Contemporary issues in sustainability accounting: A bibliometric analysis and literature review

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ABSTRACT

This study provides an overview of the development and current state of the academic literature on sustainability accounting and its impact on corporate practices. It aims to map intellectual structures, identify thematic trends and research gaps, and propose directions for future studies. Drawing on 628 peer-reviewed articles published between 1992 and 2025, the study employs various bibliometric techniques—including citation and co-occurrence analyses—alongside manual thematic coding. This approach identifies influential constituents (authors, institutions, countries, and journals), maps collaboration networks, and highlights dominant research themes. The results show that while scientific research in sustainability accounting has grown exponentially in recent years, the field remains dominated by a limited number of countries, institutions, and journals. Furthermore, despite the significant impact of sustainability accounting research on corporate alignment with the Sustainable Development Goals (SDGs), a persistent gap remains between reporting practices and sustainability-related outcomes. Sustainability accounting has become a strategic activity under intense scrutiny from regulators and investors, indicating that managers should integrate it into governance structures, internal controls, strategic planning, and investment decisions to improve its effectiveness and move beyond "symbolic transparency". Furthermore, firms in less-connected regions should prioritize implementing international reporting frameworks, developing professional networks, and establishing cross-border collaborations to enhance global legitimacy and ensure disclosures provide decision-relevant value rather than mere compliance.

Keywords: *Bibliometric analysis, Biodiversity, Carbon emissions, Climate change, Conservation, Environmental reporting, Environmental, Literature review, Social, and governance (ESG), Sustainability accounting, Sustainable development goals.*

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Highlights of this paper

- The field of sustainability accounting research remains dominated by a limited number of countries, institutions, and journals.
- Despite the increase in sustainability disclosures, their capacity to drive substantive organizational change remains limited.
- Integrating sustainability accounting into governance structures, internal controls, and strategic processes can support improved financial performance, innovation, and risk management.

1. INTRODUCTION

The emergence of sustainability accounting represents a fundamental shift within the accounting profession, widening its scope beyond traditional financial reporting to a multidisciplinary field that combines environmental, social, and governance (ESG) dimensions (Bebbington & Unerman, 2018). Elkington and Rowlands (1999) discuss a type of sustainability accounting known as the triple bottom line (TBL), which focuses on organizations' reporting of their economic, social, and environmental impacts. This has been employed in the development of the Global Reporting Initiative (GRI) framework, which uses various indicators to assess performance toward sustainability objectives (Lamberton, 2005). During the last decade, sustainability accounting has been mainly driven by the United Nations (UN) Sustainable Development Goals (SDGs), which currently serve as a central reference point for assessing global sustainable development (Bebbington & Unerman, 2018; Saeed, 2025). Within this context, it is generally acknowledged that accounting plays a critical role in shaping disclosure practices and policy decisions, and supporting society's transition toward sustainability (Bebbington & Unerman, 2020).

Historically, sustainability accounting has evolved from early forms of "green accounting," which sought to incorporate environmental costs into national accounts, toward a more comprehensive conception aimed at maintaining intergenerational welfare through balancing environmental and non-environmental capital (Cairns, 2000). Despite this conceptual progression and its widespread use, the term "sustainability accounting" remains ambiguous, leaving its theoretical boundaries and practical applications unclear (Schaltegger & Burritt, 2010). In practice, sustainability accounting functions as an umbrella term encompassing multiple, increasingly specialized sub-domains. Climate and carbon accounting, for example, has expanded from voluntary corporate reporting to economy-wide models addressing greenhouse gas emissions, climate change, and green finance risks (Ascui, 2014; Comite, Gallo, Albergo, & Beretta, 2025). Water accounting has emerged as a vital governance and management tool in response to escalating freshwater scarcity, evolving from a focus on developing regions to a global sustainability priority (Liao & Khan, 2022; Vardon et al., 2025). Biodiversity and extinction accounting has gained significance in response to the need for preserving ecosystems and life on Earth (Maione, Cuccurullo, & Tommasetti, 2024; Roberts, Hassan, Elamer, & Nandy, 2021). At the same time, social and human rights accounting has developed, aiming to give employees a voice beyond being treated as human capital and to promote non-discrimination, although results show that social inequalities persist (Bessieux-Ollier, Nègre, & Verdier, 2023; ElKelish, 2023).

The rapid expansion of the sustainability accounting literature has made it difficult to understand the field's course and identify areas requiring further investigation, which is essential for advancing its contribution to sustainable development. To address this gap, this study conducts a comprehensive bibliometric analysis to systematically map the intellectual structure, thematic development, and emerging research directions of sustainability accounting. Most existing reviews focus on specific topics in sustainability accounting (e.g., (Ascui, 2014; ElKelish, 2023)) or employ different review types, such as systematic reviews (e.g., (Adams & Larrinaga-González, 2007)). To the author's knowledge, the only bibliometric study to date on the broad theme of

sustainability accounting is that of Hsiao, de Villiers, Horner, and Oosthuizen (2022) which reviews 1,283 academic articles published between 2014 and 2020. While this study provides a valuable overview of the field during this period, there is a need to extend the time horizon both backwards and forward to capture a more comprehensive understanding of the evolution of sustainability accounting, identify the most recent research trends, and highlight directions for future investigation. Ultimately, the present study aims to answer the following research questions:

RQ1: What are the publication and citation trends in sustainability accounting?

RQ2: What are the most influential authors, institutions, countries, journals, and articles in sustainability accounting?

RQ3: What is the state of collaboration among authors and author-affiliated universities and countries in the sustainability accounting literature?

RQ4: What are the most prominent themes in sustainability accounting?

RQ5: What are the future avenues for research regarding sustainability accounting?

2. METHOD

This section describes the methodological strategy used to identify, review, and analyze research on sustainability accounting. To ensure that no other studies reviewed sustainability accounting (Marzi, Balzano, Caputo, & Pellegrini, 2025). Google Scholar, Scopus, and Web of Science (WoS) databases were searched. The results verified that existing reviews either focus on specific topics in sustainability accounting (e.g., (Ascui, 2014; ElKelish, 2023) use different review types (e.g., (Adams & Larrinaga-González, 2007) or cover limited time periods (e.g., Hsiao et al. (2022)).

To conduct the review, the bibliometric approach was selected, which is suitable for investigating research areas that attract significant academic interest and are characterized by a large volume of publications (Lim, Kumar, & Donthu, 2024; Marzi et al., 2025). Bibliometric reviews enable quantitative analysis of data, identify trends and interconnections, and minimize interpretation bias (Donthu, Kumar, Mukherjee, Pandey, & Lim, 2021).

2.1. Data Collection

After performing an informal literature review and defining the review topic and research questions outlined in the introduction, the study's boundaries were set (Marzi et al., 2025). For the literature search, the structured approach of previous studies was followed (e.g., (Baker, Pandey, Kumar, & Haldar, 2020; Nerantzidis, Tampakoudis, & She, 2024)). The Scopus database was selected to search for the potentially relevant papers. Prior studies (e.g., Secundo, Rippa, and Cerchione (2020)) have shown that the coverage of academic journals in the Scopus database is higher than in other databases. The search focused on Business, Management and Accounting, and Economics, Econometrics and Finance journals. Consistent with previous reviews, the analysis included articles that were not empirical studies, such as conceptual and review articles (Maione et al., 2024). The search string was developed after reviewing the sustainability accounting literature and its categories (e.g., Baker et al. (2020)). In particular, the search string was constructed to capture the many facets of sustainability accounting, such as environmental accounting (water resources, natural capital, biodiversity, natural resources, extinction, climate change), social accounting (people, human rights, social inequality), and economic and governance accounting (e.g., economic inequality). The search terms were combined with the Boolean connectors "AND" and "OR" to formulate an appropriate search string (Paul, Lim, O'Cass, Hao, & Bresciani, 2021). The search was conducted on 31 October 2025. To exclude irrelevant articles, the search was limited to English-language articles published in journals. To ensure a comprehensive understanding of the existing literature, no time limit was imposed. This process resulted

in 6690 articles. To ensure the collected documents were of high quality, the analysis was limited to peer-reviewed articles published in academic journals listed in the Academic Journal Guide (AJG) 2024 (Alhossini, Ntim, & Zalata, 2021; Nerantzidis et al., 2024). To increase generalizability and reduce potential bias, all journals included in AJG were retained in the sample (Maxfield & Wang, 2024; Tsalavoutas, Tsoligkas, & Evans, 2020). To further limit the search to relevant documents, the selection was limited to the fields of "Account," "Ehics-Csr-Man," "Finance," "IB&AREA," "ORG STUD," "STRAT," "ENT-SBM," "INFO MAN," "SOC SCI, INNOV" within the AJG (Harzing, 2024). This narrowed the database to 1925 articles.

Then, a selection phase followed, in which the titles of each article were scanned to assess their alignment with the review's boundary conditions (Shea et al., 2017). For triangulation reasons, one researcher outside the research unit, serving as an external research design validator, independently followed this process (e.g., (Thomas & Tee, 2022)). The differences between the author and the external researcher were discussed to reduce inter-observer inconsistencies, and an agreement was reached (Krippendorff, 2019). At this point, 560 articles were included, and 520 were excluded. For the remaining 215 articles, the abstracts and/or the full papers were read to assess their relevance. This process yielded 68 additional articles, bringing the total to 628 articles for analysis. Table 1 summarizes the search strategy and data retrieval process.

Table 1. Search strategy and data retrieval process.

Database	**Scopus**
Search (keyword) string	"sustainability" AND ("account*" OR "disclos*" OR "management") AND ("water" OR "water resource*" OR "natural capital" OR "biodiversity" OR "natural resource*" OR "extinction" OR "climate" OR "climate change" OR "people" OR "human rights" OR "inequality" OR "economic inequality" OR "social inequality")
Search date	October 31, 2025 (no time limitations imposed)
Search field	Article title, abstract, keywords
Subject (research) areas (business and economy perspective)	Include "Business, Management and Accounting" and "Economics, Econometrics and Finance"
Document type	Include "Article"
Language	Include "English"
Publication stage	Include "Final and Article in press"
Source type	Include "Journal"
Search results	6,690 articles
Restrict to journals ranked in AJG 2024 list	Articles published in established journals (ranked as 4*, 4, 3, 2 and 1) in the AJG 2024 list
Relevance check	The selection was limited to the fields of "ACCOUNT," "EHICS-CSR-MAN," "FINANCE," "IB&AREA," "ORG STUD," "STRAT," "ENT-SBM," "INFO MAN," "SOC SCI, INNOV" within the AJG Harzing (2024)
Filtered results	1,925 articles
Selection phase	The titles were scanned to assess relevance. Results: 560 articles included, 520 articles excluded, 215 articles remained for further assessment (abstracts and/or full papers read to assess relevance, yielding 68 additional articles).
Final search results	628 articles
Analysis method	Bibliometric analysis - Performance analysis - Science mapping - Manual thematic classification -Thematic analysis -Research gaps identification

Source: Compiled by the author, adapted from Marzi et al. (2025); Paul et al. (2021) and Shea et al. (2017).

2.2. Bibliometric Analysis

To answer the research questions, a bibliometric analysis of the 628 articles was conducted using VOSviewer (Van Eck & Waltman, 2010). To map the development of the sustainability accounting literature and to identify the most influential studies, co-citation analysis was used (Marzi et al., 2025; Pandey, Andres, & Kumar, 2023). The latter is based on the idea that co-cited papers have similar content (Donthu et al., 2021). Furthermore, to explore research trends over time and identify research topics, keyword co-occurrence was used to reflect conceptual connections among authors' keywords (Pandey et al., 2023). To visualize the distribution of author-specified keywords over time and identify research trends, co-word analysis was employed, with particular focus on its overlay visualization feature. Each keyword was assigned a color based on the score derived from the average year of occurrence of the author-specified keywords, with blue indicating the earliest years, and green and yellow denoting the most recent years (Caputo, Pizzi, Pellegrini, & Dabić, 2021).

2.3. Thematic Analysis

To supplement the bibliometric analysis, a manual thematic classification scheme was applied to the articles, based on their main purpose (Nerantzidis et al., 2024; Rinaldi, 2023). This qualitative process enabled the identification of the most prominent research themes, thereby mitigating the inherent methodological biases associated with individual bibliometric indicators (Campra, Esposito, & Brescia, 2021; Caputo et al., 2021; Massaro, Dumay, & Garlatti, 2015). Finally, the results of the co-word and thematic analyses allowed for the identification of future research trends.

3. ANALYSIS AND FINDINGS

3.1. Publication and Citation Trends

To answer RQ1 (What are the publication and citation trends in sustainability accounting?), the total number of publications and citations per year was calculated. Figure 1 presents the number of publications on sustainability accounting between 1992 and 2025. The figure shows that sustainability accounting evolved from a small research niche in the 1990s and early 2000s to a rapidly growing and influential research field. For nearly 20 years, publication activity was low, but after 2010 it began to grow, reflecting rising academic and regulatory interest in sustainability reporting and ESG issues. Since 2020, the number of publications has grown almost exponentially, reaching over 170 in 2025. A similar trend is identified for cumulative citations, which exceeded 20,000 by 2025, indicating that both seminal and recent studies are gaining broad academic attention. Overall, the figure shows the field's shift from its early conceptual roots to becoming a widely recognized and influential research area.

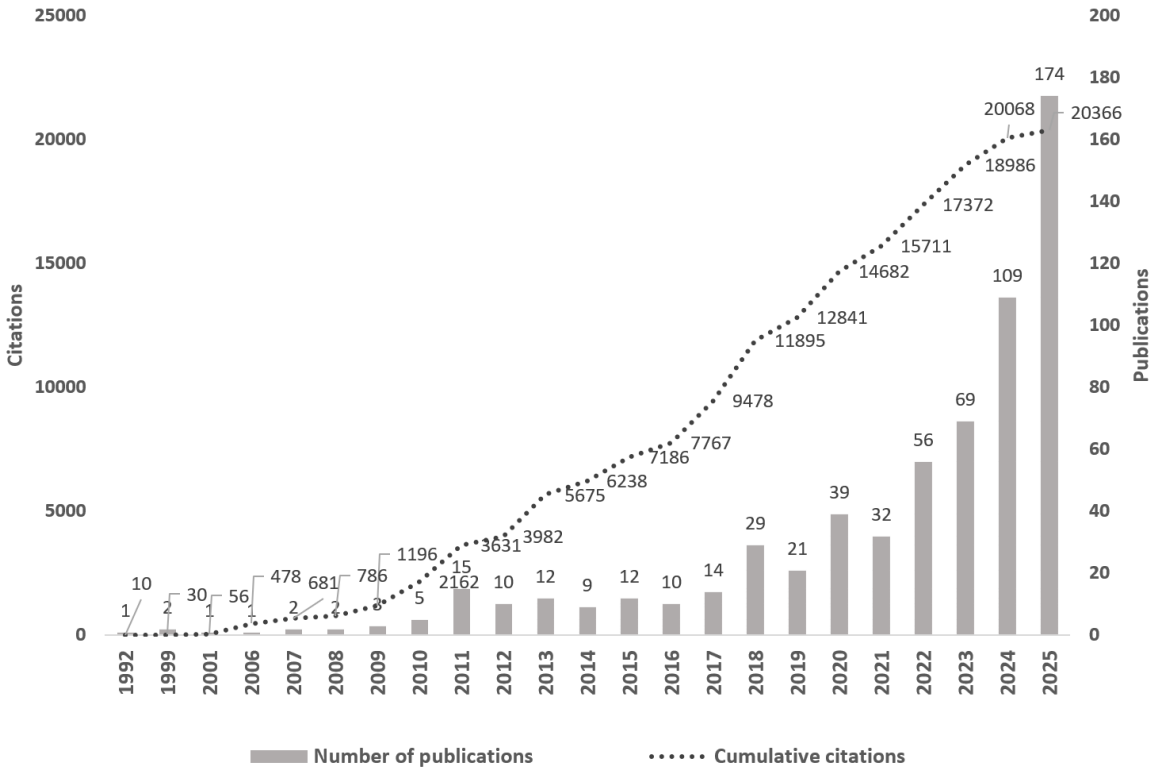

Figure 1. Publication and citation patterns taking into account AJG 2024 journals.

3.2. Influential Research Constituents

To answer RQ2 (What are the most influential authors, institutions, countries, journals, and articles in sustainability accounting?), the highest number of publications and citations was calculated.

3.2.1. Most Influential Authors

Table 2 shows the top 20 authors by total publications and total citations. Regarding publications, Warren Maroun is the most productive author, with 10 publications, reflecting a constant engagement in the field. Several others (e.g., Bui, Houqe, and Zaman (2020); Yu, Lin, and Tang (2018) and Friedrich, Velte, and Wulf (2023) follow with four to five publications, demonstrating consistent contributions over time. Regarding citations, Walid Ben-Amar is the most influential author, with 1,121 citations, despite having only four publications. Similarly, authors such as Philip McIlkenny and Millicent Chang make impactful contributions, with high citation counts (over 800). Some authors, such as Maroun and Boiral, appear on both lists, demonstrating both increased productivity and strong influence. Overall, Table 2 shows that some scholars shape the field through high productivity, while others do so through highly cited work, both of which are critical to advancing sustainability accounting research.

Table 2. Top 20 authors with the highest number of publications and citations.

Authors	Total publications	Authors	Total citations
Moreno and Caminero (2022)	10	Ben-Amar, Chang, and McIlkenny (2017)	1121
Bui et al. (2020)	5	Padilla-Lozano and Collazzo (2022)	1062
Donthu et al. (2021)	5	Koh, Durand, Dai, and Chang (2015)	807
Yu et al. (2018)	5	(Prado-Lorenzo, Rodríguez-Domínguez, Gallego-Álvarez, & García-Sánchez, 2009)	800
Friedrich et al. (2023)	4	Whiteman, Walker, and Perego (2013)	693
Ben-Amar et al. (2017)	4	Whiteman et al. (2013)	693
Boiral (2016)	4	Pfeffer (2010)	655
Safiullah, Houqe, Ali and Azam, (2024)	4	Boiral and Heras-Saizarbitoria (2017)	618
Alatawi, Ntim, Zras, and Elmagrhi (2023)	4	Ai and Chen (2003)	608
Turner et al. (2016)	4	Matin, Forrester, and Ensor (2018)	608
Treepongkaruna (2024)	4	D. Li, Huang, Ren, Chen, and Ning (2018)	608
Velte (2017)	4	(Ning, Wang, & Li, 2016)	608
Asiaei, O'Connor, Barani, and Joshi (2023)	3	Ren, Wu, Zhao, and Du (2024)	608
Thomas and Tee (2022)	3	Becker, Carbo, and Langella (2010)	602
Di Vaio, Chhabra, Zaffar, and Balsalobre-Lorente (2025)	3	Dao, Langella, and Carbo (2011)	602
O'Neill, McDonald, and Deegan (2015)	3	Gunkel, Schlaegel, Langella, and Peluchette (2010)	602
(Dumay, 2016)	3	Moreno and Caminero (2022)	427
Schaltegger, Gibassier, and Zvezdov (2013)	3	Donthu et al. (2021)	422
Jones and Solomon (2013)	3	Cairns (2000)	422
Calabrese, Costa, Levialdi, and Menichini (2019)	3	Moreno and Caminero (2022)	421

Source: Compiled by the author.

3.2.2. Most Influential Institutions

Table 3 shows the top 20 universities by total publications and total citations. The most productive universities are in Australia and Europe: Macquarie University leads with 17 publications, followed by the University of South Australia (13) and the University of Turin (12). Several institutions from Italy, the UK, Germany, and New Zealand also stand out, reflecting broad international engagement with sustainability accounting research.

Regarding citations, the University of Ottawa in Canada is first with 1,126 citations, despite not being the most productive, suggesting particularly impactful contributions. The University of Western Australia, Erasmus University, CSIRO, and Macquarie University also follow in citations across Australia, Europe, and Canada. Several Chinese universities, such as Central South University and Hunan University of Technology and Business, also present high citation counts, indicating significant contributions in influential papers. Some universities, including Macquarie University, the University of Western Australia, the University of South Australia, Monash

University, and the University of Hamburg, appear on both lists, demonstrating a combination of consistent engagement and significant impact. Overall, these patterns reflect a geographically diverse and developing research community in sustainability accounting.

Table 3. Top 20 universities with the highest number of publications and citations.

Universities	Country	Total publications	Universities	Country	Total citations
Macquarie University	Australia	17	University of Ottawa	Canada	1126
University of South Australia	Australia	13	The University of Western Australia	Australia	870
University of Turin	Italy	12	Erasmus University	Netherlands	800
University of the Witwatersrand	South Africa	11	Commonwealth Scientific and Industrial Research Organization (Csiro)	Australia	705
Lum University Giuseppe Degennaro	Italy	10	Macquarie University	Australia	700
RMIT University	Australia	10	Stockholm University	Sweden	693
University of Salamanca	Spain	10	Laval University	Canada	657
Massey University	New Zealand	9	Stanford University	United States	655
University of Birmingham	United Kingdom	9	Queen Mary University of London	United Kingdom	621
Leuphana University Lueneburg	Germany	8	Central South University	China	608
University of Oxford	United Kingdom	8	Hunan University of Technology and Business	China	608
Sapienza University of Rome	Italy	7	Shippensburg University	United States	602
University of Hamburg	Germany	7	University of Reading	United Kingdom	552
University of Sheffield	United Kingdom	7	Kedge Business School	France	508
Victoria University of Wellington	New Zealand	7	Pablo De Olavide University	Spain	506
Western Sydney University	Australia	7	Deakin University	Australia	501
Edith Cowan University	Australia	6	University of Hamburg	Germany	482
Griffith University	Australia	6	University of the Witwatersrand	South Africa	456
Monash University	Australia	6	University of South Australia	Australia	444
The University of Western Australia	Australia	6	Monash University	Australia	440

Source: Compiled by the author.

3.2.3. Most Influential Countries

Table 4 shows the top 21 countries by total publications and total citations. Regarding publications, the UK leads with 121, followed by Australia (107) and the US (77). These three English-speaking countries present strong, established research communities. Several European countries (e.g., Italy, Spain, France, Germany, and the Netherlands), as well as China, India, Malaysia, New Zealand, and South Africa, also show increased publication activity, reflecting the global importance of sustainability accounting across developed and emerging economies.

Regarding citations, Australia is the most influential country with 4,784 citations, followed by the UK (4,730) and the US (3,274). Canada is fourth in citations despite significantly fewer publications. This suggests that Canada's contributions are particularly impactful. Countries such as Italy, Spain, the Netherlands, and Sweden also present high citation performance, indicating research communities producing work of international significance. Australia, the UK, and the US occupy the top three positions in both lists. This indicates the presence of strong academic networks and influential researchers actively participating in the sustainability accounting field across all three countries. Overall, Table 3 shows that sustainability accounting research is disseminated globally, with some leading countries (Australia, the UK, and the US) and other countries gradually increasing their influence (e.g., China and Italy).

Table 4. Top 21 countries with the highest number of publications and citations.

Country	Total publications	Country	Total citations
United Kingdom	121	Australia	4784
Australia	107	United Kingdom	4730
United States	77	United States	3274
Italy	72	Canada	2588
China	50	Italy	1681
Spain	39	Netherlands	1422
India	37	Spain	1350
Canada	33	France	1216
France	33	China	1148
Germany	33	Sweden	1148
Malaysia	29	Germany	1116
New Zealand	27	New Zealand	985
South Africa	27	South Africa	791
Saudi Arabia	17	Malaysia	657
Ghana	15	Denmark	475
Netherlands	15	India	469
Indonesia	14	Pakistan	336
Thailand	11	Ecuador	289
Sweden	10	Austria	273
Pakistan	9	Iran	207
Portugal	9	Switzerland	205

Note: Countries are based on author affiliations, with each receiving a count of 1(Unweighted).

Source: Compiled by the author.

Figure 2 illustrates how sustainability accounting research has evolved among the top five most productive countries (the UK, Australia, the US, Italy, and China). The figure shows that the first research communities focusing on sustainability accounting emerged in the UK and Australia in 2006. By 2011, there was also a significant increase in publications in the US and Italy. After 2011, research increased significantly, largely driven by growing global interest in ESG reporting, integrated reporting, and corporate sustainability frameworks. This trend strengthened from 2016 to 2020, with the UK and Australia as leaders, and China becoming more active. The

strong increase in publications from 2021 onwards across all countries reflects the increasing relevance of sustainability accounting research.

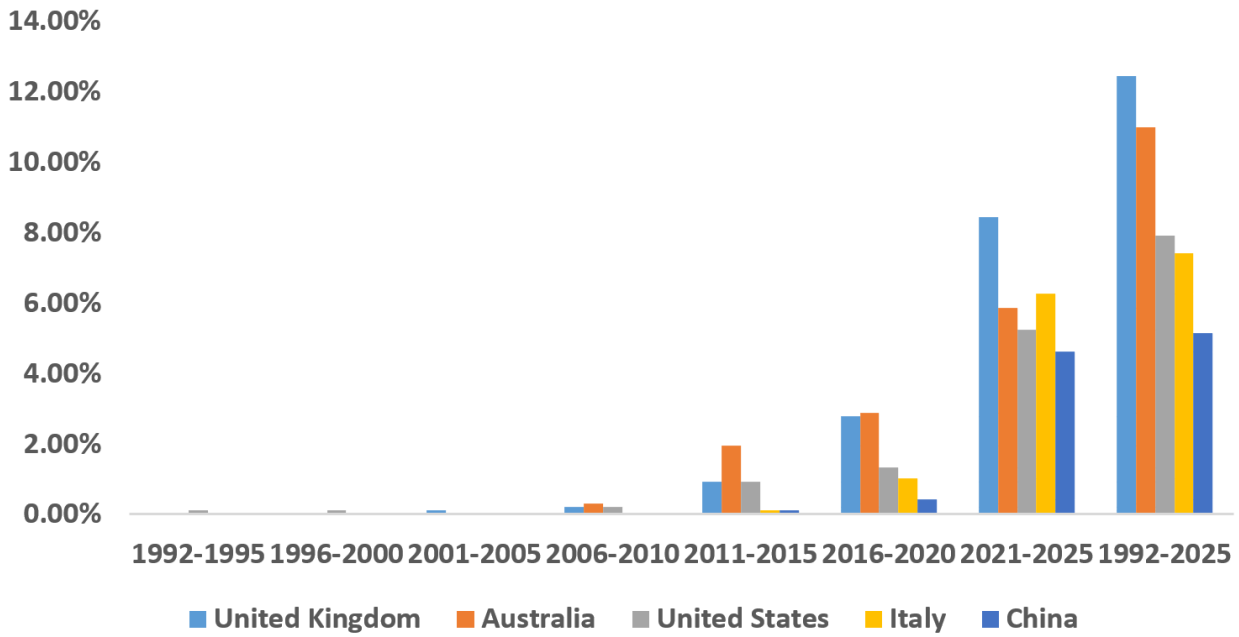

Figure 2. Temporal distribution of the Top-5 productive countries.

3.2.4. Most Influential Journals

Table 5 presents the top 20 journals ranked by total publications and total citations. Business Strategy and the Environment is the most productive journal in sustainability accounting research, with 73 publications, significantly exceeding all others. However, when measuring influence through citations, the Journal of Business Ethics is the leading journal, with 3,135 citations, followed by the Accounting, Auditing and Accountability Journal with 2,910 citations. These three journals appear in the top five in both the number of publications and the number of citations, suggesting a strong influence within the field of sustainability accounting. Other journals such as Sustainability Accounting, Management and Policy Journal, Meditari Accountancy Research, Accounting Forum, and Technological Forecasting and Social Change also advance the field.

Table 5. Top 20 journals with the highest number of publications and citations.

Journals	Total publications	Journals	Total citations
Business Strategy and the Environment (3)	73	Journal of Business Ethics (3)	3135
Sustainability Accounting, Management and Policy Journal (2)	49	Accounting, Auditing and Accountability Journal (3)	2910
Accounting, Auditing and Accountability Journal (3)	34	Business Strategy and the Environment (3)	1921
Meditari Accountancy Research (1)	31	Sustainability Accounting, Management and Policy Journal (2)	903
Journal of Business Ethics (3)	22	Journal of Management Studies (4)	783
Cogent Business and Management (1)	19	Accounting Forum (3)	674
Social Responsibility Journal (1)	15	Academy of Management Perspectives (4)	655
Technological Forecasting and Social Change (3)	13	Journal of Strategic Information Systems (4)	602
British Accounting Review (3)	10	Technological Forecasting and Social Change (3)	578
Corporate Governance (Bingley) (2)	10	Journal of Sustainable Finance and Investment (1)	544
Journal of Sustainable Finance and Investment (1)	10	British Accounting Review (3)	483
Finance Research Letters (2)	9	Meditari Accountancy Research (1)	473
Management Decision (2)	9	World Development (3)	378
Social and Environmental Accountability Journal (1)	9	Pacific Accounting Review (1)	335
International Review of Financial Analysis (3)	8	Corporate Governance (Bingley) (2)	321
Journal of Global Responsibility (1)	8	Cogent Business and Management (1)	317
Research in International Business and Finance (2)	8	Management Decision (2)	302
Accounting Forum (3)	7	Social Responsibility Journal (1)	297
Emerald Emerging Markets Case Studies (1)	7	Journal of Knowledge Management (2)	237
Organization and Environment (3)	7	Business and Society (3)	212

Note: AJG 2024 ranking in parentheses.

Source: compiled by the author.

Exploring the distribution of publications across AJG fields, the findings (panel A of Table 6) show that the fields of accounting and ethics-CSR-management dominate sustainability accounting research, accounting for more than 50% of published articles. Regarding the distribution of articles across the AJG Ranks (panel B of Table 6), the largest category is AJG 3, with 219 publications, representing 34.87%. An additional 28.34% (178 articles) is

published in AJG 2 journals. This suggests that the field's research is mostly published in strong, reputable journals.

Table 6. Distribution of publications across AJG fields and rankings.

Panel A		
AJG field	**Publications**	**Percentage of total publications**
ACCOUNT	228	36.31%
ENT-SBM	4	0.64%
ETHICS-CSR-MAN	141	22.45%
FINANCE	86	13.69%
IB&AREA	15	2.39%
INFO MAN	7	1.11%
INNOV	31	4.94%
ORG STUD	11	1.75%
PUB SEC	12	1.91%
SOC SCI	93	14.81%
Total Publications	628	100.00%
Panel B		
AJG ranking	**Publications**	**Percentage of total Publications**
4*	6	0.96%
4	15	2.39%
3	219	34.87%
2	178	28.34%
1	210	33.44%
Total Publications	628	100.00%

Source: Compiled by the author.

3.2.5. Most Influential Articles

Table 7 presents the fifteen most cited articles. The majority focus on carbon disclosure and climate change, demonstrating the growing emphasis on environmental transparency (e.g., Ben-Amar et al. (2017): 807 citations, 100.88 citations per year (CPY); D. Li et al. (2018): 608 citations, 86.86 CPY). In addition, they reflect the integration of sustainability into strategic planning (Pfeffer, 2010; Stubbs & Higgins, 2014) . Several recent studies (e.g., Ben-Amar et al. (2017) and ; D. Li et al. (2018)) present a high number of CPY, indicating a strong connection to current policy and regulatory developments. Overall, the most influential articles emphasize the link between sustainability accounting and themes like governance, environmental legitimacy, integrated reporting, and strategic management.

Table 7. Top 15 articles with the highest number of citations.

Title	Authors	Total citations	Year	CPY
Board Gender Diversity and Corporate Response to Sustainability Initiatives: Evidence from the Carbon Disclosure Project	Ben-Amar et al. (2017)	807	2017	100.88
Planetary Boundaries: Ecological Foundations for Corporate Sustainability	Whiteman et al. (2013)	693	2013	57.75
Building sustainable organizations: The human factor	Pfeffer (2010)	655	2010	43.67
Environmental Legitimacy, Green Innovation, and Corporate Carbon Disclosure: Evidence from CDP China 100	D. Li et al. (2018)	608	2018	86.86
From green to sustainability: Information Technology and an integrated sustainability framework	Dao et al. (2011)	602	2011	43
GRI and the camouflaging of corporate unsustainability	Moneva, Archel, and Correa (2006)	422	2006	22.21
Integrated reporting and internal mechanisms of change	Stubbs and Higgins (2014)	361	2014	32.82
An analysis of Australian company carbon emission disclosures	Choi, Lee, and Psaros (2013)	256	2013	21.33
Board Effectiveness and the Voluntary Disclosure of Climate Change Information	Ben-Amar and McIlkenny (2015)	255	2015	25.5
GHG reporting and impression management: An assessment of sustainability reports from the energy sector	Talbot and Boiral (2018)	249	2018	35.57
Factors influencing the disclosure of greenhouse gas emissions in companies worldwide	Prado-Lorenzo et al. (2009)	247	2009	15.44
Achieving Shared Triple Bottom Line (TBL) Value Creation: Toward a Social Resource-Based View (SRBV) of the Firm	Tate and Bals (2018)	242	2018	34.57
Coming Clean: The Impact of Environmental Performance and Visibility on Corporate Climate Change Disclosure	Dawkins and Fraas (2011)	240	2011	17.14
Does stakeholder pressure influence corporate GHG emissions reporting? Empirical evidence from Europe	Liesen, Hoepner, Patten, and Figge (2015)	239	2015	23.9
Integrating sustainability into strategic decision-making: A fuzzy AHP method for the selection of relevant sustainability issues	Calabrese et al. (2019)	232	2019	38.67

Note: CPY denotes citations per year.

Source: compiled by the author.

3.3. Collaboration Among Authors and Author-Affiliated Institutions and Countries

To answer RQ3 (What is the state of collaboration among authors and author-affiliated universities and countries in the sustainability accounting literature?), VOSviewer was used to analyze metadata on co-authors, institutions, and countries and generate collaboration networks. To visualize the networks, VOSviewer uses the number of links and their total link strength (TLS), which indicates the strength of connections between items (Van Eck & Waltman, 2010). Each node represents a research entity (author, institution, or country), with node size reflecting its importance and color denoting its cluster or community. Lines illustrate relationships or connections between two elements, while line thickness indicates the strength of the connection (Baker, Kumar, & Pattnaik, 2021). Scholars who have published at least one article from 1992 to 2025 were included.

Figures 3–5 display the collaboration network among scholars, their affiliated institutions, and countries in the area of sustainability accounting. For each of the 1615 qualifying authors, the TLS of their co-authorship connections was calculated, and the authors with the highest TLS were identified. As shown in Figure 3, not all authors are connected; the largest connected group features 32 authors. Botica Redmayne, Nives, and You, Jean have the most links (co-authorship numbers), followed by Principale, Salvatore. Bui, Binh has the highest total link strength (relation intensity), followed by Botica Redmayne, Nives, and others like Houqe, Noor Nurul, and You, Jean. Additionally, Bui, Binh, and Houqe, Noor Nurul, form the strongest collaboration. They are succeeded by Bui, Binh, and Zaman, Mahbub; Houqe, Noor Nurul, and Zaman, Mahbub; and Lombardi, Rosa, and Paoloni, Paola.

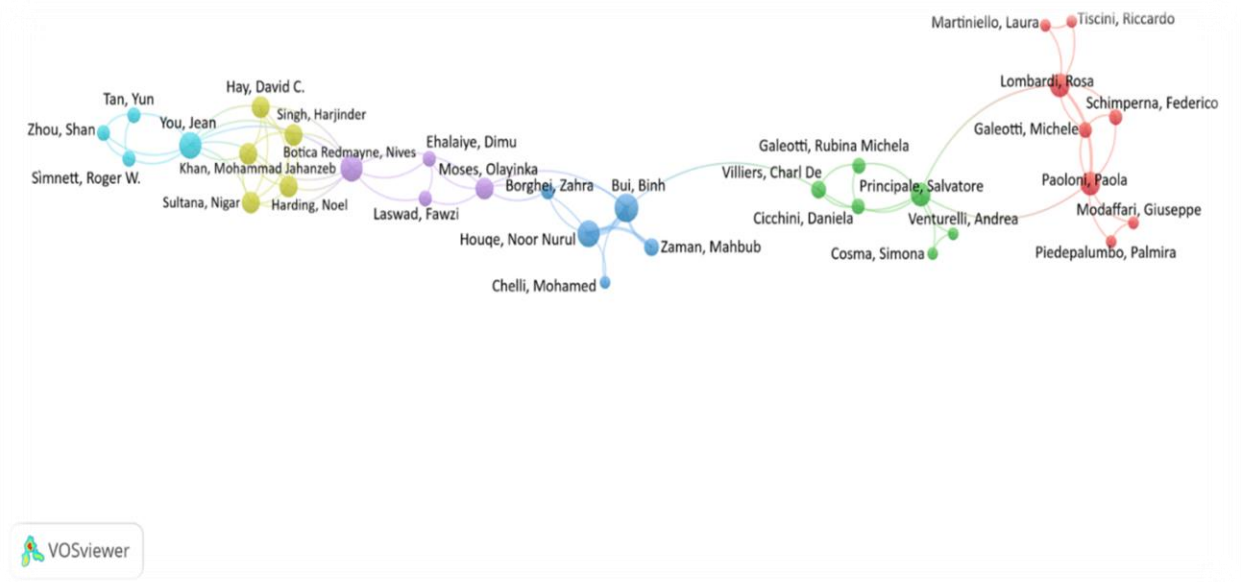

Figure 3. Co-authorship of authors between 1992 and 2025.

Note: The figure depicts the cooperation network of the most collaborating authors in this research area, using VOSviewer. Nodes represent authors. Node size indicates the relevance or intensity of collaboration. The lines linking the nodes indicate the connections, and the line thickness indicates their strength. The color of the nodes represents the cluster or community to which they belong.

Beyond collaboration networks among authors, other key aspects include partnerships between author-affiliated institutions and countries. Figure 4 illustrates the collaboration network among the institutions affiliated with the authors from 1992 to 2025. Using a minimum of three articles per institution, 124 institutions meet this criterion. The total strength of co-authorship links with other institutions is calculated for each of these 124 institutions. The institutions with the highest total link strength are highlighted. Some of these institutions are not connected. The largest connected cluster includes 109 institutions. The results reveal that Macquarie University is the most collaborative institution, displaying the highest TLS and the most collaboration ties with others, followed by Massey University, Deakin University, Monash University, and Victoria University of Wellington in terms of links, and Massey University, Victoria University of Wellington, the University of Western Australia, and Deakin University in terms of TLS. Additionally, Chulalongkorn University, the University of Western Australia, Massey University, and Victoria University of Wellington demonstrate strong collaboration networks.

Figure 5 displays the networking among the authors' affiliated countries from 1992 to 2025. Using one article as a minimum threshold for an author's affiliated country, 77 countries meet this criterion. For each of these 77 countries, the total strength of co-authorship links with other countries is calculated. The countries with the highest total link strength are highlighted. The largest connected cluster includes 71 countries. The results show

that the United Kingdom is the most collaborative country, having the highest TLS and the most collaboration ties with others, followed by Australia, Italy, and China in terms of TLS, and Italy, China, and Australia in terms of links. The thickest links are between Australia and the United Kingdom, and France and the United Kingdom, followed by collaborations between Italy and the United Kingdom. Figure 5 highlights countries with weak links (e.g., Brazil, Brunei Darussalam, Colombia, Croatia, Palestine, Romania, Senegal, Slovenia) or no links at all (e.g., Philippines, Peru, Barbados, Ukraine, Uganda, Kenya) with other countries. Increased participation from countries with little or no existing links could help deepen understanding in this research area.

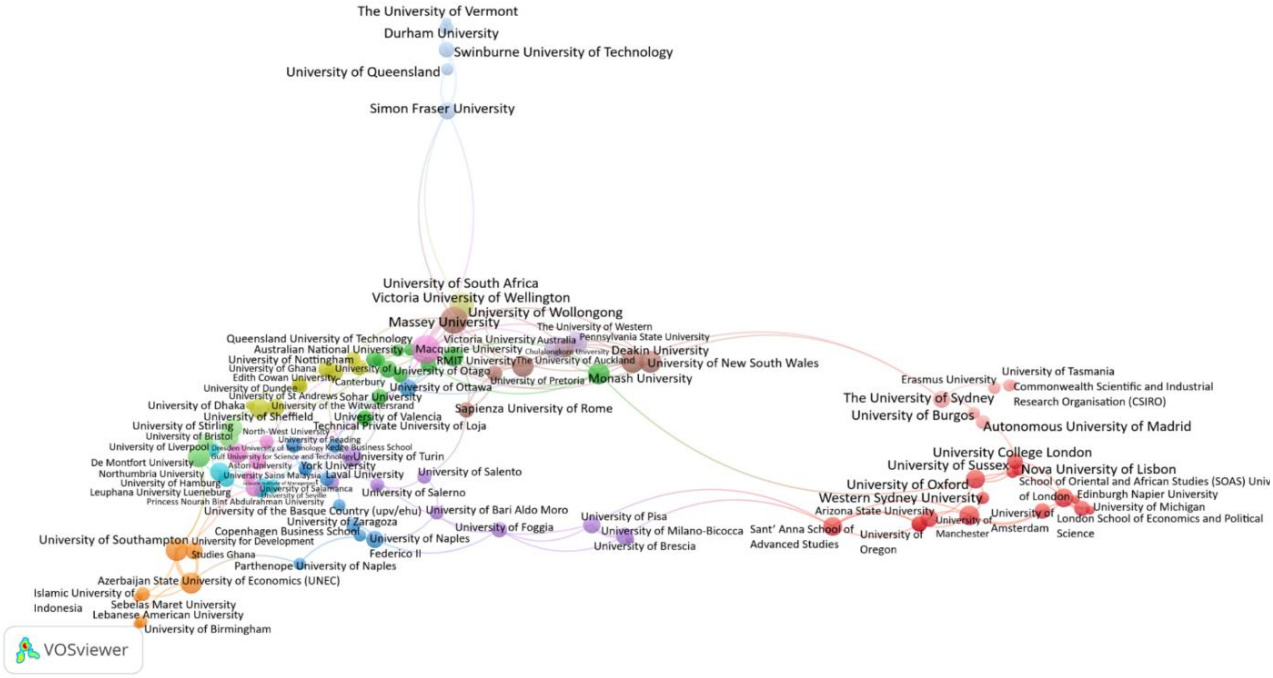

Figure 4. Co-authorship of author-affiliated institutions between 1992 and 2025.

Note: The figure depicts the cooperation network of the most collaborating institutions in this research area, using VOSviewer. Nodes represent affiliated institutions. Node size indicates the relevance or intensity of collaboration. The lines linking the nodes indicate the connections, and the line thickness indicates their strength. The color of the nodes represents the cluster or community to which they belong.

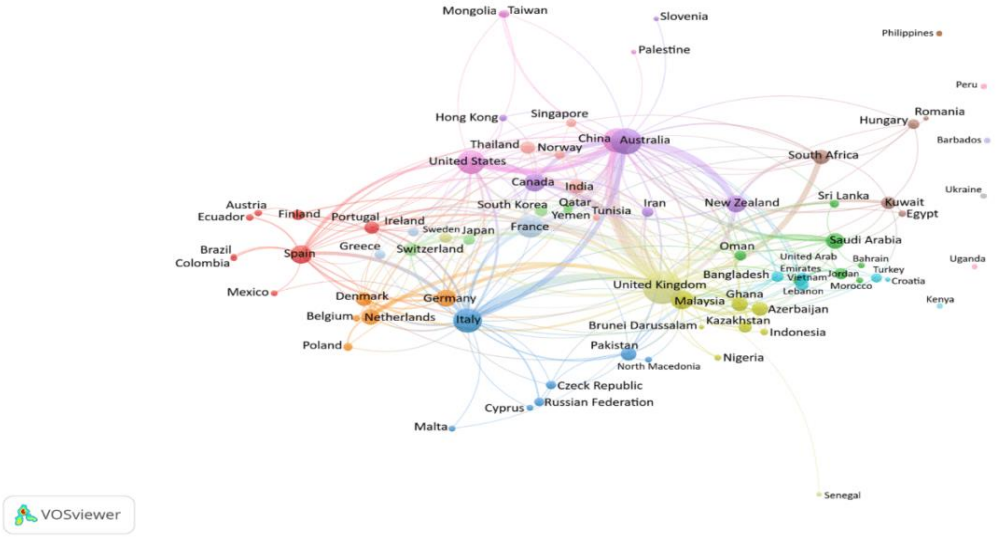

Figure 5. Co-authorship of authors-affiliated countries between 1992 and 2025.

Note: The figure depicts the network among the authors' affiliated countries in this research area, generated using VOSviewer. Nodes represent affiliated countries. Node size indicates the relevance or intensity of collaboration. The lines linking the nodes indicate the connections, and their thickness indicates the strength of those connections. The color of the nodes represents the cluster or community to which they belong.

3.4. Thematic Analysis and Discussion

To answer RQ4 (What are the most prominent themes in sustainability accounting?), each study was classified separately by its main purpose (Nerantzidis et al., 2024; Rinaldi, 2023). To enable the identification of broad themes and the understanding of each article's contribution to academic knowledge, the articles were manually coded using a structured literature review approach (Campra et al., 2021; Massaro et al., 2015). Following this procedure, the studies were classified into four main research themes: sustainability and environmental reporting, financial risk and performance, climate and carbon disclosure, and biodiversity and conservation. Table 8 presents the number of studies and the three most cited articles for each theme.

3.4.1. Sustainability and Environmental Reporting

As shown in Table 8, this is the largest cluster, with 294 articles. Most studies in this cluster examine general sustainability reporting practices, such as environmental performance measures and sustainability disclosures. The most cited article (693 times) is Whiteman et al. (2013), which explores how the Planetary Boundaries Framework (Rockström et al., 2009) has influenced corporate sustainability research and practice. Other influential studies focus on the impact of organizational decisions about people on social sustainability (Pfeffer, 2010) or develop integrated sustainability frameworks that combine resources such as human capital, information technology, and supply chains to create sustainable value and gain a competitive advantage (Dao et al., 2011).

The literature reveals an imbalance between the growing importance of sustainability reporting and the limited integration of the social dimension into accounting and management practices (Pfeffer, 2010). Furthermore, despite the wide adoption of generally accepted reporting frameworks and the increase in the volume of disclosures, symbolic compliance is difficult to deal with; empirical studies provide evidence of selective disclosure, differences between reported commitments and actual sustainability practices, and low data quality (Mai, Vourvachis, & Grubnic, 2023; Roszkowska-Menkes, Aluchna, & Kamiński, 2024; Talbot & Boiral, 2018). To address these issues, recent studies try to develop conceptual and practical tools that will direct sustainability accounting toward more relevant goals (Calabrese et al., 2019; Matin et al., 2018; Tate & Bals, 2018) and facilitate actual transformation (O'Dwyer & Unerman, 2020; Quattrone, 2022; Rowbottom, 2023; Stubbs & Higgins, 2014; Tregidga & Laine, 2022). However, evidence from integrated reporting and climate disclosure standards suggests that change remains limited, and is driven primarily by investor-focused concerns, thereby highlighting the need for sustainability accounting frameworks that more effectively align corporate practices with social justice and global sustainability goals (Morris & Guenther, 2024; Tiscini, Martiniello, & Lombardi, 2022).

3.4.2. Financial Risk and Performance

The second cluster, with 231 articles, explores how climate and environmental disclosures, governance, and strategic responses relate to financial risk, performance, and innovation. The most cited article (mentioned 240 times) is Dawkins and Fraas (2011). The authors find a positive relationship between firm environmental performance and media visibility and voluntary climate change disclosure. Other studies show that green knowledge management positively influences corporate green performance (Abbas & Khan, 2023) and that green innovation mediates the positive relationship between corporate social responsibility and competitiveness, shifting the focus from cost reduction to more responsible innovations (Padilla-Lozano & Collazzo, 2022).

Several studies show that disclosure levels have risen steadily over time, indicating that sustainability reporting is becoming standard practice (Devine, Sanderford, & Wang, 2024; Friedrich et al., 2023; Moreno & Caminero, 2022). Most of the empirical literature demonstrates a positive relationship between high-quality ESG

disclosures and financial outcomes, especially when supported by strong governance mechanisms, auditing, and institutional oversight (Adu, Abedin, Saa, & Boateng, 2024; Alshahrani, Eulaiwi, Duong, & Taylor, 2023; Devine et al., 2024). By contrast, symbolic disclosure does not necessarily lead to improved environmental performance or real investment payoffs, highlighting a gap between reporting, actual practices, and outcomes ((Adu et al., 2024; Marrucci & Daddi, 2022). In addition, some scholars emphasize the role of institutions (regulative, normative, and cultural) in determining the probability of disclosures, their quality, and firm performance (Mateo-Márquez, González-González, & Zamora-Ramírez, 2025; Sakariyahu, Lawal, Etudaiye-Muhtar, & Ajide, 2023; Shui, Zhang, Wang, & Smart, 2025) show that disclosures can be used to develop forward-looking measures of environmental risk exposure, reinforcing the relevance of accounting information for financial markets. Furthermore, risk disclosure serves not only as a risk-management or legitimacy tool but also as a driver of strategic outcomes oriented toward innovation (Bouguerra, Hughes, Rodgers, Stokes, & Tatoglu, 2024; Feng, Huang, Chen, & Liao, 2024). Overall, the literature in this stream supports that sustainability disclosures and sustainability governance are important for financial risk and performance. Still, their effectiveness depends on institutional and governance factors, as well as on whether disclosures reflect real action rather than being symbolic.

3.4.3. Climate and Carbon Disclosure

Articles in this cluster focus on how companies disclose their carbon emissions, address climate change, and incorporate climate information into their reporting. Despite the relatively low number of studies (73), the average citations per article (approximately 62) is nearly double the general average of 32, indicating that climate and carbon accounting play a central role in sustainability accounting research. The most cited article (mentioned 807 times) is Ben-Amar et al. (2017), which examines how board gender diversity influences carbon disclosures. Several studies within this stream show that stakeholder demands and legitimacy concerns are the key drivers of voluntary carbon and climate disclosures. These drivers, however, influence the existence of disclosure rather than its content, with firms often using symbolic reporting to manage legitimacy and not reflecting actual sustainability performance (Hrasky, 2011; Liesen et al., 2015). Furthermore, this relationship is strongly influenced by governance characteristics; for instance, increased female board representation increases the likelihood of voluntary climate disclosure, particularly once a critical mass is reached (Ben-Amar et al., 2017). Similarly, strong governance structures, such as board-level oversight, longer reporting horizons, and frequent board engagement, are associated with an improved disclosure-performance relationship (Bui et al., 2020). By contrast, weak governance mechanisms (e.g., classified boards or managers protected from external oversight) are associated with worse environmental performance, highlighting the importance of governance in driving sustainability (Tanthanongsakkun, Treepongkaruna, & Jiraporn, 2023). Furthermore, research indicates that external assurance enhances the credibility of gas emissions disclosure by reducing information asymmetry (Fan, Tang, & Pan, 2021).

Besides disclosure, research shows that firms increasingly develop climate management tools (e.g., internal carbon pricing), particularly when exposed to regulatory and climate-related risks (Ben-Amar, Gomes, Khursheed, & Marsat, 2022). In addition, climate policy uncertainty can lead to increased sustainability engagement and capital investment toward emissions reduction, although this influence may differ across firms and asset structures (Borozan & Pirgaip, 2024). Similarly, decarbonization strategies are influenced by accounting and accountability models (Di Vaio et al., 2025). In this context, evidence suggests that the relationship between sustainability drivers, such as digitalization, low-carbon supply-chain integration, and supplier environmental commitment, and carbon performance is strengthened by formal contracts rather than informal connections (L. Li, Zhu, Wei, Liu, & Jiang, 2025; Sharma, Pratihari, & Verma, 2025). Overall, this cluster shows that while climate disclosure and

decarbonization practices are increasingly widespread, their effectiveness depends on governance quality, assurance mechanisms, and integration into core decision-making and supply-chain structures.

3.4.4. Biodiversity and Conservation

This is the most distinct theme, with 30 articles. The studies in this group focus on ecosystems, species protection, biodiversity loss, and conservation-related topics. The most cited article (mentioned 223 times) is Boiral's (2016) study, which examines mining companies' tactics aimed at justifying negative environmental impacts to stakeholders. Research in this cluster shows that low disclosure levels, uneven quality, and a strong dependence on external pressures, governance structures, and measurement systems characterize biodiversity reporting and management. Furthermore, biodiversity disclosure is mainly shaped by general sustainability frameworks (e.g., GRI) and concentrated among lower-risk or resource-intensive firms (Rimmel & Jonäll, 2013). In addition, large international studies highlight the key role of partnerships and industry exposure in the volume of disclosures (Adler, Mansi, & Pandey, 2018). Although the latter have increased under the influence of global initiatives such as the UN Decade on Biodiversity, they are often insufficient to assess actual biodiversity performance, suggesting a continued focus on symbolic transparency rather than on the usefulness of decision-making (Adler, Mansi, Pandey, & Stringer, 2017; Maroun & Ecim, 2024).

To overcome symbolic transparency, stakeholder involvement is critical. For instance, in the mining and forestry industries, research shows that collaboration of firms with Non-Governmental Organizations, experts, public authorities, and industry coalitions leads to sustainability practices that align with legitimacy, knowledge management, and strategic objectives (Boiral & Heras-Saizarbitoria, 2017). More recent work highlights the structural and methodological barriers to substantive biodiversity accounting due to the inherent imperfection of biodiversity indicators and supports that integrated accounting and accountability frameworks, combined with ongoing multi-stakeholder collaboration, can promote learning and improvement rather than mere compliance (Addison et al., 2020; Schaltegger, Gibassier, & Maas, 2023; Sobkowiak, 2023). Furthermore, governance mechanisms are critical for disclosure levels: for instance, stronger corporate governance and higher national governance quality are associated with more extensive biodiversity reporting (Orazalin, Ntim, & Narbaev, 2026). In addition, reduced shareholder litigation pressure leads to sharp declines in disclosure, whereas greater climate policy uncertainty provides firms with incentives to increase biodiversity reporting as a signaling and legitimacy strategy (Treepongkaruna, 2024; Treepongkaruna, Au Yong, Kyaw, & Kalhoro, 2026). Overall, the literature shows that biodiversity reporting is expanding but remains fragmented and often symbolic, and that meaningful progress depends on aligning governance mechanisms, regulatory and stakeholder pressures, and robust accounting frameworks that provide decision-useful information.

Table 8. Thematic distribution of studies and 3 most cited articles per theme.

Theme	Number of studies	Title	Authors	Year	Journal	AJG ranking	Field	Citations
Sustainability & Environmental Reporting	294	Planetary Boundaries: Ecological Foundations for Corporate Sustainability	Whiteman et al. (2013)	2013	Journal of Management Studies	4	ETHICS-CSR-MAN	693
		Building sustainable organizations: The human factor	Pfeffer (2010)	2010	Academy of Management Perspectives	4	ETHICS-CSR-MAN	655
		From green to sustainability: Information Technology and an integrated sustainability framework	Dao et al. (2011)	2011	Journal of Strategic Information Systems	4	INFO MAN	602
Financial Risk & Performance	231	Coming Clean: The Impact of Environmental Performance and Visibility on Corporate Climate Change Disclosure	Dawkins and Fraas (2011)	2011	Journal of Business Ethics	3	ETHICS-CSR-MAN	240
		Green knowledge management and organizational green culture: an interaction for organizational green innovation and green performance	Abbas and Khan (2023)	2023	Journal of Knowledge Management	2	ORG STUD	216
		Corporate social responsibility, green innovation, and competitiveness – causality in manufacturing	Padilla-Lozano and Collazzo (2022)	2022	Competitiveness Review	1	IB&AREA	204
Climate & Carbon Disclosure	73	Board Gender Diversity and Corporate Response to Sustainability Initiatives: Evidence from the Carbon Disclosure Project	Ben-Amar et al. (2017)	2017	Journal of Business Ethics	3	ETHICS-CSR-MAN	807
		Environmental Legitimacy, Green Innovation, and Corporate Carbon Disclosure: Evidence from CDP China 100	D. Li et al. (2018)	2018	Journal of Business Ethics	3	ETHICS-CSR-MAN	608
		An analysis of Australian company carbon emission disclosures	Choi et al. (2013)	2013	Pacific Accounting Review	1	ACCOUNT	256
Biodiversity & Conservation	30	Accounting for the Unaccountable: Biodiversity Reporting and Impression Management	Boiral (2016)	2016	Journal of Business Ethics	3	ETHICS-CSR-MAN	223
		Problematising accounting for biodiversity	Jones and Solomon (2013)	2013	Accounting, Auditing and Accountability Journal	3	ACCOUNT	193
		Biodiversity reporting in Sweden: Corporate disclosure and preparers' views	Rimmel and Jonäll (2013)	2013	Accounting, Auditing and Accountability Journal	3	ACCOUNT	137

Source: Compiled by the author.

4. IMPLICATIONS AND FUTURE RESEARCH DIRECTIONS

4.1. Practical Implications

This study offers important implications for practice and management. Based on the quantitative findings, sustainability accounting has evolved into a rapidly growing, influential research field, reflecting the rising interest in sustainability reporting and ESG issues among regulators, academics, and society at large (Ben-Amar et al., 2017; Devine et al., 2024; D. Li et al., 2018). For practitioners, this means that sustainability accounting is no longer a secondary activity but an established domain under growing scrutiny by regulators, investors, and other stakeholders (Friedrich et al., 2023; Stubbs & Higgins, 2014). The concentration of influential research within specific journals, institutions, and countries suggests that firms operating in leading jurisdictions face particularly high expectations regarding disclosure quality, governance, and alignment with emerging standards (Ben-Amar et al., 2017; Tiscini et al., 2022). At the same time, uneven global collaboration highlights the importance for firms in less-connected regions to engage with international reporting frameworks, professional networks, and transnational partnerships to enhance legitimacy and comparability (Mateo-Márquez et al., 2025; Sakariyahu et al., 2023).

Concerning the thematic analysis, across all four themes, the literature reveals a gap between the expansion of sustainability disclosures and their ability to reflect meaningful organizational change. While compliance with established frameworks has increased disclosure volume, it has often reinforced symbolic transparency rather than decision-relevant information (Hrasky, 2011; Marrucci & Daddi, 2022; Moneva et al., 2006; Talbot & Boiral, 2018). This suggests that managers should integrate sustainability accounting into governance structures, internal controls, strategic planning, and investment decisions to improve its effectiveness (O'Dwyer & Unerman, 2020; Quattrone, 2022; Stubbs & Higgins, 2014). The literature shows that high-quality, well-governed disclosures can support improved financial outcomes and innovation, whereas symbolic adoption has limited benefits (Adu et al., 2024; Alshahrani et al., 2023; Devine et al., 2024). In the emerging biodiversity domain, early investment in robust measurement systems, stakeholder collaboration, and integrated accounting approaches may offer firms both legitimacy and early advantage as regulatory and societal expectations intensify (Addison et al., 2020; Adler et al., 2018; Boiral & Heras-Saizarbitoria, 2017; Maroun & Ecim, 2024).

4.2. Limitations

This study has several limitations. The first concerns the use of a single database and the selection of the specific search query. As a result, relevant studies that use alternative search terms or are published in journals not indexed in the selected database may have been omitted. The second concerns the methodological constraints of bibliometric techniques, which capture patterns of publication, citation, and co-authorship but do not necessarily reflect substantive contributions, potentially biasing interpretations of "influential" work. Third, the nature of bibliometric analysis is mainly backward-looking. This may hinder the identification of very recent developments and emerging research streams, thereby underestimating the dynamics of certain aspects of sustainability accounting research.

4.3. Future Research Agenda

To identify research trends indicative of potential future paths and answer RQ5 (What are the future avenues for research regarding sustainability accounting?), a two-pronged strategy was used. First, co-word analysis was employed to identify research trends. Second, these results were combined with all previous discussions to propose avenues for future research.

4.3.1. Co-Word Analysis Findings

Figure 6 depicts the co-word analysis of the most frequent topics mentioned at least twice in sustainability accounting articles. The keywords with the highest frequency of occurrence (O) and TLS are sustainability (O: 180, TLS: 520), climate change (O: 86, TLS: 282), sustainability reporting (O: 56, TLS: 171), CSR (O: 55, TLS: 160), sustainable development (O: 48, TLS: 140), corporate governance (O: 31, TLS: 107), ESG (O:31, TLS: 92), carbon emissions (O: 27, TLS: 91), and other keywords such as disclosure, integrated reporting, biodiversity, SDGs, and accountability. The keyword co-occurrence network reveals important trends. In particular, the blue and dark green dots show that early research on sustainability accounting focused on broad ideas such as sustainability, CSR, and sustainability reporting, thereby establishing the field's core concepts. More recent work (light green and yellow dots) has shifted toward more specific and practice-related topics (e.g., ESG, the SDGs, climate risk, carbon emissions, and climate-related financial disclosures), reflecting increased regulatory pressure and investor interest. In addition, recent work emphasizes corporate governance and accountability, highlighting the need to manage sustainability information effectively. At the same time, the emergence of themes such as biodiversity, civil society, and artificial intelligence shows that the field is maturing and expanding beyond environmental issues.

4.3.2. Avenues for Future Research

The above findings point to three research avenues for the future. First, there is a need for studies that explore the link between sustainability accounting practices and real environmental and social outcomes, to determine what drives or what inhibits substantive change (Adu et al., 2024; Liesen et al., 2015; Marrucci & Daddi, 2022). In the sustainability and environmental reporting cluster, the role and effectiveness of internal decision-making should be examined, including how sustainability accounting measures influence budgeting, performance evaluation, and strategic decisions (Quattrone, 2022; Rowbottom, 2023; Stubbs & Higgins, 2014). In the climate and carbon disclosure theme, where governance characteristics and stakeholder pressures are found to drive disclosure quality (Ben-Amar et al., 2017; Bui et al., 2020; Hrasky, 2011; Liesen et al., 2015), studies should further explore the mechanisms through which operational outcomes, such as emissions reductions and technological change, are achieved.

Second, future research should address the complexity, uncertainty, and tensions of sustainability accounting by developing new accounting approaches, especially in emerging areas such as biodiversity, ecosystem dependencies, and social outcomes (Addison et al., 2020; Schaltegger et al., 2023; Sobkowiak, 2023). More specifically, in the biodiversity and conservation stream, there is a need to develop effective, achievable biodiversity indicators and to examine how existing indicators are used (or ignored) in managerial decision-making. In the area of social sustainability, the identified marginalization of social dimensions and groups in sustainability reporting (Pfeffer, 2010; Tiscini et al., 2022) underscores the need for research on participatory accounting processes, particularly regarding labor rights, human rights, and community impacts.

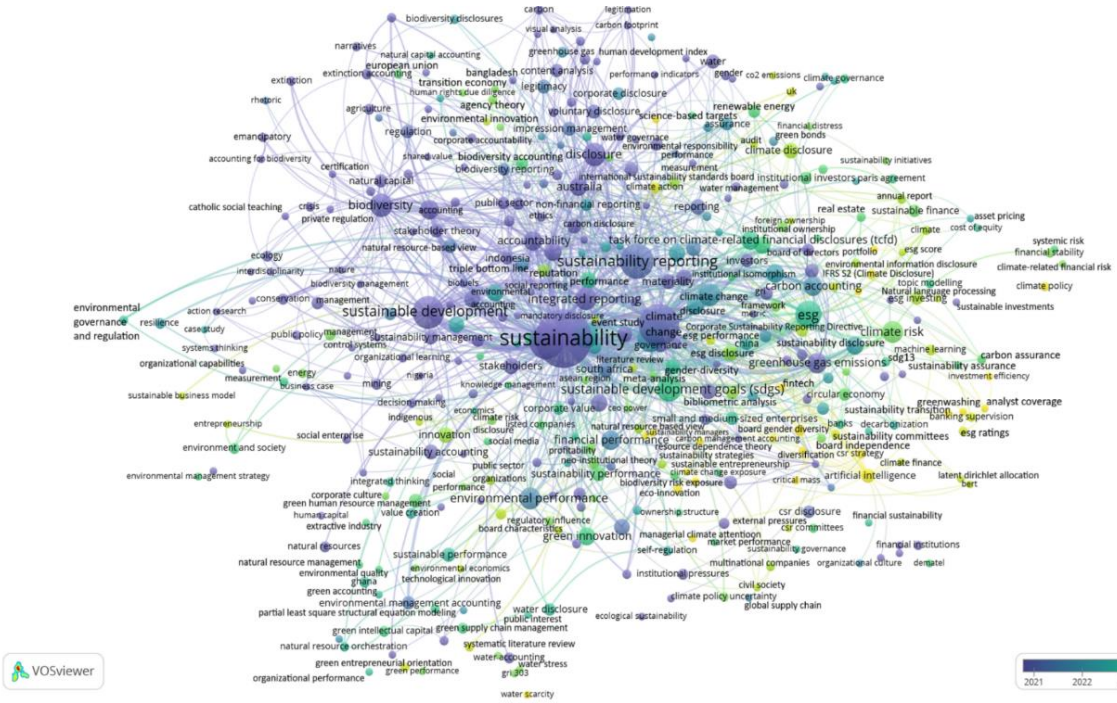

Figure 6. Co-word analysis.

Note: The figure outlines the visualization of results for the temporal allocation of author-specified keywords. Each keyword was assigned a color based on the average year of occurrence of the author-specified keywords, with blue indicating the earliest years and green and yellow denoting the most recent years (Caputo et al., 2021). For the graphical settings, each keyword was to appear at least twice (406 keywords in total). The results derived from the overlay co-occurrence network reveal several important trends that warrant further investigation.

Third, the uneven global distribution of research highlights the importance of extending sustainability accounting studies to underrepresented regions and institutional contexts, to enhance the field's relevance and capacity to address global sustainability challenges (Mateo-Márquez et al., 2025; Shui et al., 2025). For instance, within the financial risk and performance theme, most studies focus on large, publicly listed firms in developed economies, leaving a gap regarding small- and medium-sized enterprises, private firms, and organizations in emerging markets, where disclosure incentives, governance structures, and institutional pressures differ significantly (Mateo-Márquez et al., 2025; Sakariyahu et al., 2023; Shui et al., 2025). Comparative studies across firm types and institutional contexts would help assess the external validity of existing findings.

5. CONCLUSIONS

This study provides a bibliometric and thematic review of the sustainability accounting literature from 1992 to 2025, and offers insights into publication and citation trends, influential research constituencies, collaboration patterns, dominant thematic clusters, and future research paths. By combining bibliometric techniques with a manual thematic analysis, the study offers a robust, multidimensional mapping of the sustainability accounting literature to date.

The findings show that sustainability accounting has evolved from a narrow research area into a mature and rapidly expanding field. Publication and citation trends indicate particularly strong growth since the mid-2010s, reflecting increasing regulatory pressure, investor interest, and societal attention to ESG, climate risk, and corporate accountability. This growth is accompanied by rising international collaboration, although the field remains dominated by a limited number of countries, institutions, and journals. The analysis of influential authors, institutions, journals, and articles reveals that some scholars and institutions shape the field through sustained

productivity, while others do so through fewer, highly impactful contributions. The most influential articles emphasize carbon disclosure, climate governance, and the strategic integration of sustainability into organizational decision-making, highlighting the importance of climate-related issues within the broader sustainability accounting agenda.

Collaboration network analysis highlights an unevenly connected research community, combining some strong collaboration clusters among scholars and institutions in Australia, the UK, and parts of Europe, and several weakly integrated or isolated networks. This unevenness suggests significant opportunities to expand global participation and enhance the contextual diversity of sustainability accounting research.

Thematic analysis identifies four dominant research streams: sustainability and environmental reporting, financial risk and performance, climate and carbon disclosure, and biodiversity and conservation. Across all four themes, a clear trend is identified: despite the increase in sustainability disclosures, their capacity to drive substantive organizational change remains limited (Marrucci & Daddi, 2022; Moneva et al., 2006; Talbot & Boiral, 2018). Much of the literature records symbolic compliance, impression management, and a gap between reported commitments and actual practices. At the same time, a growing body of research demonstrates that integrating sustainability accounting into governance structures, internal controls, and strategic processes can support improved financial performance, innovation, and risk management (Adu et al., 2024; Devine et al., 2024; Quattrone, 2022). The underdeveloped biodiversity and conservation theme represents an emerging research stream, characterized by methodological challenges, limited disclosure quality, and strong dependence on governance and stakeholder engagement (Adler et al., 2017; Maroun & Ecim, 2024).

This study makes several important contributions. Methodologically, it integrates bibliometric analysis with structured manual thematic classification, mitigating the limitations of relying only on quantitative indicators and allowing a richer conceptual understanding of the field. Substantively, it provides an up-to-date, comprehensive synthesis of sustainability accounting research, mapping its evolution, identifying its intellectual leaders, and clarifying its core and emerging thematic streams. Conceptually, the study highlights a key tension in the field. While disclosures continue to expand, a gap remains between what is reported and what firms actually achieve in terms of sustainability performance. This reinforces the need for accounting frameworks that are more decision-relevant, embedded in governance, and focused on real outcomes.

Overall, this review serves as a reference point for future research and reveals critical gaps, particularly in biodiversity accounting and social sustainability. Furthermore, it identifies underrepresented institutional contexts and the need for studies to explore further how sustainability accounting practices influence sustainability outcomes. By tracing the field's evolution and future direction, the study strengthens the role of sustainability accounting in supporting global sustainability transitions.

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