



Toward Sustainable and Inclusive MICE Events: A Systematic Review of Green Practices and Participation Challenges for Persons with Disabilities

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DOI: <https://doi.org/10.47772/IJRISS.2026.100700037>

Received: 06 July 2026; Accepted: 11 July 2026; Published: 23 July 2026

ABSTRACT

The Meetings, Incentives, Conferences, and Exhibitions (MICE) industry drives significant economic growth but generates considerable environmental impact through energy consumption, waste, and travel-related emissions. Simultaneously, people with disabilities (PWDs), representing approximately 16% of the global population, continue to face physical, informational, and attitudinal barriers that limit their participation in MICE events. A growing body of literature has examined green event practices and PWD accessibility challenges separately, yet these two dimensions have rarely been studied together. This gap is problematic because environmental sustainability and social inclusion are interdependent pillars of the triple bottom line and addressing one without the other results in an incomplete approach to responsible event management. This study bridges this gap through a systematic literature review (SLR) using PRISMA guidelines. Articles were retrieved from Scopus, Web of Science, and Google Scholar, covering publications from 2000 to 2025, with emphasis on 2010–2025. Two seminal pre-2010 works were included for historical context. A qualitative thematic analysis synthesized findings across two streams: green practices adopted by MICE organizers and participation barriers encountered by PWDs. The review further examines how these streams converge, identifying synergies such as hybrid formats that reduce carbon footprints while enhancing accessibility and tensions, such as eliminating printed materials that may disadvantage attendees with certain disabilities. Findings reveal that green MICE research has focused predominantly on environmental concerns while overlooking disability inclusion, whereas PWD participation studies have centered on barrier identification without connecting to broader sustainability frameworks. The review identifies a critical need for an integrated approach that positions accessibility as an essential component of sustainable MICE planning. This study contributes by proposing a conceptual framework aligning green practices with universal design principles to guide event organizers, policymakers, and stakeholders toward MICE events that are both environmentally responsible and genuinely inclusive.

Keywords: MICE events, green practices, sustainability, persons with disabilities, accessibility, inclusion, systematic literature review, universal design.

INTRODUCTION

The Meetings, Incentives, Conferences, and Exhibitions (MICE) industry is widely recognized as a significant contributor to economic growth and international cooperation. Rodríguez-Zulaica and Ara (2018) emphasized that business tourism plays a key role in the future growth of businesses, cities, and destinations, and serves as



a critical driver of economic growth and GDP. The World Tourism Organization has similarly acknowledged that developments in the meetings industry can be an essential driver of a nation's economy. As countries compete to position themselves as leading MICE destinations, the scale and frequency of business events continue to expand globally.

However, this growth comes with consequences that extend across the triple bottom line. From an environmental standpoint, Koh (2026) identified that the most carbon-intensive components of the MICE supply chain are food and beverage, accommodation, and stand design and production, all of which generate significant greenhouse gas emissions. Day (2018) further noted that while the MICE sector has been a leader in adopting sustainability practices, substantial challenges remain in operationalizing sustainability in a way that supports ongoing performance management. Trisnayoni, Astawa, and Sutama (2022) found that the high cost of meeting green requirements, combined with clients who are not environmentally conscious, discourages many MICE organizers from implementing sustainability practices consistently. These findings point to a pressing need for the industry to embed green practices more systematically across all stages of event planning and execution.

Equally critical, yet often overlooked, is the social dimension of sustainability particularly the inclusion of people with disabilities (PWDs). Hayden, McIntosh, and Gillovic (2024) noted that an estimated 1.3 billion people, or 16% of the global population, live with disability, and the United Nations Convention on the Rights of Persons with Disabilities asserts that PWDs should be able to access and enjoy tourism and event experiences as a fundamental human right. Despite this, Šimkienė et al. (2025) found through a survey of 250 respondents that PWDs rate their opportunities to participate in public events as merely average, with participation limited by physical, organizational, and social barriers. Variakojienė and Gasperavičiūtė (2025) similarly reported that while perceptions of event accessibility have improved over recent years, significant challenges persist, including physical, financial, and informational barriers that hinder full participation of individuals with disabilities.

Within the MICE context specifically, these barriers are well documented. Doshi, Furlan, Lopes, Delisa, and Battistella (2014) highlighted persistent accessibility problems at conferences and convention centres for people with visual, hearing, and mobility impairments, and developed a checklist covering event planning, venue accessibility, staff training, and communication needs. Irish (2020) argued that while conference accessibility often focuses on people with mobility limitations, access for those with other disabilities such as vision or hearing loss, or mental ill-health, tends to be overlooked a significant oversight given that approximately 19% of the population experience a disability. Dashper and Finkel (2020) found through interviews with 13 MICE industry stakeholders in the United Kingdom that although the sector is paying increasing attention to accessibility, there remains persistent inequality and marginalization on the grounds of disability.

Despite this growing body of work on both green event management and PWD accessibility, these two research streams have developed largely in isolation from one another. Darcy and Dickson (2025) conducted a curated review of the *Event Management* journal spanning 2000 to 2024 and found that only eight articles representing just 0.82% of all publications addressed disability and accessibility. Their proposed research agenda called for event sustainability to be examined across social, economic, and environmental perspectives, yet the environmental dimension of disability inclusion remains virtually unexplored. Brescia-Zapata (2023) observed that sustainable events often overlook the topic of accessibility and proposed integrating universal accessibility guidelines into the ISO 20121 sustainability management standard as a first step toward bridging this divide.

Importantly, the relationship between green practices and disability inclusion is not merely additive, it involves both synergies and tensions. McIntyre and Spittle (2024) demonstrated that hybrid conference formats can reduce greenhouse gas emissions by up to 97% while simultaneously increasing attendance and accessibility, particularly for participants from low- and middle-income countries and those with disabilities. Tkatch and Tavares (2025) further argued that the tourism and hospitality industries must shift focus from mere compliance to creating genuinely inclusive experiences, using universal design principles as an equitable framework. Yet certain green practices such as eliminating printed materials or reducing physical infrastructure may inadvertently create new barriers for attendees with specific disabilities, highlighting the need for a more nuanced, integrated approach.



Given these gaps, a systematic examination of how green MICE practices and PWD participation challenges intersect, complement, or conflict with one another is both timely and necessary. Stumbo and Pegg (2005) argued that tourism businesses need to create strategies that remove attitudinal, social, and physical barriers that currently reduce opportunities for people with disabilities, and that doing so also enhances market share. This logic extends naturally to the MICE sector, where sustainability and inclusivity should be understood not as competing priorities but as interdependent pillars of responsible event management. Thus, this study aims to systematically review the published literature on green practices and participation challenges faced by PWDs in MICE events, with the goal of identifying how these two dimensions can be integrated to support truly sustainable and inclusive event planning.

LITERATURE REVIEW

Green Practices in Event Management

The concept of green event management has gained increasing scholarly attention as the environmental footprint of large-scale gatherings becomes more apparent. Koh (2026) identified that the most carbon-intensive components of the MICE supply chain are food and beverage, accommodation, and stand design and production, all of which generate significant greenhouse gas emissions that are within the influence of industry stakeholders to reduce. Green practices in event management encompass waste reduction, energy efficiency, sustainable procurement, water conservation, pollution reduction, and the minimization of carbon emissions throughout the event lifecycle. Scholars in the event area have ultimately agreed that green event practice is an ethical approach to safeguarding the environment.

Despite growing awareness, the adoption of green practices in the MICE industry remains inconsistent. Trisnayoni, Astawa, and Utama (2022) explored sustainable event practices among MICE organizers in Bali, Indonesia, and found that the high cost of meeting green requirements, combined with clients who are not environmentally conscious, discourages consistent implementation of sustainability practices across the pre-event, event, and post-event stages. Day (2018) further argued that while the MICE sector has been a leader in adopting sustainability practices, operationalizing sustainability in a manner that supports ongoing performance management remains a significant challenge. Schulenkorf and Edwards (2013) raised the additional concern of greenwashing in the MICE sector, questioning whether sustainability efforts reflect genuine commitment or mere performative compliance. Collectively, these studies indicate that while the knowledge base on green event practices is expanding, a gap remains between awareness and consistent implementation.

Participation Challenges for Persons with Disabilities in MICE Events

Persons with disabilities (PWDs) represent a substantial proportion of the global population yet continue to face persistent barriers to participating in events. Hayden, McIntosh, and Gillovic (2024) noted that an estimated 1.3 billion people, or 16% of the global population, live with disability, and the United Nations Convention on the Rights of Persons with Disabilities asserts their right to access and enjoy tourism and event experiences. Despite this, participation remains constrained.

The barriers facing PWDs in event settings are typically classified into three categories: physical or structural barriers, informational or communication barriers, and attitudinal or social barriers. Gassiot Melian (2025) traced this classification to foundational constraint theory in leisure studies, which categorized barriers as intrapersonal, interpersonal, and structural inhibitors of participation. Šimkienė et al. (2025) surveyed 250 respondents and found that PWDs rate their opportunities to participate in public events as merely average, with participation limited by physical, organizational, and social barriers. Variakojienė and Gasperavičiūtė (2025) reported similar findings in Lithuania, noting that despite improvements in perceived accessibility over recent years, significant physical, financial, and informational barriers persist, highlighting the need for a holistic, multi-dimensional approach.

Within the MICE context specifically, these challenges are well documented. Irish (2020) argued that conference accessibility often focuses on people with mobility limitations while overlooking access for those with vision or hearing loss, or mental ill-health a significant oversight given that approximately 19% of the population



experience a disability. Doshi et al. (2014) developed a comprehensive checklist covering event planning, venue accessibility, staff training, invitations and registration, and communication needs for conferences and convention centers. Rodríguez-Zulaica and Ara (2018) examined the accessibility of MICE venues, noting that while conference centers are often architecturally innovative, they must also be accessible to be enjoyed by all citizens and tourists. Dashper and Finkel (2020) found through stakeholder interviews in the UK MICE sector that despite growing attention to accessibility, there remains persistent inequality and marginalization on the grounds of disability. Darcy and Harris (2003) provided an early foundational perspective, reviewing discriminatory practices by event and venue managers through complaint cases under Australia's Disability Discrimination Act, and presenting the Sydney 2000 Olympic and Paralympic Games as a best-practice case study for incorporating disability and access issues into event operations.

Stumbo and Pegg (2005) further emphasized that many tourism-driven agencies unknowingly create organizational and institutional barriers through narrow and outdated policies, practices, and regulations that tend to exclude people with disabilities. McPherson, Oluwaseyi, McGillivray, and Misener (2020) argued that adopting a disability studies perspective provides event organizers with the opportunity to rethink the physical, social, and cultural context within which their events take place, emphasizing the importance of design in addressing structural inequalities.

The Intersection: Bridging Green Practices and Disability Inclusion

Despite the growing bodies of literature on green event management and PWD accessibility, these two research streams have developed largely in isolation. Darcy and Dickson (2025) conducted a curated review of the *Event Management* journal spanning 2000 to 2024 and found that only eight articles representing just 0.82% of all publications addressed disability and accessibility, with only two of those engaging directly with people with disability in the research. Their proposed research agenda called for event sustainability to be examined across social, economic, and environmental perspectives, yet the environmental dimension of disability inclusion remains virtually unexplored in the literature.

Brescia-Zapata (2023) represents one of the few studies that explicitly bridges these two streams. Through co-creation workshops and the organization of the Green Digital Accessibility conference in Barcelona, Brescia-Zapata observed that sustainable events often overlook the topic of accessibility and proposed integrating universal accessibility guidelines into the ISO 20121 sustainability management standard. This work signals a nascent but important recognition that environmental sustainability and social inclusion must be pursued in tandem.

The potential for synergy between green practices and disability inclusion is illustrated by the growing adoption of hybrid event formats. McIntyre and Spittle (2024) demonstrated that virtual conferences can reduce greenhouse gas emissions by up to 97% while simultaneously increasing attendance and accessibility, particularly for participants from low- and middle-income countries and those with disabilities. Even at 25% virtual attendance, hybrid events can reduce emissions by 13% before any other sustainability measures are undertaken. Tkatch and Tavares (2025) further argued that the tourism and hospitality industries must shift their focus from mere regulatory compliance to creating genuinely inclusive experiences, using universal design principles as an equitable framework that benefits all attendees.

However, the relationship between green practices and accessibility is not always complementary. Certain environmentally motivated decisions such as eliminating printed programs, reducing physical signage, or limiting individual transport options may inadvertently create new barriers for attendees with specific disabilities who rely on tactile or physical formats. Ambrose (2022) noted that people of all ages and abilities experience barriers to participation throughout the visitor journey, largely because products, services, and the built environment are not designed to be accessible to the widest range of users. Guleria and Malhotra (2024) positioned PWDs not merely as beneficiaries of sustainable development but as essential agents of change, arguing that PwD perspectives can drive innovations toward an inclusion-oriented and green society. Ubaydullayeva (2025) similarly argued that the integration of inclusivity principles into MICE tourism including barrier-free infrastructure, accessible conference facilities, and sign language interpretation not only



broadens participation and strengthens social cohesion but also increases the competitiveness of tourism markets at the international level.

Taken together, the literature reveals a clear pattern while both green event practices and PWD participation challenges have received increasing scholarly attention individually, very few studies have examined how these two dimensions interact within the MICE context. This gap represents both a theoretical and practical shortcoming, as truly sustainable event management requires an integrated approach that addresses environmental responsibility and social inclusion as mutually reinforcing rather than competing priorities. Therefore, a comprehensive understanding of how green practices and disability inclusion converge, complement, or conflict with each other in MICE events is urgently needed.

METHODOLOGY

This study explores the intersection of green event practices and participation challenges faced by people with disabilities (PWDs) in MICE events by focusing on published literature worldwide. To achieve this, the study conducted a systematic literature review (SLR) using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The systematic review method provides a structured and transparent approach to identifying, selecting, and critically appraising relevant data from existing studies. The use of PRISMA enables the evaluation and examination of the quality of past studies, assists in defining precise research questions, and provides a replicable procedure for identifying inclusion and exclusion criteria. Moreover, PRISMA allows for the examination of an extensive database of scientific literature within a defined timeframe and offers a systematic procedure for thorough review and reporting.

To optimize transparency and quality assurance, this study utilized three databases which is Scopus, Web of Science, and Google Scholar. Scopus is one of the most extensive abstract and citation databases, covering multidisciplinary subject areas including the social sciences. Web of Science complements Scopus by providing access to high-impact, peer-reviewed journals across the sciences, social sciences, and humanities. Google Scholar was included to capture grey literature and additional publications that may not be indexed in the other two databases. The combined use of these three databases ensures broader coverage of the relevant literature across both green event management and disability inclusion in events. This study specifies several inclusion and exclusion criteria while screening the relevant articles from these databases. The criteria are classified into four aspects: literature type, publication timeline, language, and the nature of the study. Table 1 presents the details of these criteria.

Table 1. The Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Literature type	Journal articles (research articles and review articles)	Book series, chapters in books, poster presentations, conference abstracts
Publication timeline	2010–2025 (with exceptions for seminal pre-2010 works)	2009 and before (except foundational/seminal works)
Language	English	Non-English
Nature of the study	Focuses on green/sustainable practices in MICE or event management, AND/OR focuses on participation barriers, accessibility, or inclusion of persons with disabilities in MICE or event settings	Does not focus on green event practices or disability participation challenges in event contexts

Source: Self-developed by this study



While the primary search focused on 2010–2025, two seminal pre-2010 publications Darcy and Harris (2003) and Stumbo and Pegg (2005) were included due to their foundational status in event accessibility research

As illustrated in Figure 1, this study conducted four phases of systematic review. The first phase involves identification, whereby the keywords and search strings used (as listed in Table 2) were applied across the three databases. This study relies on previous literature and thesaurus tools in identifying the keywords related to green event practices and disability participation in MICE events. Given the dual focus of this review, two sets of search strings were developed: one targeting green and sustainable event practices, and a second targeting accessibility and participation challenges for PWDs in event and MICE contexts. The results from both search strings were combined to form the initial pool of literature.

The second phase involves screening. At this stage, the study screened and removed duplicate records across databases, as well as literature published before 2010, non-English publications, and publications in the form of book series, chapters in books, and poster presentations.

The third phase is eligibility, whereby the study accesses the remaining literature in full text. Articles were excluded if they did not substantively address either green event practices or PWD participation challenges within event or MICE settings. Articles that addressed only general tourism sustainability or general disability without a clear connection to event management were also excluded at this stage.

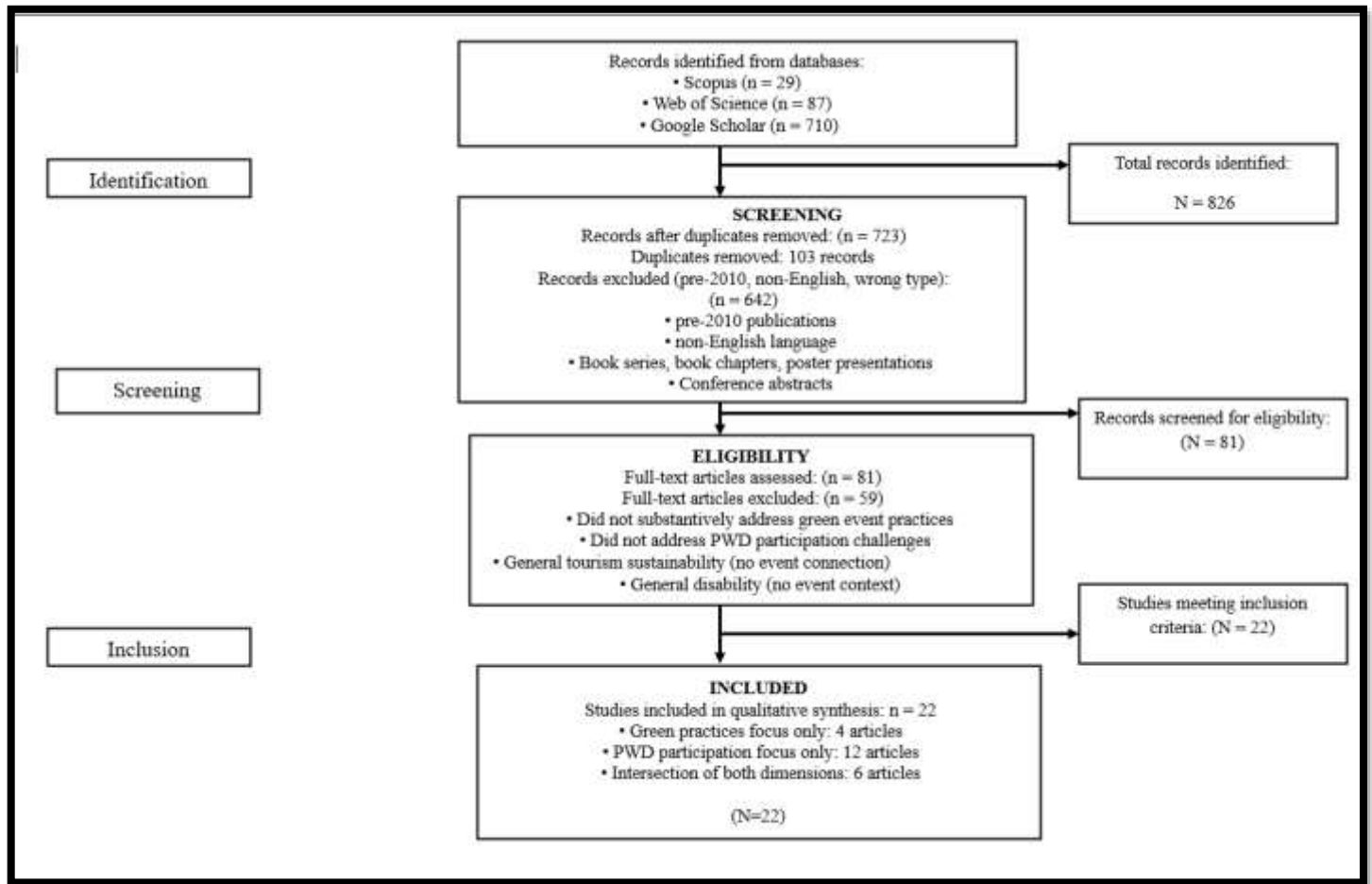
The fourth and final phase involves inclusion, whereby the eligible articles were retained for qualitative thematic analysis. A qualitative approach was applied to uncover the focused issues related to the two streams under study: the adaptation of green event practices in MICE, and the participation barriers encountered by PWDs. The included articles were further coded according to thematic categories aligned with the research questions, including: (a) types of green practices implemented or proposed, (b) types of barriers faced by PWDs, (c) synergies between green practices and disability inclusion, and (d) tensions or conflicts between the two dimensions.

Table 2. The Search Strings Used for the Systematic Review Process

Database	Keywords used
Scopus & Web of Science (Search String 1 — Green Practices)	TITLE-ABS-KEY (("green event" OR "sustainable event" OR "environmentally friendly event" OR "eco-friendly event" OR "event greening" OR "green MICE" OR "sustainable MICE" OR "green convention" OR "sustainable conference" OR "zero waste event" OR "zero-carbon event" OR "responsible event") AND ("event organizer" OR "event host" OR "event planner" OR "event manager" OR "MICE" OR "convention" OR "conference" OR "exhibition"))
Scopus & Web of Science (Search String 2 — PWD Participation)	TITLE-ABS-KEY (("disability" OR "persons with disabilities" OR "disabled" OR "accessibility" OR "inclusive event" OR "barrier-free" OR "universal design") AND ("event" OR "conference" OR "convention" OR "exhibition" OR "MICE" OR "meetings industry"))
Google Scholar (Search String 1 — Green Practices)	allintitle: ("green event" OR "sustainable event" OR "eco-friendly event" OR "event greening" OR "green MICE" OR "sustainable conference") AND ("event organizer" OR "event planner" OR "MICE")
Google Scholar (Search String 2 — PWD Participation)	allintitle: ("disability" OR "accessibility" OR "inclusive" OR "persons with disabilities" OR "barrier-free") AND ("event" OR "conference" OR "convention" OR "MICE" OR "exhibition")

Source: Self-developed by this study

Figure 1. PRISMA Flow Diagram for Systematic Review Process



Quality Appraisal and Thematic Analysis Procedures

To ensure the methodological rigor of this systematic review, all 22 selected articles underwent a formal quality appraisal process. Given the inclusion of qualitative, quantitative, and mixed-method studies, the Mixed Methods Appraisal Tool (MMAT) was utilized. Each paper was independently evaluated by two reviewers across core criteria assessing data relevance, methodological clarity, and the risk of bias. Discrepancies in scoring were resolved through collaborative discussion until a consensus was reached, ensuring that all synthesized literature met high academic standards.

Following quality appraisal, the qualitative data were synthesized using Braun and Clarke's (2006) six-phase thematic analysis framework. The process began with *data familiarization* through iterative readings of the selected texts, followed by *generating initial codes* across the entire dataset. These codes were collated into broader, preliminary themes mapping out green practices, PWD participation barriers, synergies, and structural tensions. The next phases involved *reviewing and refining* these themes against the extracted data to ensure external heterogeneity and internal homogeneity, culminating in the *definition and naming* of the final six major overarching themes presented in this study.

RESULTS

The systematic review process yielded a final set of eligible articles that were analyzed qualitatively. The reviewed articles confirmed a dual focus consistent with the research objectives: green and sustainable practices in MICE event management, and participation challenges faced by people with disabilities (PWDs) in attending MICE events. The findings from the reviewed literature can be classified into six main themes: (1) green event definitions and concepts, (2) green event principles, (3) barriers to implementing green practices, (4) benefits of green event practices, (5) participation barriers for PWDs in MICE events, and (6) the intersection of green practices and disability inclusion. Table 3 presents the distribution of themes across the reviewed articles.



No.	Authors (Year)	Theme 1: Green Event Definitions & Concepts	Theme 2: Green Event Principles	Theme 3: Barriers to Implementing Green Practices	Theme 4: Benefits of Green Event Practices	Theme 5: Participation Barriers for PWDs	Theme 6: Intersection of Green Practices & Disability Inclusion
1	Koh (2026)	✓	✓	✓			
2	Day (2018)	✓		✓			
3	Trisnayoni, Astawa & Sutama (2022)	✓	✓	✓			
4	Schulenkorf & Edwards (2013)	✓		✓			
5	Irish (2020)		✓			✓	
6	Doshi et al. (2014)		✓			✓	
7	Rodríguez-Zulaica & Ara (2018)		✓			✓	
8	Dashper & Finkel (2020)			✓		✓	
9	Darcy & Harris (2003)					✓	
10	Stumbo & Pegg (2005)				✓	✓	
11	McPherson, Oluwaseyi, McGillivray & Misener (2020)					✓	
12	Šimkienė et al. (2025)					✓	
13	Variakojienė & Gasperavičiūtė (2025)					✓	
14	Hayden, McIntosh & Gillovic (2024)					✓	
15	Ambrose (2022)					✓	
16	Gassiot Melian (2025)					✓	



17	Darcy & Dickson (2025)					✓	✓
18	Brescia-Zapata (2023)		✓				✓
19	McIntyre & Spittle (2024)		✓		✓		✓
20	Tkatch & Tavares (2025)		✓			✓	✓
21	Guleria & Malhotra (2024)				✓	✓	✓
22	Ubaydullayeva (2025)				✓	✓	✓
	Total articles per theme	4	8	5	4	16	6

Source: Self-developed by this study

Summary of the Distribution of Themes in the Literature

The pie chart illustrates the distribution of themes identified from the reviewed literature on green events and disability inclusion. Overall, six major themes were identified, with varying frequencies across the selected studies.

The most dominant theme is Theme 5: Participation Barriers for Persons with Disabilities (PWDs), which accounts for 37.2% of the total articles. This indicates that a significant portion of the literature focuses on challenges faced by PWDs in participating in events, highlighting the importance of accessibility and inclusion issues in current research.

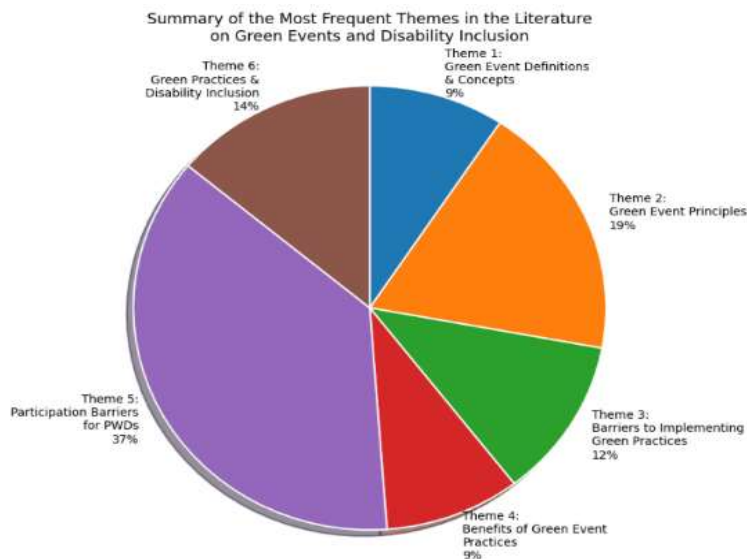
The second most frequently discussed theme is Theme 2: Green Event Principles, contributing 18.6% of the studies. This suggests that many researchers emphasize the foundational principles guiding environmentally sustainable event practices.

Next, Theme 6: Intersection of Green Practices and Disability Inclusion represents 14.0% of the literature. This reflects a growing interest in integrating sustainability with inclusivity, although it is still less explored compared to participation barriers.

Meanwhile, Theme 3: Barriers to Implementing Green Practices accounts for 11.6%, indicating that some studies focus on challenges faced by event organizers in adopting green practices.

The least represented themes are Theme 1: Green Event Definitions and Concepts and Theme 4: Benefits of Green Event Practices, each contributing 9.3%. This suggests that while definitions and benefits are acknowledged, they are less emphasized compared to practical challenges and inclusion issues.

In conclusion, the findings indicate that the literature is heavily skewed towards understanding barriers, particularly for PWDs, while conceptual and benefit-related discussions receive comparatively less attention. This highlights a potential gap for future research to further explore the benefits and conceptual frameworks of green and inclusive events.



Theme 1: Green Event Definitions and Concepts

The term green event has been explained differently by scholars worldwide. Broadly, a green event is understood as an event that is designed, organized, and implemented in ways that minimize the negative environmental impact and leave a positive legacy for the host community. Koh (2026) framed MICE sustainability around the identification of the most carbon-intensive components of the supply chain food and beverage, accommodation, and stand design and production and argued that emissions reduction in these areas represents the most actionable opportunity for industry stakeholders. Day (2018) described the MICE sector as a complex, adaptive system and emphasized the challenges of operationalizing sustainability in a way that supports ongoing performance management.

The review confirmed that there is no unified definition of green events among practitioners, even though there is similarity in terms of the principles applied. Terms such as sustainable event, eco-friendly events, low-carbon event, zero-waste event, and responsible event are used interchangeably across the literature, increasing confusion among event organizers and hindering the standardization of green practices.

Theme 2: Green Event Principles

The literature identifies several core green event principles that serve as a standard approach to guiding event organizers toward more sustainable practices. Based on the reviewed articles, six green event principles are consistently discussed:

Principle 1: Transport Management

MICE events involve significant movement of goods, services, and people to and from the event venue, resulting in substantial carbon emissions. Strategies include selecting venues near target participants, encouraging carpooling and public transport, and sourcing materials from local suppliers to shorten supply chains.

Principle 2: Waste Management (3R: Recycle, Reuse, Reduce)

The nature of events that gather large numbers of people at a specific location result in excessive use of materials such as plastic, printed brochures, and food packaging. Providing water refill stations, shifting to digital information distribution, and implementing composting programs are among the recommended practices.

Principle 3: Water Management

This involves selecting venues that implement water conservation measures and use water-efficient appliances, as well as reducing wastewater emissions and implementing water reuse projects.

***Principle 4: Energy Saving***

Events typically require significant lighting, climate control, and audio-visual equipment. Promoting energy-saving equipment, renewable energy sources, and energy-efficient venue design are key strategies.

Principle 5: Eco-Procurement

This principle involves purchasing raw materials and event equipment from local and environmentally responsible suppliers to reduce carbon emissions associated with transportation and to support sustainable supply chains.

Principle 6: Green Marketing and Promotion

Green events are encouraged to use digital and technological tools to disseminate information, replacing traditional printed brochures and pamphlets with paperless approaches to reduce paper waste.

Trisnayoni, Astawa, and Sutama (2022) confirmed that planning for environmentally friendly events requires consistent implementation of sustainability practices across the pre-event, event, and post-event stages. However, they also noted that the high cost of meeting green requirements discourages many MICE organizers from full implementation.

Theme 3: Barriers to Implementing Green Practices

The reviewed literature highlighted several barriers to implementing green practices in MICE events. These barriers can be classified into internal and external categories:

Category	Barrier	Explanation
Internal	Absence of formal green policy	Without formal organizational policy, the reinforcement of green implementation is hindered. A policy stipulates the rules and guidelines required to form a green culture within an organization.
	Limited green knowledge among staff	Insufficient understanding of green principles among event managers and inter-departmental staff leads to failure or misconduct in implementation.
	Lack of management support and green culture	Resistance to change and preference for traditional event management approaches, combined with a negative attitude toward green practices, discourages staff participation.
	Lack of internal resources	Time and financial constraints limit green implementation. Purchasing or renting green equipment is often more expensive than conventional alternatives, and smaller organizations lack budgets for green training.



External	Venues lacking environmentally friendly facilities	Some event venues, particularly older or historic buildings, do not have appropriate green infrastructure such as energy-efficient lighting or climate control systems.
	Limited green knowledge among external stakeholders	Outside catering companies, audio-visual suppliers, and other vendors often have limited environmental knowledge.
	Insufficient government enforcement	Without compulsory green regulations from local authorities, cooperation among stakeholders remains low.
	Absence of green policy at the local level	The commitment to going green is strongly influenced by the presence or absence of a green policy framework in the host city or country.

Schulenkorf and Edwards (2013) raised the additional concern of greenwashing in the MICE sector, questioning whether some sustainability efforts reflect genuine commitment or mere performative compliance.

Theme 4: Benefits of Green Event Practices

The reviewed articles also identified several categories of benefits arising from the adoption of green event practices:

Category	Benefit	Explanation
Organisational	Positive market reputation	Green events validate an organization's commitment to sustainability, creating a progressive image and serving as a benchmark for other industry players.
	Sustained business practice	The combination of positive reputation and financial gains supports long-term business sustainability.
	Financial benefits	Resource conservation and waste management policies reduce costs and increase return on investment through recycling, reusing, and reducing materials.
Environmental	Minimized negative environmental impact	Green practices reduce energy consumption, minimize waste disposal, and conserve water.
	Environmental innovation opportunities	Sustainable event management promotes investment in energy-efficient equipment, renewable energy, and resource-efficient local infrastructure.



Employee	Improved skills and knowledge	Green event implementation requires training staff, workers, and volunteers, thereby increasing their sustainability-related competencies.
Community	Job creation and public sensitization	Green events create employment opportunities and educate communities about environmental responsibility through participatory practices such as carpooling and recycling.
Industry	Industry-wide transformation	Integrating sustainable practices into event operations paves the way for green event standards and certifications such as ISO 20121, stimulating broader systemic change across the events industry.

Theme 5: Participation Barriers for Persons with Disabilities in MICE Events

The second major stream of findings relates to the participation challenges faced by PWDs when attending MICE events. The barriers identified in the reviewed literature can be organized into three categories: physical and structural barriers, informational and communication barriers, and attitude and social barriers.

Physical and structural barriers include inaccessible venue design, lack of ramps and elevators, inadequate restroom facilities, limited accessible seating, and insufficient accessible transport options. Rodríguez-Zulaica and Ara (2018) noted that while MICE conference centers are often architecturally innovative, they must also be accessible to be enjoyed by all citizens and tourists. Doshi et al. (2014) developed a comprehensive accessibility checklist covering event planning, venue accessibility, staff training, invitations and registration, and communication needs.

Informational and communication barriers include the lack of sign language interpretation, absence of materials in accessible formats (e.g., Braille, large print, audio), inaccessible websites and online registration systems, and insufficient pre-event information about accessibility features. Irish (2020) argued that conference accessibility often focuses on mobility limitations while overlooking access for those with vision or hearing loss, or mental ill-health.

Attitudinal and social barriers include stigma, lack of disability awareness among event staff and fellow attendees, and organizational cultures that treat accessibility as an afterthought rather than a priority. Dashper and Finkel (2020) found through stakeholder interviews that despite growing attention to accessibility in the UK MICE sector, there remains persistent inequality and marginalization on the grounds of disability. Stumbo and Pegg (2005) emphasized that many tourism-driven agencies unknowingly create organizational and institutional barriers through narrow and outdated policies that tend to exclude PWDs. Darcy and Harris (2003) reviewed discriminatory practices by event and venue managers in Australia, revealing that the built and social environments restrict access of PWDs to participation and their rights of citizenship.

Šimkienė et al. (2025) surveyed 250 respondents and found that PWDs rate their participation opportunities in public events as merely average, with in-person events remaining the most preferred format yet the most constrained by barriers. Variakojienė and Gasperavičiūtė (2025) reported that despite improvements in perceived accessibility over recent years, significant physical, financial, and informational barriers persist.

Theme 6: The Intersection of Green Practices and Disability Inclusion

The most significant finding of this review is the near-complete absence of studies that examine both green practices and PWD participation challenges simultaneously within the MICE context. Darcy and Dickson (2025) found that only 0.82% of articles in the *Event Management* journal over 24 years addressed disability and accessibility and called for event sustainability to be examined across social, economic, and environmental perspectives. Yet the environmental dimension of disability inclusion remains virtually unexplored.



Brescia-Zapata (2023) is among the few scholars who explicitly bridge these two streams, observing that sustainable events often overlook the topic of accessibility and proposing the integration of universal accessibility guidelines into the ISO 20121 sustainability management standard.

Where the two streams do intersect, both synergies and tensions emerge. McIntyre and Spittle (2024) demonstrated that hybrid conference formats can reduce greenhouse gas emissions by up to 97% while simultaneously increasing attendance and accessibility for PWDs and participants from low- and middle-income countries. This represents a clear case where a green practice directly enhances disability inclusion. Tkatch and Tavares (2025) argued that the tourism and hospitality industries must shift from compliance-driven approaches to creating genuinely inclusive experiences, using universal design principles as an equitable framework.

However, tensions also exist. Several green practices such as eliminating printed programs, reducing physical signage, and limiting individual transport options may inadvertently create new barriers for attendees with specific disabilities who rely on tactile, physical, or individualized formats. Ambrose (2022) noted that people of all ages and abilities experience barriers to participation largely because products, services, and the built environment are not designed to be accessible to the widest range of users. This suggests that green practices must be evaluated not only for their environmental impact but also for their accessibility implications.

Guleria and Malhotra (2024) positioned PWDs not merely as beneficiaries of sustainable development but as essential agents of change whose perspectives can drive innovations toward an inclusion-oriented and green society. Ubaydullayeva (2025) argued that the integration of inclusive principles into MICE tourism including barrier-free infrastructure, accessible conference facilities, and sign language interpretation not only broadens participation but also increases the competitiveness of destinations at the international level.

Table 6 summarizes the key synergies and tensions identified between green practices and disability inclusion.

Green Practice	Potential Synergy with Disability Inclusion	Potential Tension with Disability Inclusion
Hybrid/virtual event formats	Reduces travel barriers for PWDs; increases accessibility for those with mobility limitations	May exclude PWDs who lack digital literacy or assistive technology
Digital/paperless communication	Reduces paper waste	May disadvantage attendees who rely on printed, Braille, or large-print materials
Public transport encouragement	Reduces carbon emissions	Public transport systems are often inaccessible for wheelchair users and those with mobility impairments
Eco-procurement (local sourcing)	Reduces transport emissions	No direct tension identified
Water refill stations	Reduces single-use plastic	Must be physically accessible in terms of height and location
Energy-efficient venue design	Reduces energy consumption	Must incorporate universal design principles to ensure accessibility is not compromised
Reduced physical signage	Reduces material waste	May reduce wayfinding support for attendees with cognitive or visual impairments

Taken together, these findings confirm that green MICE practices and PWD participation challenges are rarely examined in tandem, despite clear evidence that they interact in meaningful ways. The results underscore the



need for an integrated framework that positions accessibility as an essential component of sustainable MICE event planning, rather than treating environmental sustainability and social inclusion as separate agendas.

DISCUSSION

This study sets out to systematically review the published literature on green practices and participation challenges faced by people with disabilities (PWDs) in MICE events. While both topics have attracted growing scholarly attention individually, the findings of this review reveal that the literature addressing these two dimensions remains limited in scope, fragmented in focus, and critically disconnected from one another.

Regarding green event practices, the reviewed articles limit their focus primarily to definitional debates, the identification of green principles, and the cataloguing of barriers and benefits. Koh (2026) identified the most carbon-intensive components of the MICE supply chain but did not address social sustainability dimensions such as disability inclusion. Trisnayoni, Astawa, and Utama (2022) confirmed that the high cost of meeting green requirements discourages consistent implementation among MICE organizers, yet their analysis remained focused solely on environmental concerns without considering how green initiatives might affect or exclude attendees with disabilities. Day (2018) acknowledged the complexity of operationalizing sustainability in MICE as a complex adaptive system, but the social inclusion dimension was similarly absent from the analysis. Not all reviewed articles address all aspects of green event management, and the majority concentrate on only two or three themes. This suggests that the published literature available to event organizers provides an incomplete picture of what sustainable MICE event management truly requires.

Regarding PWD participation, the literature is more developed but similarly siloed. The reviewed articles consistently identify physical, informational, and attitudinal barriers as the primary constraints to PWD participation.

Irish (2020) argued that conference accessibility tends to focus narrowly on mobility limitations while overlooking the needs of those with vision or hearing loss, or mental ill-health. Dashper and Finkel (2020) found persistent inequality and marginalization on the grounds of disability within the UK MICE sector. Darcy and Dickson (2025) quantified the scale of neglect, finding that only 0.82% of articles in the Event Management journal over 24 years addressed disability, with only two engaging directly with people with disability in the research. These findings suggest that while the barriers are well documented, they are rarely connected to broader sustainability frameworks. PWD participation is treated as an accessibility compliance issue rather than as an integral component of sustainable event management.

The most significant finding of this review is the near-complete absence of studies that examine green practices and disability inclusion together. As illustrated in Table 3, only six of the 22 reviewed articles touch upon the intersection of these two dimensions and none examines them comprehensively within the MICE context. Brescia-Zapata (2023) represents the closest attempt, observing that sustainable events often overlook accessibility and proposing the integration of universal accessibility guidelines into the ISO 20121 standard. McIntyre and Spittle (2024) demonstrated that hybrid formats offer a concrete example of synergy, reducing emissions by up to 97% while increasing accessibility. However, this review also identified tensions: certain green practices such as eliminating printed materials or reducing physical signage may create new barriers for attendees with specific disabilities. Ambrose (2022) noted that products, services, and the built environment are frequently not designed to be accessible to the widest range of users.

This disconnect is problematic because environmental sustainability and social inclusion are interdependent pillars of the triple bottom line. Addressing one without the other results in an incomplete and potentially exclusionary approach to responsible event management. Guleria and Malhotra (2024) positioned PWDs as essential agents of change whose perspectives can drive innovations toward an inclusion-oriented and green society. Ubaydullayeva (2025) argued that integrating inclusivity principles into MICE tourism broadens participation, strengthens social cohesion, and increases destination competitiveness. These perspectives suggest that the integration of green practices with disability inclusion is not only ethically imperative but also strategically advantageous for the MICE industry.



Regional Variations and Contextual Factors

The geographic distribution of the reviewed literature reveals that contextual and regional factors heavily dictate how sustainable and inclusive MICE practices are implemented. In developed MICE destinations such as Australia and the United Kingdom robust statutory frameworks, like Australia's Disability Discrimination Act, anchor accessibility as a legally mandated right. In these settings, the academic and practical focus leans heavily toward optimizing universal design and auditing institutional bias.

Conversely, in developing or emerging MICE markets, such as Indonesia or Uzbekistan, implementation challenges shift toward macro-environmental and resource limitations. For instance, research in Bali indicates that event planners are severely constrained by the high cost of green procurement and a lack of eco-conscious market demand. Meanwhile, in emerging markets like Uzbekistan, the transition toward inclusive and green infrastructure is closely tied to national tourism policies and public funding initiatives. This regional divide demonstrates that a single, standardized approach to sustainable MICE management will fail if it does not account for local infrastructure capabilities and shifting regional regulatory pressures.

Institutional Barriers: Legal, Financial, and Organizational Realities

While aligning universal design with green initiatives offers immense conceptual value, event organizers face deep operational friction across legal, financial, and organizational lines. Legally, planners are caught in dual-compliance pathways. They must navigate evolving local and international environmental mandates alongside strict statutory accessibility legislation. This complexity highlights the urgent need to integrate universal accessibility guidelines directly into standardized sustainability management models, such as the ISO 20121 framework.

Financially, the upfront capital required to implement these combined frameworks poses a significant barrier. Retrofitting older convention centers or historic event venues to support both energy-efficient infrastructure and barrier-free access requires steep capital expenditures. Because many clients remain budget-driven rather than socially or environmentally conscious, planners struggle to justify these costs due to an invisible short-term return on investment (ROI).

Organizationally, the MICE industry remains restricted by rigid structural silos. Event management teams frequently separate operational planning, environmental procurement, and accessibility logistics into distinct departments. Without an integrated organizational culture and dedicated training to build green and inclusive knowledge among staff, accessibility is treated as a secondary tick-box exercise rather than a core, non-negotiable component of a sustainable triple bottom line.

CONCLUSION

This systematic literature review confirms that the published literature on green MICE event practices and PWD participation challenges, while growing individually, remains inadequate when examined as an integrated body of knowledge. The review identified six themes across 22 articles: green event definitions and concepts, green event principles, barriers to implementing green practices, benefits of green practices, participation barriers for PWDs, and the intersection of green practices and disability inclusion. The distribution of articles across these themes reveals a clear imbalance. Participation barrier for PWDs received the most attention, while the intersection of green practices and disability inclusion received the least.

The key contribution of this study is the identification and documentation of this critical gap. Truly sustainable MICE events cannot be achieved by pursuing environmental responsibility and social inclusion as separate agendas. Green practices must be evaluated not only for their environmental impact but also for their accessibility implications, and disability inclusion must be embedded within rather than appended to sustainability frameworks. The synergies identified in this review, particularly the potential of hybrid event formats to simultaneously reduce emissions and enhance accessibility, demonstrate that these goals can be mutually reinforcing when intentionally designed together. The integrated conceptual framework proposed in this study bridges a critical gap in the literature, yet it remains primarily conceptual. Future research must empirically



validate this framework through robust field testing across diverse MICE sectors. To achieve this, researchers should deploy targeted methodologies tailored to three core stakeholder groups: For Event Organizers: Longitudinal action-research case studies should be conducted to track planners as they actively implement the framework. This will help capture real-world operational challenges and document how teams manage live trade-offs, such as mitigating the exclusionary effects of going paperless for individuals with specific cognitive or visual impairments. For Participants with Disabilities: Large-scale mixed-method surveys and semi-structured post-event interviews are required to capture lived experiences. Gathering empirical data directly from attendees with diverse physical, sensory, and cognitive needs is essential to ensure that "green" events do not inadvertently build new socio-structural barriers. For Policymakers: Future studies should utilize Delphi techniques or semi-structured interviews with industry regulators and policymakers. This line of inquiry will help identify the structural incentives, subsidies, and legal mechanisms needed to transition the MICE industry from voluntary green compliance toward holistic, mandated, and inclusive sustainable development.

Ethical Consideration

This study is a systematic literature review based exclusively on published scholarly articles and did not involve human participants, animals, or the collection of primary data. Therefore, formal ethical approval and informed consent were not required. The authors declare that there are no conflicts of interest regarding the publication of this paper and confirm that the research was conducted independently without any financial, commercial, or personal relationships that could have influenced the study's findings or interpretation.

Data Availability

The data supporting the findings of this study are derived from published articles identified through a systematic literature review conducted in accordance with the PRISMA 2020 guidelines. No primary datasets were generated or analysed beyond the published literature. All studies included in the review are cited in the reference list, and the data used to support the findings are available through the respective publishers or publicly accessible academic databases.

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