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Green Accounting and Organization Performance: Science Mapping of Present and Future Trends

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Abstract

Green accounting's main objective is to influence corporate behavior toward social and environmental concerns and address social issues affecting global sustainable development. Establishing green accounting practices in businesses is crucial for community concern and environmental sustainability. This research aims to explore the knowledge structure of green accounting and its impact on organizational performance. Environmental accounting is an important tool in improving the quality of environmental reporting. This study conducted a literature analysis, and the research methodology employed bibliometric analysis. VosViewer, with co-word analysis and bibliographic coupling, is specialized software used to visualize trends in research topics, authorship, and institutional affiliation. Scopus database is chosen due to its extensive coverage and indexing of important journals for articles published between 2005 and 2022. This search yielded 233 documents. This study implies that adopting green accounting has several important elements, namely integrated and transparent sustainability reports that help stakeholders make better decisions. Green accounting increases the accountability and transparency of sustainability reports, as it is supported by structured and measurable information. The board of directors' support and good corporate governance influence the success of the sustainability report. The company's sustainability performance is assessed using complex methods and involves quantitative and qualitative indicators. This article is the first to present a scientific mapping of green accounting literature, the basis for a study on corporate sustainability performance. The results of this study give scholars, researchers, and practitioners important information about advancements in accounting science, particularly in the area of green accounting.

***Keywords:** Bibliometric analysis, environmental performance, green accounting, sustainability development.*

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INTRODUCTION

Many businesses use the idea of maximizing profit in the modern sector, but they often go against the fundamentals of profit maximization. Economic costs, accounting costs, and opportunity costs were among the principles that were broken. The consequences of breaking these rules include disregarding environmental management. Given that poor and excellent environmental management affects human life over the long and short term, the environment is one of the most significant factors (Taqi et al., 2021). Government, stakeholders, consumers, and competition can all help to foster environmental consciousness in the industrial world. One advantage of the company's environmental conservation efforts is that they can generate interest from stakeholders and shareholders in the profit of the company as a result of environmental management (Faheem et al., 2024). Stakeholders require information about environmental management performance, as one of the elements influencing the ability of the company to achieve success in its financial and economic performance is the disclosure of its environmental performance (Bashir et al., 2021).

An organization that conducts business operations is referred to as a business entity. Business operations transform raw materials into completed goods. The existence of these commercial operations results in waste and other residual production results, which pollute the environment (Tiberius et al., 2020). To minimize environmental pollution brought on by production activities, businesses must be focused not only on increasing profits as a measure of performance success but also on maintaining and caring for their environment. A concept known as the triple bottom line requires businesses to take into account not only profit (the single bottom line) but also the environment, society, and the growth of their profit (Dermawan et al., 2023). Businesses must be concerned about the environment not only for financial gain but also to establish a balance that will be the most crucial tactic for ensuring their survival (Khomsiyah et al., 2023).

Environmental accounting is an increasing business concern, along with the high demands of stakeholders, which impact the company's social and environmental performance and financial strength (Michelon, 2012). Environmental issues are complementary to economic issues in developing countries because they affect productivity, human health, and the future of natural resource bases. This complex relationship shows how important green accounting is to promoting sustainable development and also offers a framework for integrating environmental factors into economic decision-making (Hens et al., 2018). Green accounting is a tool used to provide insight and information about the company's role in maintaining environmental safety and social welfare. Green accounting is a system that measures positive changes in environmental impacts, which are expressed in economic units (Maama & Appiah, 2019). Green accounting provides information that is an input to the environmental management system in generating information for decision-making related to cost reduction, technology investment, and the development of environmentally friendly raw materials (Hardian & Suryaningrum, 2024). In other words, implementing green accounting contributes to long-term eco-efficiency and sustainability (Arodudu et al., 2023).

Performance management evolved from and was partially a response to, traditional performance appraisal systems (Sutama et al., 2023; Sarcea et al., 2024). Compared to traditional

appraisal systems, the performance management system types illustrated in the case studies in this volume emphasize frequent, informal evaluation, real-time feedback, and alignment with organizational strategies and goals (Dahal, 2022). There are many benefits to these kinds of performance management systems, and the case studies highlight the possible benefits of contemporary performance management techniques. Organizational performance reflects the effectiveness of the company in meeting its objectives (Bashir et al., 2021; Dyatmika et al., 2023). Broadly, the company's performance is seen from financial results and includes non-financial performance, such as operational efficiency and the ability to adapt to market changes (Liu et al., 2022). The performance of organizations that consider financial and non-financial aspects shows more comprehensive achievements (Liu et al., 2022). Market changes and also business competition are the company's challenges in improving its performance. One of the market changes that has changed business behavior is the increasing demands of stakeholders on social responsibility and business sustainability (Meseguer-Sánchez et al., 2021; Yawar & Seuring, 2017). Businesses are now more conscious of the significance of considering sustainability factors in organizational performance due to this shift (Sari & Amalia, 2019; Rehman et al., 2020; Saleh & Suryaningrum, 2023).

Following the completion of the majority of the research on green reporting, studies on green accounting started to appear, such as (Rahman et al., 2019; Haryati et al., 2023). The substantial growth of green accounting research in recent years, particularly in developed nations, indicates that the field of accounting is a topic that is highly pertinent to the times. Research (Hendratno, 2016) discovered that future research on green accounting will grow in tandem with researchers' interest. Consequently, understanding its evolution is essential to comprehending the dynamic evolution of accounting science. The health sector should prioritize implementing social and environmental accounting, according to a previous study titled Bibliometric Mapping of Studies on Green Accounting (Rizka et al., 2024). Research findings from articles, chapters, proceedings, preprints, edited books, and monographs must be mapped to create a specific pattern that represents the state of green accounting research today. Bibliometric analysis was used in this study for several different purposes.

This research is motivated by two factors. First, the implementation of green accounting as a tool to obtain quality environmental impact information requires attention from all parties (Nguyen, 2023). Chamorro et al. (2023) underlined that data is a valuable tool for decision-making for environmental impact. It needs to be a structural component of financial statements. Environmental data is measured and presented in physical and monetary units, where green accounting is implemented (Hens et al., 2018). Second, there is still a gap in the previous discussion about the structure of the scientific literature on green accounting. Several previous studies have reviewed the green accounting literature but have not presented the knowledge structure of green accounting. The study has not yet presented a scientific map that can reveal the knowledge structure of the studied phenomenon. Science mapping is crucial in understanding the relationship between these articles (Donthu et al., 2021). This research aims to explore the themes that appear in the green accounting literature and further explore future trends in green accounting

literature through co-word analysis. To determine which areas need more research and guide the creation of future green accounting procedures. It is crucial to comprehend these trends in green accounting study. Researchers, scholars, and practitioners can learn a lot from this study about scientific advancements in accounting science, particularly in green accounting.

RESEARCH METHOD

This study conducted a literature analysis, and the research methodology employed bibliometric analysis. Bibliometric analysis was chosen because it demonstrates the evolution of earlier research in the field under study. The use of bibliometric analysis helps to find patterns in the relatively few but highly interesting research publications that address sustainability, environmental accounting, and green accounting (Donthu et al., 2021). Bibliometric analysis is a precise and objective technique for evaluating performance, trend analysis, and article contribution. To identify research gaps and novelties that can serve as the foundation for future studies, bibliometric analysis aids in deeper comprehension of developments in particular fields. We chose the Scopus database, a central academic database, due to its extensive coverage and indexing of important journals for articles containing the terms “green accounting, environmental accounting, sustainability, and environmental performance” published between 2005 and 2022. This search yielded 233 documents.

VosViewer, with co-word analysis and bibliographic coupling, is specialized software to visualize trends in research topics. It includes co-word analysis and bibliographic coupling. Using VosViewer according to a co-word analysis, the academic publication's author-defined keywords serve as the primary means of describing the research content. In this way, the connections between many keywords that occur together show the main focus of the field's research topic. When two interesting keywords appear together in the same paper, it indicates that the topics they refer to have some sort of bibliometric relationship. Only co-occurrence links that performed better than average were deemed influential scaffolding research keywords in the current review.

In bibliographic coupling analysis, there are four clusters will be analyzed, namely Cluster 1 (red) 10 documents labeled “sustainability risk management through collaboration and innovation. Cluster 2 (green), 10 documents labeled “accountability and transparency in environmental performance disclosure”. Cluster 3 (blue) 7 documents, with labeled “sustainability reporting: challenges and opportunity”. Cluster 4 (yellow) 3 documents with labeled “sustainability assessment method and organizational sustainability”. Meanwhile, in Co-word analysis, three clusters are produced by co-word analysis using the same database, which shows that 57 out of 2,658 keywords satisfied 23 thresholds. Cluster 1 (red) 8 keywords labeled “sustainable practices by enhancing transparency and responsibility in environmental performance”. Cluster 2 (green) 6 keywords, labeled “assessing economic and environmental impact in sustainable strategies.” Cluster 3 (blue) 6 keywords, labeled “managing and reporting environmental impacts to improve sustainability.”

RESULTS AND DISCUSSION

Results

Bibliographic Coupling

Out of 233 documents, 34 documents met a threshold of 70 citations. This means that 34 documents cite at least 70 of the same documents. These 34 documents form four clusters. The top three documents by total link strength (TLS) are Braam et al. (2016) (73 TLS), Orazalin & Mahmood (2020) (77 TLS), and Alrazi et al. (2015) (93 TLS). Alrazi et al. (2015) have strong connections to other documents through the references they cite. Several attempts were made to find the best map of research work connections in a research area before deciding on the 70-citation threshold.

Based on Table 1, the top 10 papers are ranked by the total number of citations from their publication to the current study. The article by Alrazi et al. (2015) has the highest ranking with 121 citations and 93 total link strength. Next, in second place, with 77 total link strengths and 80 citations, was written by Orazalin & Mahmood (2020). Third, with 212 citations and 73 total link strength, is a paper written by Braam et al. (2016). This examination of green accounting studies reveals a fascinating area deserving of more research. Recent study's high citation counts and overall link strengths to earlier research point to a solid basis and continued advancement in this field.

Table 1. Top 10 documents in bibliographic coupling analysis

Rank	Publication	Scope	Journal	Citation	Total Link Strength
1.	Alrazi et al. (2015)	A comprehensive literature review on and the construction of a framework for environmental legitimacy, accountability, and proactivity	Journal of Cleaner Production	121	93
2.	Orazalin & Mahmood (2020)	Determinants of GRI-based sustainability reporting: evidence from an emerging economy	Journal of Accounting in Emerging Economies	80	77
3.	Braam et al. (2016)	Determinants of corporate environmental reporting: the importance of environmental performance and assurance	Journal of Cleaner Production	212	73
4.	Orazalin & Mahmood (2018)	Economic, environmental, and social performance indicators of sustainability reporting: Evidence from the Russian oil and gas industry	Energy Policy	122	71

Rank	Publication	Scope	Journal	Citation	Total Link Strength
5.	Peters & Romi (2015)	The Association between Sustainability Governance Characteristics and the Assurance of Corporate Sustainability Reports	Auditing: A Journal of Practice & Theory	268	46
6.	Fuente et al. (2017)	The role of the board of directors in the adoption of GRI guidelines for the disclosure of CSR information	Journal of Cleaner Production	289	45
7.	Dragomir (2012)	The disclosure of industrial greenhouse gas emissions: a critical assessment of corporate sustainability reports	Journal of Cleaner Production	101	34
8.	Cho et al. (2012)	Impression Management in Sustainability Reports: An Empirical Investigation of the Use of Graphs	Accounting and the Public Interest	160	33
9.	Higgins & Coffey (2016)	Improving how sustainability reports drive change: a critical discourse analysis	Journal of Cleaner Production	87	26
10.	Clarkson et al. (2008)	Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis	Accounting, Organizations, and Society	1937	25

Source: Secondary data (Processed, 2024)

Figure 1, bibliometrics of article sources, also displays the visualization of the bibliographic coupling network. This figure illustrates the writer clusters that produce the most articles with a green accounting theme.

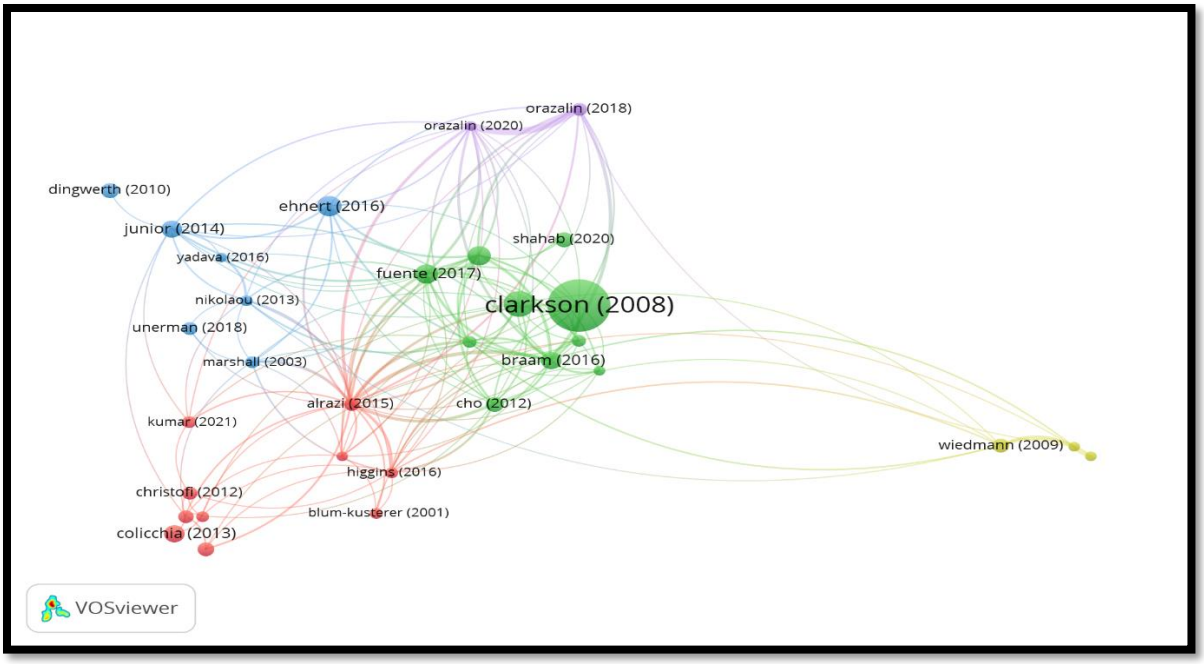

Figure 1. Bibliographic coupling of green accounting and organization performance
Source: Secondary data (Processed, 2024)

This discussion focuses on examining shared citations processed using the VOSviewer software. Following the primary theoretical underpinnings of this research topic, the data processing results revealed four clusters of common quotations. The first writers to write about green accounting were Clarkson et al. (2008), as shown in Figure 1. There is a clear separation between the four clusters. The following talks about upcoming green accounting trends and organization performance development. The cluster labels can be inductively interpreted by reviewing representative articles from the clusters again and combining them according to similar themes and lines of inquiry.

Cluster 1 (red): with 10 documents, this cluster is labeled "sustainability risk management through collaboration and innovation". Pressure from stakeholders is pushing the entire industry towards a more sustainable direction. Weber et al. (2014) compare sustainability performance between the financial and non-financial industries. The results of this study found that the sustainable performance of the financial sector is lower than that of the non-financial sector, particularly in employment, product responsibility, business ethics, and reporting. This is because, unlike other industries, the financial sector does not directly use resources or emit pollutants that harm the environment. However, the financial sector is very strong in terms of public relations and is a strategy in managing risks and opportunities related to sustainability. Another effort to respond to stakeholder pressure is through innovation and modification of resource-based business processes (Scarpellini et al., 2020). This strategy includes implementing circular economy

practices. Another strategy for managing sustainability risks is using standardized sustainability reporting practices (Christofi et al., 2012). Standardized sustainability reporting can warn early about company losses from environmental and social risks. In terms of mitigation of sustainability risks, companies can adopt collaborative initiatives collaborating with suppliers and customers to increase the overall sustainability of the supply chain (Colicchia et al., 2013). Albino et al. (2012) show that collaboration between actors in the company ecosystem is critical to the company's environmental reputation. The collaboration must have a clear mechanism for measuring environmental performance, which is still challenging for the company. Stakeholder pressure drives industries to adopt sustainable practices and manage sustainable risks.

Cluster 2 (green): with 10 documents, this cluster is labeled "accountability and transparency in environmental performance disclosure". Stakeholder appreciation for environmental transparency increases the company's environmental disclosure. Baboukardos (2018) discusses the role of environmental performance values in the company's financial statements and reports that the market appreciates companies that display environmental performance records on the balance sheet. Integrated reporting shows the interaction between financial and environmental information and affects market valuation (Baboukardos, 2018). The accountability aspect in the disclosure of the company environment is an important thing to highlight. Marquis et al. (2016) state that companies under supervision tend to refuse environmental disclosures due to poor environmental performance. This is because environmental disclosure does not directly affect the company value, and also environmental disclosure does not act as a mediator between financial performance and the environment on company value (Deswanto & Siregar, 2018). On the other hand, the diversity of corporate environmental reporting clearly shows the role of environmental performance in corporate decision-making (Braam et al., 2016). On the other hand, the diversity of corporate environmental reporting clearly shows the role of environmental performance in corporate decision-making.

Cluster 3 (blue): with 7 documents, this cluster is labeled "sustainability reporting: challenges and opportunity". The company's traditional perspective states that external events do not directly impact the company's financial performance. Unerman et al. (2018) explore ways externalities can progressively become internalized. This study found that monetization and quantification of externalities are the biggest challenges in the internalization process. This challenge is caused by significant differences in sustainability reporting practices, especially between the economic and non-economic dimensions. Reporting on the economic dimension was better than the environmental and social dimension (Yadava & Sinha, 2016). Despite its challenges, sustainability reports provide opportunities for companies to establish good communication with their stakeholders. This opportunity is created due to increasing awareness and also demand for organizations that are more accountable to society, thereby increasing the organization's tendency to publish sustainability reports (Junior et al., 2014). These results suggest that organizations should include assurance in sustainability reports to increase the reliability and credibility of the company's sustainability reports.

Cluster 4 (yellow): with 3 documents, this cluster is labeled "sustainability assessment method and organizational sustainability". The simplest and most comparable sustainability reporting method is to trace the carbon footprint, especially through the input-output analysis

technique. Research of Baboulet & Lenzen (2010) focuses on finding methods to provide comprehensive and applicative results in environmental performance reporting. This investigation's findings prove that the hybrid lifecycle assessment method, combining input-output analysis and process analysis, is very suitable for calculating organizational footprint. These results can explore environmental performance and emission reduction options across the supply chain. Extended input-output analysis for the environment can identify emission sources in the supply chain, making it possible to take action to reduce emissions and costs simultaneously (Townsend & Barrett, 2013). Meanwhile, an economically expanded analysis of output inputs is useful in determining sustainability performance by determining the quantity and distribution of sustainability effects in each upstream supply chain (Wiedmann et al., 2009; Sutama et al, 2023). The extended input-output method is very beneficial in developing sustainability accounting reporting frameworks and mechanisms.

Summary of bibliographic coupling analysis with color and cluster number, publications, labels, and representative publications.

Table 2. Bibliographic Coupling Analysis on Green Accounting and Organization Performance

Cluster No and Color	Cluster Label	Number of Publications	Representative Publication
1 (red)	Sustainability risk management through collaboration and innovation	10	Albino et al. (2012), Christofi et al. (2012), Colicchia et al. (2013), Kumar et al. (2021), Scarpellini et al. (2020), Weber et al. (2014)
2 (green)	Accountability and transparency in environmental performance disclosure	10	Baboukardos (2018), Marquis et al. (2016), Deswanto & Siregar (2018), Braam et al. (2016)
3 (blue)	Sustainability reporting challenges and opportunity	7	Unerman et al. (2018), (Yadava & Sinha (2016), Junior et al. (2014)
4 (yellow)	Sustainability assessment method and organizational sustainability	3	Baboulet & Lenzen (2010), Townsend & Barrett, (2013), Wiedmann et al. (2009)

Source: Secondary data (Processed, 2024)

Table 2 shows four clusters of productive writers based on bibliographic coupling analysis. The most prolific authors from Red Cluster released ten papers about green accounting. Cluster Green comes next, with ten publications overall. When it comes to green accounting, the red cluster and the green cluster differ in that the former concentrates on the direction of green accounting policies, while the latter concentrates on green accounting and accountability practices.

Co-word Analysis

Three clusters are produced by the co-word analysis using the same database, which shows that 57 out of 2,658 keywords satisfied 23 thresholds.

Table 3. Top 15 keywords in the co-occurrence of keywords analysis

Rank	Keyword	Occurrences	Total Link Strength
1	Sustainable Development	82	265
2	Sustainability	82	217
3	Sustainability Reporting	60	138
4	Environmental Performance	58	141
5	Environmental Management	46	164
6	Environmental Impact	37	118
7	Corporate Social Responsibility	25	80
8	Global Reporting Initiative	24	90
9	Sustainability Report	24	85
10	Environmental Reporting	20	65
11	Environmental Economics	19	69
12	Performance Assessment	18	75
13	Content Analysis	13	43
14	Environmental Indicator	12	55
15	Stakeholder	12	49

Source: Secondary data (Processed, 2024)

The top 15 keywords are ranked by total link strength and occurrences from the publication to the current study, as shown in Table 3. Sustainable development is the most highly ranked with 82 occurrences overall and 265 total link strengths. Then, in the second position, with 82 occurrences and 217 total link strength in sustainability. Third, a sustainability report with 60 occurrences and 138 total link strength. This examination of green accounting studies reveals a fascinating area deserving more research. Recent studies' high number of occurrences and overall link strength to earlier works point to a solid basis and continued advancement in this field.

Three distinct themes are represented by the three clusters that are clearly visible. The three clusters are given the proper labels based on the authors' inductive interpretation.

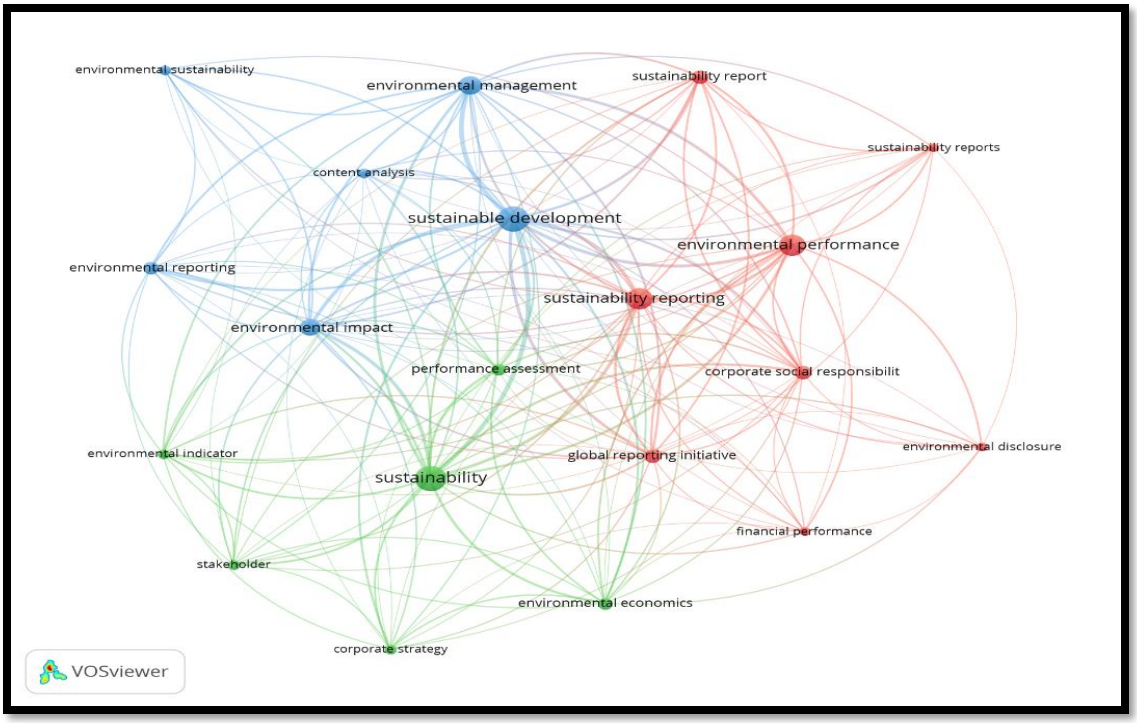

Figure 2. Co-word analysis on green accounting and organization performance
Source: Secondary data (Processed, 2024)

The following keywords commonly found in published papers with a green accounting theme are shown in Figure 2, which is sorted from the 20 retrieved keywords. Their relationships with other keywords are grouped into three clusters; specifically, red cluster 1 has eight keywords, including sustainable, sustainability report, environmental performance, sustainability reporting, corporate responsibility, global reporting initiative, corporate social responsibility, environmental disclosure, and financial performance. Blue cluster 2 consists of 6 keywords: environmental management, environmental sustainability, content analysis, sustainable development, environmental reporting, and environmental impact. Green Cluster 3 consists of 6 keywords: performance investment, sustainability, environmental indicator, stakeholders, environmental economics, and corporate strategy.

Cluster 1 (red): with 8 keywords, this cluster is labeled "sustainable practices by enhancing transparency and responsibility in environmental performance". Companies must adopt transparent mechanisms through technology implementation to enhance environmental performance (Jum'a et al., 2021). Although companies face many obstacles in meeting the environmental challenges imposed by stakeholders, attention to corporate social responsibility requires a comprehensive understanding (Bhat et al., 2024). Sustainability is practically important in tactical and strategic decision-making, especially in achieving company objectives, both in the

business and environmental sectors and meeting increasing global demands while preserving natural resources for future generations (Baghizadeh et al., 2021). With increasing market competition, environmental responsibility is an effective strategy in building accountability and professionalism felt by stakeholders (Zhang et al., 2024). Integrating sustainability practices into business operations is a responsibility of companies that can enhance competitive advantage and environmental performance. This implies that the company can secure a competitive advantage and build transparent stewardship to improve environmental performance by embracing sustainability initiatives and corporate responsibility.

Cluster 2 (green): With 6 keywords, this cluster is labeled "assessing economic and environmental impact in sustainable strategies". Evaluation of the company's business activities and processes is significant in economic and environmental impact assessment (Alfarsi et al., 2024). This assessment helps identify areas for improvement and promotes sustainable practices that align with corporate social responsibility (ElAlfy et al., 2020). Another approach to promoting sustainable practices in companies is to adopt various tools and initiatives. The approaches include corporate social responsibility, circular economy, eco-efficiency, life cycle assessment, and sustainability reporting (Lozano, 2020). Adopting environmental impact assessments (EIAs) into business evaluation processes increases transparency and fosters accountability to stakeholders (Castelblanco et al., 2023). Strategic efforts from environmental impact assessment to corporate governance ensure that the organization not only achieves compliance with government regulatory standards but also progresses toward operational excellence for sustainability (Dev et al., 2020). Strategic adoption of environmental impact assessments also demonstrates a company commitment to environmental management and social responsibility, which can improve the company's reputation amid business competition (Bian & Zhao, 2020).

Cluster 3 (blue): With 6 keywords, this cluster is labeled "managing and reporting environmental impacts to improve sustainability". Implementing practices and strategies oriented towards reducing the company's negative impact on the environment is a form of environmental impact management and can produce quality environmental impact reports (Shahab et al., 2020). Quality environmental impact reporting demonstrates the company's long-term commitment to sustainability (Arvidsson & Dumay, 2022). In responding to stakeholder demands, sustainability reporting improvements are critical in providing detailed insights into how resources are used to create sustainable corporate value. The increase in sustainability reporting initiatives is increasingly significant, especially for companies with easier access to and support for government resources. The company leverages the support of government resources to improve its sustainability strategy more effectively (Zhou et al., 2022; Purbawangsa et al., 2020).

A summary of the co-word analysis, comprising cluster number and color, cluster labels, number of keywords, and representative keywords. Table 4 shows the analyses that take place in conjunction with keywords to get a general sense of the research topic's content. According to the findings of the co-word of the author's keyword analysis of the top 20 keywords from the three clusters under study, "green accounting" is the primary keyword because it is prominently displayed in the center of the map and is red. Several studies have demonstrated that disclosure and environmental are keywords that are closely associated with green accounting. Generally speaking, businesses that successfully apply green accounting can promote sustainable

development by showing environmental concern. Green accounting and the environment are, therefore, closely related. Aside from that, businesses that use green accounting have high-quality financial statement disclosures that include social responsibility data.

Table 4. Summary of Co-Word Analysis on Green Accounting and Organization Performance

Cluster No and Color	Cluster label	Number of Keywords	Representative Keywords
1 (red)	Sustainable Practices by Enhancing Transparency and Responsibility in Environmental Performance	8	Environmental Performance, Sustainability Reporting, Corporate Social Responsibility, Global Reporting Initiative, Sustainability Report
2 (green)	Assessing economic and environmental impact in sustainable strategies	6	Sustainability, Performance Assessment, Corporate Strategy, Environmental Economics, Environmental Indicator
3 (blue)	Managing and reporting environmental impacts to improve sustainability	6	Sustainability Development, Environmental Impact, Environmental Management, Environmental Reporting

Source: Secondary data (Processed, 2024)

CONCLUSION

The study concludes that implementing transparent, responsible sustainability practices in environmental performance is essential for companies facing pressure from stakeholders. Integrated sustainability reports and environmental transparency allow stakeholders to make better decisions regarding the environmental impact of the company's activities. This reporting also increases accountability and manages sustainability risk through collaborative initiatives, such as collaboration with suppliers and customers in the supply chain. In addition, environmental transparency is strongly linked to corporate governance, where support from the board of directors and executives plays an important role in improving voluntary disclosure and environmental performance. Integration-based indicators, such as Global Reporting Initiative (GRI)-based reporting, help to measure environmental performance more effectively, influencing the market's assessment of companies. Economic, social, and environmental impact assessments are carried out using complex methods and involve quantitative and qualitative indicators. This assessment is necessary to support a better decision-making process by stakeholders. The sustainability strategy adopted by the Company not only aims to create business opportunities but also to improve the quality of life and conserve natural resources.

This study offers visual insights into the evolution of green accounting research over time, making it an invaluable resource for understanding the field's changing terrain. It directs future researchers to navigate this challenging field by identifying promising keywords and highlighting significant authors and organizations. Concerns have been raised about implementing and promoting green accounting, which may damage its reputation. Economic entities must involve sustainability in their strategies, not only to create business opportunities but also to achieve a better quality of life and save natural resources. Future research should investigate how Green Accounting policies are adopted based on specific corporate attributes.

It is important to keep in mind that the results of this study are subject to change as new advancements in green accounting and organizational performance become apparent. The research focuses on a particular time period, and the dataset raises the possibility of more comprehensive analyses considering various time periods and data sources. Furthermore, using different software programs and adding more components could help future studies thoroughly examine green accounting trends and organizational performance trends. All things considered, this research offers insightful information about the development of Green Accounting in organizational research and the path forward for further research in this important field.

List of Abbreviations

Global Reporting Initiative (GRI), total link strength (TLS), environmental impact assessments (EIAs),

Authors' Contribution

RN and *ES* conceptualized and drafted the manuscript and final article draft. While *WA* and *MA* do data curation and data analysis.

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The authors declare no competing interest

Availability of Data and Materials
Data and materials can be requested by emailing the corresponding author stating the purpose of the request.

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