


**A SUSTAINABILITY REPORTING ISSUE: A COMPARATIVE REVIEW BETWEEN  
INDONESIA AND NORDIC COUNTRY**

Marsdenia<sup>A</sup>, Raldi Hendrotoro Seputro Koestoer<sup>B</sup>



ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p>Received 25 August 2023</p> <p>Accepted 27 November 2023</p>	<p><b>Purpose:</b> The aim of this study is to make a comparative review on sustainability reporting between Indonesia and Nordic Country</p>
<p><b>Keywords:</b></p> <p>Sustainability Report; Environmental Information; Social Information; Governance Information; Information Disclosure.</p>	<p><b>Theoretical framework:</b> The article captures various research which includes quantitative and qualitative analyses and case studies available in Scopus illustrated for a better understanding of how sustainability reporting in Indonesia differs from Sustainability in Nordic countries.</p>
	<p><b>Design/methodology/approach:</b> This paper wants to find out comparison of sustainability reports between Indonesia and Nordic. The methodology used in this research is the Systematic Literature Review (SLR) method. The SLR process systematically and critically reviews existing research studies. The steps this research undertakes are i) identifying and discovering keywords, ii) literature search, and iii) analysis and synthesis process. Identifying keywords is the initial step related to the proposed topic: sustainability reports. Regarding the environmental aspect, economy and governance; several other keywords are applied to the selected review locations, Nordic country and Indonesia. The choice of this search engine was intended to obtain scholarly literature with a reputable Scopus indexing.. So, this article shows different kinds of research, such as quantitative and qualitative analyses and case studies that can be found in databases like Scopus. This helps readers understand the topic better.</p> <p><b>Findings:</b> The results of comparative study the sustainability report of company listed in Indonesia stock exchange left behind to elevated in the quantity and quality. In looking sustainability reporting (SR) conditions in Indonesia and SR in the European Union (EU) or Nordic countries (mandatory regime) , despite Indonesia(Voluntary regime) having issued regulation POJK 51/2017, there is still a need for further development and detailed guidelines regarding standards for producing sustainability reports to achieve the primary goal of managing sustainability risks related to a company's economic, social, and environmental aspects to safeguard human life in the future</p> <p><b>Research implications:</b> The study have implication that sustainability reports produced by public company should backed up by proper regulation.</p> <p><b>Social implications:</b> The study have social implication that sustainability reports accountability represents the participation on company in social and environment aspects in the society.</p> <p><b>Originality/value:</b> The comparative review discusses theories, methodologies, context, findings, and future scope of research.</p> <p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i12.4014">https://doi.org/10.26668/businessreview/2023.v8i12.4014</a></p>

<sup>A</sup> Doctoral Students, School of Environmental Science Programme and Research Scholar, Vocational Programme, University of Indonesia, Depok, Indonesia. E-mail: [marsdenia@vokasi.ui.ac.id](mailto:marsdenia@vokasi.ui.ac.id) Orcid: <https://orcid.org/0000-0002-7491-2374>

<sup>B</sup> PhD in Environmental Science, Professor. School of Environmental Science Programme. University of Indonesia, Depok, Indonesia. E-mail: [raldy.hk@ui.ac.id](mailto:raldy.hk@ui.ac.id) Orcid: <https://orcid.org/0000-0003-1701-0419>

## UMA QUESTÃO DE RELATÓRIO DE SUSTENTABILIDADE: UMA ANÁLISE COMPARATIVA ENTRE A INDONÉSIA E O PAÍS NÓRDICO

### RESUMO

**Objetivo:** O objetivo deste estudo é fazer uma revisão comparativa sobre relatórios de sustentabilidade entre a Indonésia e os países nórdicos.

**Enquadramento teórico:** O artigo capta diversas pesquisas que incluem análises quantitativas e qualitativas e estudos de caso disponíveis no Scopus ilustrados para uma melhor compreensão de como os relatórios de sustentabilidade na Indonésia diferem da sustentabilidade nos países nórdicos.

**Design/metodologia/abordagem:** Este artigo pretende descobrir uma comparação de relatórios de sustentabilidade entre a Indonésia e os países nórdicos. A metodologia utilizada nesta pesquisa é o método de Revisão Sistemática da Literatura (RSL). O processo SLR revisa sistemática e criticamente os estudos de pesquisa existentes. As etapas que esta pesquisa realiza são i) identificar e descobrir palavras-chave, ii) pesquisa bibliográfica e iii) processo de análise e síntese. A identificação de palavras-chave é o passo inicial relacionado ao tema proposto: relatórios de sustentabilidade. No que diz respeito à vertente ambiental, economia e governação; várias outras palavras-chave são aplicadas aos locais de avaliação selecionados, país nórdico e Indonésia. A escolha deste mecanismo de busca teve como objetivo obter literatura acadêmica com indexação Scopus respeitável. Assim, este artigo apresenta diferentes tipos de pesquisas, como análises quantitativas e qualitativas e estudos de caso que podem ser encontrados em bases de dados como a Scopus. Isso ajuda os leitores a entender melhor o assunto.

**Constatações:** Os resultados do estudo comparativo do relatório de sustentabilidade da empresa listada na bolsa de valores da Indonésia deixaram para trás níveis elevados em quantidade e qualidade. Ao analisar as condições dos relatórios de sustentabilidade (SR) na Indonésia e dos RS na União Europeia (UE) ou nos países nórdicos (regime obrigatório), apesar da Indonésia (regime voluntário) ter emitido o regulamento POJK 51/2017, ainda há necessidade de maior desenvolvimento e diretrizes detalhadas sobre padrões para a produção de relatórios de sustentabilidade para atingir o objetivo principal de gerenciar riscos de sustentabilidade relacionados aos aspectos econômicos, sociais e ambientais de uma empresa para salvaguardar a vida humana no futuro

**Implicações da pesquisa:** O estudo implica que os relatórios de sustentabilidade produzidos por empresas públicas devem ser apoiados por regulamentação adequada.

**Implicações sociais:** O estudo tem implicação social de que a prestação de contas dos relatórios de sustentabilidade representa a participação da empresa nos aspectos sociais e ambientais da sociedade.

**Originalidade/valor:** A revisão comparativa discute teorias, metodologias, contexto, resultados e escopo futuro da pesquisa.

**Palavras-chave:** Relatório de Sustentabilidade, Informação Ambiental, Informação Social, Informações de Governança, Divulgação de Informação.

## UNA PROBLEMA DE INFORMES DE SOSTENIBILIDAD: UNA REVISIÓN COMPARATIVA ENTRE INDONESIA Y EL PAÍS NÓRDICO

### RESUMEN

**Propósito:** El objetivo de este estudio es realizar una revisión comparativa de los informes de sostenibilidad entre Indonesia y los países nórdicos.

**Marco teórico:** El artículo captura diversas investigaciones que incluyen análisis cuantitativos y cualitativos y estudios de casos disponibles en Scopus ilustrados para una mejor comprensión de cómo los informes de sostenibilidad en Indonesia difieren de los de los países nórdicos.

**Diseño/metodología/enfoque:** este documento quiere conocer la comparación de los informes de sostenibilidad entre Indonesia y los países nórdicos. La metodología utilizada en esta investigación es el método de Revisión Sistemática de la Literatura (SLR). El proceso SLR revisa sistemática y críticamente los estudios de investigación existentes. Los pasos que emprende esta investigación son i) identificar y descubrir palabras clave, ii) búsqueda de literatura y iii) proceso de análisis y síntesis. Identificar palabras clave es el paso inicial relacionado con el tema propuesto: los informes de sostenibilidad. En cuanto al aspecto ambiental, economía y gobernanza; Se aplican varias otras palabras clave a las ubicaciones de revisión seleccionadas, el país nórdico e Indonesia. La elección de este motor de búsqueda tuvo como objetivo obtener literatura académica con una indexación Scopus acreditada. Por lo tanto, este artículo muestra diferentes tipos de investigaciones, como análisis cuantitativos y cualitativos y estudios de casos que se pueden encontrar en bases de datos como Scopus. Esto ayuda a los lectores a comprender mejor el tema.

**Hallazgos:** Los resultados del estudio comparativo del informe de sostenibilidad de una empresa que cotiza en la bolsa de valores de Indonesia dejaron atrás niveles elevados en cantidad y calidad. Al observar las condiciones de los informes de sostenibilidad (SR) en Indonesia y SR en la Unión Europea (UE) o los países nórdicos (régimen

obligatorio), a pesar de que Indonesia (régimen voluntario) ha emitido el reglamento POJK 51/2017, todavía existe la necesidad de un mayor desarrollo y Directrices detalladas sobre los estándares para producir informes de sostenibilidad para lograr el objetivo principal de gestionar los riesgos de sostenibilidad relacionados con los aspectos económicos, sociales y ambientales de una empresa para salvaguardar la vida humana en el futuro.

Implicaciones de la investigación: El estudio implica que los informes de sostenibilidad elaborados por empresas públicas deben estar respaldados por una regulación adecuada.

**Implicaciones sociales:** El estudio tiene implicaciones sociales de que la rendición de cuentas de los informes de sostenibilidad representa la participación de la empresa en los aspectos sociales y ambientales de la sociedad.

**Originalidad/valor:** la revisión comparativa analiza teorías, metodologías, contexto, hallazgos y alcance futuro de la investigación.

**Palabras clave:** Informe de Sostenibilidad, Información Ambiental, Información Social, Información de Gobernanza, Divulgación de Información.

## INTRODUCTION

Every inhabitant of Earth possesses a common understanding that we live within the constraints of finite resources, and human existence hinges upon the sustainability of natural resources (Li et al., 2022). The terminology of sustainability first gained prominence when the United Nations' World Commission on Environment and Development (WCED) released what became known as the Brundtland Report in 1987 (Gosseries, 2005). Brundtland and her colleagues identified that sustainable development is a way to align development with the issues of resource limitations. Sustainable development is recognized as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987) (Khatri & Kjærland, 2023). The terminology of sustainability has also been a concern for countries in Southeast Asia. In Indonesia, the Financial Services Authority (Otoritas et al.) issued regulations in 2012 that require listed companies to disclose sustainability information, either integrated within their annual reports or released separately as standalone sustainability reports. Similar principles have been applied in other countries. (Ali et al., 2023). In Malaysia, Bursa Malaysia has mandated sustainability reporting as a listing requirement since 2007 (Afrizal et al., 2023). Furthermore, Singapore and the Philippines have introduced 'fit or proper' policies in their stock exchange sustainability reporting. The Stock Exchange of Thailand has also required listed companies to disclose CSR activities in sustainability reports or Form 56-1 since January 2014 (Wichianrak et al., 2023). In other words, an accountant who recognizes the responsibility of sustainability should be supported by all professions and fellow accountants. An accountant should provide financial and non-financial information, such as sustainability reports as standalone reports or integrated within corporate annual reports.

Several practices in various industries related to sustainability reporting, such as in the energy sector, lead us to conclude that sustainability reporting still needs improvement to meet best practices (Aljanadi & Alazzani, 2023). Implementing and supporting mandatory regime regulations can also play a crucial role in enhancing the quality of sustainability disclosure. (Aljanadi & Alazzani, 2023). Among the countries implementing mandatory regimes are advanced nations such as the United States, the United Kingdom, and Australia (Yadav & Saini, 2023). A company can become part of the global movement after adopting sustainable practices, including information about the environment, economy, and society (Corporate Social Responsibility/CSR) (WBCSD, 2017).

As a disclosure in sustainability reports, the Corporate Social Responsibility (CSR) reporting initiative is increasingly being adopted for legitimization. Meanwhile, sustainability reporting practices are still widely debated. However, according to a global survey by KPMG, the submission of sustainability reports has experienced a significant increase both in terms of quantity and as a percentage of total listed companies worldwide (KPMG, 2022)

Companies in Europe and Scandinavia have recently managed to maintain their leading positions compared to companies in the United States and other countries (Khatri & Kjærland, 2023). To achieve the goal of enhancing business transparency and accountability regarding social and environmental issues in Europe, the European Union (EU) adopted the Non-Financial Reporting Directive (NFRD) 2014/95/EU on the disclosure of non-financial information by certain large companies of public interest (NFRD, 2014).

Meanwhile, Anglo-Saxon countries have been actively reporting greenhouse gas emissions and environmental issues since the 2000s. These findings were obtained from research on a sample of 526 companies from 39 countries and ten industrial sectors from 2017-2020 (Zamponi et al., 2022). This study provides insights into using alternative communication tools for sustainability reports and annual reports, such as the CoP prepared by participating companies in the UNGC to enhance accountability towards the Sustainable Development Goals (SDGs). Specifically, the study demonstrates that sustainability reporting can overcome companies' reluctance to integrate SDGs into traditional financial and non-financial reporting systems, enabling firms to enhance legitimacy and meet stakeholders' needs. Furthermore, this study offers empirical evidence supporting stakeholder theory, legality, and resource dependence arguments regarding the positive role of gender diversity on boards concerning companies' non-financial disclosures. Notably, the study's findings indicate that companies appointing more women to their boards are more attentive to providing information about the

actions taken to achieve the SDGs. In this way, the study confirms that the diversity of opinions, perspectives, skills, competencies, leadership styles, experiences, and relationships ensured by the presence of women in boardrooms enhances the quality of discussions and internal decision-making processes of the company. This improves the company's ability to address stakeholder interests through higher SDG disclosures (Zampone et al., 2022).

Sustainability reporting from listed companies in Indonesia should consider the parties responsible for the governance and management of these companies. They need to realize that the texts they currently use for sustainability reporting fall within a spectrum that needs to be made more easily understandable (Adhariani & du Toit, 2020). The possibility of such conditions in a country like Indonesia, where English is not the native language, can result in a reduced understanding of corporate communication and the messages intended by the company. This poses a problem, especially for international investors who need assistance reading the Indonesian version of company reports. Therefore, the leaders responsible for the company reporting process must adhere to clear language principles. Consistent with these findings, the length and comprehensibility of annual report texts can positively impact the relationship between Environmental Information Disclosure and firm value (Cai et al., 2023). In addition to the low readability levels of sustainability reports (SR) from listed companies in Indonesia, a strong relationship was found between environmental sustainability reporting and ecological sustainability management despite their differences (Agung et al., 2023). The eco-efficiency approach allows companies to produce more valuable products while reducing negative impacts such as resource consumption and cost (Ifada & Jaffar, 2023). Meanwhile, there is still an information gap between the data NGOs need to be usable and reliable for decision-making and the companies' voluntary environmental information (Wichianrak et al., 2023). An integrated approach is required, which involves reviewing relevant literature and incorporating these insights into the requirements and guidelines of these standards (Hewawithana et al., 2023).

### **The Objective of the Work**

- The main objective of the article is a comparative review of sustainability reporting between Indonesia and Nordic Country
- To better understand the impact of elevating the quality of sustainability reporting in Indonesia agreed to Nordic Countries' Sustainability

## LITERATURE REVIEW

KPMG's 2022 Sustainability Reporting Survey indicates that Nordic countries have a relatively high level of sustainability reporting. The national sustainability reporting rates in Finland, Iceland, Norway, and Sweden (Denmark not included in the study) are 94%, 91%, 91%, and 98%, respectively (KPMG, 2022). However, Nordic countries have varying levels of disclosure regarding sustainability risks (biodiversity, climate, social, and governance). Climate risk disclosure is the most reported category in almost all countries, while biodiversity is the least said risk category. Therefore, in the context of the EU taxonomy and increased regulatory actions against 'greenwashing' in the Nordic region, Nordic countries must ensure high reporting on sustainability risks (KPMG, 2022). Strict and comprehensive sustainability reporting is critical to reducing 'greenwashing' and preventing companies from overlooking the impact of climate change on their bottom line.

Therefore, studying sustainability reporting practices is crucial to enhancing the quality of sustainability reporting. Methods that can improve the quality of sustainability reporting include sustainability reports, reporting based on specific frameworks, and ensuring the sustainability reports are assured. However, companies might only use sustainability reporting practices for legitimization purposes. In other words, companies might use sustainability reporting as a reputation management strategy to highlight positive aspects of sustainability performance and mask unfavorable outcomes (Diouf & Boiral, 2017). The European Union is moving towards the adoption of the Corporate Sustainability Reporting Directive (CSRD), which will revise the existing NFRD, expand its scope to include all large companies, require assurance of the reported information, detailed reporting following mandatory EU sustainability reporting standards, digitalization of this information, and more.

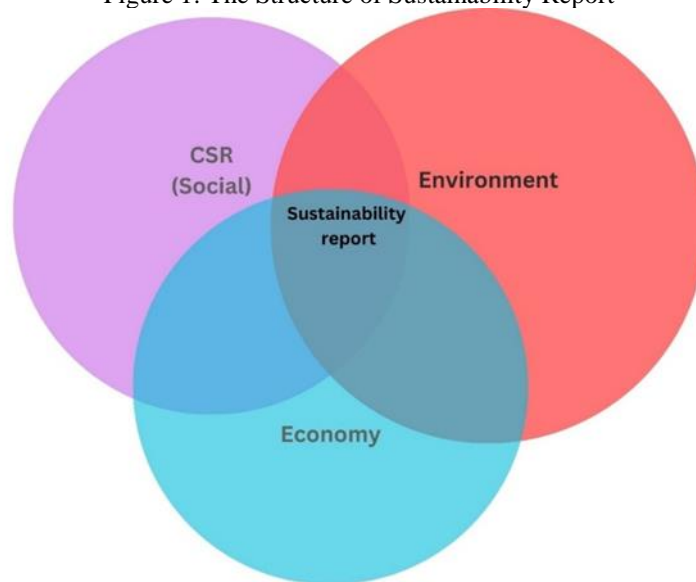
Furthermore, several studies on sustainability reporting primarily refer to research on sustainability reports, the Global Reporting Initiative (GRI) standards, and external assurance related to environmental performance. The studies encompass 210 listed companies based in the Nordic region from 2002 to 2020 in Denmark, Finland, Norway, and Sweden (Khatri & Kjærland, 2023). The basic model with ordinary least squares regression shows that publishing sustainability reports and reporting based on the Global Reporting Initiative (GRI) standards positively relates to environmental performance, while external assurance is insignificant. However, it was found that companies without environmental certificates and not receiving corporate social responsibility (CSR) awards also perceive sustainability reporting practices as positively related to environmental performance. By applying a substantive versus symbolic

approach to legitimacy, researchers argue that companies with inadequate environmental commitments or reputations might face significant pressure to achieve corporate legitimacy. Therefore, sustainability reporting practices can be used as a substantive approach to legitimacy. Our findings have important policy relevance in enhancing the focus on sustainability reporting standards in Europe and other countries. The study recommends that sustainability reporting practices that improve quality and reduce symbolic corporate behavior should be mandated under mandatory regimes. European and Scandinavian companies have recently managed to maintain their leading positions compared to companies in the United States and other countries. The European Union (EU) adopted the Non-Financial Reporting Directive (NFRD) 2014/95/EU to enhance business transparency and accountability regarding European social and environmental issues.

In 2021, OJK (Indonesia's Financial Services Authority) released Regulation No. 51/2017 regarding sustainable finance. Every listed company is required to publish a sustainability report. The Sustainability Report under POJK 51/2017 is made public. This report presents the economic, financial, social, and environmental performance of Financial Institutions, Issuers, and Public Companies in sustainably conducting business (Figure 1). The annex to this regulation further explains that the Sustainability Report can be prepared separately from the annual report or as an inseparable part. The following information must be included in the Sustainability Report: An explanation of the sustainability strategy and an overview of sustainability aspects (economic, social, and environmental) – the sustainability report discloses information related to the company's economic, social, and ecological risks. Second, the sustainability report provides brief profiles of Financial Institutions, Issuers, and Public Companies. Third, it provides explanations from the Board of Directors regarding the information stakeholders require. Fourth is information on sustainable governance, outlining the company's commitment to fairness, honesty, ethics, etc. Fifth, data on sustainable performance, communicating long-term planning related to performance targets in the company's future. Sixth, if conducted, information about assertions or assessments from independent parties on various aspects of the company, for example, the quality of the company's information disclosure. Seventh, information related to feedback sheets for readers, if available. Eighth, information related to the responses of Financial Institutions, Issuers, and Public Companies to feedback reports from previous periods. In Indonesia, there are already adequate regulations that can be used by listed/public companies as a reference when issuing sustainability reports, whether separate reports or reports integrated into the annual report.

However, the number of listed companies publishing sustainability reports is significantly lower in quantity and percentage compared to countries in the US and Europe and the Asia-Pacific or Southeast Asian region. After a simple analysis, this situation's possible contribution is because Indonesia adopted a voluntary regime concerning sustainability reporting.

Figure 1: The Structure of Sustainability Report



Sources: POJK 51/2017

A study in five Southeast Asian countries with the most significant capital markets, namely Indonesia, Malaysia, Singapore, Thailand, and the Philippines, shows that variables such as director attendance in board meetings and the existence of CSR committees are positively related to the disclosure of Sustainable Development Goals (SDG) (Muhamad et al., 2021). This study also indicates that a high frequency of board meetings can drive more intensive disclosure. The frequency of board meetings may also be related to the directors' commitment. Therefore, this study suggests that corporate disclosure related to SDGs becomes more robust with a higher workload for the board of directors (Sekarlangit & Wardhani, 2021).

## DATA AND METHODOLOGY

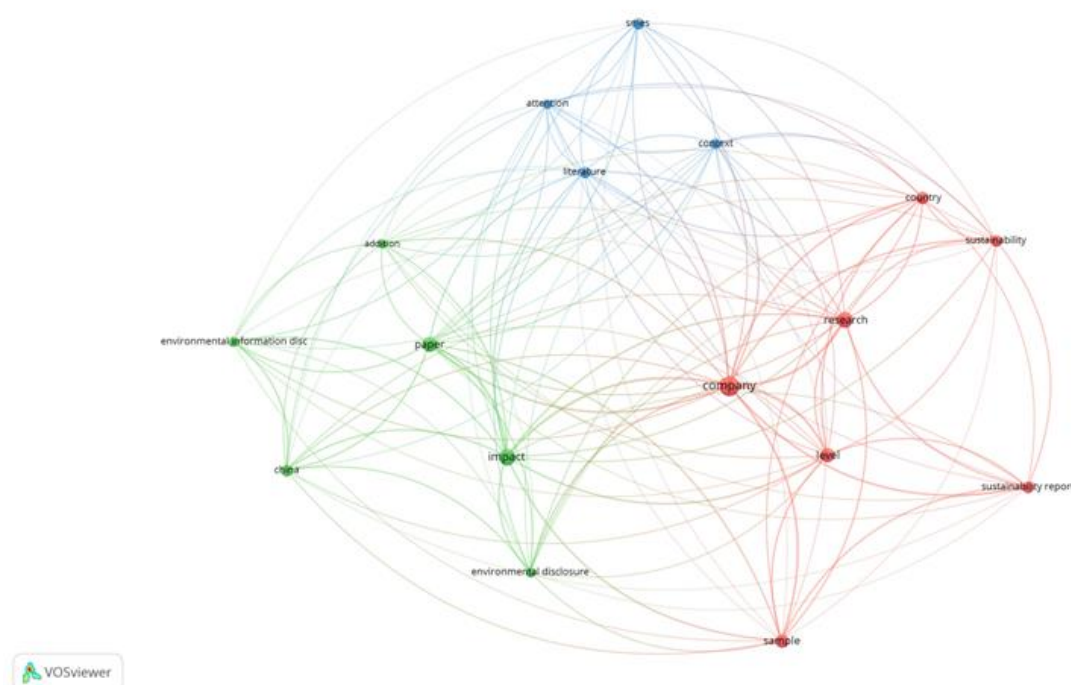
This writing employs a qualitative descriptive approach or method, carried out by comparing the implementation of strategies in the Nordic (Mandatory Regime) versus Indonesia (Voluntary Regime) using the framework established by KPMG International (2022) and some additional references. The comparative analysis primarily focuses on readability, regulations, information assurance, and the substantive approach to legitimacy in sustainability



reporting. The research method employed in this study is qualitative descriptive research. The methodology used in this research is the Systematic Literature Review (SLR) method. The SLR process systematically and critically reviews existing research studies (Snyder, 2019).

The steps this research undertakes are i) identifying and discovering keywords, ii) literature search, and iii) analysis and synthesis process. Identifying keywords is the initial step related to the proposed topic: sustainability reports. Regarding the environmental aspect, economy and governance; several other keywords are applied to the selected review locations, Nordic country and Indonesia. The choice of this search engine was intended to obtain scholarly literature with a reputable Scopus indexing.

Figure 2. VOSviewer : interconnections between the identified keywords



Sources: Author

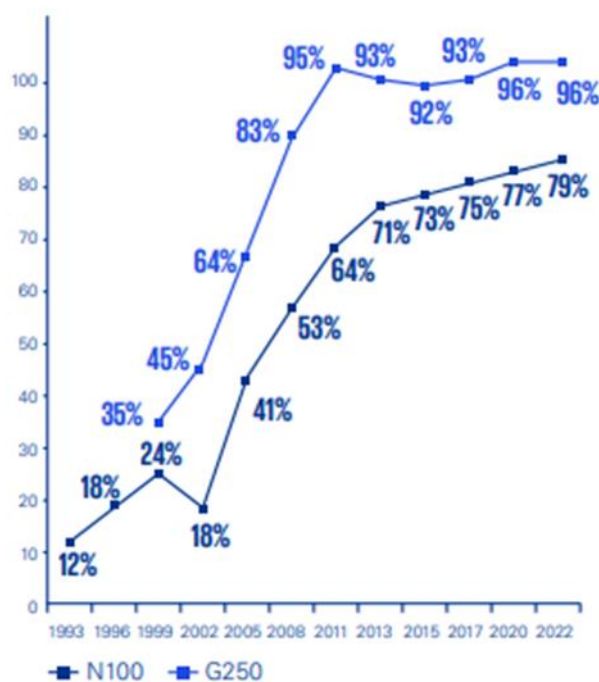
In the literature search process, a total of 1,026 pieces of literature were obtained from the years 2021 to 2023. After the literature search, a screening and criteria determination process was conducted using the Prisma 2020 and VOSviewer applications. Prisma 2020 (Haddaway et al., 2022) was used to filter the abstracts and contents of the 1,026 literature pieces, and VOSviewer was used to analyze the interconnections between the identified keywords. The focus was on articles retrieved from Scopus with a specific geographical scope, namely, research on sustainability reporting conducted in Indonesia and Nordic countries. Based on Figure 2. the screening conducted with the assistance of VOSviewer, the relationship

between sustainability reports, in the form of articles, and the subject area of environmental science has resulted in 393 pieces. The researcher then read the abstracts and filtered the literature. The researcher obtained 23 pieces of literature relevant to the research topic from this screening process.

## **RESULTS AND DISCUSSION**

According to a study by Ernst & Young Indonesia, until 2017, only 30% of the 100 largest companies based on market capitalization listed on the Indonesia Stock Exchange issued sustainability reports (Ernst & Young, 2017). According to the Financial Services Authority (OJK), since 2016, only 9% of companies listed on the Indonesia Stock Exchange have published sustainability reports (OJK, 2017). Organizations like the Corporate Performance Rating Program (PROPER) have adopted activities and initiatives to support sustainability practices and reporting. PROPER assesses companies' environmental performance, organized by the Ministry of Environment, and the Indonesian Sustainability Reporting Award, organized by the National Centre for Sustainability Reporting (NCSR). NCSR is the first independent organization to develop sustainability reporting in Indonesia and introduced the term 'sustainability report' for the first time in Indonesia. NCSR was established in 2005 and has been actively promoting the Indonesian sustainability reporting system through various seminars and training sessions since then (National Centre for Sustainability Reporting). The analysis and discussion of the results should characterize the context of the research, either through the description of the environment, conjuncture or economic sector. Present the development of the research. Structuring subsections in the sense of “responding” to the objectives to which the work proposes. It can be structured in subsections in order to respond to the objectives to which the work proposes.

Figure 3. The Global Sustainability Reporting Rate (1993-2022)

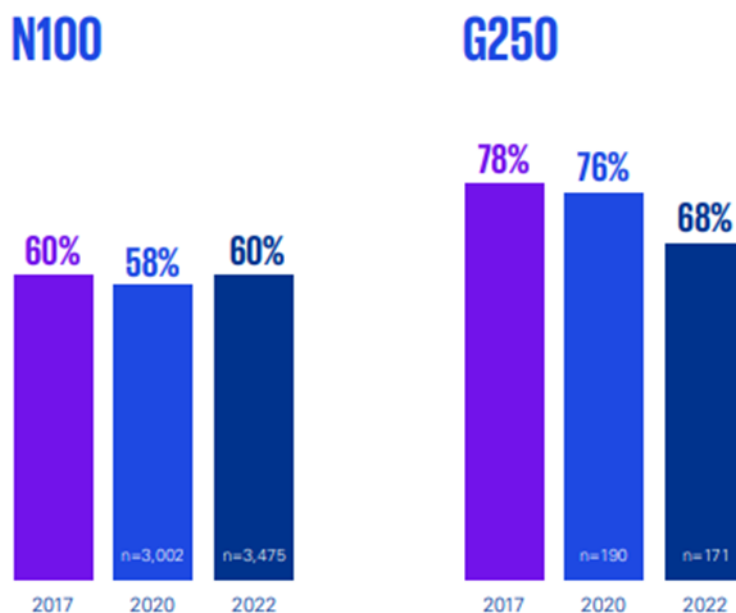


Base: 5,800 N100 companies and 250 G250 companies

Sources: KPMG International's Sustainability Reporting Survey 2022.

Figure 3 shows that almost 100 percent of the world's largest companies publish sustainability reports. From 1992 to 2022, companies from the N100 or G250 experienced steady growth, and finally, in 2022, N100 reached 79% and G250 reached 96%. In other words, sustainability reporting has become a mainstream practice for many companies, with smooth growth over the past decade. G250 represents the top 250 companies in the world based on revenue according to the Fortune 500 rankings for 2021, and N100 represents the top 100 companies sampled based on income across 58 countries, regions, and jurisdictions worldwide.

Figure 4. Sustainability Information in Annual Financial Reports (1993-2022)

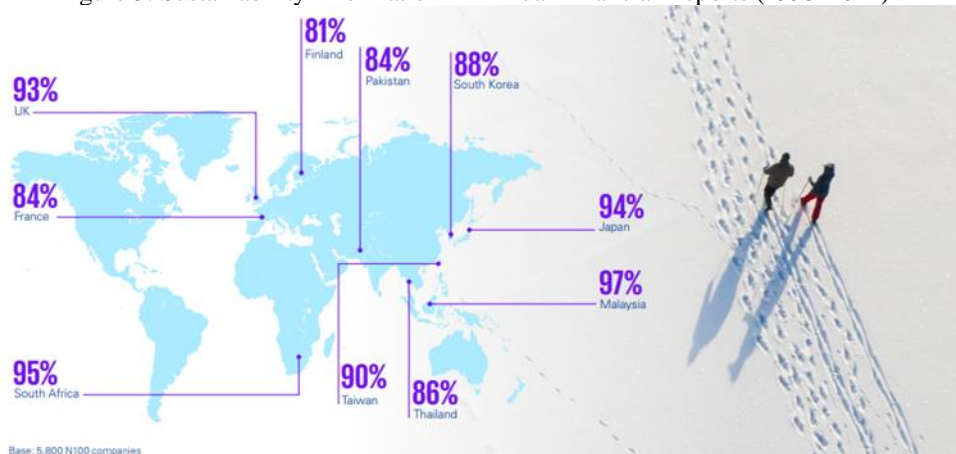


Base: 5,800 N100 companies and 250 G250 companies

Source: KPMG Sustainability Reporting Survey 2022, KPMG International, September 2022.

Figure 4 illustrates the percentage of listed companies publishing Sustainability Reports (SR) compared to the total listed companies within G250 and N100. N100 remains stagnant, while G250 declines in 2017, 2020, and 2022. Despite the stagnation, the percentage of sustainability information in companies' annual reports in N100 exceeds 50%.

Figure 5. Sustainability Information in Annual Financial Reports (1993-2022)



Base: 5,800 N100 companies

Source: KPMG Sustainability Reporting Survey 2022, KPMG International, September

Figure 5 illustrates the top 10 countries, regions, and jurisdictions based on the percentage of N100 companies that include sustainability information in their annual financial reports, including South Africa, Taiwan, Thailand, Malaysia, Japan, South Korea, Pakistan,

Finland, the UK, and France. This means there is still an opportunity for Indonesian sustainability reporting to be among these top-ranking countries.

Table 1. The Comparison of Sustainability Reporting (SR) in the Nordic and Indonesia

	<b>Nordic</b>	<b>Indonesia</b>
Publication Status of Sustainability Reporting (SR)	Requirements/Obligations	Voluntary
Quality of information disclosure	Not just for legitimacy	Legitimacy purposes
Regulation	Guidelines for Non-Financial Reporting	OJK Regulation No. 51/2017
Indonesian assurance.	High level	Low to moderate level
Reliability	High level	Low level
Standard guidelines	Detailed standard guidelines	Not detailed (not shared)

Sources: Comparison by the author

Table 1 compares sustainability reporting (SR) conditions in Indonesia and SR in the European Union (EU) or Nordic countries. Despite Indonesia having issued regulation POJK 51/2017, there is still a need for further development and detailed guidelines regarding standards for producing sustainability reports to achieve the primary goal of managing sustainability risks related to a company's economic, social, and environmental aspects to safeguard human life in the future.

## CONCLUSION

The Sustainability Reports of companies listed on the Indonesian stock exchange have limitations, including sustainability reporting being in a spectrum that is difficult for financial report users to understand, the limited number of companies issuing sustainability reports compared to Nordic and EU countries, and Indonesia still adheres to a voluntary regime for publishing sustainability reports.

Therefore, to address these issues, the recommendation for sustainability reporting in Indonesia, drawn from the mandatory regime, is that sustainability reporting in Nordic countries and the European Union is superior in quantity and quality. Hence, we recommend that companies listed in Indonesia first improve the readability of Indonesian sustainability reports. (Adhariani & du Toit, 2020). Second, assurance of information disclosure (reliability) and detailed guidelines for standard sustainability information disclosure are necessary, covering environmental, social, and economic aspects. The limitation of this study is the scope country and there is some opportunity for future research, such as the scoping countries and the indicator of measurement of sustainability reports.

**REFERENCES**

- Adhariani, D., & du Toit, E. (2020). Readability of sustainability reports: evidence from Indonesia. *Journal of Accounting in Emerging Economies*, 10(4), 621–636. <https://doi.org/10.1108/JAEE-10-2019-0194>
- Afrizal, Safelia, N., & Muda, I. (2023). Determinants of carbon emission disclosure and sustainability reporting and their implications for investors' reactions: The case of Indonesia and Malaysia. *International Journal of Management and Sustainability*, 12(2), 271–288. <https://doi.org/10.18488/11.v12i2.3375>
- Agung, U. I. G. K., Muhammad, Z. G., & Michael, M. A. (2023). Environmental sustainability disclosure in sustainability reports: Mining, oil, and gas companies on the Indonesia stock exchange. *International Journal of Management and Sustainability*, 12(2), 214–228. <https://doi.org/10.18488/11.v12i2.3351>
- Ali, K., Nadeem, M., Pandey, R., & Bhabra, G. S. (2023). Do capital markets reward corporate climate change actions? Evidence from the cost of debt. *Business Strategy and the Environment*, 32(6), 3417–3431. <https://doi.org/10.1002/bse.3308>
- Aljanadi, Y., & Alazzani, A. (2023). Sustainability reporting indicators used by oil and gas companies in GCC countries: IPIECA guidance approach. *Frontiers in Environmental Science*, 11(February), 1–13. <https://doi.org/10.3389/fenvs.2023.1069152>
- Cai, R., Lv, T., Wang, C., & Liu, N. (2023). Can Environmental Information Disclosure Enhance Firm Value?—An Analysis Based on Textual Characteristics of Annual Reports. *International Journal of Environmental Research and Public Health*, 20(5). <https://doi.org/10.3390/ijerph20054229>
- Diouf, D., Boiral, O., 2017. The quality of sustainability reports and impression management. *Account Audit. Account. J.* 30 (3), 643–667. <https://doi.org/10.1108/AAAJ-04-2015-2044>.
- Ernst and Young (2017). “EY study: The rise of sustainability reporting in Indonesia,” available at: <https://www.ey.com/id/en/newsroom/news-releases/news-ey-study-the-rise-of-sustainabilityreporting-in-indonesia>.
- Gosseries, A. (2005). The egalitarian case against Brundtland's sustainability. *GAIA - Ecological Perspectives for Science and Society*, 14(1), 40–46. <https://doi.org/10.14512/gaia.14.1.15>
- Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis Campbell Systematic Reviews, 18, e1230. <https://doi.org/10.1002/cl2.1230>
- Hewawithana, D., Hazelton, J., Walkerden, G., & Tello, E. (2023). Will the revisions to GRI 303 improve corporate water reporting? The challenges of defining and operationalising “water stress.” *Meditari Accountancy Research*, 31(2), 320–343. <https://doi.org/10.1108/MEDAR-12-2019-0639>

Ifada, L. M., & Jaffar, R. (2023). Does Environmental Cost Expenditure Matter? Evidence from Selected Countries in the Asia-Pacific Region. *Sustainability (Switzerland)*, 15(5), 1–16. <https://doi.org/10.3390/su15054322>

Khatri, I., & Kjærland, F. (2023). Sustainability reporting practices and environmental performance amongst nordic listed firms. *Journal of Cleaner Production*, 418(May), 138172. <https://doi.org/10.1016/j.jclepro.2023.138172>

KPMG, (2022). Survey of Sustainability Reporting 2022. Available at <https://kpmg.com/no/nb/home/nyheter-og-innsikt/2022/10/survey-of-sustainability-reporting-2022.html>.

Li, R., Wu, M., Aleid, S., Zhang, C., Wang, W., & Wang, P. (2022). An integrated solar-driven system produces electricity with fresh water and crops in arid regions. *Cell Reports Physical Science*, 3(3), 100781. <https://doi.org/10.1016/j.xcrp.2022.100781>

Muhamad, M. Q. B., Mohamad, S. J. A. N. S., & Nor, N. M. (2021). Navigating the future of industry 4.0 in Malaysia: A proposed conceptual framework on SMEs' readiness. *International Journal of Advanced and Applied Sciences*, 8(7), 41–49. <https://doi.org/10.21833/ijaas.2021.07.006>

OJK-Otoritas Jasa Keuangan (2017), “Infografis Lembaga Jasa Keuangan dan Emiten Penerbit sustainability report”, available at: <https://www.ojk.go.id/sustainable-finance/id/publikasi/riset-dan-statistik/Pages/Sustainability-Report-bagi-Lembaga-Jasa-Kuangan-dan-Emiten.aspx>.

Sekarlangit, L. D., & Wardhani, R. (2021). The effect of the characteristics and activities of the board of directors on sustainable development goal (Sdg) disclosures: Empirical evidence from southeast asia. *Sustainability (Switzerland)*, 13(14). <https://doi.org/10.3390/su13148007>

Snyder, Hannah. 2019. “Literature Review As A Research Methodology: An Overview And Guidelines.” *Journal Of Business Research* 104(March): 333–39. <https://doi.org/10.1016/j.jbusres.2019.07.039>.

Wichianrak, J., Khan, T., Teh, D., & Dellaportas, S. (2023). Critical Perspectives of NGOs on Voluntary Corporate Environmental Reporting: Thai Public Listed Companies. *Sustainability (Switzerland)*, 15(7), 1–24. <https://doi.org/10.3390/su15076195>

World Business Council for Sustainable Development. Reporting Matters: Striking a Balance between Disclosure and Engagement; WBCSD: Geneva, Switzerland, 2017.

World Commission on Environment and Development – WCED. (1987). Our Common Future. Oxford: Oxford University Press

Yadav, M., & Saini, M. (2023). Environmental, social and governance literature: a bibliometric analysis. *International Journal of Managerial and Financial Accounting*, 15(2). <https://doi.org/10.1504/IJMFA.2023.129844>

Zampone, G., Nicolò, G., Sannino, G., & De Iorio, S. (2022). Gender diversity and SDG disclosure: the mediating role of the sustainability committee. *Journal of Applied Accounting Research*. <https://doi.org/10.1108/JAAR-06-2022-0151>