

COMPARATIVE ANALYSIS OF SUSTAINABILITY REPORTS OF COAL PRODUCTION SUB-SECTOR MINING COMPANIES BASED ON GLOBAL REPORTING INITIATIVE STANDARDS

Ika Makherta Sutadji^{1*}, Mariama Trawally Sawo², and Nina Indriastuty³

¹ Department of Accounting, Faculty of Economics and Business, Balikpapan University, Balikpapan, 76114, Indonesia

² Department of Economics and Finance, School of Business and Public Administration, University of The Gambia, PO BOX 3530, Gambia

³ Department of Management, Faculty of Economics and Business, Balikpapan University, Balikpapan, 76114, Indonesia

ABSTRACT

Introduction/Main Objectives: This study aims to conduct a comparative analysis of the sustainability report of mining companies in the coal production sub-sector listed on the Indonesia Stock Exchange. Global Reporting Initiative standards as a reference in the analysis of all selected companies. **Background Problems:** Not all companies listed on the Indonesian stock exchange make sustainability reports as a form of reporting on social responsibility activities through each company's corporate social responsibility program. **Novelty:** Based on the results of the review of sustainability reports, it was found that not all disclosures on specific topics refer to the Global Reporting Initiative Standards. This is because company sustainability reporting is still voluntary. **Research Methods:** This study uses descriptive qualitative research. Through reference to GRI Standards Series 200, 300, and 400 through disclosure of specific topics for each company. Then, content analysis was carried out to obtain results for the study using content analysis techniques and comparative methods. **Finding/Results:** The analysis of comparative analysis disclosed in sustainability reports shows specific topics on economic, environmental, and social aspects disclosed by 11 companies that make sustainability reports that refer to the Global Reporting Initiative standards. The level of disclosure of specific topics for each aspect and each company varies according to the social responsibility activities that have been carried out. This indicates that not all of them disclose according to specific topics in the GRI Standards, and most of the selected companies have implemented corporate social responsibility through the Corporate Social Responsibility program as an effort to prepare for business sustainability. **Conclusion:** Based on the results of the research

ARTICLE INFO

Keywords:
Sustainability Report,
GRI Standards, Aspect
Economic, Aspect
Environment, Aspect
Social

analysis, it can be concluded that 11 companies have started making sustainability reports that refer to the GRI Standards. With an average disclosure percentage for each aspect above 50%, it shows that the company is starting to make sustainability reports that can be accessed by stakeholders. This shows the company's seriousness in carrying out social responsibility around the company's operations.

* Corresponding Author at Department of Accounting, Faculty of Economics and Business, Balikpapan University, Balikpapan, 76114, Indonesia Jl. Pupuk Raya Kota Balikpapan, 76114, Indonesia
E-mail address: ika.makherta@uniba-bpn.ac.id, mtrawalleh@utg.edu.gm, nina.indriastuty@uniba-bpn.ac.id

1. Introduction

The public's perception of the role of business in society is growing. It must be acknowledged that the business world contributes to economic growth, job creation, and wealth accumulation. However, the business world is also considered to have various non-economic roles and interests. (Nguyen et al., 2018). Modern business organizations face increasing pressure over time from various stakeholders in meeting the needs and expectations of society as well as implementing good operations and gaining profits from organizational activities (De Villiers et al., 2014; Orzalin & Mahmood, 2020). The perception of the role of business in society has changed, encouraging companies to always consider broader outputs and results rather than just pursuing profits. Companies implement policies through efforts to increase corporate social responsibility, business ethics, and the extent of company operations to meet stakeholder demands (Smith & Rhiney, 2020).

Business competition makes companies try to be at the forefront by changing themselves through new strategies and ideas for business sustainability (Caesaria & Basuki, 2017; Taib et al., 2015). Corporate social responsibility is an important issue for the company's agenda (Rhiney, 2020). Integrate CSR into a central business objective. Ensuring organizations continue to develop and implement various strategies to support and encourage business growth. Companies preparing for business continuity must have special tips. Strategy and innovation will help and encourage its growth (García-Chiang, 2018). Companies need to continue to pay attention to the interests of stakeholders. Corporate actions to address environmental and social issues are known as corporate social responsibility (CSR). CSR is related to and seeks to balance environmental, social, and economic factors (Halkos & Nomikos, 2021).

The Coalition for Economically Responsible Economies (Ceres) introduced the Global Reporting Initiative (GRI) to develop a sustainability framework in the form of information disclosure in the form of a Sustainability Report. The United Nations Environment Program (UNEP) collaborated with Ceres in 1999 on the GRI project. In 2000, the GRI Sustainability Reporting Guidelines were published and nearly 50 companies have published sustainability reports guided by GRI. A year later, GRI became an independent organization in the Netherlands. GRI was introduced so that it could become a reporting guide that adopts the triple bottom line: economic, social and environmental performance. GRI uses the basic line of the Triple Bottom Line which refers to three main aspects, namely Profit, People and Planet (Sukoharsono, 2019). GRI states that "the triple

bottom line, namely economic, environmental, and social performance (based on Elkington 1997), is a starting point that can be understood by many people and has achieved a degree of agreement as a reasonable entry point into a complex problem (Langer, 2006).

By referring to the GRI Standards in making sustainability reports, it is hoped that the process of transparency and accountability in corporate governance can be realized. The value obtained by a company if it makes a sustainability report that refers to GRI standards can increase investors' confidence in investing because they think the company pays attention to the economic, social, and environmental factors around which the company operates.

As a business entity, the company must take full responsibility for the activities it has carried out. Stakeholders must synergize with the company so that the company's activities do not damage order in the economic, social, and environmental fields. Matters that need to be conveyed in the form of corporate care activities contained in CSR activities are included in the sustainability report, which refers to the Global Reporting Initiative (GRI) Standards.

Many large companies that drive global economic growth and technological progress have been criticized for hurting social and environmental problems such as waste, pollution, and resource depletion. Developing countries seek to drive global economic growth by shrinking their environmental and ecological space and depleting resources (Rathnayaka Mudiyansele, 2018; Reverte, 2009). Oil and gas companies face greater scrutiny from various stakeholders regarding economic, environmental, and social performance due to the characteristics of their products (Laplume et al., 2008; Orazalin & Mahmood, 2020).

Eweje (2014) said that sustainability research has increased in developing countries in recent years. However, the literature has emphasized how important it is to research sustainability in institutional environments different from those of the West (Laquimia & Eweje, 2014; Muttakin et al., 2015; Rathnayaka Mudiyansele, 2018; Reverte, 2009). Here, sustainability reporting is considered an important channel for organizations to meet the needs and expectations of all stakeholders. Businesses can increase transparency, improve reputation, increase legitimacy and brand value, reduce information asymmetry, motivate managers and employees, and improve overall corporate image by disclosing sustainability information in a diverse and detailed manner (Herzig & Schaltegger, 2006; Kiliç et al., 2015; Orazalin & Mahmood, 2020). Sustainability reports consist of three main components, according to GRI. First, general disclosure is a report of relevant data about how a company reports sustainability. Second, disclosure of management strategy involves disclosing details about how the company is dealing with significant problems. Third, disclosure of special topics aims to convey information about organizational effects (Nurhidayah et al., 2023). The increasing use of sustainability reporting is based on the ideal of transparency, assuming that the information reported provides the most complete and realistic portrait of the possible positive and negative impacts of corporate activities (Boiral, 2013).

Sustainability is a topic in all business sectors, including the mining industry. Synergy between stakeholders is needed to create a sustainable environment and business practices. The mining industry, in carrying out operational activities, has a relatively large impact on the balance of nature in the form of environmental, social, and economic impacts. The quality and level of transparency in sustainability reports between companies in the coal production sub-sector vary. A comparative analysis of these sustainability reports is needed to identify companies complying with GRI

standards and managing sustainability impacts. Through this analysis, best practices, shortcomings, and opportunities for improvement can be identified to improve sustainability performance in this sector. This research aims to conduct a comparative analysis of the sustainability reports of mining companies in the coal production sub-sector based on GRI standards. Thus, it is hoped that this research will provide valuable insights for companies, regulators, and other stakeholders in increasing transparency and accountability in sustainability reporting in the mining industry.

2. Literature Review

The GRI standards are guidelines issued by an independent international standardization body headquartered in Amsterdam, namely the Global Reporting Initiative. The GRI Standards are the latest standards published by GRI to make it easier for corporations to create sustainability reports. These standards were published in the fourth quarter of 2016. In 2017, many companies in Indonesia adapted and used GRI standards as sustainability reporting guidelines. GRI is an internationally recognized sustainability reporting standard that provides guidelines for companies to report on a company's economic, environmental, and social impacts.

The advantages of using GRI standards include

- a. Comprehensive Framework: GRI indicators are relevant to a wide range of industries, including mining.
- b. Comparability: Allows comparisons to be made between companies and sectors.
- c. Transparency: Promote transparency and accountability in sustainability reporting.

The sustainability report produced by the company will provide benefits for the company in the form of:

- a. Communicating Sustainability Performance: The company's commitment to responsible business practices to stakeholders, including investors, government, and society.
- b. Evaluating Risks and Opportunities: Reporting can identify environmental and social risks and opportunities for continuous improvement.
- c. Improving Reputation: Transparency in sustainability reporting can improve the reputation and public trust in a company.

The concept of corporate social responsibility has been known since the 1970s, known as stakeholder theory, which was introduced by the Stanford Research Institute in 1963 (Freeman 1984). Freeman (1984; 46) states that stakeholders are organizations, groups, or individuals who can be influenced and influence organizational goals. According to stakeholder theory, a company is not just an entity that operates for its interests and profit but also provides benefits to its stakeholders, consisting of shareholders, creditors, consumers, suppliers, the government, society, analysts, and other parties. Stakeholder theory is a theory that reveals that company sustainability cannot be separated from the roles of internal and external stakeholders (Lindawati et al., 2015).

This concept was not just born but went through various stages first. The echo of CSR began to be felt in the 1950s. CSR, which is now being implemented by many companies, has undergone evolution and metamorphosis over a long period. The book entitled *Social Responsibility of the Businessman* by Howard R. Bowen, written in 1953, is an early piece of literature that became a milestone in the modern history of CSR. Bowen is nicknamed the "Father of CSR" because of his work.

3. Method, Data, and Analysis

This study uses a descriptive-qualitative research approach. Qualitative research is an analysis technique to understand the phenomenal things that research subjects feel (Saldaña, 2011). This study uses a case study by reviewing documents in the form of sustainability reports of the mining industry on the Indonesia Stock Exchange in the coal production sub-sector for 2022. The sustainability report was obtained from the website of the company that published it. Researchers collect complete and in-depth information according to data disclosing specific topics in the economic category, environmental category, and social category as the focus of the research. Based on a series of 200 specific topics, economics has seven main topics and 14 specific disclosures as derivatives. Based on a series of 300 specific topics, the environment has eight main topics and 27 specific disclosures as derivatives. Based on a series of 400 specific topics, social has 18 main topics and 29 specific disclosures as derivatives.

The disclosure index is carried out as follows: a. Give a score to each disclosure item. If it is disclosed, it is given a value of 1, and if it is not disclosed, it is given a value of 0. b. The scores for disclosure are added up, and then a percentage calculation is made as an analysis tool. The analysis techniques used are content analysis and comparative methods. Content analysis is a research technique to examine and prove the truth of certain words in a text. Content analysis is a research technique to examine and prove the truth of certain words in a text or collection of texts (Al Hamzah et al., 2023; Ningsih dan Cheisviyanny, 2019). This study aims to show the disclosure of sustainability reports by 11 (eleven) coal production companies have been published and compare disclosures on specific topics from these companies.

This study is based on the results of previous research that used the GRI Standards to assess company transparency and accountability in disclosing company activities and corporate social responsibility. Through the GRI Standards, it will be seen the level of seriousness of the company in providing information to stakeholders, which is disclosed in the sustainability report. A research article created by Gallego (2006) explains the use of economic, social, and environmental indicators in company sustainability reports in Spain and shows that companies that implement GRI standards tend to have more transparent and comprehensive reporting. Adams & Frost (2008) revealed that companies integrate sustainability reporting into their management practices. GRI standards help companies identify and manage risks and opportunities related to sustainability. In addition, research by Jenkins and Yakovleva (2006) revealed trends in social and environmental disclosure in the mining industry. shows that mining companies that use GRI standards are more likely to disclose relevant and important information regarding their social and environmental impacts. Research on the analysis of indicators for the disclosure of corporate sustainability reports shows that the GRI standards provide a clear framework for companies to systematically disclose various aspects of sustainability (Roca & Searcy, 2012). This supports the conclusion that historical analysis of sustainability reporting and its assurance throughout the world shows the importance of GRI standards in improving the quality and credibility of sustainability reports (Junior et al., 2014). The research results, according to Hahn & Kühnen (2013), reveal various factors that influence corporate sustainability reporting. Adoption of GRI standards is one of the main determinants that encourages companies to report sustainability information in more detail. Research conducted by

Clarkson et al. (2008) analyzed the relationship between environmental performance and environmental disclosure in sustainability reports. The findings show that companies with good environmental performance tend to use GRI standards to disclose information more openly.

4. Result and Discussion

Indonesia is the largest mining-producing country in the world, with the second-largest gold contribution in the world after China. Indonesia occupies the third-top position in the world for nickel and gold minerals. With its extraordinary mining potential, Indonesia is always in the top ten in the world. The Indonesian Stock Exchange has seven different mining sub-industries, namely coal production, oil and gas production and refinery, gold, iron and steel, diversified metals and minerals, cooper, and aluminum.

This article only focuses on companies that are included in the coal production sub-sector. From the results of accessing all coal production company websites, 34 companies are sorted according to their focus on making sustainability reports to measure the disclosure of specific topics from economic, environmental, and social aspects.

Table 1. List of companies in the coal production sub-sector

No	Company Name	Information	Selection Results
1	PT. Adaro Energy Tbk - ADRO	create a Sustainability Report	v
2	PT. Akbar Indo Makmur Stimec Tbk - AIMS	the website cannot be accessed	
3	PT. Atlas Resources Tbk - ARII	only make annual reports and financial reports	
4	PT. Borneo Olah Sarana Sukses Tbk - BOSS	only make annual reports and financial reports	
5	PT. Baramulti Suksessarana Tbk - BSSR	based on POJK NO 51/POJK.03/2017	
6	PT. Bumi Resources Tbk - BUMI	create a Sustainability Report	v
7	PT. Bayan Resources Tbk - BYAN	create a Sustainability Report	v
8	PT. Dian Swastatika Sentosa Tbk - DSSA	only make annual reports and financial reports	
9	PT. Golden Energy Mines Tbk - GEMS	create a Sustainability Report	v
10	PT. Garda Tujuh Buana Tbk - GTBO	only make annual reports and financial reports	
11	PT. Harum Energy Tbk - HRUM	create a Sustainability Report	v
12	PT. Indika Energy Tbk - INDY	create a Sustainability Report	v
13	PT. Indo Tambangraya Megah Tbk - ITMG	create a Sustainability Report	v
14	PT. Resource Alam Indonesia Tbk - KKGI	only make annual reports and financial reports	
15	PT. Mitrabara Adiperdana Tbk - MBAP	based on POJK NO 51/POJK.03/2017	
16	PT. Bukit Asam Tbk - PTBA	create a Sustainability Report	v
17	PT. Golden Eagle Energy Tbk - SMMT	based on POJK NO 51/POJK.03/2017	
18	PT. TBS Energi Utama Tbk - TOBA	based on SEOJK No. 16/2021	
19	PT. Trada Alam Mineral Tbk - TRAM	only make annual reports and financial reports	
20	PT. Pelayaran Nasional Bina Buana Raya Tbk - BBRM	based on POJK NO 51/POJK.03/2017	
21	PT. Batulicin Nusantara Maritim Tbk - BESS	only make annual reports and financial reports	
22	PT. Capitol Nusantara Indonesia Tbk - CANI	only make annual reports and financial reports	
23	PT. Eksploitasi Energi Indonesia Tbk - CNKO	only make annual reports and financial reports	
24	PT. Dwi Guna Laksana Tbk - DWGL	only make annual reports and financial reports	
25	PT. Alfa Energi Investama Tbk - FIRE	only make annual reports and financial reports	
26	PT. Mitrabahtera Segara Sejati Tbk - MBSS	create a Sustainability Report	v
27	PT. Pelita Samudera Shipping Tbk - PSSI	create a Sustainability Report	v
28	PT. Indo Straits Tbk - PTIS	only make annual reports and financial reports	
29	PT. Rig Tenders Indonesia Tbk - RIGS	create CSR reports	
30	PT. Sumber Global Energy Tbk - SGER	only make annual reports and financial reports	
31	PT. Transcoal Pacific Tbk - TCPI	only make annual reports and financial reports	
32	PT. Dana Brata Luhur Tbk - TEBE	create a Sustainability Report	v
33	PT. Trans Power Marine Tbk - TPMA	create CSR reports	
34	PT Black Diamond Resources Tbk - COAL	only make annual reports and financial reports	

Source: processed data

From the results of determining the list of companies that only make sustainability reports, the next step is to measure the percentage (%) of company disclosures in disclosing specific topics following the GRI Standard.

Table 2. Disclosure of corporate sustainability reports in 2022 based on economic categories referring to the Global Reporting Initiative Standards.

GRI	Information	Type	Specific Topic	ADRO	BUMI	BYAN	GEMS	HRUM	INDY	ITMG	PTBA	MBSS	PSSI	TEBE
GRI 201 - Economic Performance	201-1 Direct economic value generated and distributed	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	1	1	1
	201-2 Financial implications and other risks and opportunities due to climate change	Specific Topic Disclosures	1	1	1	-	1	-	1	1	1	-	-	-
	201-3 Defined benefit plan obligations and other retirement plans	Specific Topic Disclosures	1	-	-	1	1	-	1	1	1	-	-	-

	201-4	Financial assistance received from government	Specific Topic Disclosures	1	1	1	1	1	-	1	1	1	-	-	-
GRI 202 - Market Presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Specific Topic Disclosures	1	-	1	-	1	-	1	-	1	-	-	-
	202-2	Proportion of senior management hired from the local community	Specific Topic Disclosures	1	-	1	-	1	-	1	-	1	-	-	-
	203-1	Infrastructure investments and services supported	Specific Topic Disclosures	1	-	1	-	1	-	1	1	-	-	-	-
GRI 203 - Indirect Economic Impacts	203-2	Significant indirect economic impacts	Specific Topic Disclosures	1	1	1	-	1	-	1	1	-	-	-	-
	204-1	Proportion of spending on local suppliers	Specific Topic Disclosures	1	-	1	-	1	1	1	-	-	-	-	-
GRI 205 - Anti-corruption	205-1	Operations assessed for risks related to corruption	Specific Topic Disclosures	1	-	1	-	1	1	1	1	1	-	-	-
	205-2	Communication and training about anti-corruption policies and procedures	Specific Topic Disclosures	1	-	1	1	1	1	1	1	1	-	-	-
	205-3	Confirmed incidents of corruption and actions taken	Specific Topic Disclosures	1	-	1	1	1	1	1	1	1	-	-	-
GRI 206 - Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Specific Topic Disclosures	1	-	-	-	1	-	1	-	-	-	-	-
GRI 207 - Tax	207-1	Approach to tax	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-	-
	207-2	Tax governance, control, and risk management	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-	-
	207-3	Stakeholder engagement and management of concerns related to tax	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-	-
	207-4	Country-by-country reporting	Specific Topic Disclosures	1	-	1	-	1	-	-	-	1	-	-	-
Number of Economic Categories				14	4	12	5	14	5	13	9	10	1	1	1
Percentage (%)				100	29	86	36	100	36	93	64	71	7	7	7

Source: processed data

Table 3. Disclosure of corporate sustainability reports in 2022 based on environment categories referring to the Global Reporting Initiative Standards

GRI	Information	Type	Specific Topic	ADRO	BUMI	BYAN	GEMS	HRUM	INDY	ITMG	PTBA	MBSS	PSSI	TEBE
GRI-301 Material	301-1	Materials used by weight or volume	Specific Topic Disclosures	1	-	-	1	-	-	-	-	1	-	-
	301-2	Recycled input materials used	Specific Topic Disclosures	1	-	-	1	-	-	-	-	-	-	-
	301-3	Reclaimed products and their packaging materials	Specific Topic Disclosures	1	-	-	1	-	-	-	-	-	-	-
GRI-302 Energy	302-1	Energy consumption within the organization	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	1	1
	302-2	Energy consumption outside of the organization	Specific Topic Disclosures	1	-	1	-	1	1	1	1	1	-	-
	302-3	Energy intensity	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	-
	302-4	Reduction of energy consumption	Specific Topic Disclosures	1	-	-	1	1	1	1	1	1	-	-
GRI 303 -Water and Effluents	303-2	Reductions in energy requirements of products and services	Specific Topic Disclosures	1	-	-	-	1	-	1	1	1	-	-
	303-1	Interactions with water as a shared resource	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	303-2	Management of water discharge-related impacts	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	303-3	Water withdrawal	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	-
	303-4	Water discharge	Specific Topic Disclosures	1	1	1	1	1	-	1	1	1	-	1
GRI 304 -Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	-
	304-2	Significant impacts of activities, products and services on biodiversity	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	-
	304-3	Habitats protected or restored	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	-
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Specific Topic Disclosures	1	1	1	-	1	-	1	1	1	-	-
GRI 305-Emissions	305-1	Direct (Scope 1) GHG emissions	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	1
	305-2	Energy indirect (Scope 2) GHG emissions	Specific Topic Disclosures	1	1	1	-	1	1	1	1	1	-	1
	305-3	Other indirect (Scope 3) GHG emissions	Specific Topic Disclosures	1	-	-	-	1	-	1	1	1	-	-
	305-4	GHG emissions intensity	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	-
	305-5	Reduction of GHG emissions	Specific Topic Disclosures	1	-	1	1	1	1	1	1	1	-	-
	305-6	Emissions of ozone-depleting substances (ODS)	Specific Topic Disclosures	1	-	-	-	1	-	1	1	1	-	-
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Specific Topic Disclosures	1	-	1	1	1	-	1	1	1	-	-
GRI 306 - Waste	306-1	Waste generation and significant waste-related impacts	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	306-2	Management of significant wasterelated impacts	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	306-3	Waste generated	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	-	1
	306-4	Waste diverted from disposal	Specific Topic Disclosures	1	1	1	1	1	-	1	-	1	-	-
	306-5	Waste directed to disposal	Specific Topic Disclosures	1	1	1	1	1	-	1	-	1	-	-
GRI 308 - Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	Specific Topic Disclosures	1	-	-	-	1	1	1	1	1	-	-
	308-2	Negative environmental impacts in the supply chain and actions taken	Specific Topic Disclosures	1	-	-	-	1	-	1	1	1	-	-
Number of Environmental Categories				27	15	18	16	27	14	24	22	24	3	2
Percentage (%)				100	56	67	59	100	52	89	81	89	11	7

Source: processed data

Table 4. Disclosure of corporate sustainability reports in 2022 based on social categories referring to the Global Reporting Initiative Standards.

GRI	Information	Type	Topik Spesifik	ADRO	BUMI	BYAN	GEMS	HRUM	INDY	ITMG	PTBA	MBSS	PSSI	TEBE
GRI 401 - Employment	401-1	New employee hires and employee turnover	Specific Topic Disclosures	1	1	1	-	1	1	1	1	-	-	1
	401-2	Benefits provided to full-time employees that are not provided to temporary or parttime employees	Specific Topic Disclosures	1	1	1	-	1	-	1	1	-	-	1
	401-3	Parental leave	Specific Topic Disclosures	1	1	1	-	1	-	1	1	-	-	1
GRI 402 - Labor/Management Relations	402-1	Minimum notice period regarding operational changes	Specific Topic Disclosures	1	1	1	-	1	-	1	1	1	-	-
GRI 403 - Occupational	403-1	Occupational health and safety management system	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	403-2	Hazard identification, risk assessment, and incident investigation	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	403-3	Occupational health services	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	403-4	Worker participation, consultation, and communication on occupational health and safety	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-
	403-5	Worker training on occupational health and safety	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-

Health and Safety 2018	403-6	Promotion of worker health	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-	-	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Disclosure of Management Approach	-	-	-	-	-	-	-	-	-	-	-	-	
	403-8	Workers covered by an occupational health and safety management system	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	1	-	-	-
	403-9	Work-related injuries	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	1	-	1	1
	403-10	Work-related ill health	Specific Topic Disclosures	1	1	1	-	1	1	1	1	1	1	-	-	1
GRI 404 - Training and Education	404-1	Average hours of training per year per employee	Specific Topic Disclosures	1	1	1	1	1	-	1	1	1	1	1	1	
	404-2	Programs for upgrading employee skills and transition assistance programs	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	1	-	1	1
	404-3	Percentage of employees receiving regular performance and career development reviews	Specific Topic Disclosures	1	1	-	-	1	1	1	1	1	1	-	1	-
GRI 405 - Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	Specific Topic Disclosures	1	-	1	-	1	-	1	1	1	1	1	-	
	405-2	Ratio of basic salary and remuneration of women to men	Specific Topic Disclosures	1	-	1	-	1	-	1	1	1	1	-	-	
GRI 406 - Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	Specific Topic Disclosures	1	-	1	-	1	-	1	-	1	-	-	-	
GRI 407 - Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Specific Topic Disclosures	1	1	1	-	1	-	1	-	1	-	-	-	
	408-1	Operations and suppliers at significant risk for incidents of child labor	Specific Topic Disclosures	1	-	1	-	1	-	1	-	1	-	-	-	
GRI 409 - Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Specific Topic Disclosures	1	-	1	-	1	-	1	-	1	-	-	-	
GRI 410 - Security Practices	410-1	Security personnel trained in human rights policies or procedures	Specific Topic Disclosures	1	1	1	-	1	-	1	1	1	1	-	-	-
GRI 411 - Rights of Indigenous Peoples	411-1	Incidents of violations involving rights of indigenous peoples	Specific Topic Disclosures	1	-	1	-	1	-	1	1	1	1	-	-	-
	413-1	Operations with local community engagement, impact assessments, and development programs	Specific Topic Disclosures	1	1	1	1	1	1	1	1	1	1	1	-	1
GRI 413 - Local Communities	413-2	Operations with significant actual and potential negative impacts on local communities	Specific Topic Disclosures	1	1	1	-	1	-	1	1	1	1	1	-	-
	414-1	New suppliers that were screened using social criteria	Specific Topic Disclosures	1	-	1	-	1	-	1	1	1	1	-	-	-
GRI 414 - Supplier Social Assessment	414-2	Negative social impacts in the supply chain and actions taken	Specific Topic Disclosures	1	-	1	-	1	-	1	1	1	1	-	-	-
	415-1	Political contributions	Specific Topic Disclosures	1	-	1	-	1	-	1	1	1	1	-	-	-
GRI 415 - Public Policy	416-1	Assessment of the health and safety impacts of product and service categories	Specific Topic Disclosures	1	-	-	-	-	-	-	-	-	1	-	-	-
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Specific Topic Disclosures	1	-	-	-	-	-	-	-	-	1	-	-	-
	417-1	Requirements for product and service information and labeling	Specific Topic Disclosures	1	-	-	-	-	-	-	-	-	1	-	-	-
GRI 417 - Marketing and Labeling	417-2	Incidents of non-compliance concerning product and service information and labeling	Specific Topic Disclosures	1	-	-	-	-	-	-	-	-	1	-	-	-
	417-3	Incidents of non-compliance concerning marketing communications	Specific Topic Disclosures	1	-	-	-	-	-	-	-	-	1	-	-	-
	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Specific Topic Disclosures	1	-	-	-	-	-	-	-	-	1	1	-	1
Number of Social Categories				29	14	22	5	23	7	23	19	28	4	5	8	
Percentage (%)				100	48	76	17	79	24	79	66	97	14	17	28	

Source: processed data

Table 5. Recapitulation of disclosures on specific topics regarding economic, environmental, and social aspects from companies making sustainability reports in 2022.

No	Company Name	Aspects of Disclosure	%
1	PT Adaro Energy Indonesia Tbk - ADRO	Economic Aspects	29
		Environmental Aspects	56
		Social Aspects	48
2	PT. BUMI Resources Tbk. - BUMI	Economic Aspects	86
		Environmental Aspects	67
		Social Aspects	76
3	PT Bayan Resources Tbk - BYAN	Economic Aspects	36
		Environmental Aspects	59
		Social Aspects	17
4	PT Golden Energy Mines Tbk - GEMS	Economic Aspects	100
		Environmental Aspects	100
		Social Aspects	79
5	PT Harum Energy Tbk - HRUM	Economic Aspects	36
		Environmental Aspects	52
		Social Aspects	24
6	PT Indika Energy Tbk - INDY	Economic Aspects	93
		Environmental Aspects	89
		Social Aspects	79
7	PT Indo Tambangraya Megah Tbk - ITMG	Economic Aspects	64
		Environmental Aspects	81
		Social Aspects	66

8	PT. Bukit Asam Tbk - PTBA	Economic Aspects	71
		Environmental Aspects	89
		Social Aspects	97
9	PT Mitra Bahtera Segara Sejati Tbk - MBSS	Economic Aspects	7
		Environmental Aspects	11
		Social Aspects	14
10	PT. Pelita Samudera Shipping Tbk - PSSI	Economic Aspects	7
		Environmental Aspects	7
		Social Aspects	17
11	PT. Dana Brata Luhur Tbk - TEBE	Economic Aspects	7
		Environmental Aspects	26
		Social Aspects	28

Source: processed data

From the recapitulation results, it can be seen from the economic aspect that above 50% are PT companies. BUMI Resources Tbk., BUMI; PT Golden Energy Mines Tbk., GEMS; PT Indika Energy Tbk., INDY; PT Indo Tambangraya Megah Tbk., ITMG; and PT. Bukit Asam Tbk., PTBA. From the environmental aspect, those that reveal above 50% are the companies. PT Adaro Energy Indonesia Tbk – ADRO, PT. BUMI Resources Tbk. – BUMI, PT Bayan Resources Tbk – BYAN, PT Golden Energy Mines Tbk – GEMS, PT Harum Energy Tbk – HRUM, PT Indika Energy Tbk – INDY, PT Indo Tambangraya Megah Tbk – ITMG, PT. Bukit Asam Tbk – PTBA. From the social aspect, above 50% are PT companies. BUMI Resources Tbk., BUMI; PT Golden Energy Mines Tbk., GEMS; PT Indika Energy Tbk., INDY; PT Indo Tambangraya Megah Tbk., ITMG; and PT. Bukit Asam Tbk., PTBA.

This shows that in the disclosure of each aspect, there are still many companies included in the coal production sub-sector list that have not prepared sustainability reports that refer to GRI standards. Because sustainability reports are still voluntary. Since the OJK regulation was issued with the number POJK NO 51/POJK.03/2017, several companies have started to make reports referring to this regulation.

Several factors that influence the level of disclosure in a coal mining company's sustainability report include:

- a. Management Commitment: Leadership committed to sustainability tends to encourage better disclosure and transparency.
- b. Stakeholder pressure: Pressure from investors, the government, and society can influence the level of transparency in reporting because of the high expectations that companies have of maintaining natural balance.
- c. Company Size and Complexity: Companies that are larger and have more complex operations tend to reveal more information about the company's operating activities.
- d. Government Regulations and Policies: Governments that implement strict regulations regarding sustainability reporting encourage companies to be more transparent.

5. Conclusion and Suggestion

The conclusion of this article :

1. There is significant variation in the level of sustainability disclosure among the companies

analyzed. Some companies demonstrate a high level of compliance with GRI standards, while others still have a lot of room for improvement.

2. It can be concluded that 11 companies have started making sustainability reports that refer to the GRI Standards. With an average disclosure percentage for each aspect above 50%, it shows that the company is starting to make sustainability reports that can be accessed by stakeholders. This shows the company's seriousness in carrying out social responsibility around the company's operations.
3. The level of disclosure is influenced by various factors, including management commitment, stakeholder pressure, company size and complexity, and government regulations. Companies with management that is highly committed to sustainability and that responds well to external pressures tend to have more comprehensive reports
4. Companies that are more compliant with GRI standards generally show better sustainability performance. They not only report more information but also show real efforts to manage the environmental, social, and economic impacts of their operations.
5. Sustainability reporting helps companies increase transparency, manage risks, and build a good reputation in the eyes of stakeholders. It also encourages companies to continuously improve their sustainability practices.

The suggestion of this article:

1. Management is more committed to sustainability and ensures that the entire company understands the importance of sustainability reporting. Training and education regarding GRI standards must be increased for all levels of management.
2. Companies are more responsive to the needs and expectations of stakeholders, including investors, local communities, and regulators. Involving stakeholders in the reporting process can help improve the quality and relevance of reports.
3. Companies can learn from the best practices of other companies in the same industry to help identify areas that need improvement.

Reference

- Ardianti, A. N., & Widiartanto, M. A. (2019). Pengaruh Online Customer Review dan Online Customer Rating terhadap Keputusan Pembelian melalui Marketplace Shopee . *Jurnal Ilmu Administrasi Bisnis*, 1–11.
- Adams, C., & Frost, G. (2008). Integrating sustainability reporting into management practices. *Accounting Forum*, 32, 288–302. <https://doi.org/10.1016/j.accfor.2008.05.002>
- Al Hamzah, M. H., Kurniawan, W. O., Rizqiani, A., & Indra, D. (2023). Analisis Komparatif Laporan Keberlanjutan Kategori Sosial Standar Gri Pada Perusahaan Telekomunikasi. *Majalah Ekonomi*, 28(01), 95–102. <https://doi.org/10.36456/majeko.vol28.no01.a7098>
- Boiral, O. (2013). Sustainability reports as simulacra? A counter-account of A and A+ GRI reports. *Accounting, Auditing & Accountability Journal*, 26(7), 1036–1071. <https://doi.org/10.1108/AAAJ-04-2012-00998>
- Caesaria, A. F., & Basuki, B. (2017). The study of sustainability report disclosure aspects and their impact on the companies' performance. *SHS Web of Conferences*, 34, 08001. <https://doi.org/10.1051/shsconf/20173408001>
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis.

- Accounting, Organizations and Society, 33(4), 303–327.
<https://doi.org/https://doi.org/10.1016/j.aos.2007.05.003>
- De Villiers, C., Low, M., & Samkin, G. (2014). The institutionalisation of mining company sustainability disclosures. *Journal of Cleaner Production*, 84(1), 51–58.
<https://doi.org/10.1016/j.jclepro.2014.01.089>
- Fonseca, A., McAllister, M. L., & Fitzpatrick, P. (2014). Sustainability reporting among mining corporations: a constructive critique of the GRI approach. *Journal of Cleaner Production*, 84, 70–
83. <https://doi.org/https://doi.org/10.1016/j.jclepro.2012.11.050>
- Gallego, I. (2006). The use of economic, social and environmental indicators as a measure of sustainable development in Spain. *Corporate Social Responsibility and Environmental Management*, 13(2), 78–97. <https://doi.org/10.1002/csr.94>
- Ganis Sukoharsono, E. (2019). Sustaining a Sustainability Report By Modifying Triple Bottom Line To Pentaple Bottom Line: an Imaginary Research Dialogue. *The International Journal of Accounting and Business Society*, 27(1), 119–127.
<https://doi.org/10.21776/ub.ijabs.2019.27.1.7>
- García-Chiang, A. (2018). Corporate social responsibility in the Mexican oil industry: Social impact assessment as a tool for local development. *International Journal of Corporate Social Responsibility*, 3(1). <https://doi.org/10.1186/s40991-018-0038-z>
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5–21. <https://doi.org/10.1016/j.jclepro.2013.07.005>
- Halkos, G., & Nomikos, S. (2021). Corporate social responsibility: Trends in global reporting initiative standards. *Economic Analysis and Policy*, 69, 106–117.
<https://doi.org/10.1016/j.eap.2020.11.008>
- Herzig, C., & Schaltegger, S. (2006). Corporate sustainability reporting: An overview. In S. Schaltegger, M. Bennett, & R. Burritt (Eds.), *Sustainability Accounting and Reporting* (pp. 301–324). Springer Netherlands. https://doi.org/10.1007/978-1-4020-4974-3_13
- Jenkins, H., & Yakovleva, N. (2006). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, 14(3), 271–284. <https://doi.org/https://doi.org/10.1016/j.jclepro.2004.10.004>
- Junior, R., Best, P., & Cotter, J. (2014). Sustainability Reporting and Assurance: A Historical Analysis on a World-Wide Phenomenon. *Journal of Business Ethics*, 120.
<https://doi.org/10.1007/s10551-013-1637-y>
- Kiliç, M., Kuzey, C., & Uyar, A. (2015). The impact of ownership and board structure on corporate social responsibility (CSR) reporting in the Turkish banking industry. *Corporate Governance (Bingley)*, 15(3), 357–374. <https://doi.org/10.1108/CG-02-2014-0022>
- Langer, M. (2006). Comparability of sustainability reports: A Comparative content analysis of Austrian sustainability reports. In S. Schaltegger, M. Bennett, & R. Burritt (Eds.), *Sustainability Accounting and Reporting* (pp. 581–602). Springer Netherlands.
https://doi.org/10.1007/978-1-4020-4974-3_26
- Laplume, A. O., Sonpar, K., & Litz, R. A. (2008). Stakeholder theory: Reviewing a theory that moves us. In *Journal of Management* (Vol. 34, Issue 6). <https://doi.org/10.1177/0149206308324322>
- Laquimia, M. B., & Eweje, G. (2014). Collaborative governance toward sustainability: A global challenge on Brazil perspective. In *Critical Studies on Corporate Responsibility, Governance and Sustainability* (Vol. 8, pp. 371–413). Emerald Group Publishing Limited. <https://doi.org/10.1108/S2043-905920140000008018>

- Lindawati, A. S. L., & Puspita, M. E. (2015). Corporate Social Responsibility: Implikasi Stakeholder dan Legitimacy Gap dalam Peningkatan Kinerja Perusahaan. *Jurnal Akuntansi Multiparadigma*, 157–174. <https://doi.org/10.18202/jamal.2015.04.6013>
- Muttakin, M. B., Khan, A., & Subramaniam, N. (2015). Firm characteristics, board diversity and corporate social responsibility: Evidence from Bangladesh. *Pacific Accounting Review*, 27(3), 353–372. <https://doi.org/10.1108/PAR-01-2013-0007>
- Nguyen, M., Bensemman, J., & Kelly, S. (2018). Corporate social responsibility (CSR) in Vietnam: a conceptual framework. *International Journal of Corporate Social Responsibility*, 3(1). <https://doi.org/10.1186/s40991-018-0032-5>
- Nurhidayah, F., Meutia, M., Zulfikar, R., & Uzliawati, L. (2023). Comparative Analysis of Sustainability Report Based on Social Categories GRI Standards. <https://doi.org/10.4108/eai.4-11-2022.2329726>
- Orazalin, N., & Mahmood, M. (2020). Determinants of GRI-based sustainability reporting: evidence from an emerging economy. *Journal of Accounting in Emerging Economies*, 10(1), 140–164. <https://doi.org/10.1108/JAEE-12-2018-0137>
- Rathnayaka Mudiyansele, N. C. S. (2018). Board involvement in corporate sustainability reporting: evidence from Sri Lanka. *Corporate Governance (Bingley)*, 18(6), 1042–1056. <https://doi.org/10.1108/CG-10-2017-0252>
- Reverte, C. (2009). Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics*, 88(2), 351–366. <https://doi.org/10.1007/s10551-008-9968-9>
- Roca, L. C., & Searcy, C. (2012). An analysis of indicators disclosed in corporate sustainability reports. *Journal of Cleaner Production*, 20(1), 103–118. <https://doi.org/https://doi.org/10.1016/j.jclepro.2011.08.002>
- Saldaña, J. (2011). A survey of qualitative data analytic methods. In *Fundamentals of Qualitative Research: Understanding Qualitative Research*.
- Smith, D., & Rhiney, E. (2020). CSR commitments, perceptions of hypocrisy, and recovery. *International Journal of Corporate Social Responsibility*, 5(1), 1–12. <https://doi.org/10.1186/s40991-019-0046-7>
- Sustainability Report (2022). PT Adaro Energy Indonesia Tbk ADRO, <https://adaro.com/pages/read/9/51/Laporan%20Keberlanjutan?tanggal%5Byear%5D=2022>
- Sustainability Report (2022). PT Bayan Resources Tbk - BYAN [chrome-extension://efaidnbmnnnibpcajpcgicfindmkaj/https://www.bayan.com.sg/cfind/source/files/sr-2022-byan-final.pdf](https://efaidnbmnnnibpcajpcgicfindmkaj/https://www.bayan.com.sg/cfind/source/files/sr-2022-byan-final.pdf)
- Sustainability Report (2022). PT. Bukit Asam Tbk - PTBA [chrome-extension://efaidnbmnnnibpcajpcgicfindmkaj/https://www.ptba.co.id/uploads/ptba_laporan_berkelanjutan/20230530082411-2023-0530ptba_laporan_berkelanjutan082404.pdf](https://efaidnbmnnnibpcajpcgicfindmkaj/https://www.ptba.co.id/uploads/ptba_laporan_berkelanjutan/20230530082411-2023-0530ptba_laporan_berkelanjutan082404.pdf)
- Sustainability Report (2022). PT. BUMI Resources Tbk.-BUMI <https://www.bumiresources.com/en/sustainability/reports>
- Sustainability Report (2022). PT. Dana Brata Luhur Tbk - TEBE <https://tebe.co.id/id/annual-report/>
- Sustainability Report (2022) PT Golden Energy Mines Tbk-GEMS <https://www.goldenenergymines.com/id/hubungan-investor/laporan-tahunan/>
- Sustainability Report (2022) PT Harum Energy Tbk-HRUM <http://www.harumenergy.com/id/investor-relations/37/annual-report>

- Report (2022) PT Indika Energy Tbk-INDY
<https://www.indikaenergy.co.id/id/investor/laporan-keberlanjutan/> Sustainability
- Report (2022) PT Indo Tambangraya Megah Tbk-ITMG chrome
extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.itmg.co.id/files/sustainability_uploads/ITM%20Sustainability%20Report%202022.pdf
- Sustainability Report (2022) PT Mitra BahteraSegara Sejati Tbk-MBSS
<https://www.mbss.co.id/id/sustainability/sustainability-report/>
- Sustainability Report (2022) PT. Pelita Samudera Shipping Tbk-PSSI chrome-
extension://efaidnbmnnnibpcajpcglclefindmkaj/https://samudera.id/public_assets/3/uploads/2_0230515060412SR_2022.pdf
- Taib, M. Y. M., Udin, Z. M., & Ghani, A. H. A. (2015). The impact of green management and technology in electrical and electronics manufacturing in business sustainability in Malaysia. *Jurnal Teknologi*, 77(5), 149–154. <https://doi.org/10.11113/jt.v77.6131>