### **CHAPTER I**

#### INTRODUCTION

## 1.1. Research Background

The effects of global warming are clear indicated by increasing temperature of the earth. This condition has an immediate impact on the melting of ice at two poles which fear could submerge the earth. The giant chunks of ice are starting crack from a layer in the western part of the Antarctic Peninsula and researchers warn that 2080 square kilometers of ice is in danger by showing signs of released (Kasa, 2019). In addition, signs of change can be seen from biological mechanisms, such as the displacement of various species as far as 6 kilometers towards the poles every decade for the last 30-40 years. Another indicator of changes in seasonal events such as the process of flowering and spawning is 2 - 3 days faster in every decade in moderate temperature regions (Root et al, 2005).

According to Arief, Emil and Retraubun (2009), global warming makes sea level rise 1.8 - 2.5 millimeter per year in the period 1961-2000 and above. It estimated that 2000 islands in Indonesia have the potential to sink in 2050 due to the increasingly extreme climate intensity. Especially for areas where the land height is only 1 - 1.5 meters, such as the islands in the thousand islands are at risk of sinking. Furthermore, they said that at least 28 islands have submerged in the archipelago. In more detail, the average rise in sea level each year has reached 2.5 millimeter, while in 2006 the sea level rise has only reached 1.8 mm. The Maldives Islands, which have a low land area of only 1.3 meters, are very worried to be drowning. Not only the loss of land and national borders, but also the existence of coastal ecosystems and the biodiversity that are the source of the

economy of these islands are also threatened. For this reason, action plans to expect the impacts of climate change must be realized, not stop at the conceptual level.

Erika et al, 2019 stated in their study that one of the action plans to expect the impacts of climate change is an idea of a new economic era that emerged through international political commitments universally agreed upon in Rio de Janeiro, Brazil, June 1992. The idea which took the form of the Earth Summit was aimed at realizing the concept of sustainable economic development, namely development that meets the needs of current generation without any interest to harm the needs of the next generation. The United Nation Framework Convention on Climate Change (UNFCCC) created an international amendment known as the Kyoto Protocol. The Kyoto Protocol is an international convention that was created in Kyoto, Japan in 1997 has the commitments of countries in the world in dealing with global problems, efforts to reduce and prevent the causes of the depletion of the ozone layer have been increasingly encouraged by governments in various countries (Liesen et al, 2015). The essence of the convention must be obliged to meet the requirements for Greenhouse Gas (GHG) emissions, because the recent climate change is caused by the use of fossil energy since the industrial revolution 1850. There are 6 GHGs targeted for reduction in the Kyoto Protocol, namely carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), perfluorocarbons (PFC), and hydrofluorocarbons (HFC) (Irwantoko and Basuki, 2016).

Indonesia as one of the countries that signed the Kyoto Protocol, has ratified the Kyoto Protocol through Law no. 17 of 2004 in the context of

implementing sustainable development and participating in efforts to reduce global GHG emissions. In addition, Indonesia's commitment to reducing carbon emissions explained in the Presidential Decree No. 61 of 2011 about the National Action Plan for Reducing Greenhouse Gas Emissions and also Presidential Decree No. 71 of 2011 about the implementation of a national greenhouse gas inventory. In article 4 of Presidential Decree No. 61 of 2011, it explain that business actors also take part in efforts to reduce GHG emissions (Erika et al, 2019).

In 2015 the United Nations on Climate Change Summit or COP (Conference of The Parties) in Paris, France issued the Paris Agreement as a replacement for the Kyoto Protocol to combat the impacts of climate change. This agreement was negotiated by 195 country representatives at the 21st United Nations Climate Change Conference in Paris, France. Indonesia is one of the countries that signed this agreement on April 22, 2016. The percentage of greenhouse gases ratified by Indonesia is 1.49%. However, Indonesia's emission reduction target is not sufficient to reach the temperature target below 2 ° C. To make the goals of the Paris Agreement achieved, experts say Indonesia must improve its forest protection policies, given that deforestation is the highest source of emissions (Erika et al, 2019).

As mentioned above, decreasing in environmental quality caused by the forestry sector and land use change is the phenomenon of peat fires that occurred in West Aceh which reached 69 hectares (Tribunnews, 2017). Most of Indonesia's territory is forest, which produces oxygen and absorbs carbon dioxide gas (the world's lungs). However, it has turned into a land that produces carbon dioxide gas (Indonesia Ministry of Environment, 2012). The loss of carbon stocks has

made Indonesia's peatlands one of the main sources of global carbon emissions. This should be the focus of company attention in land management in Indonesia if the world hopes to reduce carbon emissions (Pratiwi and Sari, 2016). Furthermore, there is a case of environmental pollution by PT Millenium which is one of the cases of environmental pollution by companies in Indonesia. Air waste in the form of dense black smoke that the company throw away is carried by the wind to the residents' homes, making the air quality exceed environmental quality standards resulting in health problems. The source of air pollution released from the four PT Millenium chimneys is triggered by the use of coal fuel (Erika et al, 2019). The increase in the burning of fuel oil, coal and other organic materials that exceed the ability of plants and the sea to absorb them results in an increase in the earth's surface temperature and very extreme climate change on earth (Cahya, 2016).

Another argument come from Matsumura et al (2011). they stated in their research that this warming phenomenon occurs as a result of economic activity. The production, distribution and consumption processes carried out by economic actors have a negative impact, namely, the formation of exhaust gas or carbon gas emissions in a varying amount according to the size of the economic activity carried out. This argument supported by Luo and Tang Yi (2013) in their research. They said companies engaged in mining, construction and utilities produce more carbon emissions than companies with financial, service and health business sectors.

The amount or volume of emissions produced by the company is highly dependent on the operational activities carried out by the company. The more activities that are carried out, the higher the resulting carbon emissions will be. In addition, the technology used by the company also has an influence on the production of carbon emissions. The technology referred is the use of machines in production activities, the use of transportation equipment with large machine capacities such as mining and construction companies. This volume difference separates the types of intensive and non-intensive industries. According to GICS (Global Industry Classification Standard) which is a global standard, categorizes companies by sector and industrial activity. GICS categorizes companies into intensive industries and non-intensive industries. Intensive industries according to GICS are companies operating in the energy, materials, utilities and transportation sectors (GICS, 2018). This type of industry directly influence on Carbon Emission Disclosure because the volume of carbon emissions produced by companies in the intensive industry will be greater than those of non-intensive industry companies (Krishnamurti and Velayutham, 2018).

Efforts to reduce GHG emissions (including carbon emissions) carried out by companies as business actors can be seen from the carbon emission disclosure. The extent of disclosure can be made by referring to the questionnaire provided by the Carbon Disclosure Project (CDP). CDP is run by a non-profit organization based in London UK that asks companies affected by global warming to fill out a questionnaire every year (Zhang et al, 2013). The focus of the questionnaire is on how the company's condition is affected by global warming or the steps that the company has taken to reduce greenhouse gas emissions. Business actors should participate in protecting the environment from the impacts of climate change. One way that can be taken is carbon emissions disclosures in the company's annual

report or sustainability report. In practice, disclosure of carbon emissions in Indonesia is rarely carried out by business entities because it is still a voluntary disclosure.

Companies that disclose carbon emissions have several considerations, including obtaining legitimacy from stakeholders, avoiding threats, especially for companies that produce greenhouse gases such as increased operating costs, reputation risk, and reduced demand, legal proceedings, as well as fines and penalties (Berthelot and Robert, 2011). Stakeholders plays an important role in and evaluating management performance. monitoring Particularly shareholders who relying their economic decision on financial and non-financial report of the company. Shareholders could individual and institutional. Mostly the major shareholders owned by institutional ownership. Institutional ownership is also one component affecting carbon emission disclosure. With the existence of institutional ownership is expected supervision of management is more optimal. the institutional ownership, the greater the The greater institutional encouragement to oversee the company's management so that the company can optimize the company's performance (Akhiroh and Kiswanto, 2016).

Consistent with theory of legitimacy, company are in charge to assure society that the activity of the company has positive impact to the development of company and the society surrounding. According to Elijido-Ten in 2007, he stated that company has ability to affect the society and their stakeholder, include to ensure that the company will responsible to the society and environment when company reach higher growth rate. Irwhantoko and Basuki in 2016 stated in their research that company tend to concern on reaching their financial objective rather

than considering environmental sustainability. Growth raise many demand for the company to fulfill their responsibility, including diclose their environmental information. Although environmental disclosure are important, company have to optimize their resources to provide a quality of environmental disclosure which at the same time company also have a chance to grow up.

Research on carbon emission disclosure is interesting because the impact of climate change more and more visible day by day. Companies around the world have to involved to mitigate and reducing the risk of climate change, although their business resulting a minimum carbon emission during operation. The involvement of them will be reflected through their environmental information disclosure, particularly carbon emission disclosure. The stakeholders and society can evaluate the company's environmental responsibility through their sustainability report or annual report provided by the company it self. The more information provided, the highest responsibility of the company and vice versa. Since the disclosure of carbon emission still voluntary, there are many consideration that make company want to disclose their activity related carbon emission, either to meets stakeholders demand, pressure from society, type of industry, ownership structure or the growth rate purposes. Based on that, this study will be conducted with title "Industrial Type, Institutional Ownership, Company's Growth on A Quality of Carbon Emission Disclosure in Indonesia (An Empirical Study to The Companies Listed on Indonesia Stock Exchange and ASRRAT's Participants period 2018 - 2020)".

### 1.2. Research Problem

# A. The Purposes of The Study

The purpose of this study is to explore and give explanation to the readers about whether industrial type, institutional ownership and company's growth influence the quality of carbon emission disclosure in Indonesia.

# B. Research Question

This research is conducting to answer a question as follow:

- 1. How intensive and non-intensive industry affect the quality of carbon emission disclosure in Indonesia?
- 2. How institutional ownership affect the quality of carbon emission disclosure in Indonesia?
- 3. How company's growth affect the quality of carbon emission disclosure in Indonesia?

## 1.3. Research Objective

The nature of carbon emission disclosure is voluntary mean until this study is done there is no regulation that forcing companies in Indonesia to disclose their emission resulted from their activity in accordance to specific applicable standard. This condition could make different way among companies in different industry to disclose their emission's activity, depend on the intensity of use of emission during company's operation. The disclosure of carbon emission could be affected by several factors, for instance are stakeholders expectation and consideration of legitimacy requirement. Thus, the objective of this study is to provide empirical

evidence whether industrial type, institutional ownership and company's growth influence the quality of carbon emission disclosure in Indonesia.

#### 1.4. Research Contribution

The result of this study expected to give contribution in empirical and practical aspect. For empirical aspect, this study is expected to enrich the previous study by using research data that is newest than the previous study. Practically, the result of this study expected to be use as information by the readers to evaluate the company's environmental performance related carbon emission and provide information as new evidence whether a quality of carbon emission disclosure affected by industrial type, institutional ownership and company's growth.

## 1.5. Writing Systematics

The systematics writing of this research consists of five chapters, the first chapter is the introduction. This chapter is an introduction to research that consists of research background, problem statement, research objectives, research contribution, and systematics writing. The second chapter is the literature review. This chapter describes the theoretical foundations used related research, thinking, framework, and hypotheses from this research.

The third is the research methodology. This chapter contains research design, population and sample, types and sources of data obtained, research variables, data analysis methods with hypothesis testing. The fourth chapter is the results and discussion chapter. This chapter contains a description of the research's sample, which consists of the result of data analysis and discussion. The last

chapter is conclusion and suggestion. This chapter contains conclusions, limitations of the research and recommendations for the upcoming similar study.

