CHAPTER I

INTRODUCTION

1.1 Background of Study

Climate change and global warming have been prominent subjects of discussion for an extended period. The phenomenon of global warming is primarily caused by the accumulation of greenhouse gases, with carbon dioxide (CO_2) being the dominant contributor, predominantly emitted through human activities (Raihan et al., 2022). This human activity, since the beginning of the second industrial revolution in 1870, has been marked by mass production that relied heavily on burning fossil fuels and electricity generation. Power plants, cement production, and fossil fuels consumption in many homes has released large amounts of CO_2 into the atmosphere (Cahyono et al., 2022).

The global atmospheric, in this case the CO_2 levels have swiftly risen, going from 280 parts per million (ppm) during the pre-industrial era to 403 ppm by 2016, experiencing an annual increment of 2 ppm (Fasihi et al., 2019). Indonesia generates roughly 15 to 20 million tons of carbon emissions daily, ranking it as the sixth-largest contributor of carbon emissions among countries. (Nursulistyo et al., 2023). Nearly 13% of the world's tropical peatlands are situated in Indonesia. These peatlands are a vital repository of terrestrial carbon, and if disrupted, there could be an expedited decomposition process, releasing stored carbon into the atmosphere in the form of greenhouse gas emissions, particularly CO_2 (Surahman et al., 2018).

Then in this case, in order not to expand the threat of further environmental destruction and reduce the problems that have occurred, the government do efforts to prevent and/or reduce all challenges and threats that have a direct impact on the environment, one of which is making regulations for the companies who is the business activity is concerned will add to environmental damage. These companies must understand and willing to communicate their contribution to global warming which mostly results from carbon emissions. (Choi et al., 2013). The wide-range effort in making the regulations are on an international scale which is the signing of the United Nations Framework Convention on Climate Change (UNFCCC). This is the United Nations organization responsible for assisting the worldwide effort in addressing the challenge of climate change. UNFCCC was founded in 1992, and its initial headquarters were located in Geneva. Then, since 1996, the secretariat has been located in Bonn, Germany. This entity has universal membership of around 199 parties and is the parent treaty of the 2015 Paris Agreement and 1997 Kyoto Protocol.

The Paris Agreement is a binding international treaty aimed at addressing climate change. It was adopted by 196 parties in Paris on December 12, 2015, and officially became effective on November 4, 2016. The objective of this agreement is to limit the increase in the global average temperature to approximately 1.5°C above pre-industrial levels, with the peak temperature occurring no later than 2025 and a reduction of at least 43% by 2030. The 1997 Kyoto Protocol was adopted on December 11, 1997, and became effective on February 16, 2005. The overarching goal of the UNFCC, Paris Agreement, and 1997 Kyoto Protocol is to maintain greenhouse gas (GHG) levels in the atmosphere at a point that prevents harmful human interference with the climate system. This should be achieved within a timeframe that permits natural ecosystem adaptation and supports sustainable development.

In implementing the international agreements that have been agreed upon, one of the things that the countries can do is carry out environmental disclosure. Choi et al. (2013) noted that the topic of environmental disclosure, particularly in relation to carbon emissions, has been studied in numerous countries and across an extended timeframe. The aim is to know what variables explain the extent of carbon emission disclosure, since this issue happen in the long term and will impact the company in experiencing profitability, investment, and productivity (Nursulistyo et al., 2023).

Several variables have been studied by researchers around the world, as we take the example from developed countries, first by Saka & Oshika (2014) from Japan, the variable used in this research are the market value of equity and corporate carbon management disclosure. Then from Turkey, Kılıç & Kuzey (2015) made a research using corporate governance characteristics as the variable, this characteristics consist of the independence directors on board, the board nationality diversity, and a sustainability committee. Next from United Kingdom (UK), Liu et al. (2017) conduct a research using corporate financial performance as variables. Finally, in a study conducted by Tan et al. (2020) in China, they investigated how participating in a carbon emission trading system and the degree of internal control influence the quality of carbon emission disclosures.

Even though there are already international agreements, many countries still have not required their business entities to disclose the carbon emission, especially those are the developing countries. However, many business entities have decided to voluntarily and proactively carry out emission reductions and their disclosure approaches, for example, in Indonesia. Indonesia has already committed to the United Nations Framework Convention on Climate Change (UNFCCC) by ratifying Law No. 6 of 1994 and the Kyoto Protocol through Law No. 17 of 2004. This commitment aims to promote sustainable development and diminish global greenhouse gas (GHG) emissions. Indonesia also ratified Presidential Regulation No. 61 of 2011, whose function is to carry out planning, implementing, as well as monitoring, and evaluating action plans for reducing GHG emissions for ministries/agencies (Pratiwi, 2018).

As previously mentioned before, the practice of disclosing carbon emissions in Indonesia is still in the category of voluntary disclosure. Choi et al. (2013) from their research on the extent of voluntary carbon emission disclosure is conducted in a developed country which is Australia. To identify the factor that accounts for the level of carbon emissions, they relied on data extracted directly from the companies' annual and sustainability reports. Then they compare the data to a checklist provided by the Carbon Disclosure Project (CDP). In another instance, as demonstrated by Kim et al. (2021) in South Korea, their study delves into the connection between foreign investors and the voluntary disclosure of carbon emissions. They utilized carbon emission data from South Korean companies spanning the period from 2014 to 2019.

The authors found that much research had been carried out in Indonesia. The companies studied in the previous period were still small, around the 20s to 40s compared to many companies in Indonesia. It means that there are still very few companies in Indonesia that voluntarily disclose their carbon emissions. As Wiratno & Muaziz (2020) carbon emission disclosure research, there are only 21 companies that met the criteria they wanted with the population was manufacturing companies in Indonesia for the period 2016 – 2018. Suhardi & Purwanto’s (2015) research, they have 31 companies in 2010 and 33 companies from 2011 to 2013 as their samples. Septriyawati & Anisah (2019) research selected the manufacturing company listed on IDX in 2014 – 2018 and only 10 companies were selected. Then the research by Astuti & Setiany (2021) with their 24 sample companies.

The author also found in the coefficient of determination of the research results in Indonesia was found to be below 50%, which means that there is little influence from the variable used in these previous studies, as Niza & Ratmono (2019) research, it was 47%. Research by Trufvisa & Ardiyanto (2019) was 16,89%. The Author finds that this test's low score is due to using fewer variables, such as profitability, growth, leverage, media exposure, company size, audit committee size, internal audit, industry type, and environmental performance.

Along with the purpose of this study which to find whether or not there is an effect of corporate governance characteristics on carbon emission disclosure. Corporate Governance refers to the set of regulations and methodologies that oversee the direction and management of a company. It establishes roles and responsibilities, determines decision-making authority, and ensures that the organization maintains effective decision-making procedures and safeguards to balance the interests of all stakeholders, including shareholders, employees, suppliers, customers, and the community. The corporate structure in the world is divided into two, namely One-Tier Board System or Unitary System and Two-Tier board System. In the one-tier board system concept, all functions of the entire company are carried out by one board, namely the Board of Directors. They carried out operational policies as well as supervision. There are also Executive Directors and Non-Executive Directors, in the US they use this concept with the pattern of

CEO and Chairman. In this system, all members of the Board of Directors make the decisions, the monitoring and supervision process is carried out by board members who are in the position of non-executive directors or chairman or president in the company, and the one who acts as CEO is the executive director on the board. This framework is put into practice in Anglo-Saxon nations like the United Kingdom, United States, Canada, and Australia, in addition to various Asian countries such as Singapore, Hong Kong, and Malaysia.

As for Two-Tier Board System, there is a separation between management and supervisors. This system is implemented in Indonesia and European countries, such as the Netherlands and Germany. In Indonesia, the oversight body is referred to as the Board of Commissioners, while the executive body is known as the Board of Directors. The Board of Commissioners holds a higher position than the Board of Directors because their primary responsibility is to oversee the activities of the Board of Directors. This arrangement is stipulated in Law No. 40 of 2007 concerning Limited Liability Companies.

Therefore, several variables that will be used in accordance with the Two-Tier Board System implemented in Indonesia and the characteristics of the Corporate Governance are the Board of Commissioner Size, Director Size, Board Independence, Board Diversity consisting of Gender and Profession Hold, and Sustainability Committee. These variables are expected to have an impact on carbon emission disclosure in Indonesia.

1.2 Problem Formulation

Based on the information provided in the preceding context, the research will address the following issues:

1. Do the companies listed on the Indonesia Stock Exchange (IDX) in the manufacturing and mining sector in the period 2017-2021 have disclosed carbon emissions in their company?
2. Does the Board of Commissioners Size have an effect on Carbon Emission Disclosure?
3. Does the Director's Size have an effect on Carbon Emission Disclosure?
4. Does the Board Independence have an effect on Carbon Emission Disclosure?
5. Does the number of Female on the Board of Commissioner and Directors have an effect on Carbon Emission Disclosure?
6. Does the number of Commissioners and Directors hold another profession have an effect on Carbon Emission Disclosure?
7. Does having Sustainability Committee on company have an effect on Carbon Emission Disclosure?

1.3 Research Objectives

The purpose of this study is to:

1. Analyze how much the manufacturing and mining companies listed on Indonesia Stock Exchange in the period 2017-2021 conducting Carbon Emission Disclosure voluntarily.

2. Prove empirically whether the Board of Commissioners Size has effect on Carbon Emission Disclosure.
3. Prove empirically whether Director Size have effect on Carbon Emission Disclosure.
4. Show whether Board Independence have effect on Carbon Emission Disclosure.
5. Explain whether the Gender Diversity on the Board of Commissioners and Director have effect on Carbon Emission Disclosure.
6. Explain whether the number of Commissioners and Directors hold another profession have effect on Carbon Emission Disclosure.
7. Examine whether having Sustainability Committee on company have effect on Carbon Emission Disclosure.

1.4 Research Benefits

This research is expected to provide benefits in the form of:

1. Theoretical Uses

   The result of this study can increase the knowledge and insight of academics and provide a broader assessment for external parties of business entities regarding Carbon Emission Disclosure, especially regarding the extent to which Indonesian companies do voluntary disclosure and the effect of corporate governance characteristics on Carbon Emission Disclosure.

2. Practical Use

The result of this research can contribute ideas as a media library and reference for interested parties such as academics and the public, as well as for business entities that are expected to be able to provide quality and valuable financial information.

1.5 Writing Systematic

This research paper is organized into five chapters, which are presented as follows:

CHAPTER I INTRODUCTION

In this chapter, you will find the background of the issue under investigation, the problem formulation, the research objectives, the advantages of the research, and the structured composition.

CHAPTER II LITERATURE REVIEW

This chapter elaborates on the theories pertaining to the research problem, prior research, the conceptual framework, and the hypothesis framework.

CHAPTER III RESEARCH METHODS

This section on research methodology offers an outline of the research's execution plan. It details the variables involved, the selected population and sample, and the methods for data collection and analysis.

CHAPTER IV ANALYSIS AND RESULTS

This chapter outlines the analysis and results of the research carried out, describing the research object, analysis, and interpretation of data processing.

CHAPTER V CONCLUSION

This chapter contains conclusions from the results of the research that has been carried out, the limitations of the research, and suggestions for future research.