

## SUSTAINABILITY REPORTING OF INDONESIAN MINING COMPANIES: HOW COMPLIANT ARE THEY?

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### ABSTRACT

*The GRI Standards are utilized by many companies in Indonesia to compose their Enterprise Sustainability Reports because the standards are considered relevant. Companies in Indonesia on average utilize the “core” selection as the minimum selection for reporting enterprise sustainability based on the GRI Standards. Although the minimum disclosure has been opted, not all the minimum information has been presented in the Enterprise Sustainability Reports of the companies, which can lead to a reduction in the quality and reliability of the reports. Therefore, the objective of this research is to make a further analysis on the quality and compliance of mining companies in Indonesia in presenting their enterprise sustainability reports. This research utilized the qualitative approach with the narrative method, which is then synthesized to create a thorough conclusion that can become a contribution to the regulator, as input for revisions to regulations. Based on the results of this research, the compliance of the enterprise sustainability reporting of mining companies in Indonesia toward the GRI Standards is still at an average of approximately 84.77%. According to this research, the highest level of compliance was found for PT Antam Tbk with 85.93%, followed by PT Pertamina Persero with 84.73% and PT KPC in last place with a level of compliance of 83.64%. This indicates that the enterprise sustainability reporting of mining companies is still not fully (100%) compliant toward the minimum disclosure based on the GRI Standards with the “core” selection. Therefore, it needs to be followed-up by the authority in charge for conducting supervision for this matter, particularly for points for which the level of reporting is still low.*

Key words: Sustainability Reporting, GRI, Mining Company, CSR.

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### INTRODUCTION

Environmental damage is a serious issue that has occurred in recent times. Many companies have exploited nature only for the sole purpose of obtaining profits without paying attention to its conservation. Excess exploitation of nature without consideration of its conservation can damage the ecosystem and pollute the environment. If pollution and ecosystem damage continue to occur, in the long term, this may cause natural disasters and global warming that will cause climate change, which can threaten the lives of people in the future. Therefore, at present, leaders of countries around the world, including the government of Indonesia, have conducted many efforts to deal with the environmental damage.

The government of Indonesia has obligated every company that operates businesses in the field of natural resources to conduct activities that show social and environmental responsibility, which is also called Corporate Social Responsibility (CSR). This obligation for companies in the field of natural resources is stated in Law Number 40 of Year 2007. However, although it has been clearly stated in the law, there are still several companies in the field of natural resources that do not conduct CSR activities continuously. CSR activities are only conducted through charity-type activities that are conducted in a short timeframe and do not continue in the following periods. In addition, the sanctions given to companies that do not conduct CSR activities are also not firm because they are not clearly stated in a binding regulation. As such, the government has trouble in supervising and measuring the commitments of CSR programs that are conducted by companies because the limited amount of analysis that can be performed toward CSR reports (Inge, 2019). In particular, lack of enforcement capabilities and regulation, weak government structures and a political will, lack of awareness and interest in sustainability matters has been identified as the main barriers composing Sustainability Reports (Mahmood et al., 2019; Susilawati & Kanowski, 2020). Based on this background, the government issued a new regulation related to Sustainability Reporting, as OJK Regulation Number 51/POJK.03/2017 on the Application of Sustainable Finances for Financial Service Institutions, Bankers, and Public Companies. Through this regulation, the government obligates banks and other financial institutions to compose Sustainability Reports (SRs) to accompany their Annual Reports.

Up to 2020, many mining companies and financial institutions have created separate enterprise sustainability reports that are usually called Sustainability Reports (SRs). A separate SR is considered able to provide a greater amount of information in relation to enterprise sustainability (Orazalin & Mahmood, 2018) in comparison to a simple inclusion in annual reports. The SRs of those companies are composed by adhering to OJK standards and other standards that do not conflict with the OJK. One of the general standards that is often utilized in Indonesia are the standards issued by the Global Reporting Initiative (GRI). In addition to Indonesia, the GRI Standards are also utilized in many other countries including developing country, such as Sri Lanka. Dissanayake & Qian (2019) in their research found that the GRI Standards are the standards that are most relevant and most appropriate to the characteristics of companies in Sri Lanka.

Most companies in Indonesia which was preparing SRs in accordance with the GRI Standards prefer the “core” option, and thus their SRs only contain the minimum information required by the GRI Standards. Based on a preliminary study conducted prior to this research, although the SRs of the public companies had been composed with the “core” option, not all the minimum of

information has been presented in the SRs of those companies, for which the result is a decrease in the quality and reliability of the SRs. The SRs are seemingly only created to absolve responsibility without considering their contributions to the sustainable development by the government. This was also found by Laskar & Maji (2018) which is stated that the average quality of SR disclosure of companies in Indonesia according to the GRI framework is still very low compared to the average quality of disclosure of other countries in Asia. In addition, Nara et al. (2019) in their research also found that tobacco companies in Brazil applied the principle of the "triple bottom line" in an imbalanced manner, wherein the primary focus of the companies is more greatly placed on their reputation in society than on the other elements of the "triple bottom line". This finding is also supported by Hourneaux Junior et al., (2017) who was found that there is also imbalance and incompleteness regarding the triple bottom line approach in companies' reporting, with a predominance of social aspects. This is in contrast with the results of research conducted by Papoutsi & Sodhi (2020), in which it is stated that the SR of a company reflects the performance of significant sustainability efforts by the company. Aside from its limitations, a sustainability report can provide insights related to the nature, causes, and implications of organizational hypocrisy, which may be analyzed from the SR of the company in question (Higgins, Tang, & Stubbs, 2020).

Many researches have been conducted on sustainability reporting in developed countries as mentioned in previous explanation, but there is a dearth of study in developing countries (Dissanayake et al., 2016) such as Indonesia. Therefore, this research focused on Indonesia as the developing country who has many of natural resources that should be protected from destruction due to the company's operational activity to get the profit from the nature, through regulation related to sustainability reporting. The result of this study can be used as the example of the compliance of developing country in South East Asia towards GRI standards in relation with sustainability reporting. So that, the further analysis regarding the compliance of mining companies in Indonesia (as the developing country) to publish SRs to a greater depth of information becomes interesting to be conducted.

Research regarding the quality of SRs in Indonesia has been previously conducted. Most often, the previously conducted research has been performed quantitatively with statistical testing. This research utilized the qualitative method by performing content analysis of company SRs in an in-depth manner and conducting evaluations of the appropriateness of company SRs toward the GRI Standards.

The objective of this research is to analyze further the quality of SRs and the appropriateness or compliance of SRs composed by mining companies in Indonesia with the GRI Standards. This research has the specific objective of providing input to the regulator, as considerations to improve policies and regulations related to SRs and thereby improve the reports as well. If the low compliance of companies in composing SRs according to existing regulations or standards continues to persist without being followed up, the CSR conducted by companies may not be able to contribute much to sustainable development by the government. Furthermore, the government would not be able to supervise the CSR or companies reliably because the composed SRs are not fully in accordance with the standards. This may provide an opportunity or loophole for companies to continue to exploit nature without consideration of its conservation, which can result in environmental damage that cannot be minimized and thus may threaten the lives of people in the future. Therefore, there needs to be continuous improvement of regulations related to SRs as the form of the documentation and evaluation of the CSR activities of a company.

## LITERATURE REVIEW

### Regulations related to Corporate Social Responsibility in Indonesia

Companies are regarded to possess the greatest responsibility when a reduction in environmental quality occurs (Türk, Uslu, and Ertaş 2019, Ma and Ma 2019, Tu and Huang 2015). However, the realization of companies still tends to be low. Even if companies are willing to expend the costs for the environment, oftentimes this is not merely because of concern, but only as compliance toward the provided standards. Therefore, it is required to implement supervision to support the continuous implementation of the *Corpora* (Wei, 2018). The composition of SRs that is trustable and reliable needs to be conducted in stages, and as a result, this requires a system that is appropriate to needs (Kan & Meng 2015; Ma & Ma 2019).

In general, at present the standards and guidelines that regulate regarding the social responsibility of companies is still limited to major enterprises in the form of companies, state-owned enterprises, banks, and financial institutions. Corporate social responsibility is regulated in a regulation, Law No. 40 of Year 2007, which states that companies that operate in business fields or activities related to natural resources are required to conduct social and environmental responsibility (Article 77), and all companies are obligated to present information on performance as well as social and environmental responsibility in the Director's Annual Report during the General Shareholder's Meeting (Article 66). Law No. 40 of Year 2007 is supported by Government Regulation No. 47 of Year 2012 on the Execution of Company Social and Environmental Responsibility (TJSPL), for which starting from 2012, the TJSPL has become an obligation for companies. Additionally, the SRs of companies are regulated in Financial Services Authority (OJK) Regulation No. 51/POJK.03/2017 on the application of sustainable financing for financial service institutions, bankers, and public companies, which has required practices of sustainable financing to be presented to the stakeholders.

### Application of Sustainability Reporting (SRs) of Indonesian Companies

An SR is a form of public reporting on the practices of companies or organizations that is related to economic, environmental, and social effects, along with both positive and negative contributions toward the primary goal of sustainable development (NCSR, 2019). Since the issuance of OJK Regulation No. 51/POJK.03/2017 on the application of sustainable financing for financial service institutions, bankers, and public companies, the SR becomes mandatory to be composed separately from the annual report especially for banks and other financial institutions. Up to 2020, many mining companies, banks and other financial institutions have created separate enterprise sustainability reports that are usually called Sustainability Reports (SRs).

The standards or guidelines that are often utilized by companies to compose SRs are the GRI Standards. Orazalin & Mahmood (2019) suggest in their research that developing countries, Indonesia being one of them, be able to implement the GRI Standards as the standards for the separate reporting of SRs, because the GRI Standards can encourage companies to report SRs according to the focus of the enterprise sustainability issue that a company is specifically experiencing. Company SRs that are composed according to the GRI Standards may be composed through a choice between two usage options that determine the quality and reliability of the report. The choice of options is “core” or “comprehensive”. For the “core” option, the company SR only needs to contain a minimum amount of information, while for the “comprehensive” option, the company needs to add other information in addition to the minimum information based on the GRI standards (NCSR, 2019). Most companies in Indonesia opt for the “core” option, and the result is that their SRs only contain the minimal required information by GRI Standards, for which the result is a decrease in the quality and reliability of the SRs. Meanwhile, many of those Indonesian companies who opt “core” option do not comply to all the minimum information that has been required by GRI Standards. So that, it can result in a lack of quality and reliability of its SR. It is as if the SR was only carried out as an omission of obligations without any regard to its contribution to the sustainability of the social and environment. This is also stated by the results of research conducted by Laskar & Maji (2018) which states that the average quality of SR disclosure of companies in Indonesia based on the GRI framework is still very low compared to the average quality of disclosure in other countries in Asia.

### **Global Reporting Initiative (GRI) Standards**

The GRI is a nonprofit international institution. The GRI has the role of aiding companies, governments, and other organizations to understand and communicate about the economic, social, and environmental effects caused by their activities through the GRI Standards for SRs (NCSR, 2019). GRI is the most popular voluntary reporting guideline in the world. 63% of all companies that published business sustainability reports surveyed used the GRI standard as the reference (NCSR, 2019). GRI standard is composed of universal standards and specific topic standards. The universal standards are composed of GRI 101: Foundation, GRI 102: General Disclosures, and GRI 103: Management Approach, while specific topic standards are composed of GRI 200, GRI 300, and GRI 400. The GRI Standards include the (1) requirements, which is denoted using “shall” and bold font and it always presented inside a box, (2) recommendation, which is denoted using “should”, and (3) guidance, which is denoted by separate section. The composition of SRs in accordance with the GRI Standards for reporting can be executed according to two usage options that determine the quality and reliability of the SR of a company. The two options are “core” and “comprehensive”. With the “core” option, the SR of the company only needs to contain the bare minimum of information, while with the “comprehensive” option, the company is required to add other information in addition to the minimum of information as contained in the GRI Standards (NCSR, 2019). The required criteria in preparing a report in accordance with the GRI standards for both “core” and “comprehensive” option are explained in Table 1 in Section 3 of GRI 101 (NCSR, 2019). Through those tables we can also find the minimum criteria to meet in order to make SR in accordance with GRI standards. By using that table and the minimum requirements stated before we can assess the compliance of the company’s SR.

### **METHODS**

This research utilized the qualitative approach, as content analysis that was performed with the usage of the narrative method. According to Daiute & Lightfoot (2004) in Creswell (2016), narrative research has many forms, and it is rooted in different disciplines of humanities and social science. Narratives may refer to themes that are given to certain texts or discourses, or texts that are utilized in research contexts or forms in qualitative research (Chase, 2005). Narrative research, according to Schreiber & Asner-Self (2011), is a study about the lives of individuals as told through the stories of their experiences, including discussions about the meaning of experiences for individuals. According to Webster and Metrova (2007), narrative research is a research method in the social sciences. The point of this method is its ability to understand the identity and worldview of others by referring to the stories (narratives) that are heard or told in everyday activities.

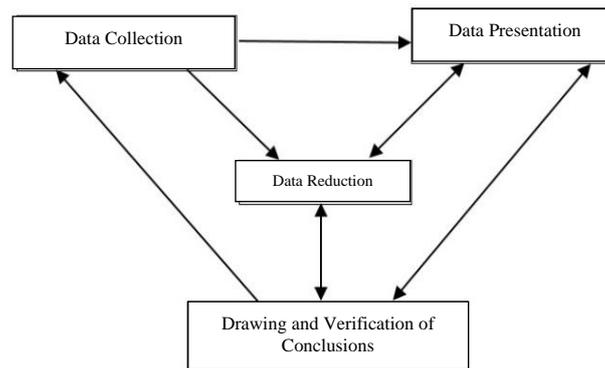
### **The Research Data**

The type and source of data that were utilized in this research were secondary data. The secondary data were obtained from the SRs of mining companies in Indonesia in 2017 which consist of PT Antam Tbk., PT Pertamina Persero and PT KPC. The standards that became the reference for this research was the GRI Standards from 2016, which is usually called GRI G4. Documentation research was also conducted with cases, studies, journals, policies, regulations, and laws related to CSR and SRs.

### **Data Analysis**

The data analysis in this research utilized the interactive model presented by Miles and Huberman (1992). The following is the flowchart of the interactive model according to Miles and Huberman (1992):

**Figure 1. Flowchart of the Interactive Model**



The following is the explanation of this research data analysis' components according to the Interactive Model above (Figure 1):

1. Data Collection

In this research, data collection was performed through content analysis of the SRs of mining companies in Indonesia. First, the research involved the analysis of whether the companies, in reporting their SRs based on the GRI Standards, selected the "core" or "comprehensive" option. After the choice was known, then a second analysis was performed on the data and criteria that had to be fulfilled by the companies when reporting their SRs in the manner of their selected choices. After finding out the appropriate criteria, then the SRs of the companies were analyzed for their compliance based on those criteria, which covers the criteria of minimum reporting standards, composed of universal standards and specific topic standards. The universal standards are composed of GRI 101: Foundation, GRI 102: General Disclosures, and GRI 103: Management Approach, while specific topic standards are composed of GRI 200, GRI 300, and GRI 400. In this research, all mining companies that became the representative of their sub-sectors reported their SRs based on the GRI Standards with the "core" option, and therefore, GRI 101 does not contain sub-standards even though it is composed of several sub-chapters. Regarding GRI 102, there are 33 required sub-standards that are mandatory to be disclosed in the company SR, out of a total of 56 standards. For GRI 103, there are 3 sub-standards that must be disclosed in the company SR, out of a total of 3 standards. Regarding the specific topic standards of GRI 200, GRI 300, and GRI 400, it becomes the choice of the company to decide which specific topics would be disclosed depending on the results of the preliminary study conducted by the company, and therefore for the standards, the number of points that would be disclosed would be different for each company. Next, the SRs of the companies were analyzed based on the sub-standards according to the required minimum criteria of reporting based on the "core" option (the statements were given box marks for each sub-standard explanation). Based on the minimum criteria of the sub-standards, the percentage of the level of compliance was calculated, thereby resulting in the percentage level of compliance that would be compared based on what was applied and not applied in the SRs of the companies. After the percentages of compliance were calculated per sub-standard, the levels of compliance were classified in a table and summarized.

2. Data Reduction

The reduction of data covers summarizing, selecting essential matters, focusing on important matters, seeking themes and patterns, and removing matters that are unnecessary for the research. By doing so, the data that had been reduced will provide a clearer picture and make it easier to perform further data collection, and to seek them if necessary. At this stage, the results of summarization and classification in the previous stage was reduced and then sorted and regrouped to find out the relevant parts, which then made it easier to illustrate the level of compliance of the companies toward the GRI Standards.

3. Data Presentation

The summarized data was presented in table form to make it easy for readers to understand the results. Next, the table is interpreted and explained. The presentation of the interpreted and explained data is in the form of explanation with text in a narrative manner.

4. Conclusion Drawing

At this stage, conclusions are made from the results of data analysis that had been performed. Drawing a conclusion in qualitative research may allow the resolution of the problem that was initially formulated. The conclusion in qualitative research is expected to constitute new findings that have not previously existed. The new findings may be in the form of descriptions or illustrations of objects that were previously unclear and through research becomes clearer.

**RESULTS AND DISCUSSION**

The objective of this research is to analyze the compliance of mining companies toward the obligation to publish an Enterprise Sustainability Report, or what is often called the Sustainability Report (SR), that is separate from the Annual Report. The SRs of many companies in Indonesia up to the present have utilized the standards issued by the GRI. Therefore, for this research, the GRI Standards of 2016 (GRI G4) were the selected standards for referencing the compliance of the mining companies. The SRs that were analyzed in this research are the SRs of mining companies in Indonesia, whether registered on the Indonesia Stock Exchange (IDX) or not. The mining companies were divided into four major sub-sectors: (1) coal, (2) oil and natural gas, (3) metals and minerals, and (4) rocks (BEI, 2020). For each of the four sub-sectors, one company was selected as the representative of the sector, for which the company published a separate SR from the annual report in 2017. The following are the representatives of each sub-

sector: (1)Coal was represented by PT Kalimantan Prima Coal (PT KPC), (2)Oil and natural gas was represented by PT Pertamina Persero, (3)Metals and minerals was represented by PT Antam Tbk., (4)Rocks was not represented and therefore was not analyzed because no SRs were found from companies in this sub-sector.

The following Table 1 is the results' summary of compliance analysis for the SR of PT KPC, PT Pertamina Persero, and PT Antam Tbk. toward the GRI Standards. From the results of analysis that had been conducted for this research, all companies that represent each sub-sector opted to compose their SRs with the "core" option.

**Table 1. The Compliance's Summary of the 2017 SRs Mining Companies toward the GRI Standards**

No.	Evaluation Criteria	GRI Standards Evaluation	Average % Level of Reporting		
			PT KPC	PT Pertamina Persero	PT Antam Tbk.
1	Claim or statement of SR disclosure based on the GRI Standards	Inclusion of the statement: "This report had been prepared according to the GRI Standards: Core Option"	100%	100%	100%
2	GRI 101: Foundation, to follow the basic process in preparing the sustainability report	Fulfillment of all requirements in part 2 of GRI 101: Foundation ('Usage of the GRI Standards for sustainability reporting').	54.55%	63.64%	61.54%
3	GRI 102: General Disclosures, to report contextual information about the organization	Fulfillment of all requirements for disclosure reporting by GRI 102: General Disclosures, as the following:	94.32%	94.35%	97.52%
		1. Disclosures 102-1 to 102-13 (Organizational Profile)	80.51%	70.26%	85.13%
		2. Disclosure 102-14 (Strategy)	100%	100%	100%
		3. Disclosure 102-16 (Ethics and Integrity)	100%	100%	100%
		4. Disclosure 102-18 (Management)	100%	100%	100%
		5. Disclosures 102-40 to 102-44 (Involvement of stakeholders)	100%	100%	100%
		6. Disclosures 102-45 to 102-56 (Reporting Practices)	85.42%	95.83%	100%
4	GRI 103: Management Approach, to report methods of management and limits of topics for all material topics (covering what are included and not included in the GRI Standards)	For each material topic, compliance of all reporting requirements of GRI 103: Management Approach. Reasons for non-disclosure are only permitted for Disclosures 103-2 and 103-3.	93.57%	100%	100%
5	GRI Standards for specific topics (200, 300, and 400 series) to report material topics	For each material topic covered by the GRI Standards for specific topics: compliance with all reporting requirements for the "disclosure of management approach" section and compliance with all reporting requirements for at least one specific topic disclosure. Reasons for non-disclosure are permitted for all disclosures of specific topics.	93.15%	63.18%	72.87%
6	Ensuring that reasons for non-disclosure are utilized appropriately, if present	Inclusion of reasons for non-disclosure (if present)	0%	0%	0%

No.	Evaluation Criteria	GRI Standards Evaluation	Average % Level of Reporting		
			PT KPC	PT Pertamina Persero	PT Antam Tbk.
7	Informing the GRI about the usage of GRI Standards	appropriately according to GRI requirements Informing the GRI about the usage of the GRI Standards for the SR	100%	100%	100%
<b>Overall Average Level of Reporting Based on the GRI Standards</b>			<b>84.73%</b>	<b>83.64%</b>	<b>85.93%</b>

#### Coal Sub-Sector: PT Kalimantan Prima Coal (KPC)

The results of evaluation of all elements present in the SR of PT KPC showed an average level of 84.73%. This means that the compliance or appropriateness of PT KPC in composing an SR based on the GRI Standards with the “core” option is still not yet 100%. The criteria to claim that a report has been prepared according to the GRI Standards based on the “core” option is the compliance of the company toward all criteria of minimum information disclosure on enterprise sustainability as explained in GRI 101: Foundation 2016. In each SR created according to the GRI Standards, the company must have already included an index or table of contents that refer to the GRI minimum standards based on the “core” option along with the associated page numbers, making it easy for users of the SR to seek for the required information. However, based on the results of this research, it turns out that not all the standards referred in the index or table of contents have fulfilled the minimum standards of content as delineated for each standard (for the statements that are given box marks).

Based on the results of the analysis for this research, PT KPC has fully (100%) complied with GRI Standards in relation to the core criteria of the claim or statement of SR disclosure based on the GRI Standards and informing the GRI regarding the usage of the GRI Standards. Regarding the other criteria, PT KPC has not fully disclosed the minimum criteria for an SR based on the GRI Standards with the “core” option. This includes GRI 101 on the disclosure of the foundation to apply the basic process in preparing a sustainability report. The compliance of PT KPC toward all requirements in Part 2 of the GRI 101 on the Usage of the GRI Standards for sustainability reporting is still 54.55%. This means that PT KPC has not fully disclosed about the principles of reporting that have been applied, disclosures that have been made to provide contextual information about the organization, and each material topic that has been identified and reported. In addition, in relation to GRI 102 on the general disclosure to report contextual information regarding the organization, PT KPC has disclosed only 94.32%, in that PT KPC has not yet fully disclosed its organizational profile and its reporting practices. In relation to GRI 103 on the management approach to report management methods and limitations of topics for all material topics (covering matters that are included and not included in the GRI Standards), PT KPC has complied by 93.57%, with the standards that have not been completely disclosed being GRI 103-1 and 103-3. The GRI Standards for specific topics (200, 300, and 400 series) for the reporting of material topics has been complied by 93.15%, with the standards that have not been completely disclosed being 201-1, 302-4, 302-5, 401-2, and 413-1. Based on the results of the analysis, the SR of PT KPC did not include the reason for not including the points of minimum disclosure, although not all standards were disclosed in full.

#### Oil and Natural Gas Sub-Sector: PT Pertamina Persero

Table 2 shows the details of the results for evaluating the compliance of the SR of PT Pertamina Persero toward the GRI Standards with the “core” option.

The average compliance of the SR of PT Pertamina Persero toward the GRI Standards is 83.64%. This score is not much better when compared to the compliance score for the SR of PT KPC. The score means that the compliance or appropriateness of the SR of PT Pertamina Persero, as the representative of the sub-sector for oil and natural gas, toward the GRI Standards with the “Core” option, is still not 100%. The SR of PT Pertamina Persero has included an index or table of contents that refers to the minimum GRI Standards based on the “core” option with the referred pages. However, as with the SR of PT KPC, based on the results of this research, not all the standards referred in the index or table of contents have fulfilled the minimum standards of content as delineated for each standard (for the statements that are given box marks). Based on the results of the analysis for this research, PT Pertamina Persero has fully (100%) complied with the three standard points of the GRI Standards that relate to the core criteria of the claim or statement of SR disclosure based on the GRI Standards, GRI 103 on the management approach to report management methods and limitations of topics for all material topics (covering matters that are included and not included in the GRI Standards), and informing the GRI about the usage of the GRI Standards. In relation to the other criteria, PT Pertamina Persero has not fully disclosed all the minimum criteria for an SR based on the GRI Standards with the “core” option. This includes GRI 101 on the disclosure of the foundation to apply the basic process in preparing a sustainability report. The compliance of PT Pertamina Persero toward all requirements in Part 2 of the GRI 101 on the Usage of the GRI Standards for sustainability reporting is still 63.64%. This means that PT Pertamina Persero has not fully disclosed about the principles of reporting that have been applied, disclosures that have been made to provide contextual information about the organization, and each material topic that has been identified and reported. In addition, in relation to GRI 102 on the general disclosure to report contextual information regarding the organization, PT Pertamina Persero has disclosed only 94.35%, as PT Pertamina Persero has not yet fully disclosed its organizational profile and its reporting practices, as with the SR of PT KPC. The GRI Standards for specific topics (200, 300, and 400 series) for the reporting of material topics still has a low compliance by 63.18%, with the standards that have not been completely disclosed being 201-1, 205-2, 205-3, 302-1, 305-5, 403-2, 403-4, 404-1, and 413-1. Based on the results of the analysis, as with PT KPC, the SR of PT Pertamina Persero did not include the reason for not including the points of minimum disclosure, although not all standards were disclosed in full.

**Metals and Minerals Sub-Sector: PT Antam Tbk.**

Table 3 shows the detailed results of compliance evaluation for the SR of PT Antam Tbk toward the GRI Standards with the “core” option.

The overall average level of compliance of the SR of PT Antam Tbk toward the GRI Standards is 85.93%. This score is the best score in comparison to the compliance score for the SRs of PT KPC and PT Pertamina Persero. However, this also means the compliance or appropriateness of the SR of PT Antam Tbk, which represents the sub-sector of metals and minerals toward the GRI Standards with the “core” option, is also still not 100%. As with the SRs of PT KPC and PT Pertamina Persero, the SR of PT Antam Tbk also has already included an index or table of contents that refer to the GRI minimum standards based on the “core” option, along with the associated page numbers. Yet, not all the standards that are referred in the index or table of contents have fulfilled the minimum standards of content as delineated for each standard. Based on the results of analysis for this research, PT Antam Tbk has 100% complied with the three standard points of the GRI Standards related to the core criteria of the claim or statement of SR disclosure based on the GRI Standards, GRI 103 on the management approach to report management methods and limitations of topics for all material topics (covering matters that are included and not included in the GRI Standards) and informing the GRI about the usage of the GRI Standards. Regarding the other criteria, PT Antam Tbk has not fully disclosed the minimum criteria of an SR based on the “core” option for GRI standards. This includes compliance toward GRI 101. The compliance toward GRI 101 covers the compliance of PT Antam Tbk toward all the requirements in Part 2 of the GRI 101, which is still 61.54%. The next point that has not been fully complied by PT Antam Tbk is GRI 102, which regards the general disclosure to report contextual information regarding the organization and is still 97.52%. In relation to GRI 102, PT Antam Tbk still has not fully disclosed its organizational profile. Another point that has not been complied by PT Antam Tbk is the GRI Standards for specific topics (200, 300, and 400 series), which is still relatively low at 72.87%, with the standards that have not been completely disclosed being GRI Standards 102-10, 205-2, 302-1, 302-3, 303-1, 303-3, 304-3, 305-1, 305-3, 306-1, 306-2, 401-1, 401-2, 403-2, 405-2, and 413-1. The final point that has not been fully complied by PT Antam Tbk is that in the SR, PT Antam Tbk did not include the reason for not including the points of minimum disclosure despite that not all standards were disclosed in full.

**Discussion**

The following is a table that compares the level of compliance for the SRs of PT KPC, PT Pertamina Persero, and PT Antam Tbk.

**Table 2. Comparison of Compliance Evaluations of the 2017 SRs of PT KPC, PT Pertamina Persero, and PT Antam Tbk.**

No.	Evaluation Criteria	Average % Level of Reporting			Overall Average Level of Reporting
		PT KPC	PT Pertamina Persero	PT Antam Tbk.	
1	Claim or statement of SR disclosure based on the GRI Standards	100%	100%	100%	100%
2	GRI 101: Foundation, to follow the basic process in preparing the sustainability report	54.55%	63.64%	61.54%	59.91%
3	GRI 102: General Disclosures, to report contextual information about the organization	94.32%	94.35%	97.52%	95.40%
4	GRI 103: Management Approach, to report methods of management and limits of topics for all material topics (covering what are included and not included in the GRI Standards)	93.57%	100%	100%	97.86%
5	GRI Standards for specific topics (200, 300, and 400 series) to report material topics	93.15%	63.18%	72.87%	76.40%
6	Ensuring that reasons for non-disclosure are utilized appropriately, if present	0%	0%	0%	0%
7	Informing the GRI about the usage of GRI Standards	100%	100%	100%	100%
<b>Total</b>		<b>83.64%</b>	<b>84.73%</b>	<b>85.93%</b>	<b>84.77%</b>

Based on the results of analysis in this research, the highest level of compliance was found for PT Antam Tbk with 85.93%, followed by PT Pertamina Persero with 84.73% and PT KPC in last place with a level of compliance of 83.64%. This research found that PT Antam Tbk. is the most comply with GRI G4 2016 if it is compared with PT KPC and PT Pertamina Persero. Abdul & Ariwendha (2017) on their research had also concluded that PT Antam's CSR performance in 2006 - 2016 is good on average. PT Antam Tbk. as the most comply company is the only listed company in this research. It seems that PT Antam Tbk. try it best to comply the standards to maintain its reputation in front of investors. Based on that result, it can infer that the application of environmental accounting in Indonesia is based on reputation not on awareness and responsibility (Suryani & Rofida, 2020; Rainsbury et al., 2016; Li & Zhang, 2010). The average level of reporting for the three mining companies is still 84.77%. This result is nearly the same with the research’s result of Fuadah and Budiman (2017), which was found that PT Bukit Asam (PTBA) Tanjung Enim (one of Indonesian mining company) had complied GRI G4 by 82% in the year of 2014. The result of this research is also supported by (Anggraeni & Djakman, 2018) which was found that even most of Indonesian corporation use GRI as their SRs standard, but the disclosure did not adequately cover all of the information needs by stakeholders.

Based on the results of this research, there are certain patterns of compliance in the SRs of mining companies toward the GRI Standards. One of them is that the three companies have 100% complied regarding the claim or statement of SR disclosure based on the GRI Standards and has informed the GRI about the usage of GRI Standards. The compliance of the mining companies toward GRI 101 has the lowest level of compliance among all the standards, being still at an average level of 59.91%. In relation to GRI 101, the three companies still have not disclosed all the requirements in Part 2 of GRI 101 that regards the foundation of utilizing GRI for sustainability reporting. Next, the level of compliance of mining companies toward GRI 102, which is composed of 33 sub-standards, is relatively good with an average of 95.40%. Regarding GRI 103, the average compliance of the three companies is quite high, being 97.86%. On the other hand, the compliance of the three mining companies toward the requirement of specific topics (200, 300, and 400 series) that they had determined is still relatively low, being 76.40%. Based on this research, the SRs of the three mining companies did not comply with the requirement that for every GRI Standard that is required to be disclosed but is not, the reason must be explained. PT KPC, PT Pertamina Persero, and PT Antam Tbk did not explain the reason why they did not disclose them at all. Therefore, the evaluation result is a score of zero.

From this analysis, it can then be said that mining companies in Indonesia, which are represented by PT KPC, PT Pertamina Persero, and PT Antam Tbk, have not fully complied with the requirements of sustainability reporting based on the GRI Standards with the “core” option and an average level of reporting of 84.77%. The results of this research are in accordance with another research conducted by Pratama, Adam, & Kamardi (2019) who also found that the quality of the social responsibility disclosure of companies listed on the IDX in 2017 as present in their annual reports based on the GRI Standards is still at the mediocre level. The results of this research are also in line with Azzouz & Jack (2020) who found that the factors of the environment and social economy have not been fully disclosed in the SRs of companies of high-speed railways (HSR). In addition, it was also mentioned that the level of involvement as indicated by companies in Indonesia as contained in their separate annual reports and SRs is still low, although there has been an increasing trend over a period of five years from 2012 to 2016 (Adhariani & Siregar, 2018). Furthermore, according to their research, the increased awareness and involvement of companies, as disclosed in their annual reports and SRs, can provide encouragement to maintain the stability of financial performance, as the profits of the companies. Therefore, with the results of this research, it is expected that the authorities in charge can create or establish particular standards regarding SRs in Indonesia in order to have a better way of measuring compliance by way of uniform standards. Additionally, the authorities in charge should also be able to supervise the SRs of mining companies with emphasis on parts of their reports that still have a low level of compliance, such as GRI 101 and GRI Standards for specific topics (200, 300, and 400 series). The presence of this compliance may be able to support the application of Integrated Reporting in Indonesia, for which the format has already reached 60% conformity with SRs that are present in Indonesia (Adhariani & Sciulli, 2020).

## MANAGERIAL IMPLICATIONS

Based on the results of this research, mining companies should be able to increase the compliance of the content of their SRs toward the GRI Standards, which have become the standards for reporting. Mining companies can focus on the points of reporting with low compliance, such as GRI 101 and GRI Standards for specific topics (200, 300, and 400 series), while improving other parts of the reports that are still not 100% compliant. The mining companies still peruse the “core” option, which means that they only need to meet the minimum criteria for disclosure and reporting in the SRs they compose. Considering that mining companies are entities that conduct business activities through the exploration of nature, these companies may actually have a greater chance to cause environmental damage if their business activities do not pay attention to “green entity” standards that should have been able to accommodate the sustainability of the environment, society, and their associated people. The Sustainability Reporting and Organizational Change Management for Sustainability have reciprocal reinforcing relationships, where Sustainability Reporting provides a starting point for planning organizational change for sustainability and organizational change for sustainability improves the reporting process (Lozano et al., 2016). Therefore, if the company fully comply to this mandatory SR, it will also support the company’s business sustainability and its surrounding’s environment.

## CONCLUSION

The objective of this research is to conduct further analysis on the quality and appropriateness or compliance of SRs that are created by mining companies in Indonesia according to the GRI Standards. This research has the specific objective of providing input to the regulator as materials of consideration to improve policies and regulations related to SRs. The research utilized the qualitative approach with the narrative method, which was then synthesized to result in a thorough conclusion. The data for this research consisted of the SRs of mining companies in 2017 who reported their SRs based on the 2016 GRI Standards (GRI G4). The mining companies who opted to utilize the GRI Standards did so with the “core” option. GRI Standards with the “core” option means that the utilized standards for the creation of the SRs are only those that meet the minimum criteria for disclosure, not the complete reporting of all standards as would be for the “comprehensive” option. The findings of this research showed that the level of reporting quality of the SRs of mining companies in Indonesia is still not 100% compliant, with an average level of 84.77% with the “core” option. Based on the results of analysis for this research, the highest level of compliance was found for PT Antam Tbk, representing the sub-sector of metals and minerals, with 85.93%, followed by PT Pertamina Persero, representing the sub-sector of oil and natural gas, with 84.73%, and lastly PT KPC, representing the sub-sector of coal, with a compliance of 83.64%. The lowest levels of reporting compliance were for the reporting of GRI 101: Foundation, followed by GRI Standards for specific topics (200, 300, and 400 series). Therefore, there needs to be improvements in the quality of the reporting of SRs with the criteria of the “core” option for 100% compliance, and this may even be increased by choosing the “comprehensive” option and implementing the reporting of all criteria based on the GRI Standards of 2016. Furthermore, it is expected that with the results of

this research, the authorities in charge can create or establish specific and uniform standards regarding the reporting of SRs in Indonesia for measuring the compliance of those reports. Moreover, the authorities in charge should also be able oversee the SRs of mining companies and put particular emphasis on the reporting of criteria that still have low levels of compliance, such as for GRI 101 and GRI Standards for specific topics (200, 300, and 400 series).

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