other stakeholders of the Olympic Movement with regard to compliance.

OA2014 R30.2: Give advice on new developments with regard to compliance.

OC2015 BLR37.1.1: (…) provide guidance to the OCOG (…) including in relation to collaborating with the relevant public authorities.

HC2015 P14: The IOC and IOC-Controlled Entities will assist the OCOG during its entire lifecycle and provide (…) guidance and information based on the experience and knowledge accumulated during the organisation and staging of previous editions of the Olympic Games (…).

SS2017 O12: Strengthen support (…) of the OCOGs' implementation of sustainability-related bid commitments, Host City Contract requirements and IOC's recommendations (…).

SS2017 O13: Facilitate exchanges between Olympic Games stakeholders (…).

NN2018 M23: The role of the IOC administration will evolve to ensure increased presence and longer periods of time with the Organising Committees, assisting them in the development of strategies, action plans, issue resolution, etc (…).

NN2018 M110: (…) the IOC, experts and Olympic Movement stakeholders will assist the upcoming OCOGs on the implementation of [the 3+4 Games Planning Framework].

NN2018 M111: (…) The IOC will provide a central repository of information, which will help each OCOG to document its plans (…).

NN2018 M112: The IOC will introduce executive learning and coaching to senior Games organisers (…).

NN2018 M113: (…) the IOC and Olympic Movement stakeholders will provide tailor-made learning opportunities (…).

NN2018 M114: The IOC and Olympic Movement stakeholders will contribute to the selection process for executive positions within the OCOG.

NN2018 M115: Assist future host city/country authorities and support them in the development and implementation of their legacy strategies (…).

HC2019 P12.a: the IOC shall share with the OCOG certain information, knowledge and expertise (…), including in particular the "Olympic Games Guides" issued by the IOC to assist the OCOG in the delivery of the Games (…).

HC2021 Preamble.L: through the various rights and entitlements conferred as part of the Contribution of the IOC to the success of the Games as defined herein, the IOC will provide an essential assistance to the Hosts, the Host NOC and the OCOG in their task of planning, organising, financing and staging the Games.

Expertise

OA2014 R1.1: The IOC to introduce an assistance phase during which cities considering a bid will be advised by the IOC about bid procedures, core Games requirements and how previous cities have ensured positive bid and Games legacies.

OA2014 R2.6: The [Evaluation] Commission to benefit from third-party, independent advice in such areas as social, economic and political conditions, with a special focus on sustainability and legacy.

OA2014 R12.3: The IOC to consider the provision of turnkey solutions for OCOGs in areas which require highly specific Olympic expertise.

OC2014 BLR33.2.3: Each Evaluation Commission shall (…) submit to all IOC members a written report on all candidatures (…) [which] shall include an assessment of the opportunities and risks of each candidature, as well as of sustainability and legacy.

NN2018 M4: The IOC to carry out its own analyses to assess the general feasibility of hosting the Games in the proposed Interested Cities. (…)

NN2018 M25: (…) [find] the most efficient way to deliver (…) the programme, using the capabilities of IFs, NFs, operators of existing venues, local event organisers or (…) built in-house capabilities. (…)

NN2018 M55: (…) deliver resilient energy and telecommunications services (…) taking into account: (…) the involvement of relevant experts (…).

NN2018 M115: (…) [Leverage] the IOC's network of stakeholders and the contributions of host cities to the World Union of Olympic Cities (…).

OC2019 BLR33.2.5: The IOC Executive Board shall study the reports and any recommendations of the Future Host Commissions and, if endorsed, submit a report and recommendations (…) to be submitted to the vote by the Session for election (…). [It] shall include its assessment of the opportunities and risks of each interested host, as well as of sustainability and legacy.

HC2015 P14: The IOC and IOC-Controlled Entities will (…) provide (…): i. (…) knowledge and expertise and (…) relevant information acquired from other Organising Committees of the Olympic Games and will allow the OCOG to participate in and benefit from the IOC's Olympic Games Knowledge Management Programme and related initiatives; ii. (…) the expertise from the IOC's and IOC-Controlled Entities' staff and advisors in areas most relevant for the planning, organising, financing and staging of the Games (…).

Standardisation

OA2014 R2.3: (…) define core requirements for hosting the Olympic Games. (…)

OA2014 R29.1: The financial statements of the IOC to be prepared and audited according to the International Financial Reporting Standards, even if these higher standards are legally not required from the IOC.

HC2013 P1: (…) the City and the NOC (…) undertake to fulfil their obligations in full compliance with (…) all other documents and commitments referred to in this contract.

➥ **HC2015 P1**: (…) the City and the NOC (…) undertake to fulfil their obligations in full compliance with (…) all Host City Contract Detailed Obligations (…) and all other documents and commitments referred to in this contract.

HC2013 P6: (…) The City, the NOC and the OCOG shall adapt to any (…) amendments and any (…) ~~new technical manuals, guides and directions~~ so that the Games will be organised in the best possible manner (…).

➥ **HC2015 P7**: The City, the NOC and the OCOG shall adapt to any amendments or changes made by the IOC pursuant to (…) Host City Contract Detailed Obligations, (…) Programme of the Games, and (…) Olympic Charter (…), as well as to any change requested by the IOC to the Games Delivery Plan (…) so that the Games will be organised in the best possible manner (…).

HC2015 P16: (…) the OCOG shall develop (…) based upon generic documents communicated by the IOC (…) [a] "Games Foundation Plan"; and a (…) "Games Delivery Plan".

HC2016 SUS02: Ensure that the sustainability strategy is aligned with the IOC Sustainability Strategy and specifically addresses the following matters: Infrastructure and natural sites; (…) Mobility (…); and Climate (…).

HC2015B SUS05: In coordination with the Host City, (…) publicly report on progress towards delivering the sustainability strategy [in conformity with] ~~the Global Reporting Initiative Guidelines (G4) including the Event Organisers Sector Disclosures~~.

➥ **HC2016 SUS07**: In coordination with the Host City, (…) publicly report on progress towards delivering the sustainability strategy [in conformity with] internationally recognised reporting standards for sustainability.

SS2017 O12: (…) provision of common methodologies and independent third party assessments (…).

HC2015 P21: The City, the NOC and the OCOG undertake to carry out their obligations and activities (…) in a manner which embraces the concept of sustainable development, ~~and which serves to promote the protection of the environment. In particular, the concept of sustainable development shall address the legacy of the Games~~ (…).

➥ **HC2017A P15.1**: The Host City, the Host NOC and the OCOG undertake to carry out all activities (…) in a manner which (…) contributes to the United Nations' Sustainable Development Goals.

NN2018 M12: During the Candidature Process (…) cities (…) to define their vision for legacy such as: (…) Urban development (including use of venues after the Games); Environment; and Economic value and brand equity.

OC2018 R19.3.3: [the IOC] establishes an annual report and the financial statements of the IOC in accordance with International Financial Reporting Standards and Swiss law (…).

HC2018 LGY01: Develop (…) a Legacy plan (…) using the dimensions defined in the IOC Legacy Strategic Approach as a reference. (…)

CE2016 C1 A16: The Olympic parties will respect ~~the requirements of the various procedures published by the IOC, particularly regarding the selection of Olympic Games host cities, as well as the Rules of Conduct Applicable to All Cities Wishing to Organise the Olympic Games.~~

➥ **CE2018 C11 A16**: The Olympic parties shall respect the ~~"Rules Governing the Candidature Process"~~ published by the IOC.

➥ **CE2020 C12 A16**: The Olympic parties shall respect the "Rules of Conduct for Continuous Dialogue" and the "Rules of Conduct for Targeted Dialogue" published by the IOC.

4. Contain Urban-Related Costs

Size

OA2014 R9.1: The IOC to limit the number of athletes, officials and events for the Games of the Olympiad to approximately: 10,500 athletes; 5,000 accredited coaches and athletes' support personnel; 310 events.

OA2014 R9.2: The IOC to limit the number of athletes, officials and events for the Olympic Winter Games to approximately: 2,900 athletes; 2,000 accredited coaches and athletes' support personnel; 100 events.

OA2014 R9.3: The IOC to study ways in which the overall number of other accreditations at the Olympic Games can be reduced.

OA2014 R10.1: (…) the following restrictions to be respected: For the Games of the Olympiad: approximately 10,500 athletes, 5,000 accredited coaches and athletes' support personnel, and 310 events, For the Winter Games, approximately 2,900 athletes, 2,000 accredited coaches and athletes' support personnel, and 100 events.

OC2013 BLR45.2.1.4: (…) ~~the total number of sports included in the programme (…) shall not exceed 28~~.

➥ **OC2014 BLR45.3.2**: (…) the following approximate numbers shall apply: with respect to the Games of the Olympiad, ten thousand five hundred (10,500) athletes, five thousand (5,000) accredited coaches and athletes' support personnel and three hundred and ten (310) events; with respect to the Olympic Winter Games, two thousand nine hundred (2,900) athletes, two thousand (2,000) accredited coaches and athletes' support personnel and one hundred (100) events.

HC2016 CER17: Present the proposed location of the Medals Plaza for IOC approval.

➥ **HC2018 CER17**: In case the OCOG plans to have a Medals Plaza, submit the proposed location to the IOC for approval. If the OCOG chooses to organise a Live Site, it can be proposed as a potential site for the Medals Plaza.

HC2016 LIV01: Submit the programme of all activities (...).

➥ **HC2018 LIV01**: Should city activities for the Olympic Games be developed, submit (...) the programme of all activities (...).

HC2016 MPS05: ~~The Olympic Hospitality Centre provides a venue on-site for those Olympic Marketing Partners that may elect to fit out a suite at their own cost in order to conduct their business development and hospitality activities during Games time. If the OCOG chooses to create an OHC, then it shall (...).~~

HC2016 PRS02: Provide an MPC (...) ~~and in addition, for the Olympic Winter Games, a Mountain Media Centre (MMC)~~. (...)

➥ **HC2018 PRS02**: Provide an MPC (...). For the Olympic Winter Games, depending on available facilities and travel time between the MPC/IBC and the venues, a secondary location may be needed.

HC2016 VIL17: ~~Provide or ensure that the following services are available/delivered in the OVP: Village general store; dry cleaning; bank; café; photo store; travel agent; Village call centre; mail services; internet centres; ticket office; hair salon; information office; florist; first aid station.~~

NN2018 M70: Only one Medals Plaza is required for the Olympic Winter Games. If applicable, a Live Site can be used as alternative.

Locations

OA2014 R1.3: The IOC to allow, for the Olympic Games, the organisation of preliminary competitions outside the host city or, in exceptional cases, outside the host country, notably for reasons of sustainability.

OA2014 R1.4: The IOC to allow, for the Olympic Games, the organisation of entire sports or disciplines outside the host city or, in exceptional cases, outside the host country notably for reasons of geography and sustainability.

OC2013 R34: All sports competition must take place in the host city of the Olympic Games, unless the IOC Executive Board authorises the organisation of certain events in other cities, ~~sites or venues situated in the same country~~. (...) ~~For the Olympic Winter Games~~, (...) for ~~geographical or topographical~~ reasons (...) the IOC may, on an exceptional basis, authorise the holding of these [events] in a ~~bordering~~ country.

➥ **OC2014 R34**: ~~All sports competitions~~ and the opening and closing ceremonies ~~must, in principle, take place in the host city (...). The IOC Executive Board (...) may authorise (...) preliminary sports competitions [or complete sports, disciplines or events] in a city (or cities) located outside the host city or, in exceptional circumstances, outside the host country, notably for reasons of sustainability~~.

➥ **OC2019 R34**: In the determination of the location, sites and venues of the Olympic Games, priority must be given to the use of existing or temporary venues and infrastructures. (...)

OC2014 BLR34.1: ~~Any request to organise any event (...) in any other city or location (...) must include the reason(s) for such request~~ (...).

NN2018 M29: (...) OCOGs are strongly encouraged to observe the following measures: (...) for the specific case of mono-functional venues (...) competitions should be moved to the most suitable existing venue (...) even if located outside the host city/country.

NN2018 M48: Candidate Cities/OCOGs to consider multi-site (...) solutions for the IBC and the MPC if no existing facility is suitable.

NN2018 M102: Allow the use of existing doping control laboratories within acceptable proximity of the host city instead of an onsite laboratory (...).

HC2016 PRS02: Provide an MPC (...) ~~conveniently~~ located (...).

➥ **HC2018 PRS02**: Provide an MPC (...) suitably located (...).

HC2016 BRS02: Provide an [IBC] ~~which is conveniently located~~ in proximity to (...).

➥ **HC2018 BRS02**: Provide an [IBC] in proximity to (...). The IBC/MBC can also be provided as a multi-site, (...) notably for reasons of legacy, sustainability and cost-efficiency. (...)

HC2018 VEN01: Ensure that sports competitions take place in the Host City of the Olympic Games. (...) the IOC may allow the organisation of preliminary competitions, or even entire sports or disciplines, outside the Host City or outside the Host Country, notably for reasons of legacy, sustainability and cost-efficiency. (...)

HC2018 VEN02: (...) for the specific case of mono-functional venues (...) competitions should be moved to the most suitable existing venue (...) even if located outside the Host City/Country. (...)

HC2016 VIL01: Provide, ~~whenever possible, a single~~ Olympic Village for all athletes and team officials ~~in close proximity to the competition venues and the Olympic Stadium.~~ (…)

➥ **HC2018 VIL01**: Provide (…) an Olympic Village (…), which for reasons of legacy, sustainability and cost-efficiency, can consist of one or several existing, new, temporary or demountable residential and/or hotel facility(ies).

Venue Sharing

OC2015 BLR32: The duration of the competitions (…) shall not exceed sixteen days unless otherwise approved by the relevant IF and the IOC Executive Board, in which case some competitions and preliminaries may be organised prior to the Opening Ceremony.

NN2018 M30: (…) optimise the venue masterplan and competition schedule, with (…): More preliminaries being held prior to the Opening Ceremony and/or outside the host city; The format of some competitions being condensed in collaboration with the IFs concerned if it allows for a reduction in the overall number of venues required (…); Using modular fields of play, maximise opportunities for venue sharing. (…) Opportunities to increase the number of sports in a venue to be explored.

NN2018 M34: Reduce the overall number of training venues (…) by optimising the training schedule.

NN2018 M118: (…) [Use] turnkey solutions [for] (…) Venue integrated schedule (…).

HC2016 SPT02: (…) ~~In exceptional circumstances~~, some preliminaries may be organised prior to the Opening Ceremony (…).

➥ **HC2018 SPT01**: For reasons of legacy, sustainability and cost-efficiency, the OCOG may propose preliminary competitions to be organised prior to the Opening Ceremony (…).

HC2018 SPT23: Ensure that the competition schedule is developed with the overall objective of optimising the number of competition venues, especially considering opportunities to: hold preliminary events prior to the Opening Ceremony and/or outside the Host City; propose a condensed competition format for certain events; and use shared FOPs. (…)

HC2018 VEN06: The OCOG may suggest an alternative format and schedule of competitions (…) to maximise use of shared venues and allow for a reduction in the overall number of venues required (…). Use of modular FOPs is also encouraged.

Requirements

OA2014 R2.3: (…) The field of play for the athletes to always be state-of-the-art for all competitions and to form part of the core requirements.

NN2018 M31: The IOC and IFs will ensure that venue requirements at the Olympic Games do not exceed those of each sport's World Championships. Requirements to be considered include: Roofing specifications; Ceiling height; Vertical drop; Dimensions; and Other technical features, including air conditioning, lighting, IT infrastructure, etc.

NN2018 M32: No minimum requirements for venue capacities. Instead, capacity should be determined according to context, with emphasis on the following criteria: (…) Capacity of any existing venue to be used; Capacity of new or renovated venues with regard to legacy use post-Games; Popularity of the sport in the host city/region/country; (…) Temporary capacity increase for Games use; Terrain venue footprint and layout (outdoor venues); Loading and unloading at peak capacity; Transport capacity – inbound/outbound; and Venue precincts, clusters or stand-alone structures.

NN2018 M35: (…) simplify venue designs and requirements across several areas, such as spaces used for workforce, OCOG compounds, press areas and lounges, parking spaces and security screening areas.

NN2018 M36: (…) venue access and flows have been separated according to accreditation privileges (…). Future operational plans should be simplified, while boosting the efficiency of layouts, flows, and services in certain areas (…).

NN2018 M45: Review the overall service levels in the Olympic Village(s) [including]: (…) Reduce number of NOC assistants on a case-by-case basis; (…) Consider doing away with the sport viewing room as new technologies mean most athletes can follow the action on their smartphones and laptops, etc.; Review the services offered in the Olympic Village Plaza and consider low-cost replacements, especially if there are support services nearby (…).

NN2018 M54: Review the IBC requirements: Reduced ceiling height (…).

NN2018 M90: Reduce the overall requirements to avoid reserving rooms that will be released shortly before the Games or not used (…).

HC2018 BRS02: (…) certain [IBC] requirements (e.g. ceiling height, usable space) can be handled more flexibly (…).

HC2018 VEN03: Given that no minimum capacities are specifically required, ensure that venue capacities are determined/finalised according to the local context, in particular considering the ability of local organisers to ensure full stadiums, the capacity of existing venues, the required capacity for legacy post-Games use, the popularity of the sport in the Host City/Region/Country, the inbound/outbound transport capacity as well as the space around the venue and its loading/unloading capacity. (…)

HC2018 VEN04: (…) Upon proven case of additional benefits from a legacy, sustainability and/or financial stand point for the Host City, the IOC (…) and the respective IF shall approve proposals of venues with flexibility in regard to certain requirements (…).

HC2018 VIL05: (…) The [services in or nearby the Olympic Villages] can be adjusted (…) especially in case of a concept involving multiple Villages.

Service Optimisation

NN2018 M25: (…) the OCOG will be tasked with finding the most efficient way to deliver each discipline and event on the programme (…).

NN2018 M42: Guarantee only one bed for each athlete either at the main or an additional Olympic Village.

NN2018 M43: To appropriately scope the size of the main Olympic Village[(s)] (…), implement a process for early projection of allocation (…).

NN2018 M55: (…) [develop] more cost-effective ways to deliver resilient energy and telecommunications services (…).

NN2018 M56: (…) optimise the power-infrastructure solutions in terms of legacy and sustainability opportunities.

NN2018 M57: (…) [use] latest technologies (…) to profoundly reduce resources.

NN2018 M59: Review the scope of services for Telecommunications, Information Management, and Equipment Operations.

NN2018 M62: Optimise operational aspects in the management of technology (…) [like] reduced space and equipment sharing.

NN2018 M67: Reduce the scope and consequently costs and resources for the implementation of the Look of the Games by: Prioritising the field of play elements over back of house; Favouring spectaculars over low visibility elements across the city (…).

NN2018 M79: (…) OCOGs are encouraged to find solutions which minimise usage of a dedicated fleet and buses. A client-by-client approach should be taken, based on the actual needs of the clients.

NN2018 M80: Combine OCOG transport services (…).

NN2018 M81: (…) identify transport facilities and services, such as dedicated parking, that are underutilised and better align them to match actual needs and usage (…).

NN2018 M83: Better align service levels for arrivals and departures at co-host cities and other points of entry with actual capacities and usage (…).

NN2018 M84: Adjust the scope of T1 (…); T2 (…); and T3 services to actual needs. (…)

NN2018 M86: Review media transport services and service levels, merging the media transport system with public transport (…).

NN2018 M87: Separate operational Venue Access and Parking Passes from commercial/privilege [ones] and ensure that the latter are (…) user-paid.

NN2018 M90: (…) adjust the period of stay to actual use (…).

NN2018 M91: (…) use of alternative accommodation solutions is encouraged (for example home-stay programmes, apartment rental websites and others). (…)

HC2016 NRG02: (…) ~~Legacy opportunities shall also be considered by the Games Energy Council at all times~~.

➥ **HC2018 NRG02**: (…) optimise the energy solutions, including through (…) upgrades required for legacy purposes and sustainability opportunities.

HC2018 MED06: Establish a multi-disciplinary Polyclinic in the Olympic/Paralympic Village (…). For reasons of legacy and cost-efficiency specific services (…) not frequently used or not considered essential/emergency (…) might be provided in existing hospitals. (…)

HC2018 TRA03: Ensure that (…) transport plans combine OCOG-dedicated resources with public transport in view of developing sustainable and accessible mobility solutions and optimising the usage of dedicated fleet and buses (…).

HC2018 VIL02: (…) To allow the reduction of required number of beds (…) implement (…) a process for early projection of athletes and team officials' numbers as well as alternative housing solutions and/or incentives. (…)

5. Enhance Urban Sustainability

Games Planning

OA2014 R4.1: Develop a sustainability strategy to enable potential and actual Olympic Games organisers to integrate and implement sustainability measures that encompass economic, social and environmental spheres in all stages of their project.

OA2014 R4.2: (…) establish the best possible governance for the integration of sustainability throughout the organisation.

HC2015 P16: (…) the OCOG shall develop (…) a document detailing the OCOG's vision (…), as well as the key strategic and organisational/governance and reporting processes applicable to the planning, organising, financing and staging of the Games (…); and a document describing the main planning framework, timelines and milestones (…).

HC2016 SUS01: Develop (…) a sustainability strategy (…) indicating how sustainability objectives (…) will be embedded (…), [taking] into account the views of all relevant stakeholder groups (…).

HC2016 VEN10: Ensure that the water quality at natural bodies where athletes compete complies with local laws and IFs' standards (…).

SS2017 O10: Ensure sustainability is addressed (…) throughout all phases of the Candidature Process.

SS2017 O13: (…) develop innovative sustainable solutions for planning and staging of the Olympic Games.

SS2017 INF3: Maintain conservation status for any natural or cultural protected areas (…).

SS2017 INF5: Optimise environmental performance of Olympic venues (…).

SS2017 MOB1: (…) develop sustainable transport solutions (…).

SS2017 MOB2: (…) maximise use of public transport and active travel modes (…).

SS2017 MOB3: (…) implement sustainable logistics solutions for movement of goods.

SS2017 MOB4: (…) promote sustainable tourism in host cities/regions.

SS2017 CLI1: (…) minimise the Olympic Games' carbon emissions.

SS2017 CLI2: OCOGs to compensate their "direct"/"owned" emissions.

SS2017 CLI3: (…) promote low carbon solutions (…) in the host country.

SS2017 CLI4: (…) take into account potential consequences of climate change when selecting Olympic Games locations.

NN2018 M6: Reduce the deliverables for cities, (…) adapted to actual needs (…).

NN2018 M24: (…) 3+4 Games Planning Framework (…): [seven to five] years out from the Games (…): focus on the vision and governance model (…), identification and confirmation of assets (…), engagement with communities, the development of key strategies (…); From approximately four years (…) to Games time: (…) focus on operational planning (…), operational readiness and delivery (…).

HC2018 VEN01: (…) Any change of a Key Olympic Venue must enhance the Candidate City proposals, in particular the legacy and sustainability aspects and/or the cost efficiency of the Games concept.

HC2021 Preamble.F: the IOC, the Hosts and the Host NOC strive to place the Games at the forefront in the field of sustainability, including by delivering Games that are climate positive, thereby contributing to international efforts aligned with the objectives of the Paris Agreement on climate change.

HC2021 Preamble.G: the IOC, the Hosts and the Host NOC are committed to the conservation of biodiversity and cultural heritage (…).

Resource Efficiency

OA2014 R1.2: The IOC to actively promote the maximum use of existing facilities (…).

OA2014 R2.2: The IOC to consider as positive aspects for a bid: the maximum use of existing facilities (…).

HC2015B TRA41: (…) ensure that spectators can benefit from reliable, safe and efficient public transport (…).

SS2017 INF1: Maximise use of existing facilities (…).

NN2018 M29: (…) OCOGs are strongly encouraged to observe the following measures: (…) for the specific case of mono-functional venues (…) no permanent construction will be required. (…)

NN2018 M46: Better align the services and service levels at any Olympic Village(s) with existing infrastructure (…) while minimising the need for additional or temporary infrastructure (…).

NN2018 M49: Candidate Cities/OCOGs to use appropriate adjacent facilities (…) to reduce the MPC footprint.

NN2018 M55: (…) deliver resilient energy and telecommunications services (…) taking into account: Use of existing infrastructure and services (…).

NN2018 M79: Candidate Cities and OCOGs to propose transport plans which combine the use of OCOG-dedicated resources and public transport (…) [which] must be based on the robustness and availability of an existing network. (…)

NN2018 M82: Candidate Cities and OGOCs to propose arrival and departure transport plans which maximise the use of public transport or other "user-pay" services. (…)

HC2018 ACM14: Provide a Media Village (or more than one) (…) only in cases where the hotel infrastructure of the Host City does not have sufficient capacity (…).

HC2016 MED17: Ensure that all samples collected at the Olympic Games are analysed by a World Anti-Doping Agency-accredited laboratory ~~that is situated in (or in close proximity to) the Host City~~.

➥ **HC2018 MED17**: Ensure that all samples collected at the Olympic and Paralympic Games are analysed by an existing World Anti-Doping Agency-accredited laboratory.

HC2018 NRG02: (…) optimise the energy solutions, including through maximising the use of existing infrastructure (…).

HC2018 NRG06: (…) ensure that: venue power is supplied from the grid with full redundancy utilising as much as possible the existing infrastructures and taking into consideration specific characteristics of each venue and sport. (…)

HC2016 OFS09: (…) provide the IOC with the space (either a temporary or ~~permanent~~ construction or an existing venue) (…) to operate the OLC in a location proposed by the OCOG (…).

➥ **HC2018 OFS06**: Identify and propose to the IOC an existing venue or an adequate space (plot of land for temporary construction) to be used by the IOC for the purposes of the Olympic Club. (…)

HC2018 TRA14: (…) outside the Host City (…) for reasons of cost-efficiency, the use of public transport shall be optimised. (…)

HC2018 TRA30: (…) Ensure that the media transport system be delivered maximising the use of public transport and/or other existing transport services (…).

HC2018 VEN02: (…) for the specific case of mono-functional venues (…) no new permanent construction shall be required. (…)

HC2018 VIL05: Ensure (…) the services (…) in or nearby the Olympic and Paralympic Villages, maximising the use of existing infrastructures/service providers (…) while minimising the need for additional or temporary infrastructures. (…)

OC2019 R34: (…) priority must be given to the use of existing (…) venues and infrastructures. (…)

HC2019 P15.3: (…) the Host Cities, the Host NOC and the OCOG shall maximise the use of existing and planned infrastructure (…).

Overlay

OA2014 R1.2: The IOC to actively promote the (…) use of temporary and demountable venues.

OA2014 R2.2: The IOC to consider as positive aspects for a bid: (…) the use of temporary and demountable venues where no long-term venue legacy need exists or can be justified.

SS2017 INF1: Maximise use of (…) temporary and demountable structures (…).

NN2018 M44: Advise Candidate Cities/OCOGs to consider temporary or demountable solutions for the Olympic Village(s), if no existing facility is suitable and permanent facilities are not required post-Games.

NN2018 M48: Candidate Cities/OCOGs to consider (…) temporary or demountable solutions for the IBC and the MPC if no existing facility is suitable.

NN2018 M50: Candidate Cities/OCOGs to consider temporary media facilities when existing venues are not sufficient (…) and permanent facilities are not required post-Games.

NN2018 M88: For co-host cities, limit the OCOG transport services to connections where public transport is not sufficient or cannot be sufficiently expanded.

NN2018 M91: (...) OCOGs are encouraged to use temporary accommodation when existing capacities are insufficient or there is no post-Games need for new permanent structures.

HC2016 ACM14: Provide a Media Village (or more than one) (...). ~~Preference shall be given to~~ existing, permanent accommodation structures (...).

➥ **HC2018 ACM14**: (...) For reasons of legacy, sustainability and cost-efficiency, Media Village(s) can be existing, new or temporary structures.

HC2016 BRS02: Provide an existing facility, new construction or ~~large building shell that can be easily retrofitted~~ (...) to serve as the IBC. (...)

➥ **HC2018 BRS02**: Provide an existing facility, new construction or temporary building (...) to serve as the IBC. (...).

HC2018 BRS03: When existing media facilities at the venues are not sufficient (...) and permanent facilities are not required post-Games, temporary and/or demountable solutions shall be used for reasons of legacy, sustainability and cost-efficiency.

OC2019 R34: (...) priority must be given to the use of (...) temporary venues and infrastructures. (...)

HC2019 P15.3: (...) the Host Cities, the Host NOC and the OCOG shall (...) consider temporary and demountable venues (...) in all situations where new permanent venues are not supported by viable business plans and fulfilling long-term legacy needs (...).

Constructions

HC2015B VEN07: As a principle, protected natural and/or heritage areas must not be impacted by the construction of Games venues or other Games-related activities.

HC2015B TRA02: Ensure that (...) scheduling and monitoring processes and systems are in place and used for the construction of all Games-related transport infrastructure and facilities works, whether developed by the OCOG, public transport agencies or other providers. (...)

SS2017 INF1: (...) only develop new permanent facilities that offer long-term benefits for local communities and contribute to the development of sustainable cities.

SS2017 INF2: Prioritise the use of previously developed or degraded land over greenfield sites (...) where these can provide sustainability benefits (...).

SS2017 INF4: Use recognised 'green building' standards (...).

SS2017 INF6: Avoid displacement (...) and adverse impacts on indigenous people and land rights; where unavoidable, consult and provide fair compensation and support (...).

NN2018 M29: (...) OCOGs are strongly encouraged to observe the following measures: Temporary venues should be developed in the most cost-effective way, weighing the cost of the technical solution against the revenue-generating potential for the events it will host; New permanent venues should be considered only if a viable business plan is presented detailing proven post-Games demand, funding and future operational usage, including operator (...).

NN2018 M118: (...) [Use] turnkey solutions [for] (...) Venue planning and design;

HC2018 HNS01: (...) ensure (...) a healthy and safe environment (...) during construction (...) and reinstatement of the Games sites (venues and facilities); safety of venue infrastructure (...) in terms of construction (...); protection of all stakeholders from environmental health and safety risks (...) in case of construction of venues on contaminated land, with regard to water quality of natural bodies (...).

HC2018 VEN02: (...) ensure the following: temporary venues shall be developed in the most cost-effective way, weighing the cost of the technical solution against the revenue-generating potential for the events it will host; new permanent or relocatable venues shall be considered only if a viable business plan is presented detailing proven post-Games demand, funding, sustainability and future operational usage, including operator (...).

HC2018 VEN08: Ensure that (...) in relation to sustainability (...) necessary measures (...) are taken (...) for permanent, demountable and temporary constructions and overlay installations alike, as well as any other Games related new infrastructure.

HC2018 VEN09: Prioritise the use of previously developed or degraded land over green field sites (...). Integrate the potential consequences of climate change (...). Maintain conservation status for any natural or cultural protected areas (...). Use recognised 'green building' standards (...). Optimise environmental performance (...). Avoid displacement (...); where unavoidable, and consistent with Protection and Respect of Human Rights section, consult and provide fair compensation and support, in accordance with internationally-recognised standards and all international agreements, laws and regulations applicable in the Host Country.

OC2019 R34: (…) The construction of new permanent venues or infrastructure (…) shall only be considered on the basis of sustainable legacy plans.

HC2021 Preamble.G: (…) the Host Country Authorities have undertaken to ensure that no permanent Olympic construction occurs in statutory nature, cultural protected areas and World Heritage sites.

HC2021 P15.3: (…) Where new permanent venues need to be constructed, the Hosts, the Host NOC and the OCOG shall ensure that they are not located in or adjacent to statutory nature, cultural protected areas or World Heritage Sites.

Legacy Planning

HC2015B SUS01: Develop (…) a sustainability strategy indicating how sustainability will be delivered (…) and how that will serve the host city community in the future.

HC2016 SUS01: Develop (…) an Olympic legacy plan (…) [taking] into account the views of all relevant stakeholder groups (…).

LA2017 O1.1: Legacy is discussed with cities interested in hosting the Olympic Games as early as the Dialogue Stage, and is fully embedded in the Candidature Process.

LA2017 O1.2: Legacy vision and objectives are an integral element of the Games management, coordination and decision-making process.

LA2017 O1.4: Legacy governance in the host territory is operational early in the lifecycle, and is made resilient to operational pressures and political changes.

LA2017 O1.5: Funding of legacy is ensured through early definition of the roles and responsibilities of local authorities as regards the long-term financing of the overall legacy programme.

NN2018 M11: Include discussions on the legacy of the Games with cities interested in hosting the Olympic Games (…) and fully embed legacy in the Candidature Process.

NN2018 M13: (…) develop a high-level legacy plan establishing priorities, action plans, potential funding sources and strategies for proactive communications.

NN2018 M14: Ensure that the legacy vision and objectives are an integral part of the management of the Games from the early stages and reflected in the coordination and decision-making processes.

NN2018 M15: The legacy entity and other relevant bodies of the host city/country to be operational early in the lifecycle of Games organisation (…).

NN2018 M16: (…) Legacy strategy and its implementation (…) is a top priority, one that must remain resilient to operational pressures and political change.

NN2018 M17: Ensure funding for legacy through early definition of the roles and responsibilities of local authorities involved in the long-term financing of the overall legacy programme.

NN2018 M18: Future OCOGs to contribute to the funding of legacy programmes by dedicating any financial surplus resulting from the Games to legacy projects and activities (…).

NN2018 M55: (…) deliver resilient energy and telecommunications services (…) taking into account: (…) Clear and communicable legacy opportunities (…).

HC2018 LGY01: Develop (…) a Legacy plan (…) [including]: the overall vision for legacy, priorities and key objectives; actions with corresponding Key Performance Indicators and timeline for implementation; legacy plan for all Key Olympic Venues and Paralympic venues, as well as infrastructure (…); allocation of roles and responsibilities for the delivery of the Legacy plan before, during, and after the Games, including monitoring, resource needs and financing, issues and risks.

HC2018 LGY02: (…) develop appropriate governance structures (…) to oversee the fulfilment of the [Legacy plan, ensuring:] legacy governance (…) is operational from early in the lifecycle and made resilient to operational pressures and political changes; transparent mechanisms are in place (…); appropriate evaluation programme; and application of corrective measures when necessary. Ensure that the responsibilities of relevant (…) entities (…) are formalised in appropriate agreements (…).

HC2018 VEN15: (…) the Venues & Infrastructure Games legacy plans [shall include] (…): the post-Games use and post-Games owners and operators of Key Olympic Venues and infrastructure; (…) financial planning and funding model, detailing (…) post-Games retrofit and adaptation costs, expected facility operational maintenance and operating costs and revenues, and the strategy for covering potential operational loss; demonstration of secured funding model (…).

OC2019 R32.4: Any surplus by a host (…) shall be applied to the (…) legacy of the Olympic Games as determined by the IOC Executive Board in consultation with the host, the OCOG and the NOC of the country of the host.

HC2019 Preamble.E: The Host Cities and the Host NOC have developed their candidature (…) so that the Games significantly contribute to the fulfilment of the Host Cities' long-term development plans and leave a positive legacy for the citizens of the Host Cities and the Host Country.

HC2019 P10: (…) any surplus resulting from (…) the Games shall be divided as follows: (…) sixty percent (60%) to the OCOG or, as determined by the IOC, to the Host Country Authorities or other third parties (…) to be used exclusively for the development, delivery and funding of the OCOG's legacy plan (…) and for the development of sport in the Host Cities and the Host Country (…).

HC2019 P15.4: The Host Cities, the Host NOC and the OCOG shall define, implement and communicate a legacy plan based on the Candidature Commitments (…).

HC2021 P15.4: (…) Consistent with the IOC Legacy Strategic Approach, the legacy plan shall aim at using sports to improve the health and well-being of citizens of the Host Country. (…)

Appendix II

Research Agenda for Paris 2024 and Milan-Cortina 2026

In this appendix, **Table A.2** outlines the *Research Agenda* designed to assist in investigating the implementation of Olympic Agenda 2020, focusing on the case studies of Paris 2024 and Milan-Cortina 2026. It includes the *Questions* formulated in Chapter 4, along with the specific issues they address. Additionally, it details the urban-related *Reforms* of Olympic Agenda 2020 that informed these *Questions*, as well as the *codes* derived from *IOC Policies* and *IOC Regulations* that highlighted potential misalignments with these issues.

Table A.2 *Research Agenda*: *Questions* and corroboration with Olympic Agenda 2020.

Question	**Issue(s)**	**Corroboration with Olympic Agenda**	
		Reform	***Codes***
1. Did the Aquatics Centre have a viable legacy plan justifying its construction?	Aquatics Centre	Constructions	NN2018 M29; HC2018 VEN02; OC2019 R34
		Legacy Planning	LA2017 O1.5; NN2018 M13; NN2018 M17; HC2018 LGY01; HC2018 VEN15
2. Was there a viable alternative option to host the aquatic competitions in an existing or temporary venue?	Aquatics Centre	Locations	OC2019 R34
		Resource Efficiency	OA2014 R1.2; OA2014 R2.2; SS2017 INF1; OC2019 R34; HC2019 P15.3
		Overlay	OA2014 R1.2; OA2014 R2.2; SS2017 INF1; OC2019 R34; HC2019 P15.3
3. Was a proper construction plan developed for the Aquatics Centre?	Aquatics Centre	Games Planning	HC2015 P16
4. Did constructing a new swimming pool in Marville waste existing resources and compromise the function of an existing facility for which a legacy plan was not previously developed?	Marville Swimming Pools	Resource Efficiency	OA2014 R1.2; OA2014 R2.2; SS2017 INF1; OC2019 R34; HC2019 P15.3
		Legacy Planning	LA2017 O1.5; NN2018 M13; NN2018 M17; HC2018 LGY01; HC2018 VEN15
5. Were some investments in certain venues not properly disclosed in the candidature process? *Alternative formulation:* 5. Did hosting the Olympic Games lead to impulsive investments with rushed planning and deliberation?	Marville Swimming Pool; Colombes Swimming Pool; Georges-Vellerey Swimming Pool; Max-Rousié Stadium; Bertrand Dauvin Stadium; Auguste-Delaune Sports Centre; Poissoniers Sports Centre; Guy Moquet Gymnasium; Pablo Neruda Gymnasium; Saint-Denis Gymnasium; Stelvio Stadium; Lago di Tesero Stadium; Giuseppe Dal Ben Ski Jumping Stadium; Arena Alto Adige; Azzurri d'Italia; Mottolino	Compliance	HC2017A Preamble.A
6. Did the change of location of the new Aubervilliers swimming pool disregard social and environmental sustainability?	Aubervilliers Swimming Pool	Games Planning	SS2017 CLI4; HC2021 Preamble.G
		Constructions	SS2017 INF2; SS2017 INF6; HC2018 VEN09
	Media Village	Compliance	HC2015 P21

7. Was the Media Village project compatible with long-term plans?		Legacy Planning	HC2019 Preamble.E
8. Did the Media Village project disregard environmental considerations?	Media Village	Games Planning	HC2021 Preamble.G
		Constructions	HC2021 P15.3
9. Was the Media Village necessary for the Games?	Media Village	Resource Efficiency	HC2018 ACM14; OC2019 R34; HC2019 P15.3
10. Did the reorganisation of the traffic flows in the Pleyel Interchange harm local communities and contribute to the intensification of unsustainable transport solutions?	Pleyel Interchange	Games Planning	SS2017 CLI3
		Constructions	SS2017 INF1; HC2018 VEN08
11. Did the construction works in the Pleyel Interchange put local inhabitants, and specifically children, at health and safety risks?	Pleyel Interchange	Constructions	HC2018 HNS01
12. Could athletes' transport justify the reorganisation of Pleyel traffic flows, or could it be delivered through other more sustainable mobility solutions?	Pleyel Interchange	Service Optimisation	NN2018 M79; HC2018 TRA03
		Games Planning	SS2017 MOB2
13. Did the construction of the Olympic Village, together with other projects accelerated by the Games but not directly associated with them, contribute to gentrification and, consequently, to indirect displacement?	Olympic Village	-	-
14. Did International Federations adapt venue requirements in a flexible manner?	Saint-Quentin-en-Yvelines BMX Stadium; South Paris Arena 6; Court Suzanne Lenglen at Roland-Garros; Ice Rink Pinè	Requirements	NN2018 M31; HC2018 VEN04
	South Paris Arena 6/Pierre Mauroy Stadium	Games Planning	HC2018 VEN01
	Ice Rink Pinè	Requirements	NN2018 M32; HC2018 VEN03
15. Did the process for the selection of additional sports risk compromising efforts to downsize the event?	OCOG proposals on new events	Size	OA2014 R9.1; OA2014 R9.2; OA2014 R10.1; OC2014 BLR45.3.2
	Teahupo'o Surfing Venue	Locations	OC2019 R34; HC2018 VEN01
16. Were less sustainable and more expensive solutions adopted due to political reasons?	Le Bourget Sport Climbing	Resource Efficiency	HC2018 VEN02
		Overlay	OA2014 R1.2; SS2017 INF1; OC2019 R34; HC2019 P15.3
		Constructions	NN2018 M29
	Le Bourget Sport Climbing; Villepinte Exhibition Centre	Venue Sharing	NN2018 M30
		Games Planning	HC2018 VEN01
	Teahupo'o Surfing Venue	Locations	OC2019 R34; HC2018 VEN01
		Games Planning	SS2017 CLI1; HC2021 Preamble.F;
17. Was there a viable legacy plan to support the construction of the sport climbing venue?	Le Bourget Sport Climbing	Constructions	NN2018 M29; HC2018 VEN02; OC2019 R34
		Legacy Planning	LA2017 O1.5; NN2018 M13; NN2018 M17; HC2018 LGY01; HC2018 VEN15
18. Were the urban upgrades in Teahupo'o necessary for the surfing competitions, and did they further threaten the environment? Could	Teahupo'o Surfing Venue	Requirements	NN2018 M31; NN2018 M35
		Games Planning	HC2021 Preamble.G
		Resource Efficiency	NN2018 M55; NN2018 M79; HC2018 NRG02; HC2018

Olympic surfing have been hosted using the existing resources, like the WSL?			NRG06; OC2019 R34; HC2019 P15.3
		Constructions	HC2018 VEN08
19. Was there a viable legacy plan to support the upgrades in the Teahupo'o surfing venue?	Teahupo'o Surfing Venue	Legacy Planning	LA2017 O1.5; NN2018 M13; NN2018 M17; NN2018 M55; HC2018 LGY01; HC2018 VEN15
20. Were the tenders for the renovation of PalaSharp and the construction of PalaItalia biased, and did they jeopardise existing businesses?	PalaSharp; PalaItalia	Compliance	HC2015 P21
21. Was there a viable legacy plan including the business plans of all Milan's arenas, thus mitigating risks of obsolescence triggered by market competition?	Allianz Cloud; PalaSharp; Forum di Assago; PalaItalia	Legacy Planning	HC2015B SUS01; HC2016 SUS01; LA2017 O1.1; LA2017 O1.2; NN2018 M11; NN2018 M13; NN2018 M14; HC2018 LGY01
22. Could the competitions proposed for PalaSharp be hosted in the Allianz Cloud without significant losses for the event, thereby reducing the Games' risks related to funding, construction, and legacy?	PalaSharp	Resource Efficiency	OA2014 R1.2; SS2017 INF1; OC2019 R34; HC2019 P15.3
23. Given its lengthy preparation period, demanding requirements, and strict contracts, is the Olympic Games format resilient enough to adapt to unforeseen changes and emerging stakeholders' interests?	San Siro Stadium; Ice Rink Pinè; Eugenio Monti Sliding Centre; PalaSharp	-	-
24. Did the Milan-Cortina 2026 candidature develop viable legacy plans for existing venues requiring significant upgrades?	Ice Rink Pinè; Eugenio Monti Sliding Centre	Games Planning	SS2017 O10
		Legacy Planning	HC2016 SUS01; LA2017 O1.1; LA2017 O1.5; NN2018 M13; NN2018 M14; NN2018 M17; HC2018 LGY01; HC2018 VEN15; HC2019 Preamble.E
25. Is the venue classification system used by candidate cities flawed and inconsistent, potentially leading to negligent or deliberate misrepresentation of venue conditions and required upgrades?	Elancourt Hill; Ice Rink Pinè; Eugenio Monti Sliding Centre; Arena Alto Adige; Cortina Olympic Stadium; Pista Olimpia della Tofana; Stelvio Stadium; Lago di Tesero Stadium; Giuseppe Dal Ben Ski Jumping Stadium; Carosello 3000; Mottolino; Sitas-Tagliede and Azzurri d'Italia Stadium	-	-
26. Were there feasible alternatives, such as utilising existing or temporary solutions, to avoid expensive permanent upgrades at the Ice Rink Pinè?	Ice Rink Pinè	Locations	OA2014 R1.4; OC2019 R34; HC2018 VEN01
		Resource Efficiency	OA2014 R1.2; SS2017 INF1; OC2019 R34; HC2019 P15.3
		Overlay	OA2014 R1.2; SS2017 INF1; HC2019 P15.3
		Constructions	SS2017 INF1; NN2018 M29; HC2018 VEN02; OC2019 R34
27. As a mono-functional venue, could existing alternatives be used to avoid permanent upgrades to the Eugenio Monti Sliding Centre?	Eugenio Monti Sliding Centre	Locations	OA2014 R1.4; OC2019 R34; NN2018 M29; HC2018 VEN01; HC2018 VEN02
		Resource Efficiency	OA2014 R1.2; SS2017 INF1; NN2018 M29; HC2018 VEN02; OC2019 R34; HC2019 P15.3

		Constructions	SS2017 INF1; NN2018 M29; HC2018 VEN02; OC2019 R34
28. Was an accurate plan for the upgrades of the existing venues properly developed?	Ice Rink Pinè; Eugenio Monti Sliding Centre; PalaSharp	Games Planning	HC2015 P16
29. Do host cities exploit the exceptional conditions granted by the Olympic Games, such as the "Olympic law", to undertake unnecessary projects that increase the event's economic, social, and environmental risks?	Transport Infrastructure; Aquagranda	-	-
30. Did the plans for the construction of the Bormio bypass adhere to environmental regulations, respecting biodiversity and aligning with the local community's interests?	Bormio bypass	Compliance	HC2015 P21
		Games Planning	HC2016 SUS01; HC2021 Preamble.G
		Constructions	HC2018 VEN08
31. Did the construction plans for the Bormio bypass promote unsustainable mobility, and could it be justified by Games' needs?	Bormio bypass	Games Planning	SS2017 O13; SS2017 MOB1; SS2017 MOB2; SS2017 MOB3; SS2017 CLI3
		Resource Efficiency	NN2018 M79; HC2018 TRA14
		Constructions	SS2017 INF1
32. Were the candidature plans detailed enough to ensure the viability of the proposals?	Mottolino; Cortina Olympic Village	Games Planning	HC2015 P16
33. Did the choice of relocating Mottolino's facilities decrease the opportunity to leverage local experience, thereby increasing environmental impacts?	Mottolino	Expertise	OA2014 R12.3; NN2018 M25
		Games Planning	HC2021 Preamble.G
34. Did the option to use Arena di Verona for ceremonies increase the risks of compromising the conservation status of the cultural protected building and World Heritage Site?	Arena di Verona	Games Planning	SS2017 INF3; HC2021 Preamble.G
		Constructions	HC2018 VEN09; HC2021 Preamble.G
35. Was the concept of Milan-Cortina 2026 an overcomplication, and was it really designed for reasons of legacy, sustainability, and cost-efficiency?	Milan-Cortina 2026 Games concept	Locations	OA2014 R1.4; HC2018 VEN01

Appendix III

Reports of Field Visits

This appendix provides references to detailed reports documenting data collection and observations from field visits conducted in 2022 for the Paris 2024 and Milan-Cortina 2026 case studies. For Paris 2024, a follow-up report was developed to share insights from additional field visits conducted in 2024.

Paris 2024

Early Visit to the Paris 2024 Olympic Games: Travel Memoir – Spring 2022.

Published: May 2022, Lisbon.

DOI: 10.13140/RG.2.2.17666.96960 (Available on Research Gate).

Milan-Cortina 2026

4 Years Ahead: Visiting the clusters of the Milan-Cortina 2026 Winter Olympics. Travel Memoir – Summer 2022.

Published: September 2022, Lisbon.

DOI: 10.13140/RG.2.2.35171.02089/1 (Available on Research Gate).

Paris 2024 (Follow-up report):

2 Weeks Before the Games: Visiting the Paris 2024 Olympic Venues. Travel Memoir – Summer 2024

Published: August 2024, Lisbon.

DOI: 10.13140/RG.2.2.16735.68000 (Available on Research Gate).

Appendix IV

Details from Interviews

This appendix provides an overview of the interviews conducted as part of the research for the Paris 2024 and Milan-Cortina 2026 case studies. **Table A.3** presents key information about each interview session. It includes the interviewee group, indicating the category or type of individuals interviewed and the corresponding case study. Each interview was assigned a sequential number ordered by the date on which the session took place. The table also identifies the organisation or entity represented by the interviewee(s) and specifies the number of participants involved in each session. For clarity, it includes the department within the organisation associated with the interviewee(s), the method used to conduct the interview – whether in person, by video call, or written – and the duration and number of questions of each interview session.

Table A.3 Interviews conducted to stakeholders of the Paris 2024 and Milan-Cortina 2026 Olympic Games.

Interviewee Group	Case study	No.	Date	Organisation	No. of partici-pants	Department	Method	Duration	No. of ques-tions
A Event Organisers	Paris 2024	1	04.03.2022	Paris 2024	1	Planning and Information Knowledge Management	In-person	01:10:32	18
		4	18.03.2022	Paris 2024	1	Impact and Legacy	Video call	00:54:19	11
		12	09.09.2022	Paris 2024	1	Sustainability	Video call	00:20:36	9
	Milan-Cortina 2026	13	20.06.2022	Fondazione Milano-Cortina 2026	1	Impact and Legacy	In-person	00:28:46	15
		17	05.07.2022	Fondazione Milano-Cortina 2026	1	Project Management	Video call	00:45:30	13
		20	12.09.2022	Fondazione Milano-Cortina 2026	1	Sustainability	Video call	00:31:33	8
B Governmental Bodies	Paris 2024	3	16.03.2022	SOLIDEO – Société de Livraison des Ouvrages Olympiques	1	Executive Board	In-person	00:54:46	11
					2	Public Affairs and Communication			
		7	04.04.2022	DIJOP – Délégation Interministérielle aux Jeux Olympiques et Paralympiques	1	*Not Applicable*	In-person	01:11:09	18
					1	*Not Applicable*			

		8	06.04.2022	Plaine Commune	1	Mission for the 2024 Olympic and Paralympic Games	Video call	01:05:27	10
		9	10.05.2022	Seine-Saint-Denis Department	1	Delegation for the Olympic and Paralympic Games	Written	-	20
		10	30.08.2022	DRIEAT – Direction Régionale et Interdépartementale de l'Environment, de l'Aménagement et des Transports	1	Departmental Unit of Seine-Saint-Denis	Written	-	13
	Milan-Cortina 2026	14	30.06.2022	Comune di Bormio	1	Executive Board	In-person	00:21:11	11
		21	28.10.2022	Comune di Livigno	1	Sport	Video call	00:26:41	7
					1	Public Works			
C Environmental Associations	Paris 2024	6	31.03.2022	MNLE 93 – Mouvement National de Lutte pour l'Environnement	2	*Not Applicable*	In-person	02:02:34	8
	Milan-Cortina 2026	15	04.07.2022	Mountain Wilderness	1	*Not Applicable*	Video call	00:44:25	13
		16	05.07.2022	CIPRA Italia – International Commission for the Protection of the Alps	1	*Not Applicable*	Video call	00:42:04	13
D Civic Groups	Paris 2024	2	14.03.2022	Saccage 2024	1	*Not Applicable*	In-person	00:31:43	9
		5	31.03.2022	Collectif de Défense des Jardins D'Aubervilliers	1	*Not Applicable*	In-person	00:43:22	11
		11	31.08.2022	Comite de Vigilance	1	*Not Applicable*	Video call	00:41:49	8
	Milan-Cortina 2026	18	18.07.2022	Peraltrestade	1	*Not Applicable*	Video call	00:36:00	9
		19	06.09.2022	Bormini per l'Alute	1	*Not Applicable*	Video call	00:33:32	10

Appendix V

Findings on the *Research Agenda Questions*

This appendix summarises key findings from field visits and interviews conducted as part of the case study analysis. It provides insights related to the *Questions* of the *Research Agenda*, highlighting critical issues, patterns, and discrepancies identified during the study. **Table A.4** offers a detailed look at how the collected data clarifies the *Questions* and supports the overall analysis.

Table A.4 Findings of field visits and interviews on the *Research Agenda Questions*.

Question	Findings
1. Did the Aquatics Centre have a viable legacy plan justifying its construction?	There is a significant shortage of swimming facilities in Seine-Saint-Denis, which has the lowest rate of swimming pools per inhabitant in France, and where half of the children do not know how to swim. To address this, the plan for the Aquatics Centre aimed to provide a facility that would benefit the local population, offering various installations for physical activities. Additionally, Paris lacked a high-quality swimming facility for elite sports, particularly for diving, making the French Swimming Federation eager to have a national training centre capable of hosting national and European championships, with temporary seating expansions when needed. Previous Olympic bids for 2008 and 2012 had committed to building a permanent Aquatics Centre, but despite available construction funds, financing the facility's daily operations was a challenge, as neither the state nor the municipality wanted to take on this responsibility. The Olympics facilitated the financing of the centre, supported by the establishment of Métropole du Grand Paris in 2015, which agreed to fund the project. The Aquatics Centre is also expected to replicate the impact of the Stade de France, which has been widely recognised as a catalyst for urban, economic, and social development in Saint-Denis over the past decades. Furthermore, it is anticipated to inspire the practice of professional swimming. Additionally, the facility's construction was complemented by a pedestrian bridge, aimed at improving pedestrian flows in neighbourhoods divided by highways and enhancing access to public transport. These plans were clearly outlined in the candidature files. However, none of the interviewees provided specifics regarding the operational plan for the facility after the Games, suggesting a potential lack of a concrete vision for its legacy. This raises questions about how the theoretical legacy plans will be practically implemented to ensure the centre's viability post-Games.
2. Was there a viable alternative option to host the aquatic competitions in an existing or temporary venue?	An alternative option was initially confirmed during the first masterplan revision, which proposed constructing a temporary Aquatics Stadium next to the Aquatics Centre. However, having both the Aquatics Centre and the Aquatics Stadium near Stade de France would have placed excessive pressure on public transport, and combined with concerns over the OCOG budget, this led to the decision to move the competitions to La Défense Arena and abandon the temporary stadium idea. Using La Défense Arena along with the new Marville swimming pool could have eliminated the need to build the Aquatics Centre. However, this solution, or the construction of a temporary Aquatics Stadium without a permanent smaller facility, were not considered viable alternatives due to the legacy commitments outlined in the bid, which emphasised delivering a permanent Aquatics Centre in Seine-Saint-Denis.
3. Was a proper construction plan developed for the Aquatics Centre?	The cost of the permanent Aquatics Centre was significantly underestimated in the candidature files, especially when compared to benchmarks from the construction of aquatics centres for previous Games, such as London 2012 and Tokyo 2020. Subsequent external audits confirmed this underestimation, leading to a revision and downgrading of the Aquatics Centre's original concept.

4. Did constructing a new swimming pool in Marville waste existing resources and compromise the function of an existing facility for which a legacy plan was not previously developed?	The refurbishment of the Marville swimming pool was included in local development plans, alongside the renovation of several other pools under the Plan Piscines 2016-2021. However, the decision to build a new facility instead of renovating the existing one seems to have been driven by the funding allocated for the Olympic Games, as the pool was initially planned to be a competition venue. The future use of the existing facility was not directly discussed in interviews, although minor comments from interviewees suggested that this issue was not a primary concern.
5. Were some investments in certain venues not properly disclosed in the candidature process? *Alternative formulation:* 5. Did hosting the Olympic Games lead to impulsive investments with rushed planning and deliberation?	The alternative formulation of the question more accurately reflects the situation under analysis. For all the venues mentioned in both case studies, it is evident that the decision to invest in these facilities occurred after the bid and was justified by the availability of national, regional, or local funds specifically allocated due to the Olympic Games. Additionally, these investments were facilitated by streamlined construction processes associated with Olympic works, often utilising the services and privileges of delivery authorities such as SOLIDEO or Infrastrutture Milano Cortina 2026. However, there are notable differences between the case studies. In Paris 2024, the focus was on developing smaller facilities with local catchment areas that, while serving the needs of the Games, also benefited local communities by improving access to sports activities. Many of these projects had been planned for some time. In contrast, the Milan-Cortina 2026 case primarily involved world-class venues for professional sports. These facilities require periodic upgrades to maintain their international status, and the Olympics provided an ideal opportunity for such renovations. The improvements are expected to support future international competitions that these venues regularly host, simplify event logistics, and result in future cost savings. However, these investment opportunities were not clearly identified during the candidature phase, and the changes do not primarily address the needs of the local population. As a result, the interventions were perceived by residents as lacking transparency, revealing a perceived disconnect between the promised concept and the reality being delivered. This shift has raised concerns about increased environmental, social, and financial risks.
6. Did the change of location of the new Aubervilliers swimming pool disregard social and environmental sustainability?	The gardens, although technically illegal, are widely recognised as valuable from both environmental and social perspectives. The construction of the new swimming pool required the use of 18 garden lots. While 14 of the "owners" accepted the eviction terms, the remaining 4 refused and won their case in court, which forced an adaptation of the pool's design. The contested part of the project involved the construction of a solarium, intended to support the swimming pool's self-sustainability and offer additional leisure options for the community. To protect the gardens, opposition groups proposed an alternative architectural design, which was dismissed by the local government. These groups blame the Olympics for the gardens' destruction, despite interviewees in groups A and B consistently stating that the swimming pool was not required for the Games and that the project had simply leveraged the Olympic construction process, similar to other instances (as noted in *Question 5*). Public consultations were conducted for the originally proposed location (Fort d'Auber), which opposition groups considered a more suitable option that would have preserved the gardens. However, the location change was made without notice, leading interviewees in group D to criticise the lack of transparency and absence of public debate. This lack of transparency was further compounded by the fact that a new residential development was underway at the site where the pool was supposed to be built, fuelling concerns about gentrification linked to the Grand Paris Express project (see *Question 13*). Interviewees in groups A and B acknowledged communication issues and a failure to adequately inform the public, but consistently attributed responsibility to the local government (Ville d'Aubervilliers, which did not respond to interview requests for the purpose of this study).

7. Was the Media Village project compatible with long-term plans?	Aires-des-Vents, where part of the Media Village was constructed, was designated as a natural space in the regional planning document SDRIF. However, in 2015, during the candidature phase, an architectural tender was launched for a residential project around Parc Georges Valbon, even though it conflicted with the regional land use regulations for Aires-des-Vents. This project, known as "Central Park", faced opposition from environmental groups and was halted. Interviewees in group B confirmed that the Olympics were the only way to resolve this deadlock, facilitating the modification of SDRIF in 2019, which allowed the Media Village to proceed (see also *Question 8*). The Media Village project was then justified for several reasons: its convenience during the Games, the urgent need for housing in Seine-Saint-Denis, particularly in Dugny, and its role in creating urban continuity between key sites such as Gare du Bourget (RER B), Le Bourget school group, a new pedestrian bridge linking to the Media Village, and the two sectors of the Media Village (one in Aires-des-Vents and another across the street, where industrial plots were dismantled and the soil decontaminated). The project also connects to Gare Dugny-La-Corneuve, Terrain des Essences (a polluted site that was decontaminated as compensation for using Aires-des-Vents), and Parc Georges Valbon. Furthermore, there is ongoing discussion about establishing a new park in the portion of Aires-des-Vents that will not be used for residential development.
8. Did the Media Village project disregard environmental considerations?	Part of the Media Village was developed on previously unused land in Aires-des-Vents, which was part of an ecological corridor for wildlife, particularly birds. Interviewees in group B assured that the ecological characteristics were preserved, but the quality of the environmental impact study was contested by environmental associations. As compensation for using this land, the adjacent Terrain des Essences, next to Parc Georges Valbon, was decontaminated. The construction in Aires-des-Vents with the corresponding environmental compensation in Terrain des Essences were only permitted by court due to the Olympic Games. According to the French environmental legal code, such natural sites can only be used for projects of public interest when no alternative locations exist for an essential project. The court accepted the argument that the Olympic Games and the need for a Media Village at this specific location justified its necessity and public interest, even though interviewees in group A confirmed that the Media Village was not required for the Games (see *Question 9*), and interviewees in group C believed that alternative locations were available. This decision was facilitated by the “Olympic law”, which defines the Games as a matter of public interest and supports the delivery of Olympic projects, creating a conflict with the environmental legal code, as noted in the judge’s deliberations. Regarding the design of the Media Village, interviewees in groups A and B stated that the project is endorsed by NGOs and adheres to the highest environmental standards in the country.
9. Was the Media Village necessary for the Games?	Interviews with groups A and B made it clear that the Media Village was not necessary for the Games, as Paris existing hotel infrastructure would have been sufficient to accommodate media members. Interviewees in groups C and D were also aware of this and noted that the IOC had suggested not building the Media Village. However, due to its proximity to the media facilities at Le Bourget Exhibition Centre, the Media Village was seen as a way to simplify transport logistics and enhance the media experience during the Games. Organisers viewed this as a key strength of the Paris 2024 bid and crucial to securing the candidature. They argue that the commitments made during the bidding phase should be fulfilled. Interviewees in groups C and D, however, see the project as driven by political ambitions and express concerns about its potential gentrification effects (see also *Question 13*).
10. Did the reorganisation of the traffic flows in the Pleyel Interchange harm local communities and contribute to the intensification of unsustainable transport solutions?	The health and safety concerns regarding the neighbourhood near the Pleyel Interchange are straightforward: to improve the overall road network and globally reduce associated air pollution, a smaller group of residents will face less favourable health conditions. This situation represents the typical social dilemma of wicked problems, where a local community is "sacrificed" for the perceived greater good of a larger population – a solution that is clearly open to debate. Traffic flow changes aim to improve air quality, particularly in the Port de Paris neighbourhood, but will have adverse effects on the Pleyel area, disproportionately impacting children under 12. Interviewees in group B acknowledged this issue and confirm that special measures were developed to mitigate long-term health and safety risks. Opposition groups criticised the lack of transparency and public consultation and have proposed an alternative plan that prioritises a more pedestrian-friendly neighbourhood. They also express concerns about the safety of their children in both the short and long term.

11. Did the construction works in the Pleyel Interchange put local inhabitants, and specifically children, at health and safety risks?	The construction works at the Pleyel Interchange have created a temporary situation that was very unpleasant for local residents. High walls obstructed pedestrian pathways, leaving minimal space for pedestrians, and large construction sites were located near residential and school areas. This setup was considered dangerous and not meeting ideal safety standards, as heavy traffic temporarily used local, narrow streets that pass in front of schools. The temporary traffic arrangements did not adhere to proper road hierarchies. Additionally, the information provided by the contractor at the site was perceived by the community as inadequate and even offensive.
12. Could athletes' transport justify the reorganisation of Pleyel traffic flows, or could it be delivered through other more sustainable mobility solutions?	The reorganisation of Pleyel traffic flows was planned for decades and was not developed because of the Games, although the Games have served as a catalyst for its execution and benefited from it. However, the Games were used to justify the changes, particularly for security reasons related to athletes' delegations. Additionally, Paris 2024 developed innovative and more sustainable mobility solutions for various situations, which highlights the disappointment that the Games were used by local institutions to justify these particular works.
13. Did the construction of the Olympic Village, together with other projects accelerated by the Games but not directly associated with them, contribute to gentrification and, consequently, to indirect displacement?	The Olympic Village is part of Seine-Saint-Denis's long-term development plan, addressing a housing shortage in the area, which has been exacerbated by the Grand Paris Express. SOLIDEO invested approximately 200 million euros to relocate existing businesses and acquire the land. All interviewee groups agreed that gentrification in Seine-Saint-Denis, particularly in Saint-Denis, was already underway before the Games' preparations began. Interviewees in groups A and B did not view the Games as accelerating this process. Group B interviewees asserted that their goal was to retain the current population and not to drive gentrification. Interviewees in groups C and D, however, were concerned that the residential units built are aimed at middle-class residents and may be out of reach for the existing low-income population. Prices will be capped, and a portion of public housing will be provided, as mandated by French regulations. Group A viewed this as a positive aspect, noting that the Games did not influence this share. Conversely, interviewees in group D believed the Games' symbolism and power intensify gentrification. Gentrification concerns extend to other projects associated with the Games or nearby construction, including the ZAC Saulnier adjacent to the Aquatics Centre, the ZAC Pleyel near the Grand Paris Express station and Olympic Village, the residential project "Fort d'Auber" near the Aubervilliers swimming pool (see *Question 6*), and the Media Village next to Georges Valbon Park (see *Question 7*). All these projects are located near future Grand Paris Express metro stations.
14. Did International Federations adapt venue requirements in a flexible manner?	For Paris 2024, the shooting competitions were initially planned for Terrain des Essences, but the International Shooting Sport Federation required more space than was available. Consequently, the events were relocated to the National Shooting Centre in Châteauroux, with the federation's support and encouragement. The International Basketball Federation also requested that basketball events not be held in South Paris Arena 6 due to its low ceiling. Details regarding venue requirements for BMX Cycling and Boxing were not discussed in the interviews. For Milan-Cortina 2026, the International Skating Union insisted that speed skating events be held indoors and did not accept Arena Civica di Milano, or Ice Rink Pinè without a roof. Additionally, the natural sliding centre in St. Moritz could not replace the Eugenio Monti Sliding Centre due to the quality of ice required by the International Bobsleigh & Skeleton Federation. For this study, there were no attempts to interview the relevant IFs, so the reasons behind these requirements could not be fully explored. Nevertheless, interviewees in group A emphasised the challenges of aligning existing urban resources – such as venues and transport infrastructure – with the needs and expectations of local authorities, IFs, athletes, and the IOC. They also acknowledged the importance of providing optimal conditions for athletes, who are central to the event. Furthermore, they noted that Olympic Agenda 2020 is highly ambitious and that some IFs may need more time to fully adapt to it.
15. Did the process for the selection of additional sports risk compromising efforts to downsize the event?	The selection of additional sports for Paris 2024 prioritised criteria such as popularity and youth appeal, rather than the use of existing facilities. The decision on venues for these events came later, exemplified by the national competition to host surfing. Nonetheless, the chosen venue in Place de La Concorde to host some of these sports was considered cost-efficient, easy to implement, and with minimal impact.

16. Were less sustainable and more expensive solutions adopted due to political reasons?	The decisions to build a permanent venue for sport climbing in Le Bourget and to relocate some boxing and modern pentathlon events to the Villepinte Exhibition Centre in Seine-Saint-Denis were seen as political compensation for relocating other events from the department. However, interviewees in group A noted that these decisions were also influenced by factors such as transport optimisation, legacy opportunities, and technical requirements. Concerns about insufficient space at Place de La Concorde for all the urban sports initially proposed for that site also played a role in the decision for sport climbing. Interviews also suggest that the candidacy of Tahiti to host the surfing competitions was initially driven by the French government rather than the Polynesian government, though it was later supported by local authorities. The final decision to award the Surfing events to Tahiti was influenced by both sporting and political considerations.
17. Was there a viable legacy plan to support the construction of the sport climbing venue?	The project for the Le Bourget school group, where the sport climbing venue is located, was a pre-existing plan, initially intended to include a temporary pavilion for volleyball. Removing this pavilion meant losing the "Olympic funds" allocated for the school group project. As a result, the sport climbing venue was seen as an opportunity to utilise these funds and SOLIDEO's services to continue the work. This need to secure funds using the school facilities for Olympic events led to the choice of sport climbing, influenced by transportation issues due to postponed metro line expansions to Le Bourget. Sport climbing was chosen because of its lower expected spectator capacity and ticket sales, making it a more suitable alternative in comparison to volleyball. Consequently, the legacy of the climbing walls had to be integrated into the overall school group project, raising questions about its viability. Largely due to the rushed decision to build them, the legacy plan for the climbing walls is quite uncertain. Interviewees in groups A and B expressed uncertainty about the venue's legacy, acknowledging efforts were ongoing to develop a viable plan in collaboration with the French Climbing Federation. In any case, the walls became part of a broader governmental initiative to construct 5,000 new small sports facilities across the country.
18. Were the urban upgrades in Teahupo'o necessary for the surfing competitions, and did they further threaten the environment? Could Olympic surfing have been hosted using the existing resources, like the WSL?	The IOC required comprehensive assessments and monitoring of the environmental impacts and their mitigation for the surfing competitions. Efforts have been made to minimise the Games' impact on the environment, such as not having spectators at the competition site and setting up live sites in the city. Coordination with local stakeholders involved in hosting the WSL were also in place. Interviewees in group A acknowledged that the Olympics could have used the same model as the WSL, but that the Polynesian government was keen on having a legacy from the Games. Moreover, they noted that the Games often come with higher expectations, such as providing an Olympic Village for athletes' experiences, whereas WSL athletes are typically accommodated by local residents. There was a belief among the population that many athletes would not use the athletes' village and would prefer to stay with locals.
19. Was there a viable legacy plan to support the upgrades in the Teahupo'o surfing venue?	There was a discrepancy between what the local government and the local population perceived as long-term needs. The only upgrade that aligned with local desires was the extension of the fibre network. Many residents believed that the remaining upgrades – such as improvements to the marina, transportation, parking, and the refurbishment of the Puunui hotel – would be unnecessary and merely "business as usual". During the interviews, group A members did not demonstrate a clear understanding of the planned urban interventions at the venue, which may suggest that legacy plans were not within their purview. In contrast, they expressed concern about economic legacies, such as job creation, as well as intangible benefits like prestige, educational programs, and increased sports participation. Similarly, the population was uncertain about the specifics and rationale of the planned upgrades due to a lack of information about the Olympic plans in Tahiti. This uncertainty, compounded by rumours and previously leaked plans, eroded trust in the responsible authorities.
20. Were the tenders for the renovation of PalaSharp and the construction of Palaltalia biased, and did they jeopardise existing businesses?	The designation of the Games as a matter of "public interest" significantly influenced the decisions made by the courts. However, this issue was not specifically covered in the interviews. Notably, the entities directly involved (ForumNet and the City of Milan) did not respond to interview requests. Nevertheless, interviewees noted that in Italy, court appeals are a common part of project processes of this nature.
21. Was there a viable legacy plan including the business plans of all	The development and operation of the new or refurbished arenas in Milan were to be managed by private investors, which was perceived as a guarantee of their viability. While this assumption is reasonable, it also highlights concerns about the Allianz

Milan's arenas, thus mitigating risks of obsolescence triggered by market competition?	Cloud's ability to maintain its role, given its public ownership. Interviewees in group A dismiss concerns about obsolescence, arguing that the arenas are integrated into the city's long-term plans with distinct purposes. They also point out that private investors' interest in these projects reinforces their viability. However, there is a consensus that if the legacy plans do not meet expectations and any arena becomes a "white elephant", the Games are likely to be held responsible in the public eyes.
22. Could the competitions proposed for PalaSharp be hosted in the Allianz Cloud without significant losses for the event, thereby reducing the Games' risks related to funding, construction, and legacy?	This possibility was not directly addressed during interviews. Nonetheless, at one point, the Allianz Cloud was considered for hosting some Para Ice Hockey competitions. In any case, it is clear that the refurbishment of PalaSharp was prioritised, and alternative options involving the Allianz Cloud were not seriously considered.
23. Given its lengthy preparation period, demanding requirements, and strict contracts, is the Olympic Games format resilient enough to adapt to unforeseen changes and emerging stakeholders' interests?	This issue was not directly discussed during the interviews in the context of San Siro Stadium due to the lack of response from the City of Milan and limited control over the situation by the Games' organisers. Regardless, interviewees in group A acknowledged the complexity of the situation, noting that their influence is largely limited to persuasion, which they believed is effective. In other contexts, interviewees in group B highlighted that the pandemic and energy crises necessitated adaptations to plans, which sometimes met resistance from stakeholders. Interviewees in group C suggested that the role and significance of the Games may need re-evaluation in light of contemporary global contexts and priorities.
24. Did the Milan-Cortina 2026 candidature develop viable legacy plans for existing venues requiring significant upgrades?	Some interviewees acknowledged challenges in ensuring a sustainable plan for the Ice Rink Pinè, particularly due to the high costs of necessary upgrades. Despite these concerns, they point out that the IOC, by selecting Milan-Cortina 2026 as the host for the 2026 Winter Games, accepted these risks. Regarding the Eugenio Monti Sliding Centre, a viability study that revealed that the track's operation might not be self-sustainable was only conducted in 2021. Nevertheless, and although it was closed in 2008 due to a lack of funding for major maintenance, it had been operational for 52 years prior. For that reason, it was believed that the track's future economic viability was ensured, despite the fact that only a small number of people in Italy practice sliding sports professionally. Furthermore, the track is anticipated to be incorporated into an existing adventure park to provide new summer activities.
25. Is the venue classification system used by candidate cities flawed and inconsistent, potentially leading to negligent or deliberate misrepresentation of venue conditions and required upgrades?	The interviews did not directly address the usefulness or coherence of the venue classification system. However, comments from interviewees in groups C and D indicated that the system is not well understood by the public. They argue that while the candidature files describe the venues as existing and ready for the Games, organisers are still undertaking permanent works. Interviewees in group A described these works as "minor".
26. Were there feasible alternatives, such as utilising existing or temporary solutions, to avoid expensive permanent upgrades at the Ice Rink Pinè?	The only alternative seriously considered to replace Ice Rink Pinè was Arena Civica di Milano, which was rejected by the International Skating Union (see *Question 14*). The Milan Velodrome was not deemed suitable due to the inclination of the cycling track, and a temporary adaptation was not considered. The option of using temporary structures to meet the requirements for Ice Rink Pinè was also not discussed. Another potential alternative was the oval built in Turin for the 2006 Winter Olympics. This could have been viable if Turin had agreed to join Milan and Cortina d'Ampezzo in their bid for the 2026 Winter Olympics. However, Turin showed no interest in collaborating on the bid (see *Question 35*), and after Milan and Cortina were selected as hosts, including any venues from Turin was ruled out. It appears that the search for alternative solutions was not actively pursued at the time, partly due to the political interest of Baselga di Pinè in hosting the Games and receiving an upgraded facility as promised during the candidature phase.

27. As a mono-functional venue, could existing alternatives be used to avoid permanent upgrades to the Eugenio Monti Sliding Centre?	The decision to refurbish the Eugenio Monti Sliding Centre was influenced by several factors. Politically, there was a strong desire to keep all Games competitions within Italy and specifically to have an operational sliding centre in the Italian Alps. Interviewees in group A also argued that it was more logical to revitalise an existing, albeit outdated, venue in Cortina d'Ampezzo rather than moving the events abroad. Alternative options were considered unviable: the St. Moritz sliding centre did not meet Olympic standards (see *Question 14*), using the Innsbruck sliding centre involved additional financial burdens that compromised cost-benefit considerations, and the Cesana sliding centre, built for Turin 2006, is closed and would require permanent upgrades. There is also confidence in the potential economic benefits of the refurbished venue. Lastly, maintaining or dismantling the abandoned track in Cortina would also be costly.
28. Was an accurate plan for the upgrades of the existing venues properly developed?	The cost overruns for upgrades at Ice Rink Pinè, Eugenio Monti Sliding Centre, and PalaSharp are largely attributed to the energy crisis caused by the war in Ukraine. Additionally, interviewees in groups C and D suggested that delays also played a role. Furthermore, some cost overruns resulted from changes in the plans: for instance, the difference between the originally proposed upgrades for Ice Rink Pinè and the last plans, and the decision to reconstruct the Eugenio Monti Sliding Centre rather than merely refurbish it, which included changes in the layout of the field of play and the need for additional support facilities.
29. Do host cities exploit the exceptional conditions granted by the Olympic Games, such as the "Olympic law", to undertake unnecessary projects that increase the event's economic, social, and environmental risks?	The list of works by Infrastrutture Milano-Cortina 2026 includes many projects not mentioned in the candidature dossier, many of which have minimal relevance to hosting the Games, particularly in terms of transport infrastructure development. Interviewees in groups C and D identified additional projects that local governors and stakeholders planned to include under the guise of the Games, utilising the special conditions of Olympic constructions (refer to *Question 5*). These "additional" projects faced significant opposition due to their environmental impact and promotion of unsustainable tourism in sensitive mountain areas, such as large-scale transport infrastructure (roads and ski lifts). Interviewees in groups C and D noted that the urgency to complete these projects before the Games often leads to rushed or skipped public consultations and environmental impact assessments. Conversely, interviewees in group B observed that the Games effectively accelerate projects through enhanced collaboration among stakeholders, which streamlines decision-making, funding, and coordination.
30. Did the plans for the construction of the Bormio bypass adhere to environmental regulations, respecting biodiversity and aligning with the local community's interests?	Although the Bormio bypass project has been in planning for decades, the Olympics were viewed as the ideal opportunity to finally implement it. However, many locals believe the project is primarily for political show and to access additional funds, lacking practical value. The environmental impact is significant due to the road's proximity to the river and natural ecosystems. Interviewees in groups C and D argue that the road will not effectively address the traffic problem and that the environmental cost outweighs the minimal benefits. They suggested that improving public transport would be a better solution and note that much of the population, which values the agricultural land, is unwilling to sacrifice it for tourism-related reasons. Efforts to hold a referendum were underway but that was challenging, particularly in the context of the Olympics. Groups C and D also criticise the lack of transparency and public discussion throughout the process.
31. Did the construction plans for the Bormio bypass promote unsustainable mobility, and could it be justified by Games' needs?	The limited knowledge among most interviewees in group A about the Bormio bypass project indicates that it is not directly associated with the Olympic Games. Interviewees in groups C and D argue that while the road may benefit the Olympics, its construction was not a requirement from the organisers. They believe it is primarily driven by political leaders aiming to enhance tourism. Specifically, they link the road's construction to broader plans for connecting Bormio with Santa Caterina di Valfurva via ski lifts, which could involve future expansions of parking lots and tourist areas, potentially affecting the natural landscape and the Parco Nazionale dello Stelvio.
32. Were the candidature plans detailed enough to ensure the viability of the proposals?	This *Question* was not specifically addressed during the interviews concerning the venues for Mottolino and the Olympic Village in Cortina. However, it is likely that the lack of detailed planning contributed to the failure to identify the hydrogeological risk at the Cortina Olympic Village site, a risk that was previously identified by the associations to which interviewees in group C belong. This concern is also reflected in the findings related to *Questions 3*, *28*, and *34*, which address the accuracy of the construction plans for the Aquatics Centre, Ice Rink Pinè, and Eugenio Monti Sliding Centre, as well as the failure to identify accessibility issues at Arena di Verona. Additionally, other issues include the insufficient space for the temporary Shooting Centre at Terrain des

	Essences and the environmental impact of the initially proposed Olympic Village in Livigno, which led to the relocation of athlete accommodation from Aquagranda to Teola.
33. Did the choice of relocating Mottolino's facilities decrease the opportunity to leverage local experience, thereby increasing environmental impacts?	The difference between the usual winter location for Mottolino's facilities and their installation site for the Olympics is due to the need for a larger area to accommodate Olympic requirements, increased spectator capacity, and more efficient transport operations, as the mountain top is difficult to access for buses and trucks. Interviewees expressed concerns about preserving green areas and assured that the site would be restored to its original state after the Games. However, this assurance does not align with the plans revealed by Infrastrutture Milano Cortina 2026.
34. Did the option to use Arena di Verona for ceremonies increase the risks of compromising the conservation status of the cultural protected building and World Heritage Site?	Interviewees in group A noted that the candidature plans lacked sufficient detail to address the arena's accessibility issues (see also *Question 32*). They acknowledged that modifying a historic building is a sensitive matter. The responsibility for this issue was assigned to the municipality of Verona, which committed to developing plans to enhance the facility's accessibility. The choice of the arena was driven by a desire for "spectacularism", with organisers aiming to deliver a unique and memorable experience, despite being aware of the increased challenges associated with this decision.
35. Was the concept of Milan-Cortina 2026 an overcomplication, and was it really designed for reasons of legacy, sustainability, and cost-efficiency?	Three Italian cities expressed interest in hosting the 2026 Winter Olympics: Milan (with snow sports in Valtellina), Cortina d'Ampezzo (with some venues in neighbouring cities like Tesero and Predazzo), and Turin (which proposed using venues from the 2006 Winter Olympics). Although each city developed a feasibility study, the Italian Olympic Committee encouraged a joint bid. Turin, having hosted the Olympics in 2006, preferred to bid independently and did not agree to a joint proposal. Consequently, Milan-Cortina 2026 emerged as the candidate. This indicates that the concept and the spatial distribution of venues for Milan-Cortina 2026 were driven more by the desire of the cities to host the Games than by a goal of maximising the use of existing facilities. The concept was based more on political compromise than on resource optimisation. Political interests also led to less optimal solutions, such as splitting alpine ski competitions between Lombardy and Veneto. However, the concept was not entirely politically motivated. Once the joint bid was decided, efforts were made to balance the use of available, high-quality resources with the interests of the host cities and regions, which are also financiers of the Games. Interviewees in group A confirm that this approach complicates the organisation of the Games in terms of governance and transportation.