

Structured Literature Analysis on Sustainability Report Disclosure in Public Sector Organizations

Muhammad Arifai¹⁾; Mariana^{2*)}; Heru Fahlevi³⁾; Mirna Indriani⁴⁾; Darwanis⁵⁾

¹⁾ arifai_m@pnl.ac.id, State Polytechnic of Lhokseumawe, Indonesia

²⁾ mariana@pnl.ac.id, State Polytechnic of Lhokseumawe, Indonesia

³⁾ hfhahlevi@usk.ac.id, Syiah Kuala University, Indonesia

⁴⁾ mirna_indriani@unsyiah.ac.id, Syiah Kuala University, Indonesia

⁵⁾ darwanis.fe@usk.ac.id, Syiah Kuala University, Indonesia

*) Corresponding Author

ABSTRACT

Objectives: This study examines the adoption of sustainability reporting in Public Sector Organizations (PSOs), focusing on (1) stakeholder expectations, (2) implementation challenges, and (3) the impact on accountability and value creation. It also identifies existing gaps in sustainability reporting frameworks and provides strategic recommendations to enhance transparency and effectiveness in public sector sustainability disclosures.

Methodology: A Structured Literature Review (SLR) was conducted on 97 articles from Scopus (1990–2024), selected using keywords such as "sustainability reporting," "public sector," "GRI framework," and "public sector organizations." Inclusion criteria ensured relevance to the public sector and methodological diversity. The articles were categorized by sustainability focus, country, research methods, and theoretical frameworks. This approach enabled the identification of research trends, key gaps, and best practices to support policy improvements in sustainability reporting.

Findings: The review reveals that (1) research on sustainability reporting in PSOs is still limited and predominantly conducted in developed countries, (2) there is an increasing trend in sustainability reporting driven by demands for greater transparency and accountability, (3) major challenges include inconsistencies in reporting frameworks, varied stakeholder expectations, and difficulties integrating sustainability metrics, and (4) adoption is influenced by regulatory environments, political commitment, and resource availability. Although digital reporting tools are emerging, standardization and performance measurement issues remain unresolved.

Conclusion: Despite progress, sustainability reporting in PSOs suffers from a lack of consistency, comparability, and stakeholder engagement. To improve credibility and effectiveness, harmonized standards, stronger regulatory oversight, and capacity-building initiatives are essential. Addressing these gaps will enhance accountability and foster long-term value creation in the public sector.

Keywords: Sustainability Reporting; Public Sector; Accountability; Transparency.

Submitted: 17-03-2025

Revised: 03-06-2025

Accepted: 26-06-2025

Article Doi:

http://dx.doi.org/10.22441/jurnal_mix.2025.v15i2.009

INTRODUCTION

The focus on sustainability reporting in government and the public sector has grown significantly in recent years, reflecting an urgent need for environmental accountability (Khatri & Kjærland, 2023). Stakeholders increasingly demand transparency in sustainability-related disclosures, aligning with broader sustainable development goals. In this context, this study examines Public Sector Organizations (PSOs) that contribute to sustainable development and the implementation of social and environmental sustainability measures. The objective is to explore how PSOs can align non-financial reporting with stakeholder expectations while ensuring adequate sustainability accountability.

One of the primary challenges faced by PSOs is integrating sustainability reporting practices within their organizational structures. Recent studies indicate that PSOs have begun adopting voluntary disclosures through various reporting formats, such as sustainability reports, popular reports, and integrated reports, to meet stakeholder expectations and enhance accountability. However, despite these advancements, many sectors, particularly healthcare, continue to struggle with consistent and effective sustainability reporting (Berceanu & Nicolescu, 2024; Marx, 2019; Vluggen et al., 2019).

A Structured Literature Analysis (SLA) is crucial for understanding the development of sustainability reporting in PSOs. SLA provides researchers with a systematic framework for evaluating existing literature, identifying gaps in prior research, and determining future research directions. As PSOs strive to meet evolving societal expectations, establishing a solid foundation from existing studies on sustainability disclosure is essential.

Previous research has investigated the challenges faced by PSOs in sustainability reporting, particularly in Australia and New Zealand. In Australia, evidence suggests that local governments actively engage in sustainability reporting, although implementation challenges remain. In New Zealand, some studies indicate that the emphasis on internal rather than external stakeholders contributes to lower levels of sustainability disclosure at the local level (Al Nuaimi et al., 2020).

From a broader perspective, PSOs must work toward creating public value in line with sustainability principles while addressing contemporary social and environmental challenges. Sustainability is not merely about achieving short-term outcomes but also about generating long-term value, which often does not align with traditional financial reporting. Transforming their reporting approach is a crucial step for PSOs to enhance transparency and accountability in sustainability matters (Iliemena, 2023; Kumasaka et al., 2021).

Through an - literature review, this study aims to address key research questions regarding the driving factors of sustainability report disclosures in the public sector and the major research gaps that indicate suboptimal reporting practices. Consequently, the SLA will provide strategic guidance for policymakers in formulating more effective sustainability reporting frameworks for PSOs.

METHOD

This study employs a Structured Literature Review (SLR), a systematic and objective research method used to analyze recent studies on sustainability reporting in the public sector. Unlike traditional narrative reviews, which can be subjective, SLR follows a rigorous and

replicable procedure with clear logical steps, enhancing transparency and minimizing bias and analytical errors. This method has been increasingly adopted in accounting research, including public sector accounting, as it helps identify patterns, trends, and research gaps to support the development of more effective sustainability reporting policies (Camsana et al., 2024; Hanh & Anh, 2020; Kaur & K. Lodhia, 2014; Kaur & Lodhia, 2019; Tommasetti et al., 2020).

Table 1 Structured Literature Review Systematics

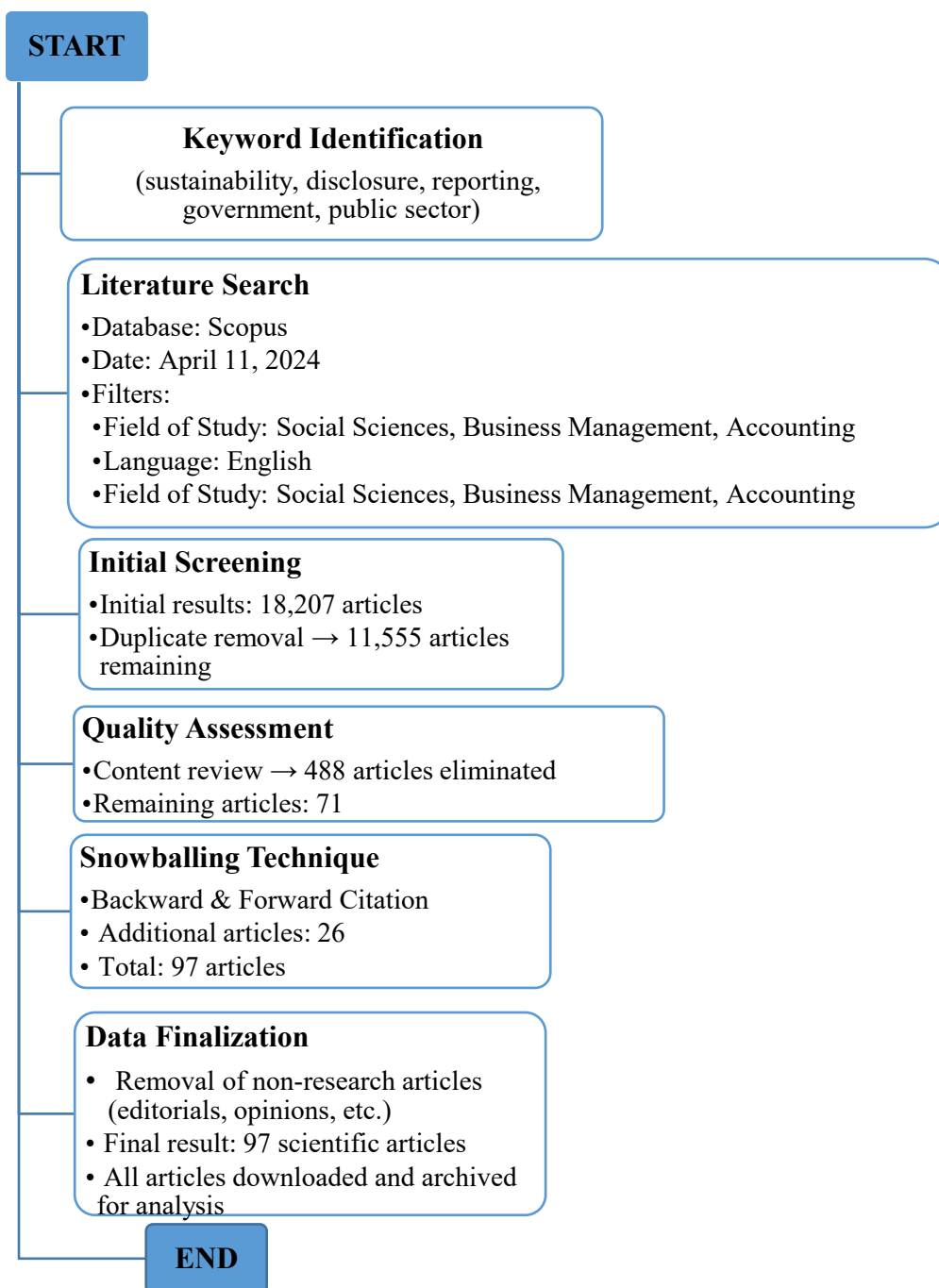
Step	Number of Articles Obtained
Initial search with keywords “sustainability” or “disclosure” and “government” or “public” and “sector” in title, abstract, and keywords	18,207
Limited to publications from 1990 to April 2024	18,154
Limited to document type ‘article,’ publication stage ‘final,’ source type ‘journal,’ and English language	11,555
Limited to Business, Management, and Accounting subject areas	2,649
Excluded non-accounting journals	559
Excluded irrelevant articles (non-disclosure-related)	71
Added articles through snowball technique (backward and forward citation)	26
Total articles after snowball technique	97
Excluded non-research articles (e.g., opinion/editorial notes)	97

Literature Search and Sample Development

The literature search was conducted on April 11, 2024, in the Scopus database using keywords related to sustainability reporting and the public sector. The search was limited to English-language journal articles in social sciences, business management, and accounting, published between 1990 and 2024. Non-research documents such as books, book chapters, editorials, conference papers, and reports were excluded to ensure quality and relevance (Chigbu et al., 2023; Snyder, 2019).

The initial search yielded 18,207 articles. After removing duplicates and applying filters, the dataset was narrowed down to 11,555 articles. Further screening based on relevance to sustainability disclosure and reporting in the public sector reduced the number to 559. After a detailed review, 488 irrelevant articles were excluded, leaving 71 articles. To enrich the sample, a snowballing technique (backward and forward citation analysis) was applied, adding 26 relevant articles from reputable journals. Following the exclusion of opinion pieces and editorial notes, the final sample comprised 97 scholarly articles.

The journal with the highest number of articles was *Sustainability Accounting Management and Policy Journal* (SAMPJ) with 10 articles, followed by *Meditari Accounting Research* (MAR) with 9 articles. The entire literature search and selection process is illustrated in Flowchart 1.



Flowchart 1 Systematic Literature Search Process

Sample Coding and Development of Literature Review Focus

The next phase involved coding and categorizing the 97 selected articles to analyze key themes aligned with the research objectives. This included determining the observation criteria, data recording methods, and data collection procedures. The analytical framework was adapted to focus on five key categories relevant to sustainability reporting in Public Sector Organizations (PSOs):

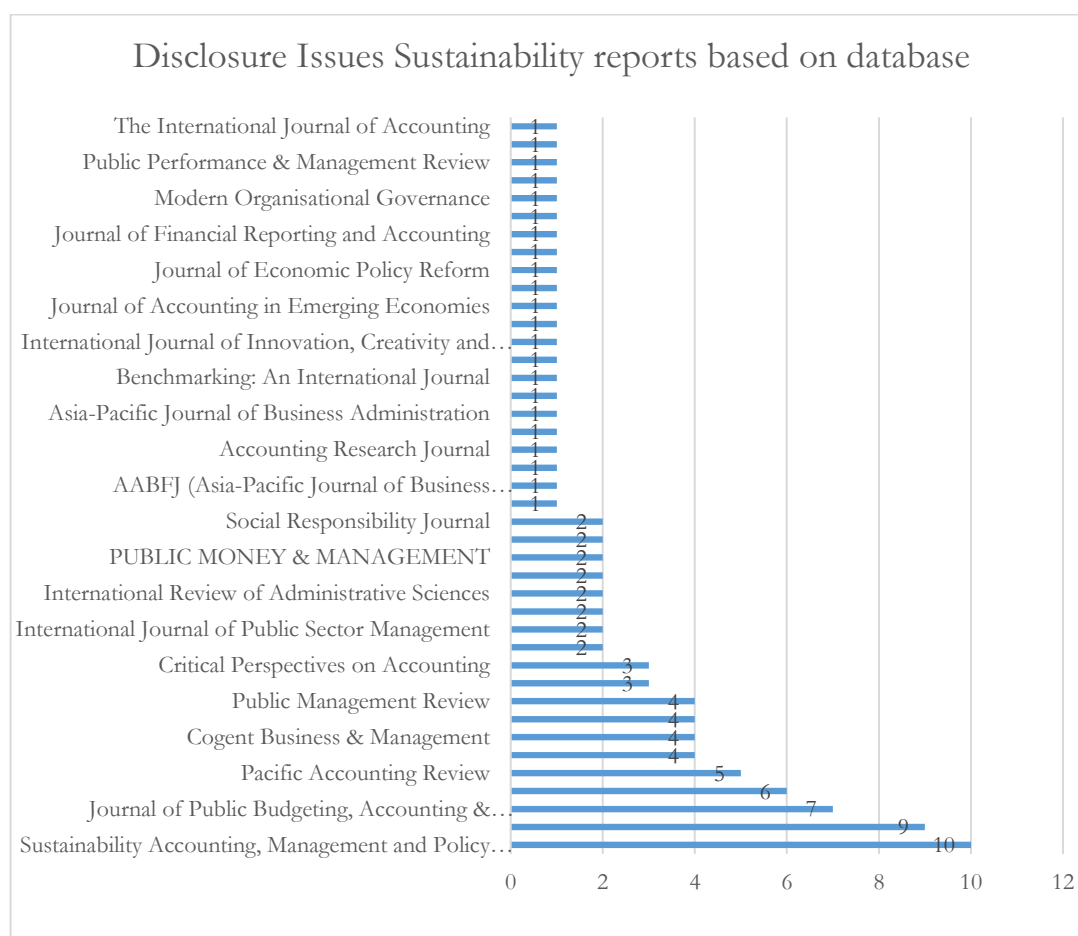
1. Sustainability issues focus
2. Research country
3. Research focus
4. Research methods
5. Theoretical frameworks used

This structured categorization facilitated a comprehensive analysis of trends, gaps, and best practices in sustainability reporting within the public sector (Naeem et al., 2023; Oesterreich & Teuteberg, 2016).

RESULTS AND ANALYSIS

The Development of Research on Sustainability Report Disclosure in the Public Sector

The results of journal searches presented in the graph show the distribution of publications related to sustainability report disclosure in the public sector from 1990 to 2024.



Graph 1 Distribution of journals based on sustainability disclosure issues for the 1990-2024 time period.

There has been a significant increase in the number of publications on this issue, particularly in terms of the number of articles published. The journal that has published the most articles on sustainability report disclosure is the *Sustainability, Accounting, Management and Policy Journal (SAMPJ)* with 10 articles, followed by *Meditari Accounting Research (MAR)* with 9 articles.

The issue of sustainability report disclosure in the public sector aligns with the growing public demand for accountability and transparency in the use of public resources, as well as the impact of government activities on the environment and society (Almashhadani & Almashhadani, 2023). The sustainability report serves as a tool to enhance the accountability and transparency of public organizations toward stakeholders. In this context, the role of the government in achieving sustainable development goals is crucial, both in policy formulation and in providing responsible public services (Dizar et al., 2018).

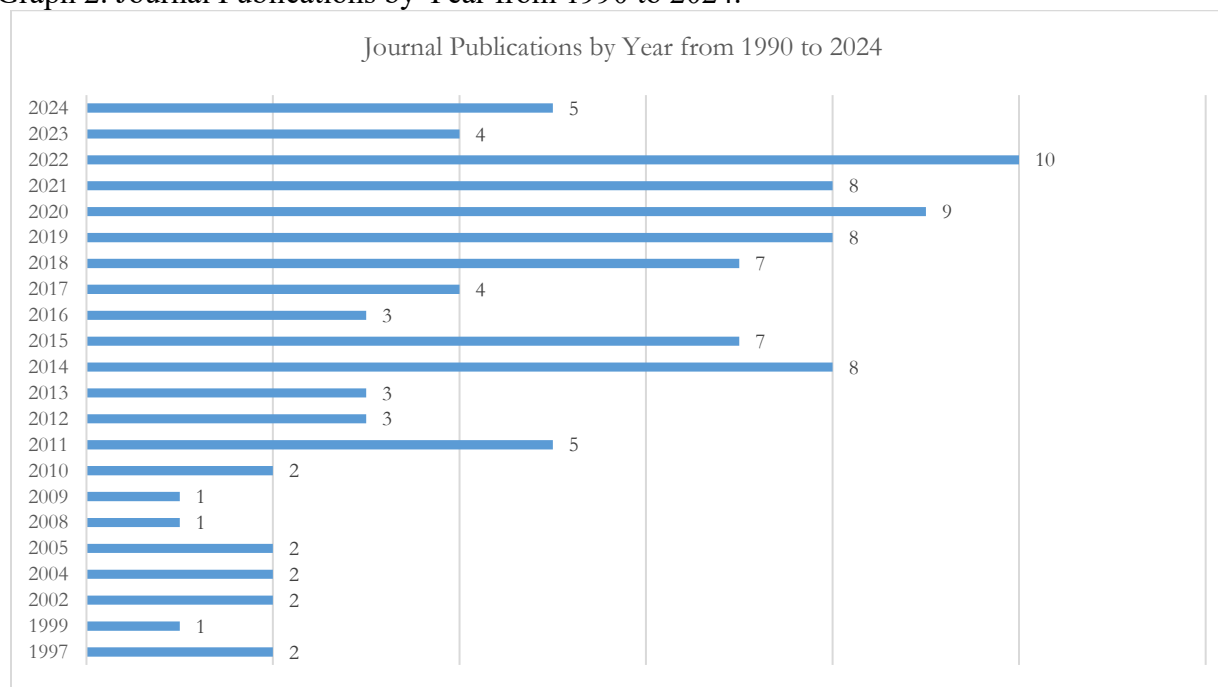
Pressure from international organizations and relevant regulations, such as the United Nations and the Organisation for Economic Co-operation and Development (OECD), has also contributed to the development of sustainability reporting practices in the public sector. According to reports from the OECD (2015) and UNESCAP (2017), sustainability reports help public sector organizations identify and manage risks related to economic, social, and environmental aspects

(Tafsir, 2021). Additionally, these reports support better governance and more efficient strategic decision-making. Several countries have also issued regulations or guidelines to encourage sustainability reporting practices in the public sector (Andrades et al., 2021).

An analysis of journal distribution reveals a significant increase in the number of published articles on sustainability report disclosure since 2014. Data indicates that from this year onwards, the average number of publications ranged between six and nine articles annually. This increase reflects the growing interest among academics worldwide in sustainability issues within the public sector. Among the 97 articles analyzed up to April 20, 2024, many have received a high number of citations, indicating their relevance and significant contribution to this field. *SAMPJ* has been one of the leading journals in publishing articles on sustainability, while 22 other journals have published approximately one article per journal per year (Lhutfi & Sugiharti, 2022).

Between 2010 and 2020, a total of 57 articles on sustainability report disclosure were published, demonstrating the increasing interest of researchers from various countries in this issue. This finding suggests that the public sector, as a key player in public policy and financial management, needs to be more proactive in providing relevant and accountable information to the public.

Overall, the development of research on sustainability report disclosure in the public sector reflects a growing awareness of the importance of accountability, transparency, and social responsibility. With increasing public demands and international regulations, it is expected that this practice will continue to evolve and receive greater attention in future studies, as illustrated in Graph 2. Journal Publications by Year from 1990 to 2024.



Graph 2 Journal Publications by Year from 1990 to 2024.

The increasing trend in sustainability reporting within the public sector has been driven by global guidelines and regulations aimed at enhancing transparency and accountability. The Global

Reporting Initiative (GRI) standards and recommendations from the Organisation for Economic Co-operation and Development (OECD) have emerged as key frameworks guiding this movement. The GRI standards, in particular, are widely recognized for their comprehensive nature, enabling organizations to measure and report their economic, environmental, and social impacts, thereby improving the credibility of sustainability disclosures (Okfalisa et al., 2021; Yehezkiel et al., 2023).

Regulatory pressures have also contributed to the widespread adoption of sustainability reporting in the public sector. Studies indicate that governmental mandates significantly influence the disclosure of sustainability reports, emphasizing the need for organizations to present detailed sustainability practices to meet legislative requirements (Nugrahani et al., 2022). These frameworks encourage both voluntary compliance and mandatory reporting, reflecting the increasing importance of sustainability metrics in public governance (Al-Shaer et al., 2022).

Additionally, corporate governance plays a crucial role in enhancing sustainability reporting. Research suggests that effective governance structures, such as diverse board compositions and strong accountability measures, positively impact the quality and frequency of sustainability disclosures (Sunday et al., 2019; Velte, 2024). Internal mechanisms ensure adherence to established guidelines like the GRI, reinforcing governance as not just a compliance facilitator but a fundamental component of sustainable reporting strategies (Al-Shaer et al., 2022; Kumar et al., 2022).

Sustainability reporting also contributes to achieving the Sustainable Development Goals (SDGs), emphasizing the link between reporting frameworks and international sustainability objectives (Alsayegh et al., 2023; Stefanescu, 2022). Scholars advocate for a stronger focus on how these reporting standards help organizations fulfill their global sustainability commitments (Alsayegh et al., 2023). The measurable and reportable sustainability goals provided by the GRI and other frameworks highlight their relevance in corporate social responsibility and governance within both public and private sectors (Tibiletti et al., 2021).

The gradual shift toward mandatory sustainability reporting reflects a broader societal consensus on the need for greater accountability in sustainability practices. Coupled with increasing scholarly attention across international journals, it is evident that sustainability reporting is not merely a trend but a significant evolution in public sector governance, enhancing organizational transparency and supporting global sustainability efforts (Pasko et al., 2022).

Sustainability Reporting in the Public Sector Trends and Challenges

The focus on sustainability reporting in the public sector has grown significantly, with at least five studies analyzing this issue through online platforms. These studies cover various aspects, including regulation-based reporting, digital technology adoption, and the integration of sustainability into strategic planning and performance management (Gamage & Sciulli, 2017; Rosa et al., 2024).

For example, Gamage & Sciulli (2017) examined how higher education institutions in Australia implement sustainability reporting and emphasized the importance of engaging with report users to understand their needs and relevant information. This reflects the challenges faced by public institutions in producing reports that not only meet standards but also respond to stakeholder expectations.

Additionally, digital technology has become a key element in enhancing public engagement and transparency. Research suggests that data analytics and information visualization in online

reporting help transform information, allowing for faster and more accurate sustainability updates. This has encouraged public institutions to explore more innovative and integrated reporting methods within existing information systems (Tullio & Torre, 2022).

The integration of sustainability into strategic planning has also gained attention. Studies indicate that linking sustainability reports to strategic planning and public sector accountability is essential to ensure that all government entities actively fulfill their annual sustainability reporting obligations (Kaur & K. Lodhia, 2014). Some research also highlights that this integration not only improves compliance but also strengthens performance management by incorporating sustainability indicators into organizational objectives. This demonstrates that sustainability is becoming an essential component of public planning and policy.

However, several key factors influence the successful implementation of sustainability reporting in the public sector. Research suggests that resources, competencies, organizational culture, and stakeholder pressure are crucial elements driving this practice (Sassen et al., 2018). Despite progress, there is still a lack of consistent research patterns in the development of sustainability studies within the public sector. This indicates a need for further studies to understand the specific dynamics and challenges faced by different public organizations in adopting sustainability reporting effectively.

Overall, the introduction of new technologies in reporting and the integration of sustainability into organizational strategies mark significant progress. However, further research is needed to address the challenges and opportunities in advancing sustainability reporting practices in the public sector efficiently and effectively.

Sustainability Report Disclosure Findings and Discussion

Sustainability Reporting in the Public Sector: A Focus on Healthcare Institutions

The issue of sustainability reporting in the public sector varies across different types of organizations, with most studies focusing on local and central governments. While there is relatively little academic attention on healthcare and higher education institutions, sustainability reporting in the public sector remains crucial, given that it accounts for approximately 40% of global economic activities and plays a key role in public services (Kaur & Lodhia, 2019; Tommasetti et al., 2020).

Kaur & Lodhia (2019) highlight a lack of research on sustainability reporting in public hospitals. They argue that healthcare institutions, particularly hospitals, deserve greater attention due to their significant environmental and social impact. Similarly, Tommasetti et al. (2020) emphasize that sustainability reporting is hindered by a lack of standardization and professionalism, affecting transparency and accountability.

Hospitals are of particular interest due to rising healthcare costs in OECD countries and their responsibility to meet social needs by providing quality medical services (Anh, 2023; Tommasetti et al., 2020). Additionally, hospitals contribute substantial waste and are major consumers of energy and water, making them key actors in environmental impact reduction (Anh, 2023; Sun et al., 2012). Thus, sustainability reporting can serve not only as a regulatory compliance tool but also as a means to raise awareness and accountability on sustainability issues (Tommasetti et al., 2020).

Challenges in the healthcare sector reveal a gap in existing literature. While some studies highlight the importance of healthcare institutions in sustainability reporting, many remain

exploratory and focus more on reporting performance rather than developing standardized models (Kaur & Lodhia, 2019; Sun et al., 2012). Further research is needed to explore the dynamics of sustainability disclosure in hospitals, considering factors such as organizational culture, resource competencies, and stakeholder pressures (Williams, 2015). This is essential to ensure that healthcare institutions meet accountability and transparency demands in sustainability reporting.

Overall, although public organizations have significant potential to contribute to sustainability through clear and measurable reporting, they still face challenges in integrating social, economic, and environmental issues into their reporting practices. Further research in this field is expected to provide solutions that enhance transparency and accountability, particularly in healthcare institutions, which are currently overlooked.

Sustainability Disclosure in the Public Sector: Challenges and Developments

The reporting of social, ethical, and environmental issues in government sectors, particularly at the local government level, has become a crucial focus in accounting and public management studies. Sustainability accountability is receiving increased attention as stakeholder expectations grow regarding transparency and the responsibility of public organizations in managing resources and addressing social and environmental impacts. In this regard, public organizations are expected not only to report financial aspects but also to disclose their contributions to sustainable development (Kılıç & Kuzey, 2019).

Literature studies indicate that research on sustainability disclosure in the public sector is still dominated by studies on local governments, with approximately 42% of studies highlighting how these entities communicate their sustainability performance to the public (Hummel et al., 2019; Smirnow & Deng, 2024). However, reporting practices in this sector continue to face challenges, particularly in implementing uniform standards. While the Global Reporting Initiative (GRI) has been widely adopted in the private sector, its adoption in the public sector remains limited (Alcaraz-Quiles et al., 2015). Inconsistencies in standards and reporting methodologies can hinder cross-organizational comparisons and reduce the reliability of information provided to stakeholders.

From the perspective of legitimacy theory, public organizations often disclose sustainability information in response to social pressures and external expectations (Leuenberger, 2006). This trend is supported by evidence showing that local governments are increasingly using social media and digital platforms to disseminate sustainability-related information, aiming to enhance public engagement and strengthen accountability (Hategan et al., 2021; Radu & Lux, 2024). For instance, local governments in Italy use social media to report on environmental policies such as waste management, air quality, and energy efficiency (Radu & Lux, 2024). However, while this approach improves information accessibility, a more systematic mechanism is still required to ensure that disclosures are structured and aligned with user needs.

Beyond local governments, research on sustainability disclosure in the healthcare and higher education sectors remains limited, despite these institutions playing a significant role in social and environmental development (Kaur & Lodhia, 2019). Hospitals, for example, contribute to high energy consumption and generate large amounts of medical waste, necessitating more transparent reporting practices to ensure responsible environmental management (Anh, 2023). However, to date, many hospitals have yet to formally adopt sustainability reporting standards,

indicating a gap in both the literature and reporting practices that should be addressed in future research (Tommasetti et al., 2020).

Based on these findings, several important implications arise for future research. Stricter regulations and reporting standards need to be implemented to ensure that public organizations present sustainability information transparently and consistently. Additionally, enhancing sustainability literacy and capacity in the public sector is essential, as many government employees still lack in-depth understanding of sustainability reporting. Governments should invest in training and education to improve employees' competencies in this area.

Further research is also needed to explore how digital technology can enhance the quality of sustainability disclosure in the public sector. So far, technology use has been limited to passive information dissemination, whereas the potential applications of data analytics and artificial intelligence in improving the accuracy and accessibility of sustainability reports remain largely unexplored. Moreover, current research tends to focus on reporting practices without examining their impact on organizational effectiveness. More in-depth studies on the relationship between sustainability reporting and public sector performance could provide broader insights into the benefits of disclosure in managing public resources more efficiently and accountably.

Overall, although there have been advancements in sustainability disclosure practices in the public sector, numerous challenges remain. Future research is expected to provide solutions for improving transparency, accountability, and the effectiveness of sustainability reporting, enabling public organizations to contribute more significantly and systematically to sustainable development.

Sustainability Reporting in Higher Education Institutions: Challenges and Developments

Sustainability reporting in higher education institutions (HEIs) has been gaining increasing attention among academics, although it remains in its early stages of development. This reporting includes key sustainability issues, such as the disclosure of financial and non-financial information to assess the economic, social, and environmental impacts of university activities (Blasco et al., 2019; Gamage & Sciulli, 2016). A literature review found that out of 97 studies analyzed, only nine articles addressed the adoption of sustainability reporting (SR) in universities, which is still considered voluntary and an initial step by stakeholders (Lozano, 2011).

The importance of sustainability reporting has become increasingly evident, as these reports are not only used to comply with regulatory requirements but also to ensure that organizations effectively communicate their progress to stakeholders. These reports aim to evaluate an institution's effectiveness in implementing sustainability practices (Šereš et al., 2019). Although awareness of environmental responsibility in higher education is growing, there are still gaps in the literature highlighting the need for further research in this area.

Several studies highlight the significance of sustainability reporting across different countries, including in the Asia-Pacific region and Canada (Shan et al., 2021; Fonseca et al., 2011). In Indonesia, although universities rank highly in environmental aspects, they often fail to provide adequate reporting or do not report at all, with relatively low compliance with Global Reporting Initiative (GRI) standards. This study emphasizes that despite efforts to implement sustainability practices, as reflected in the UI GreenMetric rankings, there remains a gap between performance and disclosure (Sari et al., 2023).

The theoretical framework underlying sustainability reporting is largely based on stakeholder theory, which emphasizes the importance of engaging and fulfilling the rights of all stakeholders through transparent disclosures (Poza et al., 2021). This approach is crucial in understanding how disclosed information can reduce information asymmetry between educational institutions and their stakeholders (Cho et al., 2012). While the GRI guidelines and standards serve as a reference for many institutions, their implementation varies depending on the national context (Ghaus et al., 2017).

Although many Australian universities are making significant efforts to improve their sustainability reporting, they often face challenges in ensuring the consistency and traceability of the disclosed information (Kosta, 2017; Gamage & Sciulli, 2016). Additionally, better integration of sustainability reporting with university management systems is needed to ensure that sustainability efforts are both measurable and effectively communicated (Sepasi, 2018).

Overall, the increasing attention toward sustainability reporting in higher education institutions is a positive sign, yet significant challenges remain. Therefore, further research is needed to explore the factors influencing decision-making in sustainability reporting and to examine various approaches that can be employed to address these challenges within the context of higher education (Osman et al., 2023; Morhardt et al., 2002).

Sustainability Reporting in the Public Sector: Challenges and Recommendations

The study of sustainability reporting in the public sector has generated several suggestions and recommendations that can support future research development. Existing studies highlight the need for a framework that aligns with the unique context, objectives, and challenges faced by public sector organizations. It is essential to consider aspects of governance, public accountability, and resource utilization within this framework (Matikainen, 2022). This aligns with other research indicating that enhanced transparency and accountability through sustainability reporting can strengthen public trust in government organizations (Ardiana, 2019).

One of the key recommendations is involving stakeholders in the sustainability reporting process. Active stakeholder participation helps organizations understand and meet the information needs of various parties (Kaur & Lodhia, 2019; Trana et al., 2024). Kaur & Lodhia (2019) further emphasize that stakeholder engagement not only benefits reporting but also supports strategic planning and better managerial practices.

Integrating sustainability reporting with organizational strategic planning is a crucial step toward more responsible governance (Anh, 2023). Additionally, developing sustainability performance indicators relevant to organizational priorities enables comparisons and benchmarking across various public sector institutions. Comparative research is also essential in identifying best practices and challenges in public sector sustainability reporting (Puroila & Mäkelä, 2019).

In the digital era, technology and innovation play a vital role in enhancing the efficiency and accuracy of sustainability reporting. Digital technology and data analytics enable greater accessibility to sustainability reports (Fobbe et al., 2024). For instance, information technology-based platforms can help government institutions disseminate information about their sustainability practices more quickly and accurately, meet stakeholder needs, and strengthen public accountability.

Future research should further explore the impact of various sustainability reporting mechanisms on organizational performance and how report transparency can reinforce public support. This not only contributes to theoretical advancements in accounting and sustainability but also serves as a practical guide for public sector organizations in improving their reporting practices (Gagné et al., 2022).

A holistic and interdisciplinary approach is necessary to address the challenges of sustainability reporting in the public sector. Future research that considers these aspects is expected to make significant contributions to establishing standardization and improving sustainability reporting practices (Lobont et al., 2018; Moratis & Brandt, 2017).

Future Research Agenda

The findings of this review reveal several critical avenues for future research aimed at enhancing the quality, relevance, and strategic value of sustainability reporting in the public sector. First, there is a pressing need to expand the research focus beyond central and local governments to include other significant public institutions—particularly healthcare and education. Hospitals, due to their intensive energy usage and medical waste generation, pose considerable environmental challenges. Similarly, universities hold transformative potential in promoting sustainability through both operational practices and reporting initiatives. However, these sectors are underrepresented in current literature, and existing reporting standards remain inadequate. Future research should investigate the unique barriers to adoption and identify tailored frameworks suitable for these domains.

Second, the development and harmonization of standardized sustainability reporting guidelines warrant deeper exploration. Despite the availability of international frameworks such as the Global Reporting Initiative (GRI), their uptake in the public sector remains limited. Future studies should explore the institutional, regulatory, and contextual factors that hinder or facilitate adoption. Comparative research across countries and sectors could provide insights into best practices and inform policy development for unified reporting standards.

Third, the integration of emerging digital technologies in sustainability reporting is an area with untapped potential. Technologies such as artificial intelligence (AI), big data analytics, and blockchain could significantly enhance the accuracy, credibility, and user-friendliness of sustainability disclosures. Future research should examine the feasibility, benefits, and challenges of adopting these tools in public sector reporting, including their role in improving public engagement, data transparency, and evidence-based policymaking.

Fourth, the role of human capital and organizational capacity in shaping reporting practices deserves greater attention. Empirical studies are needed to assess how limitations in skills, resources, and institutional support affect the quality of sustainability disclosures. In addition, the impact of leadership commitment, organizational culture, and inter-agency collaboration on the successful implementation of sustainability reporting should be systematically explored. This includes evaluating the effectiveness of training and capacity-building programs for public officials involved in sustainability initiatives.

Lastly, future research should explore the strategic implications of sustainability reporting in enhancing public sector performance. Beyond compliance, sustainability disclosures have the potential to influence decision-making processes, policy development, financial performance, and

stakeholder trust. Studies should investigate how sustainability reporting contributes to institutional resilience, long-term value creation, and the optimization of public resource management.

By addressing these research gaps, future studies can contribute to the evolution of sustainability reporting from a compliance-based exercise to a strategic governance tool—supporting transparency, accountability, and sustainable development within public institutions.

CONCLUSIONS

While sustainability reporting in the public sector has gained growing attention, most research remains concentrated on central and local governments. There is a critical need to broaden the scope to include other vital public sector institutions such as healthcare and education. Hospitals, for instance, have substantial environmental footprints due to high energy use and medical waste generation, while universities hold strategic roles in driving social and environmental development. Despite this, sustainability reporting practices and standards within these sectors are still underdeveloped.

This study identifies several persistent challenges that hinder the effectiveness of sustainability reporting in Public Sector Organizations (PSOs). These include the absence of standardized reporting guidelines, the limited adoption of globally recognized frameworks such as the Global Reporting Initiative (GRI), and a lack of institutional capacity—particularly in terms of human resources and technical expertise. Furthermore, although digital technologies are increasingly used to disclose sustainability information, their use remains largely static, with limited integration of advanced tools such as data analytics and artificial intelligence to enhance the depth and reliability of reporting.

To improve the quality and impact of sustainability reporting in the public sector, three key strategies are essential: (1) the establishment of harmonized regulatory frameworks, (2) comprehensive capacity-building initiatives to equip institutions with the necessary skills and resources, and (3) the strategic use of digital innovations to improve reporting processes and stakeholder engagement.

Finally, future research should go beyond descriptive accounts and investigate how sustainability reporting can drive performance improvements and value creation, positioning it not merely as a compliance mechanism but as a strategic tool for fostering greater transparency, accountability, and trust in public governance.

REFERENCES

- Al-Shaer, H., Albitar, K., & Hussainey, K. (2022). Creating sustainability reports that matter: an investigation of factors behind the narratives. *Journal of Applied Accounting Research*, 23(3), 738–763. <https://doi.org/10.1108/JAAR-05-2021-0136>
- Al Nuaimi, B. K., Khan, M., & Ajmal, M. (2020). Implementing sustainable procurement in the United Arab Emirates public sector. *Journal of Public Procurement*, 20(2), 97–117. <https://doi.org/10.1108/JOPP-07-2019-0044>
- Alcaraz-Quiles, F. J., Navarro-Galera, A., & Ortiz-Rodríguez, D. (2015). Factors determining online sustainability reporting by local governments. *International Review of Administrative Sciences*, 81(1), 79–109. <https://doi.org/10.1177/0020852314541564>
- Almashhadani, M., & Almashhadani, H. A. (2023). The Impact of Sustainability Reports to

- Enhance Company Performance and its Sustainability. *International Journal of Scientific and Management Research*, 06(09), 149–163.
- Alsayegh, M. F., Ditta, A., Mahmood, Z., & Kouser, R. (2023). The Role of Sustainability Reporting and Governance in Achieving Sustainable Development Goals: An International Investigation. *Sustainability (Switzerland)*, 15(4). <https://doi.org/10.3390/su15043531>
- Amidjaya, P. G., & Widagdo, A. K. (2020). Sustainability reporting in Indonesian listed banks. *Journal of Applied Accounting Research*, 21(2), 231–247. <https://doi.org/10.1108/JAAR-09-2018-0149>
- Andrades, J., Larrán, M., Muriel, M. J., Calzado, M. Y., & Lechuga Sancho, M. P. (2021). Online sustainability disclosure by Spanish hospitals: an institutionalist approach. *International Journal of Public Sector Management*, 34(5), 529–545. <https://doi.org/10.1108/IJPSM-09-2020-0259>
- Anh, V. T. Van. (2023). Sustainable Performance Measurement in Public Sectors - A Systematic Literature Review. *VNU University of Economics and Business*, 3(6), 58. <https://doi.org/10.57110/vnujeb.v3i6.225>
- Ardiana, P. A. (2019). Stakeholder Engagement in Sustainability Reporting: Evidence of Reputation Risk Management in Large Australian Companies. *Australian Accounting Review*, 29(4), 726–747. <https://doi.org/10.1111/auar.12293>
- Berceanu, I. B., & Nicolescu, C. E. (2024). Collaborative Public Administration—A Dimension of Sustainable Development: Exploratory Study on Local Authorities in Romania. *Administrative Sciences*, 14(2). <https://doi.org/10.3390/admsci14020030>
- Camsana, M. A. P., Anggia, D., Nabila, S., & Mariana, M. (2024). Identifying Errors and Fraud in Regional Financial Management: A Literature Review. *Ekalaya : Jurnal Ekonomi Akuntansi*, 2(4), 9–17.
- Chigbu, U. E., Atiku, S. O., & Du Plessis, C. C. (2023). The Science of Literature Reviews: Searching, Identifying, Selecting, and Synthesising. *Publications*, 11(1). <https://doi.org/10.3390/publications11010002>
- Correia, E., Garrido, S., & Carvalho, H. (2021). Online sustainability information disclosure of mold companies. *Corporate Communications: An International Journal*, 26(3), 557–588. <https://doi.org/10.1108/CCIJ-05-2020-0085>
- Dizar, S., Alifia, S., & Alvionita, F. (2018). The Effect of Audit Committee, Gender Commissioners and Directors, Role Duality, and Firm Size Against Extension of Sustainability Report Disclosure. *Indonesian Management and Accounting Research*, 17(01).
- Fobbe, L., Niss, C., & Hilletoft, P. (2024). Continuous and changing stakeholder engagement for organisational sustainability: Proposing the stakeholder engagement flow model. *Corporate Social Responsibility and Environmental Management*, June, 6061–6074. <https://doi.org/10.1002/csr.2908>
- Gagné, V., Berthelot, S., & Coulmont, M. (2022). Stakeholder engagement practices and impression management. *Journal of Global Responsibility*, 13(2), 217–241. <https://doi.org/10.1108/JGR-03-2021-0036>
- Gamage, P., & Sciulli, N. (2017). Sustainability Reporting by Australian Universities. *Australian Journal of Public Administration*, 76(2), 187–203. <https://doi.org/10.1111/1467-8500.12215>
- García-Sánchez, I.-M., Aibar-Guzmán, B., & Aibar-Guzmán, C. (2022). What sustainability

- assurance services do institutional investors demand and what value do they give them? *Sustainability Accounting, Management and Policy Journal*, 13(1), 152–194. <https://doi.org/10.1108/SAMPJ-06-2020-0199>
- Hanh, T. T. H., & Anh, L. T. P. (2020). Examining The Antecedents Of E-Loyalty In The Context Of Multi- Channel Retailing : A Case Study For Danang , Vietnam. *The 2nd International Conference on Commerce and Distribution*, 1, 395–407.
- Hassan, A., Adhikariparajuli, M., Fletcher, M., & Elamer, A. (2019). Integrated reporting in UK higher education institutions. In *Sustainability Accounting, Management and Policy Journal* (Vol. 10, Issue 5). <https://doi.org/10.1108/SAMPJ-03-2018-0093>
- Hategan, C. D., Pitorac, R. I., & Milu, N. D. (2021). Assessment of the mandatory non-financial reporting of romanian companies in the circular economy context. *International Journal of Environmental Research and Public Health*, 18(24). <https://doi.org/10.3390/ijerph182412899>
- Hummel, J., Pagkaliwangan, M., Gjoka, X., Davidovits, T., Stock, R., Ransohoff, T., Gantier, R., & Schofield, M. (2019). Modeling the Downstream Processing of Monoclonal Antibodies Reveals Cost Advantages for Continuous Methods for a Broad Range of Manufacturing Scales. *Biotechnology Journal*, 14(2), 1–9. <https://doi.org/10.1002/biot.201700665>
- Iliemena, R. O. (2023). Role of Accountants in Achieving the Sustainable Development Goals (SDGS): Do Accountants Really Matter for Sustainable Development Goals? *European Journal of Business and Management*, 15(2), 14–25. <https://doi.org/10.7176/ejbm/15-2-02>
- Kaur, A., & K. Lodhia, S. (2014). The state of disclosures on stakeholder engagement in sustainability reporting in Australian local councils. *Pacific Accounting Review*, 26(1/2), 54–74. <https://doi.org/10.1108/PAR-07-2013-0064>
- Kaur, A., & Lodhia, S. K. (2019). Sustainability accounting, accountability and reporting in the public sector: An overview and suggestions for future research. *Meditari Accountancy Research*, 27(4), 498–504. <https://doi.org/10.1108/MEDAR-08-2019-510>
- Khatri, I., & Kjærland, F. (2023). Sustainability reporting practices and environmental performance amongst nordic listed firms. *Journal of Cleaner Production*, 418, 138172. <https://doi.org/10.1016/J.JCLEPRO.2023.138172>
- Kılıç, M., & Kuzey, C. (2019). The effect of corporate governance on carbon emission disclosures: Evidence from Turkey. *International Journal of Climate Change Strategies and Management*, 11(1), 35–53. <https://doi.org/10.1108/IJCCSM-07-2017-0144>
- Kumar, K., Kumari, R., Nandy, M., Sarim, M., & Kumar, R. (2022). Do ownership structures and governance attributes matter for corporate sustainability reporting? An examination in the Indian context. *Management of Environmental Quality: An International Journal*, 33(5), 1077–1096. <https://doi.org/10.1108/MEQ-08-2021-0196>
- Kumasaka, J. M. V. C., Galleli, B., Henrique, J., Cruz, B. B., & Sandri, E. C. (2021). Sustainability in public organizations: a study in the Sustenta Paraná Network. *Revista de Administração Da UFSM*, 14, 1160–1181. <https://doi.org/10.5902/1983465963992>
- Leuenberger, D. (2006). Sustainable Development in Public Administration: A Match With Practice? *Public Works Management & Policy*, 10(3), 195–201. <https://doi.org/10.1177/1087724X06287496>
- Lhutfi, I., & Sugiharti, H. (2022). Financial Sustainability of Local Governments Indonesia. *Jurnal ASET (Akuntansi Riset)*, 14(1), 159–170. <https://doi.org/10.17509/jurnal>

- Lobont, O. R., Moldovan, N. C., Bociu, A., Chis, C., & Brîndescu Olariu, D. (2018). A factor analysis of the public sector performance. Significant differences between old and new EU countries. *Economic Computation and Economic Cybernetics Studies and Research*, 52(2), 139–156. <https://doi.org/10.24818/18423264/52.2.18.09>
- Manes-Rossi, F., Nicolò, G., & Argento, D. (2020). Non-financial reporting formats in public sector organizations: a structured literature review. *Journal of Public Budgeting, Accounting and Financial Management*, 32(4), 639–669. <https://doi.org/10.1108/JPBAFM-03-2020-0037>
- Marx, A. (2019). Public-private partnerships for sustainable development: Exploring their design and its impact on effectiveness. *Sustainability (Switzerland)*, 11(4). <https://doi.org/10.3390/su11041087>
- Matikainen, L. S. (2022). Addressing Sustainability in the Mining Industry Through Stakeholder Engagement. *South Asian Journal of Business and Management Cases*, 11(1), 35–48. <https://doi.org/10.1177/22779779221078673>
- Monteiro, A. P., Pereira, C., & Barbosa, F. M. (2023). Environmental disclosure on mandatory and voluntary reporting of Portuguese listed firms: the role of environmental certification, lucratively and corporate governance. *Meditari Accountancy Research*, 31(3), 524–553. <https://doi.org/10.1108/MEDAR-09-2020-1001>
- Moratis, L., & Brandt, S. (2017). Corporate stakeholder responsiveness? Exploring the state and quality of GRI-based stakeholder engagement disclosures of European firms. *Corporate Social Responsibility and Environmental Management*, 24(4), 312–325. <https://doi.org/10.1002/csr.1408>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research. *International Journal of Qualitative Methods*, 22(October), 1–18. <https://doi.org/10.1177/16094069231205789>
- Ntim, C. G., Soobaroyen, T., & Broad, M. J. (2017). Governance structures, voluntary disclosures and public accountability: The case of UK higher education institutions. In *Accounting, Auditing and Accountability Journal* (Vol. 30, Issue 1). <https://doi.org/10.1108/AAAJ-10-2014-1842>
- Nugrahani, T. S., Atiqoh, K. I., & Pertiwi, I. F. P. (2022). The Effect Of Industry Type, Government Pressure, And Company Size To Disclosure Of Sustainability Report. *Journal of Business and Management Review*, 3(1), 045–056. <https://doi.org/10.47153/jbmr31.3092022>
- Oesterreich, T. D., & Teuteberg, F. (2016). Understanding the implications of digitisation and automation in the context of Industry 4.0: A triangulation approach and elements of a research agenda for the construction industry. *Computers in Industry*, 83, 121–139. <https://doi.org/10.1016/j.compind.2016.09.006>
- Okfalisa, O., Habib, R., Hidayati, R., Mahyarni, M., Alex, W., Gusman, N., & Saktioto, S. (2021). Measuring the banking performance based on corporate social responsibility achievement: Decision support system adoption. *AIP Conference Proceedings*, 2347(Icamet 2020), 1–8. <https://doi.org/10.1063/5.0055768>
- Oprisor, T., TIRON-TUDOR, A., & NISTOR, C. S. (2016). The integrated reporting system: a new accountability enhancement tool for public sector entities. *Audit Financiar*, 14(139), 747. <https://doi.org/10.20869/auditf/2016/139/747>
- Pasko, O., Chen, F., Kuts, T., Sharko, I., & Ryzhikova, N. (2022). Sustainability reporting nexus

- to corporate governance in scholarly literature. *Environmental Economics*, 13(1), 61–78. [https://doi.org/10.21511/ee.13\(1\).2022.06](https://doi.org/10.21511/ee.13(1).2022.06)
- Puroila, J., & Mäkelä, H. (2019). Matter of opinion. *Accounting, Auditing & Accountability Journal*, 32(4), 1043–1072. <https://doi.org/10.1108/AAAJ-11-2016-2788>
- Radu, C., & Lux, G. (2024). Circular economy promotion and disclosure among Canadian municipalities. *Sustainability Accounting, Management and Policy Journal*. <https://doi.org/10.1108/SAMPJ-06-2023-0445>
- Rosa, M. R. da, Boscaroli, C., & Freitas Zara, K. R. de. (2024). A systematic review of the trends and patterns of sustainability reporting in universities. *International Journal of Sustainability in Higher Education*, 25(3), 556–576. <https://doi.org/10.1108/IJSHE-12-2022-0399>
- Sassen, R., Dienes, D., & Wedemeier, J. (2018). Characteristics of UK higher education institutions that disclose sustainability reports. *International Journal of Sustainability in Higher Education*, 19(7), 1279–1298. <https://doi.org/10.1108/IJSHE-03-2018-0042>
- Smirnow, D., & Deng, C. (2024). Mandatory Disclosures as Calculative Spaces: Public Sector Accountability on Restoring Species at Risk. *Accounting Perspectives*, 23(2), 235–265. <https://doi.org/https://doi.org/10.1111/1911-3838.12348>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104(August), 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Stefanescu, C. A. (2022). Linking sustainability reporting frameworks and sustainable development goals. *Accounting Research Journal*, 35(4), 508–525. <https://doi.org/10.1108/ARJ-07-2020-0196>
- Sun, Q., Yung, K., & Rahman, H. (2012). Earnings quality and corporate cash holdings. *Accounting and Finance*, 52(2), 543–571. <https://doi.org/10.1111/j.1467-629X.2010.00394.x>
- Sunday, O., Fidelis, A., & Godwin, O. (2019). Influence of Companies' Governance Process on Sustainability Reporting in Nigeria. *International Journal of Applied Economics, Finance and Accounting*, 5(1), 31–38. <https://doi.org/10.33094/8.2017.2019.51.31.38>
- Tafsir, M. (2021). Sustainable Finance: A Strategy to Increase Good Corporate Governance and Company Value in Banking Industry. *Atestasi : Jurnal Ilmiah Akuntansi*, 4(2), 164–172. <https://doi.org/10.57178/atestasi.v4i2.99>
- Tibiletti, V., Marchini, P. L., Furlotti, K., & Medioli, A. (2021). Does corporate governance matter in corporate social responsibility disclosure? Evidence from Italy in the “era of sustainability.” *Corporate Social Responsibility and Environmental Management*, 28(2), 896–907. <https://doi.org/10.1002/csr.2097>
- Tommasetti, A., Mussari, R., Maione, G., & Sorrentino, D. (2020). Sustainability accounting and reporting in the public sector: Towards public value co-creation? *Sustainability (Switzerland)*, 12(5), 1–19. <https://doi.org/10.3390/su12051909>
- Trana, M. G. di, Fiandrino, S., Tonelli, A., & Devalle, A. (2024). The interplay between stakeholder engagement and sustainability materiality assessment: a circular perspective. *Social Responsibility Journal*, 20(10), 2100–2118. <https://doi.org/10.1108/SRJ-04-2024-0234>
- Tullio, P. Di, & Torre, M. La. (2022). Sustainability Reporting at a Crossroads in Italian Universities: Is Web-Based Media Adoption Deinstitutionalising Sustainability Reporting? *Administrative Sciences*, 12(1). <https://doi.org/10.3390/admsci12010034>
- Upaa, J., & Iorlaha, M. (2023). Sustainability Disclosure and Information Asymmetry of Listed

- Industrial Companies in Nigeria. *International Journal of Accounting, Finance and Risk Management*, 8(4), 134–142. <https://doi.org/10.11648/j.ijafrm.20230804.16>
- Velte, P. (2024). Sustainable board governance and sustainable supply chain reporting: European evidence. *Journal of Strategy and Management*, 17(2), 222–243. <https://doi.org/10.1108/JSMA-07-2023-0189>
- Vluggen, R., Gelderman, C. J., Semeijn, J., & van Pelt, M. (2019). Sustainable public procurement-external forces and accountability. *Sustainability (Switzerland)*, 11(20), 9–17. <https://doi.org/10.3390/su11205696>
- Williams, B. R. (2015). Reporting on sustainability by Australian councils – a communication perspective. *Asian Review of Accounting*, 23(2), 186–203. <https://doi.org/10.1108/ARA-12-2013-0079>
- Yehezkiel, R. Y., Dwi Astuti, C., & Noor, I. N. (2023). Gri Standards-Based Sustainability Reporting Disclosure Practices Across Countries. *Media Riset Akuntansi, Auditing & Informasi*, 23(2), 241–256. <https://doi.org/10.25105/mraai.v23i2.17959>