

Environmental Accounting Disclosures Related to IFRS S1 and IFRS S2 Policies: Evidence on Hospital Companies Listed on the Indonesia Stock Exchange

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Abstract:

This study aims to evaluate environmental accounting disclosures related to IFRS S1 and IFRS S2 policies in hospital companies listed on the Indonesia Stock Exchange. The method carried out is qualitative descriptive with an evaluation approach to the company's sustainability report that is published. The results of the study show that the majority of hospital companies have disclosed their environmental costs and sustainability aspects according to IFRS S1 standards because they comply with the rules that apply in Indonesia, namely the Financial Services Authority Regulation Number 51/POJK.03/2017 and The Global Reporting Initiative 2021. However, there are still few companies that disclose aspects of IFRS S2 related to climate because they have not been regulated in the regulations that apply in Indonesia in the publication of company reports. Now, after the issuance of the IFRS S2 standard, the government should adjust the rules related to company reporting. Companies should also be more aware in reporting the climate impact of their business activities.

Keywords: IFRS S1, IFRS S2, environmental accounting, hospitals

I. INTRODUCTION

The hospital industry in Indonesia, which has an important role in the public health service sector, is now required to minimize the negative impact on the environment. The reason is that the increase in the number of people every year has the potential to increase the number of patients which then causes dangerous medical waste. The latest data from the Ministry of Health of the Republic of Indonesia shows that the hospital industry produces 376 thousand tons of solid waste and 48 thousand tons of liquid waste per day. In 2021, around 138 tons of medical waste were recorded that were not properly managed, especially since Covid-19 resulted in an increase in the amount of medical waste produced. In terms of regulations, there are still many districts/cities that do not have regional regulations on medical waste management. In addition, hospitals also produce greenhouse gas emissions and high energy consumption. Quoted from data from *the Indonesia Environment Center* in 2023, greenhouse gases will have an impact on global warming, melting ice and changes in extreme weather patterns.

Not only in Indonesia, sustainability and climate issues are also a concern at the global level. *The International Sustainability Standard Board (ISSB)* in 2023 has published two sustainability reporting

standards, namely IFRS S1 and IFRS S2. IFRS S1 contains disclosures of sustainability-related risks and opportunities relevant to economic decision-making by investors, while IFRS S2 contains disclosures of risks and opportunities related to climate change. The implementation of these standards allows companies, including hospitals, to systematically report on their environmental performance and manage sustainability risks.

However, in Indonesia, the application and disclosure of environmental accounting in the hospital industry is still limited. This is due to various challenges, such as a low understanding of hospital management about the importance of environmental reporting, a lack of regulations that require environmental accounting, and a lack of incentives from the government and the private sector. In fact, the implementation of environmental accounting mechanisms in accordance with IFRS S1 and IFRS S2 standards will provide long-term benefits, including improved hospital reputation, reduced operational costs through energy efficiency and better waste management. Disclosure is also important to increase investor and stakeholder confidence in hospitals that implement these standards.

This study will analyze the extent of environmental accounting disclosure in hospitals in Indonesia and how IFRS S1 and S2 standards can be effectively adopted to improve sustainability performance. This research is expected to provide useful insights for the hospital industry, regulators, and other stakeholders in an effort to overcome environmental challenges and achieve sustainable development goals.

II. LITERATURE REVIEW

The theory that is the basis of this research is the theory of legitimacy. The theory of legitimacy explains how a company or organization ensures that its business operations adhere to the norms and values in society (Sumaryati & Pratiwi, 2014). In addition, according to Setyowati May et al., (2024) if the legitimacy of a company is questioned, then an alternative that can be taken to fight is to change and influence the expectations of external parties with the company's performance in the community and environment. According to Nining, Alimuddin et al., (2024) this theory is one of the theories that can help stakeholders in making long-term decisions. This theory also explains that corporate sustainability can be achieved if the community also understands that the company or organization has carried out operations in accordance with the values that exist in the community. In the context of environmental sustainability, the theory of legitimacy encourages companies to disclose or report on their activities in preserving the environment through sustainability reports. The company informs the public that the company continues to prioritize the environment in its operations. Sustainability reporting reflects the company's concern for the environment and can strengthen the company's relationship with stakeholders.

According to Ratulangi et al., (2018) environmental accounting is a service activity that has a role in providing information as a company's response to problems that threaten the place where the company's operational activities take place. Overall, environmental accounting not only aims to comply with regulations, but also provides strategic value to the company by improving efficiency, reducing environmental risks, and improving its reputation in the eyes of stakeholders and the public. Environmental accounting is closely related to the sustainability and climate context contained in IFRS S1 and IFRS S2. In international accounting standards, IFRS S1 and IFRS S2 play an important role in strengthening sustainability disclosures. IFRS S1 focuses on reporting sustainability information that is materially relevant to a company's financial statements, while IFRS S2 focuses on disclosing climate-related risks and opportunities, including their impact on a company's financial performance. The disclosure of IFRS S1 and IFRS S2 standards on companies aims to convey information about risks and

opportunities related to sustainability and climate that is useful for stakeholders in making decisions. The company's dependence on resources and the impact of the company's operations on resources, will pose risks and opportunities for the company's operational continuity (*going concern*).

Several studies have explored the application of IFRS S1 and S2 in hospitals showing a significant impact on financial reporting management and transparency. Research by Hossain and Rahman (2019) shows that the implementation of IFRS S1 in hospitals increases the transparency of financial statements. In their study titled "The Impact of IFRS Adoption on Financial Reporting in Hospitals: Evidence From Bangladesh," it was found that hospitals that implemented IFRS S1 tended to have higher accountability. Meanwhile, research by Arifin and Purnamasari (2020) on the application of IFRS S2 in the management of drug and medical device supplies in hospitals shows that the implementation of IFRS S2 helps hospitals manage inventory more efficiently and has a positive impact on financial performance. In contrast to the previous two studies, research by Wijaya and Rahayu (2020) found that the implementation of IFRS S1 in hospitals did not provide a significant improvement in the quality of financial statements. In a study titled "Assessing the Impact on Financial Reporting in Hospital: A Critical Analysis," it was found that many hospitals still have difficulty implementing the standard, so information disclosure remains low.

III. THE METHOD

This research is a qualitative descriptive research that aims to understand phenomena and describe the conditions that occur in the field. An evaluation approach is used in this study to assess the extent to which a company has implemented and disclosed environmental accounting as a form of readiness in adapting IFRS S1 and IFRS S2 standards. This research uses secondary data obtained from the official website of the Indonesia Stock Exchange (IDX), namely www.idx.co.id. The population used is hospital companies listed on the IDX. The sampling technique is carried out using the purposive sampling method on hospital companies that publish sustainability reports as of 2023, then 12 companies that meet these criteria are obtained. This study uses an evaluation method by analyzing environmental accounting disclosures in the company's sustainability report which is evaluated based on the criteria of IFRS S1 and IFRS S2 standards. Below is a table of companies in the hospital industry listed on the IDX as of 2023 which are the research samples.

Table- II: Hospital Companies Listed on the IDX in 2023

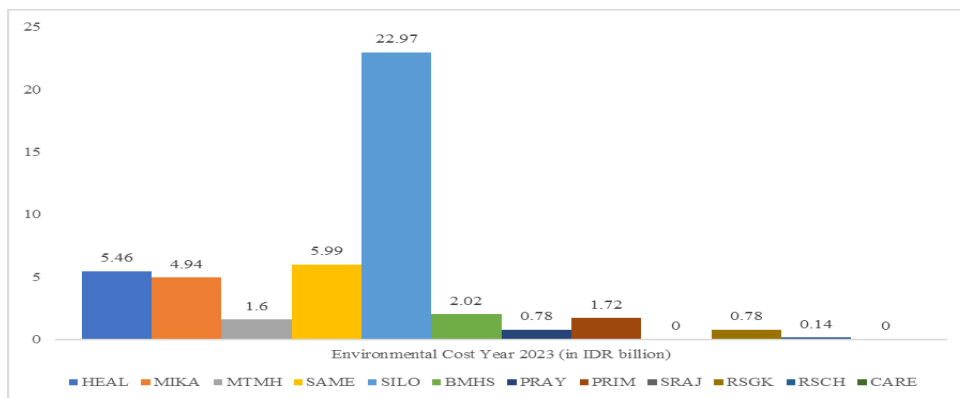
No	Company Code	Company Name
1	HEAL	PT Medialoka Hermina Tbk
2	MIKA	PT Mitra Keluarga Karyasehat Tbk
3	MTMH	PT Murni Sadar Tbk
4	SAME	PT Sarana Meditama Metropolitan Tbk
5	SILO	PT Siloam International Hospitals Tbk
6	BMHS	PT Bundamedik Tbk
7	PRAY	PT Famon Awal Bros Sedaya Tbk
8	PRIM	PT Royal Prima Tbk
9	SRAJ	PT Sejahtera Anugerahjaya Tbk
10	RSGK	PT Kedoya Adyaraya Tbk
11	RSCH	PT Charlie Hospital Semarang Tbk
12	CARE	PT Metro Healthcare Indonesia Tbk

Source: www.idx.co.id

IV. RESULT AND DISCUSSION

The results of the study show that all hospital companies listed on the IDX as of 2023 have published their sustainability reports. In the sustainability report, the company's disclosure related to environmental accounting and its compliance with IFRS S1 and IFRS S2 standards will be assessed. The core topics that need to be disclosed in the IFRS S1 standard are corporate governance, strategy, risk management, and sustainability targets. Similar to IFRS S2, the topics that need to be disclosed are governance, strategy, risk management, and corporate climate targets.

Environmental accounting in a company involves the identification and disclosure of environmental costs in accounting records (Santoso, 2015). Chopparapu & Lewis (2017) stated that environmental accounting also plays a role in the cost of better energy, water, and waste management. This is closely related to the IFRS S1 standard which focuses on the company's financial sustainability. Of the 12 hospital companies studied, 83.33% or 10 companies have disclosed their environmental costs. PT Metro Healthcare Indonesia Tbk and PT Sejahtera Anugerahjaya Tbk in their report only stated that the company has expenses for environmental conservation efforts, but did not mention the nominal amount. Meanwhile, the highest environmental cost reported by PT Siloam International Hospitals Tbk amounted to IDR 22.97 billion which was used for environmental management and monitoring programs, the implementation of environmental management systems, and waste management. Followed by PT Sarana Meditama Metropolitan Tbk with an environmental cost of IDR 5.99 billion which is used for the procurement of environmentally friendly assets, environmental impact assesment testing, crop management, and waste treatment. The third position with the highest environmental cost is PT Medialoka Hermina Tbk with IDR 5.46 billion for environmental conservation activities. However, no company has yet presented environmental accounting records in a special section of the company's report that contains details of environmental costs and environmental impacts produced.



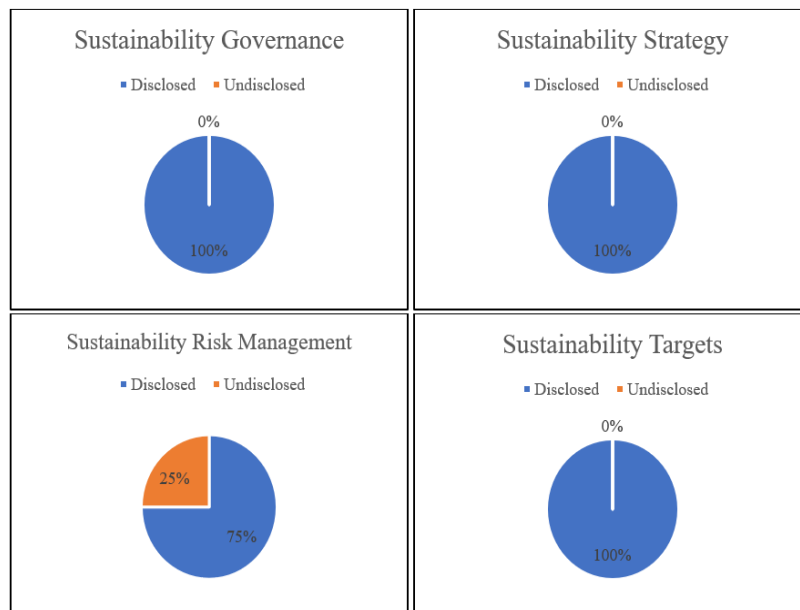
Graph 1. Environmental Cost on Indonesian Hospitals in 2023

Source: author's data processed

Apart from environmental costs, environmental accounting measurements can also be made based on the disclosure of environmental impacts caused by company operations (Tu & Huang, 2015). This is in line with Deegan's (2013) statement that environmental accounting identifies the use of resources and their impact on the environment. This topic is related to the IFRS S2 standard on climate. In Indonesia, based on the index of Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies,

the disclosure of environmental impacts in a company's sustainability report is included in the "Disclosure of Environmental Aspects" section. Of all the hospitals studied, 91.67% of companies have used POJK No. 51/POJK.03/2017 in their sustainability reports. One company, PT Sarana Meditama Metropolitan Tbk, uses reporting based on sustainable accounting standards published by the *Sustainability Accounting Standards Board (SASB)*. Meanwhile, PT Kedoya Adyaraya Tbk uses both standards. Based on the results of the research, all companies have disclosed environmental aspects that include disclosure of environmental impacts, such as energy use, emissions and waste produced, as well as environmental conservation efforts.

One of the goals of environmental accounting is as a public communication medium to convey that the company is serious about improving its environmental performance (Anggraeni & Sisdianto, 2024). In line with this, IFRS S1 and IFRS S2 also aim to disclose information on sustainability and climate-related risks and opportunities that are useful to stakeholders. The disclosure of IFRS S1 consists of four aspects, namely sustainability governance, strategies in managing sustainability risks and opportunities, sustainability risk management, and sustainability targets. Below are the conditions for the disclosure of the four aspects of IFRS S1 in the hospital sustainability report in Indonesia.



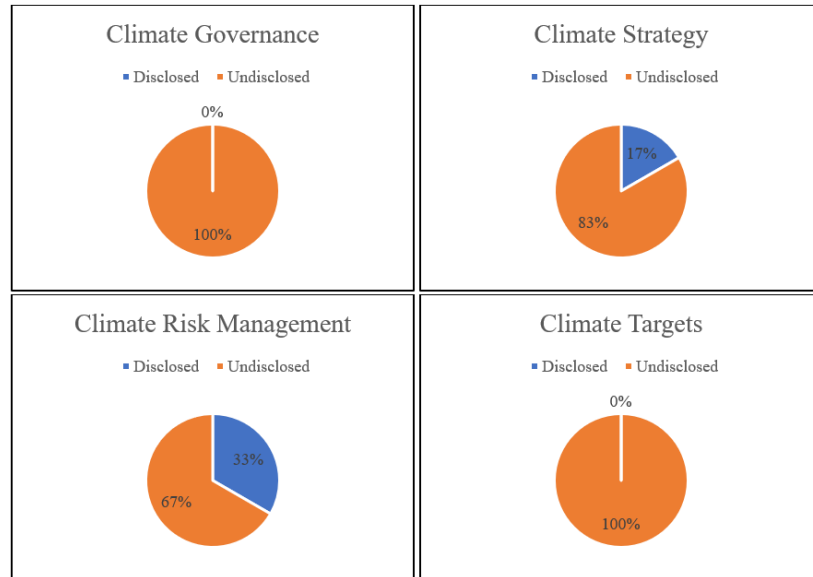
Graph 2. IFRS S1 Disclosures on Indonesian Hospitals in 2023

Source: author's data processed

In the hospital companies in Indonesia that were studied, in general, they have adopted sustainability reporting standards from POJK No. 51/POJK.03/2017 and the *Global Reporting Initiative (GRI) Content Index*. There is a conformity between the reporting standards of POJK No. 51 of 2017 and GRI with IFRS S1, namely: sustainability governance (POJK 5.A; GRI 2-9; GRI 2-12; and GRI 2-14), strategies in managing sustainability risks and opportunities (POJK 1), sustainability risk management (POJK 5.C), and sustainability targets (POJK 5.E). Thus, in general, aspects of IFRS S1 have also been disclosed in the sustainability reports of the companies studied.

The same is true for the disclosure of IFRS S2 which also consists of four aspects, namely climate governance, strategies in managing climate risks and opportunities, climate risk management, and climate

targets. Below are the conditions for the disclosure of the four aspects of IFRS S2 in the hospital sustainability report in Indonesia.



Graph 3. IFRS S2 Disclosures on Indonesian Hospitals in 2023

Source: author's data processed

In the hospital companies in Indonesia that were studied, in general, they have not reported the four aspects of IFRS S2. This is because the applicable standards in Indonesia do not require companies to disclose climate-related content in their sustainability reports. However, there are few hospital companies that have taken the initiative to disclose about the climate, especially in companies that have adopted the SASB standard. PT Sarana Meditama Metropolitan Tbk and PT Kedoya Adyaraya Tbk in their sustainability reports have adopted the SASB standard which contains the content "The Impact of Climate Change on Human Health". This content relates to the IFRS S2 standard on climate disclosure and corporate readiness to respond to climate change. PT Sarana Meditama Metropolitan Tbk stated that it is committed to facing climate change and has identified climate risks. Strategies carried out to reduce climate impacts are improving energy efficiency, reducing greenhouse gas emissions, and integrating environmentally friendly practices in. Then, PT Kedoya Adyaraya Tbk also stated its commitment to facing climate change through the implementation of *the Green Hospital* Program which is designed to minimize the negative impact of hospitals on the environment. The climate strategy carried out by PT Kedoya Adyaraya Tbk includes efforts to reduce energy consumption and waste production, as well as support environmentally friendly products to create a sustainable health service system.

The next company, PT Sejahtera Anugerahjaya Tbk, although it does not use SASB standards, has carried out risk management to mitigate climate change by transforming towards a green hospital. PT Sejahtera Anugerahjaya Tbk is committed to conducting Life Cycle Impact Analysis, selecting environmentally friendly medical equipment, and implementing the Green Building concept. PT Sejahtera Anugerahjaya Tbk also conducts water efficiency in the midst of long dry climate conditions. To reduce the impact of climate change, PT Sejahtera Anugerahjaya Tbk has transitioned boiler fuel from diesel to Compressed Natural Gas (CNG) and installed solar PV. Another hospital company that has not adopted SASB but has disclosed the climate aspect is PT Bundamedik Tbk. PT Bundamedik Tbk disclosed the risks of climate

change experienced and carried out several mitigation measures, such as awareness to all employees and patients of PT Bundamedik Tbk to use electricity and water sparingly and to sort organic, non-organic, medical and non-medical waste to be managed by independent parties who have permits. However, none of the hospital companies studied have yet to disclose climate governance and climate targets they want to achieve, whether they have adopted SASB or not.

V. CONCLUSION

All IDX-listed hospital companies have published their sustainability reports. The Company has also complied with the index of Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, as well as the index by The Global Reporting Initiative (GRI) in 2021. The two rules have apparently contained content on sustainability in all four aspects of the IFRS S1 standard. Thus, the majority of hospital companies studied have also disclosed aspects of the IFRS S1 standard. However, the implementation of IFRS S2 standards has not been included in the rules for making corporate sustainability reports in Indonesia. Thus, most companies have not reported all four aspects of the IFRS S2 standard. However, there are several companies that have adopted the standard by *the Sustainability Accounting Standards Board (SASB)* where the standard contains aspects of the company's readiness to face climate change.

The researcher provides several recommendations for companies. First, implementing environmental accounting in a special section of the company's report, which compares environmental costs with the resulting environmental impacts. Then, revealing the climate aspect according to IFRS S2 standards, because hospitals with high greenhouse gas emissions and medical waste will have a great impact on the environment and climate. For the government, the recommendation given is to make adjustments to the POJK regarding corporate reporting by including climate aspects according to IFRS S2 standards so that companies can ensure whether the reports made are in accordance with the standards. This is done to minimize the opportunity for *greenwashing* carried out by the company.

The limitation of this study is that in the sample studied, only hospital companies are listed on the Indonesia Stock Exchange in 2023. The next research is expected to examine other sectors, such as the chemical sector which also contributes emissions and waste to the environment and has a major impact on the climate.

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