

Global Research Trend In Sustainable Tourism Marketing: A Bibliometric Approach

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Abstract. The growing importance of sustainability in the global tourism industry has led to a surge in research exploring how marketing contributes to sustainable destination development. This study aims to analyze the evolution, trends, and emerging themes in sustainable tourism marketing from 2015 to 2025. Using data retrieved from 305 Scopus-indexed documents, a bibliometric analysis was conducted through performance analysis and science mapping (keyword co-occurrence and bibliographic coupling) using VOSviewer software. The findings reveal steady growth in publications over the last decade, with major contributions originating from the United Kingdom, Poland, China, and Spain. The most influential journals include *Sustainability* (Switzerland), *Journal of Sustainable Tourism*, and *Tourism Management Perspectives*. Four dominant thematic clusters were identified: environmental and cultural sustainability, marketing and communication strategies, community-based governance, and post-pandemic behavioral adaptation. These findings indicate that sustainable tourism marketing has evolved into an interdisciplinary research domain bridging sustainability, consumer behavior, and destination branding. This study provides an integrated overview of the intellectual structure of sustainable tourism marketing, serving as a reference for academics, policymakers, and practitioners in designing evidence-based and competitive sustainability strategies.

Keywords: Sustainable Tourism Marketing; Bibliometric Analysis; VOSviewer

INTRODUCTION

Sustainable tourism has emerged as one of the most pressing themes within the global tourism industry. The sustainable tourism market size is projected to expand rapidly in the coming years, from an estimated USD 3.75 trillion in 2025 to about USD 6.44 trillion by 2034, at a compound annual growth rate (CAGR) of 14.5% (The Business Research, 2025). This expansion is driven by rising consumer demand for responsible travel experiences, increasing corporate commitments to sustainability, the proliferation of green certification systems, and government incentives promoting eco-friendly tourism practices (Maniktala & Sharma, 2023). Such growth demonstrates a global shift toward value-driven consumption, where environmental and social concerns increasingly influence destination competitiveness and marketing strategies (Daneshwar & Revaty, 2024).

Sustainable tourism is a type of tourism that aims to reduce negative impact on the environment, society, and economy, while simultaneously increasing positive outcomes (Sofronov, 2017). It employs practices that conserve natural resources, respect local cultures, and ensure that local communities benefit economically and socially from tourism activities, ensuring balance and long-term viability (Lavaredas et al., 2025). Sustainable tourism marketing integrates destination communication strategies, consumer behavior, and brand management within the framework of sustainability (Chen et al., 2025). Previous studies emphasize the role of destination branding in highlighting ecological and cultural authenticity (Verances et al., 2024), while others reveal that green branding and innovation positively affect perceived customer value in tourism contexts (Mutiarasari et al., 2025; Sudirjo et al., 2024). These perspectives collectively underscore that sustainability is not merely an environmental attribute but a central component of a destination's overall value proposition.

At the global level, (Haller, 2024) indicates that three European economies with highly developed tourism sectors, namely France, Italy, and Spain, have been made possible thanks to their cultural, historical, and artistic wealth. Developed countries have demonstrated a strong

commitment to sustainable tourism management by adopting a holistic and innovative approach. (Ortyukova, 2025) highlights how countries such as New Zealand, Sweden, Canada, and Australia are actively designing and developing ecological trails that not only raise environmental awareness but also protect biodiversity and minimize negative impacts on the environment. (Sonuç, 2024)'s study confirms that ecotourism, as an alternative to mass tourism, promotes sustainable management and the creation of destination brands that reinforce sustainability values. Meanwhile, developing regions such as Indonesia, Malaysia, and Philippine are recognized for their effective destination marketing strategies that combine sustainability narratives with community-based tourism development (Ibrahim et al., 2025; Rumba & Sartika, 2024). Community-based tourism serves as a sustainable model for community empowerment, economic growth, and cultural preservation, particularly in developing regions (Tuyen et al., 2025). This geographical diversity highlights that while developed countries emphasize ecological branding and visitor management, emerging economies tend to leverage sustainability for economic inclusion and destination differentiation.

The growing scholarly interest in sustainable tourism marketing is reflected in the increasing number of publications examining its strategies, impacts, and implementation mechanisms (Roberts et al., 2022). Previous studies have related perceived sustainability to marketing variables, such as revisit intention, destination image, satisfaction, and behavioral and perceptual consumer issues (Rasoolimanesh et al., 2023). Sustainability was also associated with value co-creation (Font et al., 2021), social media (Hysa et al., 2021), branding (Petrevska & Cingoski, 2017), information and communications technology (Deaconu et al., 2018), motivation (Carvache-franco et al., 2022), word-of-mouth (Naim et al., 2023) and market segmentation (García-Madurga et al., 2019). Sustainability is increasingly regarded as a vital driver of competitive advantage within the tourism industry, delivering meaningful benefits to destinations (Rodríguez-Díaz & Pulido-Fernández, 2020). By adopting a sustainable approach, tourism can utilize natural assets responsibly while aiding their preservation and enhancement (Qiu et al., 2019), ultimately promoting the well-being of destinations and local communities, conserving the environment, and contributing to a more sustainable world. Despite this proliferation, there remains limited understanding of how sustainable tourism marketing research has evolved thematically, geographically, and conceptually. Systematic bibliometric mapping is therefore essential to synthesize this dispersed body of knowledge and identify dominant trends, influential publications, and underexplored research gaps (An & Alarcón, 2020).

This study aims to fill that gap by systematically mapping evolution, trends, and emerging themes in sustainable tourism marketing research from 2015 to 2025, using bibliometric analysis based on the Scopus database. The analysis combines performance analysis (examining publication trends, most influential journals, and productive countries) with science mapping (keyword co-occurrence and bibliographic coupling) to reveal the intellectual and thematic structure of the field. Unlike narrative reviews, this approach provides an objective, data-driven overview of how the discipline has developed, highlighting emergent topics such as eco-branding, destination authenticity, and responsible travel communication.

Although earlier studies have analyzed trends in organic food research through qualitative reviews, this paper introduces a distinct methodology by combining bibliometric techniques with a systematic review framework. Employing the PRISMA protocol improves methodological transparency and depth, ensuring the analysis is both comprehensive and objective (Agrawal et al., 2024). Through mapping thematic clusters and pinpointing gaps in the research, this study lays out a structured agenda for forthcoming research in sustainable tourism marketing (Cavalcante et al., 2021). The urgency of this research arises from the rapid expansion of the sustainable tourism industry and the growing need for evidence-based

policymaking. By identifying thematic clusters and research gaps, this study not only contributes to the theoretical understanding of sustainable tourism marketing but also provides practical insights for policymakers, destination managers, and tourism practitioners. Ultimately, it offers a comprehensive framework for understanding the evolution of sustainable tourism marketing and guides future research toward fostering destinations that are both competitive and sustainable.

METHOD

This study applied to a bibliometric analysis approach to map and evaluates the evolution and structure of research on sustainable tourism marketing using VOSviewer (version 1.6.20). The study integrated performance analysis and science mapping to visualize intellectual structures and thematic connections through keyword co-occurrence and bibliographic coupling (Donthu et al., 2021). The bibliographic data were retrieved from the Scopus database, which is considered one of the most comprehensive and reliable sources for peer-reviewed research articles. The PRISMA flow diagram was employed to transparently present the data identification, screening, and inclusion process prior to analysis (Pahlevan-sharif et al., 2019). This systematic approach increases transparency and ensures that the dataset accurately reflects the research domain of sustainable tourism marketing (Sánchez-Amboage et al., 2024). The search string combined relevant keywords such as “sustainable tourism” and “marketing” using Boolean operators (AND, OR) within article titles, abstracts, and keywords. Detailed information regarding the search string is presented in Table 1. The selection of relevant studies is a crucial step to ensure the reliability and validity of bibliometric analysis results (Sánchez-Amboage et al., 2024). To maintain a consistent and focused dataset, a set of inclusion and exclusion criteria was established, as summarized in Table 2. The screening process followed the PRISMA framework, which provides a transparent and structured approach to identifying and selecting relevant literature (Page et al., 2021).

Table 1. Topic Keywords

Topic	Keywords
Sustainable Tourism	"sustainable tourism" OR "responsible tourism" OR "eco-tourism" OR "green tourism" OR "community-based tourism"
Marketing	"marketing" OR "tourism marketing" OR "destination marketing" OR "green marketing" OR "sustainable marketing" OR "destination branding" OR "place branding" OR "eco-branding" OR "promotion" OR "communication" OR "consumer behavior" OR "visitor behavior" OR "purchase intention" OR "travel intention"
Complete String	("sustainable tourism" OR "responsible tourism" OR "eco-tourism" OR "green tourism" OR "community-based tourism") AND ("marketing" OR "tourism marketing" OR "destination marketing" OR "green marketing" OR "sustainable marketing" OR "destination branding" OR "place branding" OR "eco-branding" OR "promotion" OR "communication" OR "consumer behavior" OR "visitor behavior" OR "purchase intention" OR "travel intention")

Source: Data processed (2025)

As illustrated in Figure 1, a total of 552 documents were initially retrieved from the Scopus database using predefined keywords and filters. After screening titles and abstracts for relevance to sustainable tourism marketing, 247 records were excluded, resulting in 305 articles included for bibliometric analysis. This systematic process ensured that only high-quality and

thematically relevant publications were analyzed to map the intellectual and thematic structure of sustainable tourism marketing research.

Table 2. Article Criteria

Criteria	Included Paper	Excluded Paper
Research Focus	Articles that focus on sustainable tourism marketing, covering topics such as green destination branding, eco-friendly consumer behavior, sustainable communication strategies, and marketing aspects of sustainable tourism development.	Articles that do not directly address sustainability in tourism marketing, such as those focused solely on environmental management, general tourism policy, or non-marketing perspectives of sustainability.
Characteristic	Peer-reviewed journal articles indexed in Scopus.	Non-article documents such as conference papers, book chapters, notes, or reviews.
Subject Area	Business, Management & Accounting; Social Sciences.	Articles categorized outside the selected subject areas (e.g., Environmental Science, Engineering, or Energy).
Language	Articles written in English.	Articles written in languages other than English.

Source: Data processed (2025)

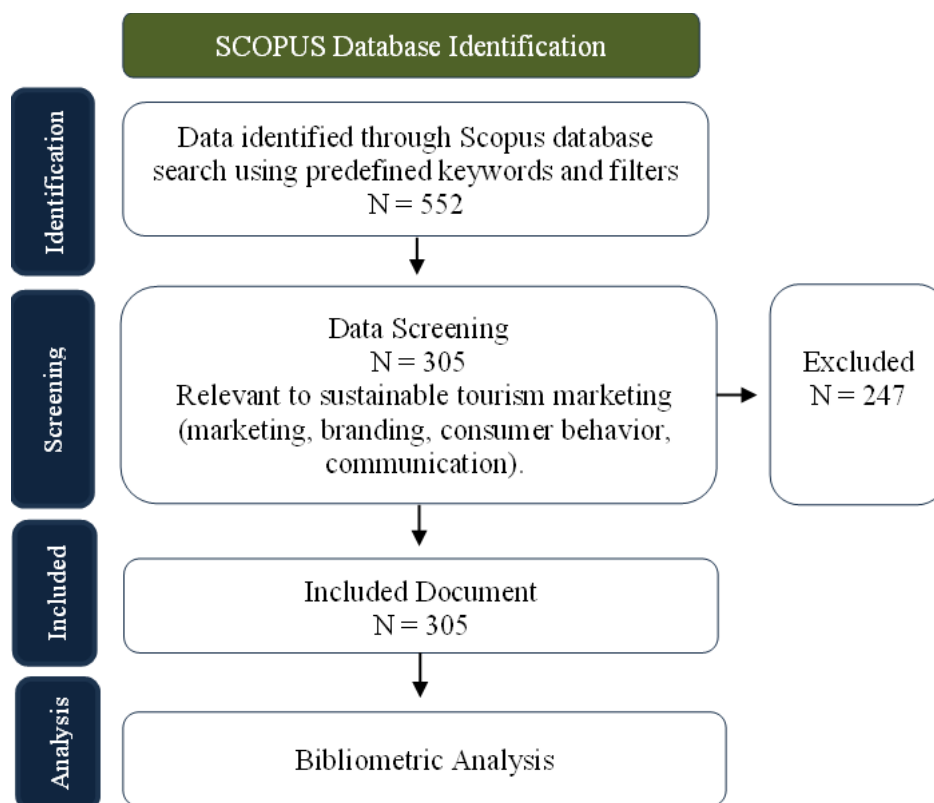


Figure 1. PRISMA Flow Diagram

Source: Author's analysis based on PRISMA protocol, 2025

RESULTS AND DISCUSSION

The bibliometric analysis covered a total of 305 journal articles on sustainable tourism marketing published between 2015 and 2025, representing a decade of scholarly development in the field. As summarized in Table 3, these publications collectively received 5,055 citations, with an average of 16.57 citations per paper, indicating a relatively strong academic impact. The dataset involved 1,012 contributing authors, with an average of 3.42 authors per paper, suggesting that collaborative research is a dominant practice in this domain. The average of 118.07 papers per author reflects the cumulative distribution of publications across multiple co-authorships within the field. Furthermore, the h-index of 36 and g-index of 58 demonstrate consistent productivity and citation influence among key contributors. These indicators reveal that sustainable tourism marketing has evolved into a well-established and collaborative research area with increasing scholarly attention and impact.

Table 3. Main Information Data

Description	Result
Publication Years	2015-2025 (10 years)
Papers	305
Papers/author	118.07
Citations	5055
Cites/paper	16.57
Authors	1012
Authors/paper	3.42
h-index	36
g-index	58

Source: Analysis from Scopus dataset processed by the author, 2025

The publication trend from 2015 to 2025 shows a significant increase in research interest in sustainable tourism marketing. As seen in Figure 2, the number of publications remained relatively low and stable between 2015 and 2019, but began to rise sharply from 2020 onwards, peaking at 73 publications in 2025. This upward trajectory reflects a growing scholarly focus on sustainability issues within the tourism marketing domain, likely influenced by global concerns about environmental responsibility, post-pandemic recovery, and the integration of sustainable practices into destination branding and consumer behavior research (Kumar et al., 2024). The increase in publications after 2020 was likely triggered by two factors: (1) the impact of COVID-19, which prompted research related to tourist behavior adaptation and post-crisis marketing strategies; and (2) increased policy attention and funding for sustainable initiatives, which encouraged empirical studies and the application of green marketing practices (Geng et al., 2024). This emphasizes the urgency of sustainable tourism marketing research and opens opportunities for longitudinal studies exploring the mechanisms of change in destination marketing practices.

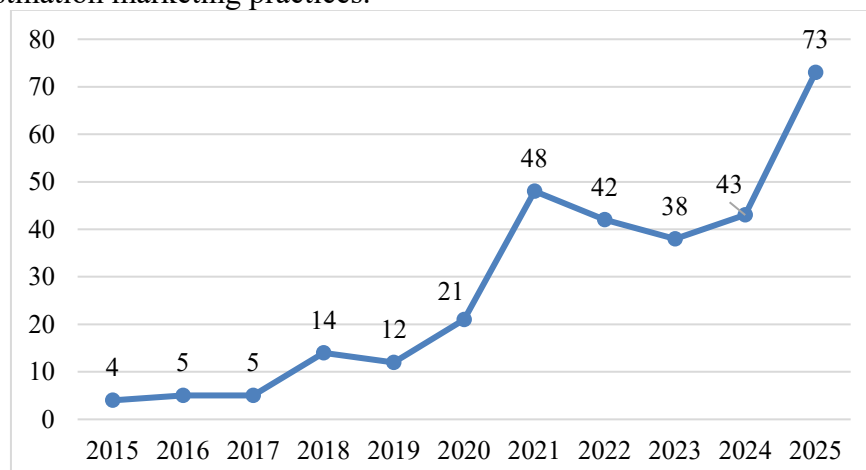


Figure 2. Publication Trends

Source: Analysis of annual publication count from Scopus data, 2025

Research collaboration trends between countries demonstrate a strong international network in sustainable tourism marketing research. The analysis results 77 countries participated in sustainable tourism marketing topic research. Using a minimum number of documents is 5 per country, 26 countries meet criteria (Table 4). The United Kingdom, Poland, China, and Spain emerge as leading contributors, with the UK achieving the highest citation impact, suggesting its influential role in shaping theoretical and empirical discourse. According to research by (Soh et al., 2023), China and the United Kingdom are also the most productive countries in this field of research. Meanwhile, Indonesia's high number of documents indicates an expanding regional commitment to sustainability-driven tourism research, although with lower citation intensity compared to Western nations. This finding is consistent with literature showing that developed countries often dominate citations due to their research capacity, international collaboration networks, and access to reputable journals (Navarro, 2024). This provides a clear illustration of the strength of collaborative relationships in sustainability and tourism research between different countries, where enhanced cross-border cooperation can facilitate knowledge transfer and increase citation impact for researchers from developing countries (Cavalcante et al., 2021).

Table 4. Bibliographic Coupling (Country-Level)

No	Country*	Documents	Citation	No	Country*	Documents	Citation
1	United Kingdom	22	924	14	Romania	13	200
2	Poland	16	541	15	Turkey	7	180
3	China	20	523	16	Greece	9	176
4	Spain	26	496	17	Ukraine	5	170
5	Italy	16	425	18	United States	14	132
6	Portugal	17	383	19	Brazil	5	125
7	Australia	9	375	20	Malaysia	18	102
8	South Africa	9	338	21	Serbia	9	89
9	Taiwan	12	290	22	Thailand	19	76
10	Indonesia	43	222	23	Vietnam	8	76
11	South Korea	12	219	24	Egypt	6	46
12	Hungary	8	209	25	Saudi Arabia	7	43
13	Austria	5	204	26	India	5	31

(Note*: The minimum threshold of five publications per country)

Source: Bibliometric analysis using VOSviewer, 2025

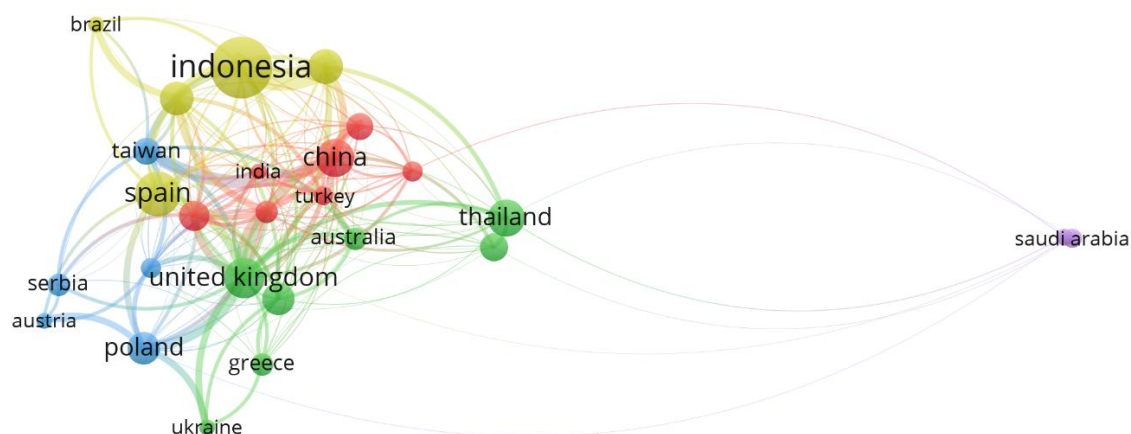


Figure 3. Relations Between Countries

Source: Network visualization of country collaboration using VOSviewer, 2025

The analysis of international research collaboration (Figure 3) reveals 26 countries with mapping results in five distinct clusters, illustrating the global structure of scholarly collaboration and thematic proximity among nations. Cluster 1 (China, India, South Africa, South Korea, Turkey, the United States, Vietnam) links major Asian and emerging economies, focusing on policy and sustainability integration in tourism. Cluster 2 (Australia, Greece, Italy, Romania, Thailand, Ukraine, United Kingdom) connects Europe and the Asia-Pacific, with the UK as a central actor shaping theoretical frameworks in the field. Cluster 3 (Austria, Hungary, Poland, Serbia, Taiwan) emphasizes regional cooperation on digital marketing and destination development. Cluster 4 (Brazil, Indonesia, Malaysia, Portugal, Spain) highlights research on city branding and community-based tourism in emerging destinations. Cluster 5 (Egypt, Saudi Arabia) reflects growing Middle Eastern efforts toward sustainable tourism diversification. This distribution suggests that future research could benefit from deeper intercontinental collaborations, particularly between emerging economies and established research hubs, to enhance knowledge exchange, methodological diversity, and global alignment in sustainable tourism marketing practices.

The analysis of source areas provides insight into the main publication outlets and intellectual structure shaping sustainable tourism marketing research. Both the bibliographic coupling and overlay visualization results highlight the journals' productivity, influence, and interconnection within this research domain. Based on Table 9, Sustainability (Switzerland) stands out as the most productive and influential journal with 110 documents and 2,518 citations, reflecting its position as the central hub for sustainability-oriented tourism studies. The dominance of Sustainability as a productive outlet reflects the discipline's tendency to publish multidisciplinary studies (covering environmental, social, policy, and marketing aspects) in reputable open-access journals that accept applied research and policy themes. These journals play an important role because they set the research agenda and bring together empirical studies with theoretical frameworks (e.g., destination branding, consumer pro-environmental behavior) (Camprubí & Gassiot-Melian, 2023; Tran & Rudolf, 2022). Journal of Sustainable Tourism and Tourism Management Perspectives follow, contributing high-impact research that integrates marketing and sustainability concepts. Meanwhile, Geojournal of Tourism and Geosites, Tourism and Hospitality, and other interdisciplinary journals contribute moderately, illustrating that sustainable tourism marketing has expanded across environmental, social, and urban development contexts. This distribution demonstrates a balanced combination between specialized tourism journals and broader sustainability-focused outlets, showing how the topic has evolved into an interdisciplinary field.

Table 5. Most Productive Source Area

Rank	Source Area*	Documents	Citations
1	Sustainability (Switzerland)	110	2518
2	Journal of Sustainable Tourism	6	422
3	Tourism Management Perspectives	4	273
4	Geojournal of Tourism and Geosites	24	184
5	Tourism and Hospitality	7	41
6	International Journal of Sustainable Development and Planning	8	21
7	Cogent Social Sciences	6	19
8	Urban Science	4	11
9	Administrative Sciences	5	9
10	Journal of Infrastructure, Policy and Development	3	7
11	Journal of Ecohumanism	3	3
12	Environment and Social Psychology	3	0

(Note*: The minimum contribution threshold for documents is set at 3)

Source: Analysis of journal productivity from Scopus data, 2025

VOSviewer visualizes the source area analysis, which generates 12 source items into five clusters, providing a deeper understanding of the thematic relationships and temporal trends among these sources. Cluster 1 comprising Administrative Sciences, Cogent Social Sciences, Journal of Sustainable Tourism, and Tourism Management Perspectives represents the integration of tourism marketing with social and managerial sciences, showing recent and growing interest between 2022–2024 (yellow shades). Cluster 2 includes Environment and Social Psychology, Geojournal of Tourism and Geosites, and Journal of Infrastructure, Policy and Development, emphasizing the environmental, psychological, and policy dimensions of sustainable tourism. Cluster 3 dominated by Sustainability (Switzerland), Journal of Ecohumanism, and Tourism and Hospitality, acts as the intellectual core, linking ecological perspectives with human-centered and practical tourism approaches. Clusters 4 and 5 consist of International Journal of Sustainable Development and Planning and Urban Science focus on spatial and developmental aspects, revealing the growing relevance of urban sustainability and planning in tourism studies. Despite this networked structure, a potential research gap remains in integrating marketing strategies with behavioral and urban sustainability perspectives. As illustrated by the mapping visualization produced using VOSviewer (Figure 5), these gaps highlight promising directions for future research and opportunities for novel scholarly contributions.

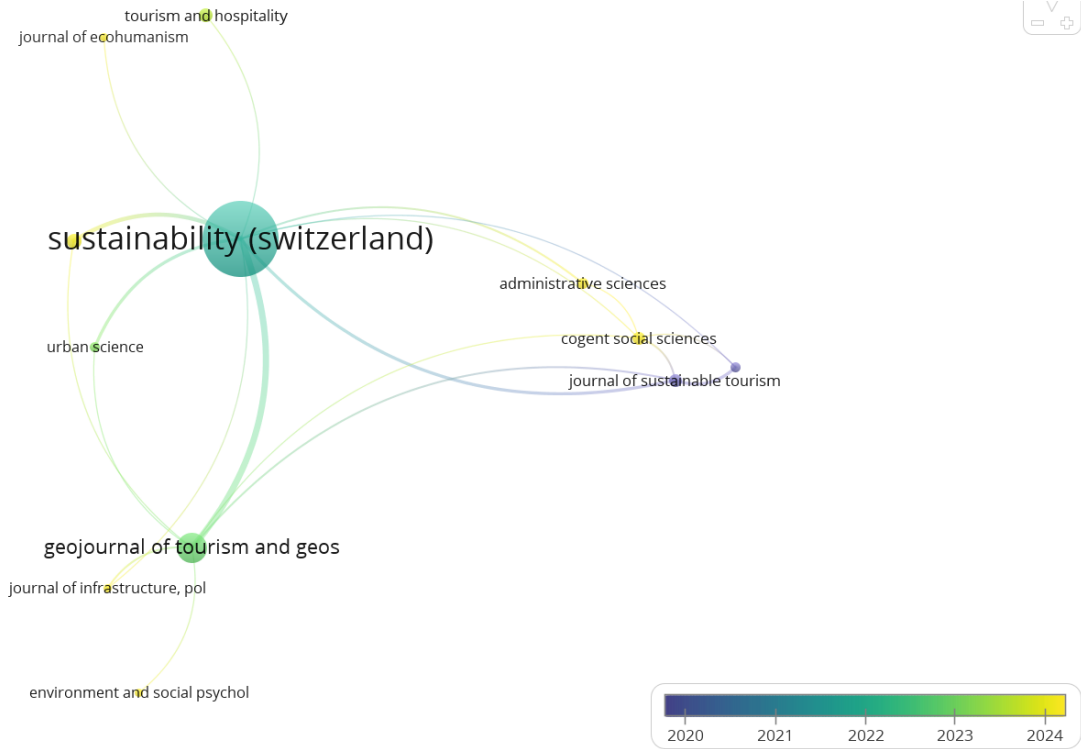


Figure 4. Source Area from The Overlay Visualization
Source: Temporal overlay visualization of journals using VOSviewer, 2025

The co-occurrence analysis identifies the main research themes and relationships among keywords in sustainable tourism marketing studies. From a total of 1,564 extracted keywords, 26 relevant terms met the inclusion threshold after screening. As presented in Table 6, Ecotourism (120 occurrences), Sustainable Tourism (98 occurrences), and Sustainability (76 occurrences) emerge as the most dominant terms, signifying that these concepts represent the theoretical backbone of the field. The strong appearance of Tourism Development (67 occurrences) and Tourist Destination (62 occurrences) highlights the industry’s operational

dimension, emphasizing how sustainability principles are embedded in practical tourism management and planning. Meanwhile, keywords such as Marketing (48 occurrences) and Tourism Management (29 occurrences) indicate the growing attention toward integrating sustainability principles into marketing and managerial frameworks within tourism sectors. The consistent co-occurrence among these high-ranking keywords reflects a converging research focus on aligning environmental responsibility with economic and marketing strategies to support long-term tourism competitiveness.

Table 6. Number of Co-occurrence based on Keyword

Rank	Keyword*	Occurrences	Rank	Keyword*	Occurrences
1	Ecotourism	120	14	Sustainable Tourism Development	18
2	Sustainable Tourism	98	15	Strategic Approach	15
3	Sustainability	76	16	Community-based Tourism	15
4	Tourism Development	67	17	Public Attitude	14
5	Tourist Destination	62	18	Consumption Behavior	13
6	Tourism	49	19	Tourism Attraction	12
7	Marketing	48	20	Cultural Heritage	12
8	Sustainable Development	35	21	Covid-19	12
9	Tourism Management	29	22	Decision Making	11
10	Social Media	28	23	Stakeholder	11
11	Perception	27	24	Heritage Tourism	11
12	Tourist Behavior	22	25	Communication	10
13	Tourism Market	22	26	Destination Image	10

(Note*: Keywords are shown based on a minimum threshold of ten occurrences)

Source: Keyword co-occurrence analysis using VOSviewer, 2025

The visualization map generated by VOSviewer (Figure 4) reveals four clusters, illustrating distinct yet interconnected thematic areas. Cluster 1 (red) includes Ecotourism, Sustainable Development, Tourism Development, and Heritage Tourism, which represent the environmental and cultural sustainability dimensions of tourism. The literature indicates ecotourism as a key topic linking nature conservation with destination marketing value (Hasana et al., 2022). Cluster 2 (green) consists of Marketing, Social Media, Tourist Behavior, and Destination Image, highlighting the behavioral and communication aspects of sustainable tourism marketing. This indicates a shift towards digital marketing and communication strategies (digital green marketing, storytelling) to shape perceptions and revisit intentions (Dethan et al., 2023; Mulyadi et al., 2025; Putri et al., 2025). Cluster 3 (blue) gathers Community-based Tourism, Decision Making, and Stakeholder, highlights governance, local participation, and co-creation in destination marketing (community-based governance). Finally, Cluster 4 (yellow) features Sustainability, Perception, Public Attitude, and Covid-19, indicating the social and psychological responses toward sustainable tourism in the post-pandemic context. Conceptually, the co-occurrence of these keywords underscores that Sustainable Tourism Marketing is an interdisciplinary field that combines aspects of the environment, marketing communication, consumer behavior, and governance. Previous research confirms the role of social media and digital marketing as important channels for promoting sustainable tourism behavior and building brand authenticity

(Camprubí & Gassiot-Melian, 2023; Tran & Rudolf, 2022). These clusters reveal that research has strongly focused on ecotourism and sustainable destination management but remains less developed in integrating marketing strategies with stakeholder behavior and technological innovation. According to the mapping visualization produced by VOSviewer, these unexplored intersections present promising research gaps for future studies, particularly in understanding how sustainable marketing communication influences tourist perception and decision-making.

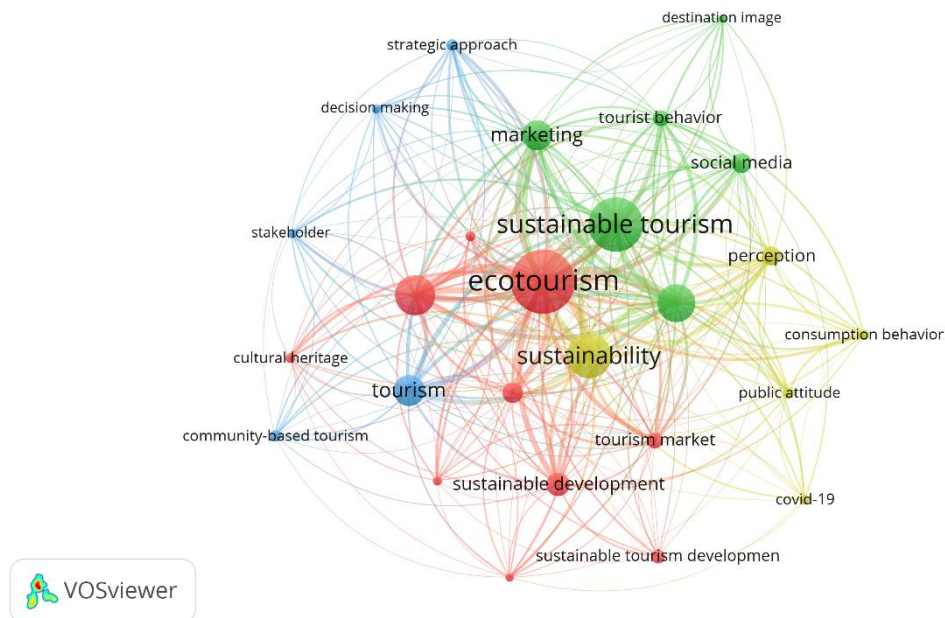


Figure 5. Network Map Based on the Keyword Co-occurrence

Source: Network visualization of keyword clusters using VOSviewer, 2025

Based on the bibliographic coupling analysis at the document level presented in Table 7, the most highly cited study (174 citation) was “*Evaluating user-generated content in social media: an effective approach to encourage greater pro-environmental behavior in tourism?*” by (Han et al., 2018), published in the Journal of Sustainable Tourism with 174 citations. This study illustrates how user-generated content (UGC) on social media influences tourists’ pro-environmental intentions through the interaction between personal and social norms, emphasizing the persuasive role of social media in promoting sustainable behaviors.

The second most cited article (165 citations) is titled “*Carbon labels in tourism: Persuasive communication?*” by (Gössling & Buckley, 2016), published in the Journal of Cleaner Production with 165 citations, explores carbon labeling in tourism as a form of persuasive communication. It critically evaluates how carbon and eco-labels communicate sustainability information to tourists and concludes that current practices remain ineffective due to communication shortcomings. Together, these studies merge the themes of sustainable tourism communication, consumer behavior, and environmental responsibility within the context of tourism marketing.

The third most cited article (164 citations) is titled “*Value Co-creation in Sustainable Tourism: A Service-Dominant Logic Approach*” by (Font et al., 2021) published in Tourism Management (2020). This study illustrates how user-centered design can be applied to identify and enhance the sustainability value proposition within the tourism industry. Also, examine why travel agents often exclude sustainability information in sales interactions and develops methods to empower them to communicate sustainability as a value-adding element. This

research integrates the topics of sustainability, user-centered design, and value co-creation within the framework of service-dominant logic.

Table 7. Cluster Mapping Based on Bibliographic Coupling

Cluster	Documents	Authors	Year	Source	Citations
1	Evaluating user-generated content in social media: an effective approach to encourage greater pro-environmental behavior in tourism?	Han, W., McCabe, S., Wang, Y., Chong, A.Y.L.	2018	Journal of Sustainable Tourism	174
1	Green purchase and sustainable consumption: A comparative study between European and non-European tourists	Nekmahmud, M., Ramkissoon, H., Fekete-Farkas, M.	2022	Tourism Management Perspectives	163
2	Post-industrial tourism as a driver of sustainable development	Kuzior, A., Lyulyov, O., Pimonenko, T., Kwilinski, A., Krawczyk, D.	2021	Sustainability (Switzerland)	101
3	Sustainability and tourism marketing: A bibliometric analysis of publications between 1997 and 2020 using vosviewer software	Cavalcante, W.Q.F., Coelho, A., Baira da, C.M.	2021	Sustainability (Switzerland)	124
4	Value co-creation in sustainable tourism: A service-dominant logic approach	Font, X., English, R., Gkritzali, A., Tian, W.S.	2021	Tourism Management	164
5	Social media usage by different generations as a tool for sustainable tourism marketing in society 5.0 idea	Hysa, B., Karasek, A., Zdonek, I.	2021	Sustainability (Switzerland)	129
6	Digital sustainability communication in tourism	Tiago, F., Gil, A., Stemberger, S., Borges-Tiago, T.	2021	Journal of Innovation and Knowledge	96
7	A Strategic Approach to Sustainable Tourism Development Using the A'WOT Hybrid Method: A Case Study of Zonguldak, Turkey	Kiş, Nermin	2019	Sustainability (Switzerland)	100
8	Online CSR communication in the hotel industry: Evidence from small hotels	Ettinger, A., Grabner-Kräuter, S., Terlutter, R.	2018	International Journal of Hospitality Management	128
9	Carbon labels in tourism: Persuasive communication?	Gössling, S., Buckley, R.	2016	Journal of Cleaner Production	165

Source: Data processed using VOSviewer (2025)

In the Cluster Mapping Based on Bibliographic Coupling, which is described in detail in Table 7, the analysis identifies nine thematic clusters outlining the key research trends in sustainable tourism communication. The unit of analysis used is the document, with a minimum citation threshold of 50 citations per document. From a total of 154 documents, ten highly cited papers were selected and classified into distinct clusters. From the nine clusters that were formed, almost all the documents stand alone and are not connected within the same cluster. Only cluster 1 contains two documents with similar topics, indicating similarities in theme or conceptual references between the two, while other studies show diversity in research directions and more fragmented scientific contributions. This pattern illustrates the low level of thematic interconnection between documents, which means that each study has a different focus or approach to the topic of sustainable tourism. The mapping highlights how research has evolved from conceptual discussions toward integrative approaches that combine marketing communication, sustainability, and digital engagement. Each mapping cluster generated has been visualized in Figure 6.

Cluster 1 encompasses two closely related studies that examine behavioral intentions toward sustainable and pro-environmental practices in tourism. Han et al. (2018) explore the influence of user-generated content (UGC) on social media as a persuasive medium to promote pro-environmental behavior among tourists. Their findings indicate that UGC can effectively activate personal and social pro-environmental norms, foster online communities centered on sustainability, and enhance tourists' engagement in environmentally responsible actions. Meanwhile, (Nekmahmud et al., 2022) focuses on tourists' sustainable consumption and green purchasing behavior by integrating the Theory of Planned Behavior (TPB) and the Theory of Consumption Values (TCV). This comparative study between European and non-European tourists reveals that environmental attitudes, knowledge, and perceived behavioral control significantly shape green purchase intentions. Collectively, both studies represent the cluster's focus on the psychological and social mechanisms driving pro-environmental and sustainable consumption behaviors in tourism contexts.;

Cluster 2 represents a focus on the intersection of post-industrial tourism and sustainable development. The study by (Kuzior et al., 2021) investigates how economic and environmental factors, alongside digital marketing, influence the development of post-industrial tourism. This cluster highlights the evolving role of digital tools in transforming industrial heritage into sustainable tourism assets.

Cluster 3 focuses on sustainability and tourism marketing through a bibliometric lens. Study by (Cavalcante et al., 2021) maps research trends from 1997–2020, showing rapid growth in sustainable tourism marketing studies. Its results reveal rapid growth in the literature, with Spain emerging as a leading contributor. The study identifies key research clusters and gaps, emphasizing the deepening integration of sustainability into marketing scholarship.

Cluster 4 highlights a user-centered approach to value co-creation in sustainable tourism. (Font et al., 2021) apply a user-centered approach to examine how travel agents and customers can jointly create sustainability value. This cluster represents the operationalization of sustainability within service design, stressing collaboration between agents and customers in creating meaningful sustainable experiences.

Cluster 5 focuses on generational differences in digital engagement for sustainable tourism marketing. The study by (Hysa et al., 2021) finds that social media use declines with age and that younger generations rely more heavily on online feedback in making travel decisions. Within the context of Society 5.0, the paper presents social media as a crucial instrument for reviving and sustaining tourism in the post-pandemic era.

Cluster 6 examines the dynamics of digital sustainability communication among tourism SMEs. The research by (Tiago et al., 2021) reveal that smaller firms emphasize eco-labels and that advanced websites tend to highlight sustainability achievements more

prominently. This cluster sheds light on how digital communication enhances transparency and strengthens the credibility of sustainability practices in the tourism sector.

Cluster 7 represents a strategic planning approach to sustainable tourism development. The study by (Kişi, 2019) identifies key priorities such as product diversification, branding, visitor management, and interorganizational collaboration. The results suggest that tourism can serve as a vehicle for regional economic independence when guided by strategic sustainability planning, making this cluster essential for destination-level policy formulation.

Cluster 8 emphasizes corporate social responsibility (CSR) communication in small hotels. In this study, (Ettinger et al., 2018) identifies gaps between hotel CSR actions and stakeholder communication, particularly in employee relations. This cluster represents an early recognition of digital CSR dialogue as a tool for stakeholder engagement and sustainable reputation management in hospitality.

Cluster 9 investigates the effectiveness of carbon labels as persuasive tools in sustainable tourism communication. (Gössling & Buckley, 2016) critiques existing tourism carbon label schemes, assessing whether they effectively influence tourists' behavior. The study reveals that most labels fail to meet key communication criteria (comprehensibility, trustworthiness, and actionability) resulting in limited behavioral impact. Despite these shortcomings, the paper argues that improving communication strategies could transform carbon labeling into a more effective mechanism for promoting sustainable consumer choices. This cluster thus contributes to understanding the communicative dimension of sustainability policy in tourism. The clusters in the bibliographic coupling show areas of established concentration as well as research gaps that can be explored in the future, such as the integration of behavioral marketing with urban sustainability.

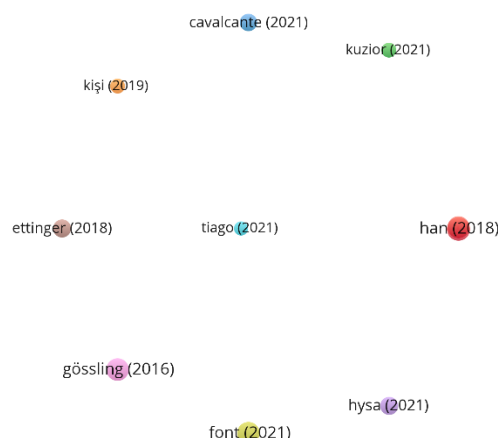


Figure 6. Network Map of Bibliograph Coupling of Documents

Source: Network visualization of bibliographic coupling clusters using VOSviewer, 2025

CONCLUSION

This study mapped the evolution of sustainable tourism marketing research from 2015 to 2025 through bibliometric analysis, integrating performance analysis and science mapping, revealing a shift from conceptual discussions to empirical, integrative approaches combining marketing communication, sustainability behavior, and digital transformation. Four key thematic clusters emerged: environmental and cultural sustainability, marketing and communication strategies, community-based tourism governance, and post-pandemic behavioral adaptation, highlighting its interdisciplinary nature bridging environmental responsibility, consumer psychology, and destination branding. Leading contributors hail from the United Kingdom, Poland, China, and Spain, with influential journals including *Sustainability*, *Journal of Sustainable Tourism*, and *Tourism Management Perspectives*. This

overview supports theoretical advancement, policy formulation, and practical guidance for aligning sustainability with competitiveness in destination marketing. For future research, exploring the integration of technological innovations—such as AI-driven marketing, immersive media, and blockchain-based sustainability certification—into sustainable tourism frameworks could yield actionable insights.

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