



CSR Index of Energy Sector Companies in Indonesia

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ABSTRACT

This research analyzes the pattern of Corporate Social Responsibility (CSR) disclosure in energy sector companies listed on the Indonesia Stock Exchange. With increasing regulations and global awareness about sustainable resources, energy companies in Indonesia are encouraged to adopt CSR practices. This study uses purposive sampling and checklist methods based on six categories of Global Reporting Initiative (GRI) indicators: economic, environmental, labor, human rights, social, and product responsibility. The research results show significant variations in CSR disclosure between companies, with the CSR Index ranging from 10.99% to 64.83%. The social community category at 8.88% and the product responsibility category at 7.44% had the lowest level of disclosure, reflecting the company's lack of attention to these issues. In contrast, the environmental category at 14.83% and the labor category at 13.76% showed the highest level of disclosure, indicating the company's focus on environmental issues and employee welfare. The suggestion from this research is that companies can increase awareness and commitment to CSR, as well as improve their social performance and product responsibility to achieve more responsible and sustainable business practices.

Keywords: Corporate Social Responsibility Index, Energy Sector, Global Reporting Initiative, Indonesia Stock Exchange

JEL Classifications: O44, Q43, Q56, Q58

1. INTRODUCTION

The Corporate Social Responsibility Index (CSR Index) has become an important focus for companies as global awareness about sustainability and environmental responsibility increases (Khan et al., 2022). The existence of increasingly stringent regulations and increased awareness of the importance of sustainability has encouraged energy sector companies in Indonesia to integrate CSR practices into company operations (Rusmana and Puspitasari, 2021).

The energy sector which includes oil, gas, and renewable energy in its company activities has a significant negative impact on the environment and society. Company activities in this sector are often associated with carbon emissions, air pollution, and land use (Nakajima and Hamano, 2022). Therefore, companies in the energy sector need to adopt effective and transparent CSR practices. The CSR index measures the extent to which companies adopt CSR

disclosure practices and publicize company efforts in supporting sustainable social responsibility. This index includes various indicators that measure various aspects such as environmental management, employee welfare, and contribution to local communities (Reverte, 2020). With the CSR Index, companies can demonstrate the company's commitment to responsible and transparent business practices (Wijaya and Indriani, 2022).

2. LITERATURE REVIEW

The *World Business Council For Sustainable Development* defines *Corporate Social Responsibility* as a company's continued commitment to act ethically and contribute significantly to economic development along with improving the standard of living of local communities or the wider community (Cahya, 2022). CSR emerged as a response to the modernization of society which is more aware of the potential negative impacts caused by

company activities on the environment. Company operations often produce waste that has the potential to pollute the environmental ecosystem. Therefore, companies need to implement social responsibility programs that aim to minimize the negative impact of environmental damage caused by company activities. Through this program, the company seeks to gain public support and trust by creating a positive and acceptable image in the surrounding environment. A company can be considered successful if it can disclose *Corporate Social Responsibility* and meet community expectations. Social Responsibility (CSR) has many very broad and complex dimensions (Mering, 2024). According to Mayndarto and Jagakarsa (2022) there are three main principles of CSR responsibility, namely *Sustainability, Accountability, and Transparency*.

CSR is a company initiative designed to establish good relations with society through activities that are in line with society's values, norms, and needs. CSR disclosure is proxied using a *check list* based on general indicators, namely the *global reporting initiative* (GRI). In this research, these indicators are divided into 6 categories, namely the Economic Category (EC) which includes direct economic impacts including income, employee wage standards, and indirect economic impacts including infrastructure investment and services provided for the public interest. Environmental Category (EN) which includes waste, emissions, water, and biodiversity. Labor Category (LA) which includes employment, work equality, and safety, as well as training and education. Human Rights (HR) category which relates to community rights. The Community Social (SO) category relates to the company's social impact, from engagement with the community to handling ethical and legal issues. The Product Responsibility (HR) category includes the company's responsibility for health, safety, and consumer satisfaction, as well as compliance with regulations and policies related to products and services (Sustainability Report, 2016). The measurement process is carried out by matching the items on the *check list* with those disclosed in the company's annual report. Each item that is disclosed gets a score of 1, while items that are not disclosed get a score of 0. After getting a score for each item, the level of CSR disclosure is calculated using the CSRI formula (Kolk and van Tulder (2022).

$$CSRI = \frac{\sum_{xyi}^k}{ni} \times 100\%$$

CSRI: Broad index of company CSR disclosure i

\sum_{xyi} : A value of 1 indicates item disclosure; a value of 0 indicates not revealing the item

ni: Total company items i

3. RESEARCH METHODOLOGY

Samples were taken representatively from a large population using the purposive sampling method, where the selection is not random and is based on certain criteria so that the sample accurately represents the research (Sugiyono, 2018). At the start of data collection, 74 energy sector companies were obtained which were listed on the Indonesia Stock Exchange during the 2017–2021

period. After applying the advanced criteria, it was found that 52 companies consistently published annual reports, 44 companies also reported social responsibility (CSR) programs, and finally, only 17 companies met all the criteria, bringing the total research observation data to 85 data from 17 companies during the period 5-year research.

Method is carried out by matching a checklist or verification method to ensure that all important criteria in the process or system are met (Aguinis and Glavas, 2022). In the context of CSR, this method is used to evaluate the extent to which companies meet social responsibility standards by matching CSR policies and practices against a list of established criteria. In the context of the CSR Index, this method is used to evaluate aspects of corporate social responsibility, such as sustainability and ethics, to ensure compliance with CSR standards, assess strengths and weaknesses, and increase transparency and accountability (Kolk and van Tulder, 2022; Alawi, 2024).

4. RESULTS AND DISCUSSION

This research measures the level of corporate social responsibility (CSR) disclosure in 17 energy sector companies listed on the Indonesia Stock Exchange during the 2017-2021 period. Data was taken from company sustainability reports and analyzed using a checklist method adapted to Global Reporting Initiative (GRI) standards. The following is a table that presents the results of calculating CSR disclosures for sample companies over five years (Table 1).

Based on data from Corporate Social Responsibility (CSR) calculations for 17 samples of energy sector companies listed on the Indonesia Stock Exchange during the 2017-2021 period, interesting patterns and trends in disclosure of corporate social responsibility were identified. In 2017, the CSR Index value ranged from 15% to 43.96%. Companies with the issuer code DOID have the highest index value, namely 43.96%, while companies with the issuer code PGAS have the lowest index value at 15%. This shows that there is significant variation in CSR disclosure between these companies. The majority of companies focus on environmental and labor disclosures. This disclosure reflects the company's attention to environmental issues and employee welfare, which are two main aspects of CSR (Gallego-Alvarez et al., 2021).

2018 showed an increase in CSR disclosure, with index values ranging from 8.79% to 48.35%. Companies with the issuer code DOID remain in the highest position with a value of 48.35%, while companies with the issuer code ELSA have the lowest index value with 8.79%. The main focus remains on environmental and labor aspects, but there is a significant increase in disclosures on social aspects. This shows that there is a greater effort by the company to pay attention to social responsibility towards the surrounding community. Social engagement and contributions to local communities are becoming increasingly important, reflecting regulatory pressures and higher societal expectations for responsible business practices (Hsu et al., 2023).

In 2019, there was a further increase in CSR disclosure with index values ranging from 11.20% to 64.83%. Companies with the issuer

Table 1: Corporate social responsibility

Number	Issuer code	2017						Items revealed	CSR index (%)
		Corporate social responsibility							
		EC	EN	LA	HR	SO	PR		
1	ADRO	3	13	10	3	1	1	31	0.340659
2	PTRO	5	7	10	0	4	2	28	0.307692
3	MYOH	3	12	12	2	3	1	33	0.362637
4	EARTH	2	6	6	1	2	1	18	0.197802
5	BYAN	2	11	11	1	0	0	25	0.274725
6	GOD	0	14	12	0	0	3	29	0.318681
7	ELSA	2	10	6	2	1	2	23	0.252747
8	CITA	5	10	4	0	2	0	21	0.230769
9	COFFEE	0	17	7	2	2	1	29	0.318681
10	TOBA	3	7	5	2	1	1	20	0.21978
11	ARII	3	7	6	1	1	2	20	0,21978
12	APEX	3	8	5	0	2	1	19	0,208791
13	DOID	5	16	13	3	2	1	40	0,43956
14	BSSR	3	9	5	2	2	2	23	0.252747
15	FIRE	3	6	5	1	1	2	18	0.197802
16	MBAP	3	12	9	2	2	2	30	0.32967
17	PGAS	3	6	5	0	0	1	15	0.164835
2018									
1	ADRO	3	11	10	3	2	1	30	0.32967
2	PTRO	4	7	3	4	0	0	18	0.197802
3	MYOH	2	14	11	1	2	1	31	0.340659
4	EARTH	4	7	7	3	0	2	23	0.252747
5	BYAN	2	10	8	1	0	1	22	0.241758
6	GOD	2	7	12	5	1	2	29	0.318681
7	ELSA	1	2	3	0	0	1	8	0.087912
8	CITA	4	10	4	0	2	0	20	0.21978
9	COFFEE	3	17	11	1	2	1	35	0.384615
10	DRUM	3	7	5	1	1	1	18	0.197802
11	AREAS	1	6	4	1	1	1	14	0.153846
12	APEX	1	7	5	0	2	1	16	0.175824
13	Doidos	5	18	13	4	2	1	44	0.483516
14	BSSR	3	10	8	2	2	2	27	0.296703
15	FIRE	2	7	8	1	1	1	20	0.21978
16	MBAP	5	21	10	1	2	2	41	0.450549
17	PGAS	3	5	9	1	0	1	19	0.208791
2019									
1	ADRO	4	18	3	2	2	0	29	0.318681
2	PTRO	4	6	5	4	0	0	19	0.208791
3	MYOH	4	11	10	1	1	2	29	0.318681
4	EARTH	5	15	9	4	0	1	34	0.373626
5	BYAN	1	10	6	1	1	1	20	0.21978
6	GOD	6	7	8	2	0	2	25	0.274725
7	ELSA	2	3	5	0	0	1	11	0.120879
8	FABRIC	3	9	5	0	1	0	18	0.197802
9	COFFEE	1	12	7	2	2	1	25	0.274725
10	TOBA	0	11	9	1	1	1	23	0.252747
11	ARII	3	9	7	1	2	2	24	0,263736
12	APEX	1	7	5	0	1	2	16	0,175824
13	DOID	3	11	9	2	2	2	29	0,318681
14	BSSR	5	17	13	3	2	4	44	0,483516
15	FIRE	3	5	9	1	0	1	19	0.208791
16	MBAP	7	24	13	6	5	4	59	0.648352
17	PGAS	8	18	11	1	0	1	39	0.428571
2020									
1	ADRO	5	23	13	4	2	1	48	0.527473
2	PTRO	5	13	7	3	0	1	29	0.318681
3	MYOH	5	8	12	1	3	1	30	0.32967
4	EARTH	5	15	7	4	0	1	32	0.351648
5	BYAN	1	12	9	1	1	1	25	0.274725
6	GOD	6	6	9	5	0	2	28	0.307692
7	ELSA	2	4	3	0	1	1	11	0.120879
8	CITA	3	10	4	1	1	0	19	0.208791

(Contd...)

Table 1: (Continued)

Number	Issuer code	2017						Items revealed	CSR index (%)
		Corporate social responsibility							
		EC	EN	LA	HR	SO	PR		
9	COFFEE	3	11	6	2	2	2	26	0.285714
10	TOBA	3	5	3	2	2	1	16	0.175824
11	AREAS	3	10	7	1	2	1	25	0.274725
12	APEX	3	7	5	0	2	1	18	0.197802
13	Doidos	3	16	10	2	2	2	35	0.384615
14	BSSR	5	17	13	3	2	4	44	0.483516
15	FIRE	4	7	9	1	0	1	22	0.241758
16	MBAP	7	24	13	5	5	5	59	0.648352
17	PGAS	9	16	10	1	1	1	38	0.417582
2021									
1	ADRO	8	15	9	2	2	1	37	0.406593
2	PTRO	4	7	10	4	2	0	27	0.296703
3	MYOH	4	19	11	3	1	2	40	0.43956
4	EARTH	6	13	8	5	0	1	33	0.362637
5	BYAN	0	4	0	2	2	2	10	0.10989
6	GOD	5	11	8	0	1	2	27	0.296703
7	ELSA	4	5	6	2	1	0	18	0.197802
8	FABRIC	4	8	3	0	2	0	17	0.186813
9	COFFEE	5	12	12	3	0	0	32	0.351648
10	TOBA	1	5	3	3	1	0	13	0.142857
11	ARII	3	7	6	1	2	2	21	0.230769
12	APEX	3	10	9	2	2	2	28	0.307692
13	DOID	2	15	10	3	2	2	34	0.373626
14	BSSR	7	22	14	3	2	4	52	0.571429
15	FIRE	4	11	10	0	1	2	28	0.307692
16	MBAP	2	9	5	1	2	2	21	0.230769
17	PGAS	9	14	10	1	1	1	36	0.395604

Source: Sustainability Report prepared by the author, 2024. EC: Economic category, EN: Environmental category, LA: Labor category, HR: Human rights, SO: Social, CSR: Corporate social responsibility

code MBAP have the highest index value with 64.83%, while companies with the issuer code ELSA again have the lowest value with 11.20%. This year saw a significant increase in disclosure in almost all aspects, especially in social and labor aspects (Yin et al., 2022). Companies are increasingly realizing the importance of transparency and accountability in company operations, as well as the positive impacts that can result from good CSR practices. This more comprehensive disclosure also reflects the company’s efforts to meet international standards and expectations from global stakeholders (Zhang et al., 2023).

In 2020, a continuous increase in CSR disclosure was recorded with index values between 11.20% and 64.83%. The company with the issuer code MBAP occupies the highest position with an index value of 64.83%. This year’s disclosure focus broadened to include economic and product aspects, indicating a more holistic understanding of social responsibility. Companies are starting to view CSR not only as a legal or social obligation, but also as a business strategy that can improve the company’s reputation and long-term sustainability (Gond et al., 2023). Economic and product aspects reflect how companies strive to provide added value to customers and other stakeholders through innovation and sustainable business practices (Brammer and Pavelin, 2023).

In 2021, the index value ranged from 10.99% to 57.14%. Companies with the issuer code BSSR occupy the highest position with an index value of 57.14%, while companies with the issuer code BYAN have the lowest index value with 10.99%. Even though

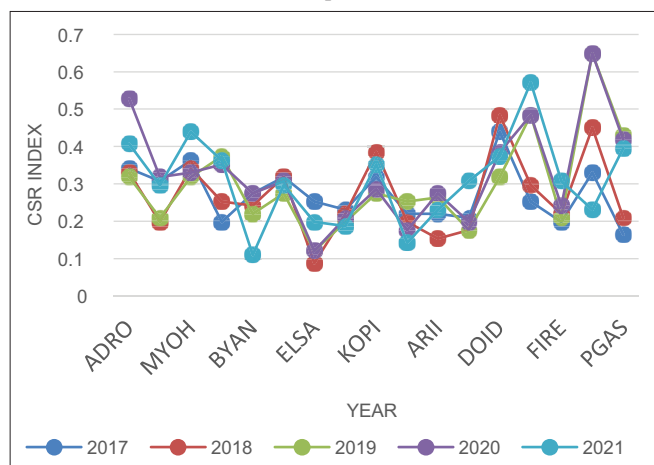
there was a slight decrease in the highest index value compared to the previous year, CSR disclosure remained strong, especially in environmental and social aspects. Companies continue to adapt to regulatory changes and increasing pressure from stakeholders to be more transparent and responsible in company operations. This trend shows the continued commitment of companies to improve CSR practices despite facing challenges and uncertainty in the market (Jiang and Zhao, 2023).

Overall, the results of CSR calculations from 2017 to 2021 show a consistently increasing trend in the disclosure of social responsibility by energy sector companies in Indonesia which is presented in the Figure 1.

Figure 1 shows CSR Index Disclosure Trends for Energy Sector Companies.

The graph presented above depicts trends and changes in corporate social responsibility (CSR) disclosures in the energy sector listed on the Indonesia Stock Exchange during the period 2017 to 2021. Each line in the graph represents one company, with the CSR Index (%) plotted against the year of observation. From this graph, it can be observed that there is a significant variation in the CSR Index value between one company and another. In 2017, the CSR Index values ranged from 15% to 44%, indicating large differences in the level of CSR disclosure between these companies. The overall trend shows an increase in CSR Index scores for most companies over the five years (Chen et al., 2023). For example, companies

Figure 1: Chart of CSR Index Disclosure Trends for Energy Sector Companies



Source: Research results (2024)

with DOID issuer codes *consistently* achieve the highest CSR Index scores, with an increase from 43.96% in 2017 to 48.35% in 2018, and peaking at around 57.14% in 2021. However, there are companies that also experience fluctuations or even declines in disclosure. CSR. For example, a company with the issuer code PGAS whose CSR Index value fluctuated from 16.48% in 2017 to a peak of 42.85% in 2019, but experienced a decline again to around 39.56% in 2021.

This trend shows that although there is an increase in CSR awareness and practices in energy sector companies, not all companies show consistent improvements. Some companies appear to be more responsive to regulatory changes and pressure from stakeholders to increase transparency and social responsibility, while others show gradual improvement. This graph indicates that awareness of the importance of CSR among energy sector companies increased during the 2017-2021 period, with greater emphasis on environmental and social aspects (Zhang et al., 2023). Increased regulations and public awareness seem to play a role in encouraging companies to be more open and comprehensive in their corporate CSR disclosures (Bae et al., 2023).

In 2017, attention to corporate social responsibility began to increase, driven by the implementation of stricter Financial Services Authority (OJK) regulations regarding CSR disclosure. Regulations such as OJK Regulation no. 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers and Public Companies encourages companies to be more transparent in reporting the company’s CSR activities (Kang et al., 2022). In addition, public and stakeholder awareness of environmental and social issues has also increased, encouraging companies to improve their CSR practices. Companies with DOID and ADRO issuer codes show quite high CSR Index scores, indicating the company’s commitment to managing social and environmental impacts.

In 2018, the trend of increasing CSR disclosures continued, driven in large part by increasing pressure from stakeholders and society for more sustainable business practices. Environmental issues

such as air pollution and climate change are in the main spotlight, encouraging companies to increase their efforts in managing environmental impacts (Nguyen et al., 2022). Global campaigns such as *World Cleanup Day* and regional initiatives to reduce greenhouse gas emissions have also encouraged companies to be more committed to CSR practices (Hsu et al., 2023). Companies with the PTBA and MEDC issuer codes show a significant increase in CSR Index scores which reflects greater awareness of the importance of social responsibility and sustainability in company operations.

In 2019, there were fluctuations in the CSR Index values for several companies, although there was an overall increase. This phenomenon may be caused by global economic uncertainty and fluctuating commodity prices, which affect revenues and budget allocations for CSR activities (Chen et al., 2023). For example, trade tensions between the United States and China create market uncertainty, which can influence corporate investment decisions (Kang et al., 2022). However, several companies with the issuer code PGAS have succeeded in maintaining or even increasing CSR disclosure, thereby showing strong commitment even in uncertain economic conditions. This year, there was also increased awareness of social issues, such as human rights and worker welfare, which encouraged companies to be more socially responsible.

The COVID-19 pandemic that hit the world in 2020 had a major impact on business operations and company priorities (Hsu et al., 2023). Many companies experience a decline in revenue and have to adjust their budgets. Despite this, several companies continue to show a strong commitment to social responsibility, as can be seen from stable or increasing CSR Index values. Companies with the issuer code PTBA and ADRO continue to invest in CSR programs, especially those related to community health and welfare. During the pandemic, many companies increased efforts to support local communities, such as providing personal protective equipment (PPE) and other health assistance. The pandemic has also taught companies the importance of sustainability and resilience in the face of crises, which is reflected in an increased focus on CSR.

In 2021, economic recovery will begin to emerge and companies will begin to increase CSR disclosures again (Yadav et al., 2022). This trend is driven by increased awareness of the importance of post-pandemic sustainability, as well as pressure from regulations and stakeholders. Additionally, the UN Climate Change Conference (COP26) held in late 2021 increased global pressure on companies to commit to sustainability goals (Huang et al., 2023). International agreements on reducing carbon emissions and global efforts to achieve net-zero emissions have also encouraged companies to be more serious in reporting CSR activities. Companies with MEDC and DOID issuer codes show a significant increase in CSR Index scores which reflects the company’s adaptation to new challenges and sustainability commitments.

5. CONCLUSIONS

Based on an analysis of Corporate Social Responsibility (CSR) disclosures in the energy sector listed on the Indonesia Stock

Exchange during the 2017-2021 period, it can be concluded that there is a significant increasing trend in CSR disclosures among companies. In general, companies are increasingly demonstrating a greater commitment to social responsibility and sustainability. 2017 was the starting point for improvement with the implementation of OJK regulations that encourage transparency in CSR reports (Kang et al., 2022). This trend continued with a significant increase in CSR disclosures in the following years, influenced by external factors such as pressure from stakeholders, global regulations, and society (Nguyen et al., 2022). Even though the COVID-19 pandemic presents major challenges, many companies maintain or even increase their commitment to CSR, especially in aspects of public health and welfare. In 2021, with economic recovery and pressure from international agreements on climate change, companies showed further increases in CSR disclosures. Overall, the results of this research reflect a consistent positive trend in corporate social responsibility management in the energy sector, with an emphasis on increasingly important environmental and social aspects. Increased regulation and public awareness play a key role in encouraging companies to be more open and comprehensive in CSR reports (Chen et al., 2023).

This research only covers 17 energy sector companies listed on the Indonesia Stock Exchange during the 2017-2021 period. Therefore, the research results cannot be generalized to all industrial sectors in Indonesia. For further research, it is recommended to expand the sample to cover various industrial sectors so that the results are more representative and identify the disclosure of *Corporate Social Responsibility information* in categories that have low levels of disclosure, such as the social and product responsibility categories.

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