CHAPTER II

THEORY BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1 Legitimacy Theory

Legitimacy theory focuses on the relationship between companies and communities through regulations made by the government and societal norms. In this case, the company's actions and activities are related to environmental problems or risks that exist around the company. Because according to Ghozali & Chairiri et al. (2007) the underlying theory of legitimacy is a "social contract" that occurs between the company and the community where the company operates and uses economic resources. Because of that the company must be aware of social responsibility to the local community. As highlighted by Gray et al. (1996) stated that disclosure plays a role in bridging the company with community groups. The legitmacy can be reached by the company if the same result desired by the company and the community. If the company failed to give the result the community can revoke the social contract with the organization if the community is not satisfied with the organization's operational activities (Putri,2020)

The company or business actually receives the license to operate from the social and they must accountably inform how the company operates (Rankin, 2012). Community group need to know the problem or risk related the environmental while the company run the operation. Information from the company will be very useful for the public to know and deal with problems or risks that will come.

The company must be aware that the interests of the community are as important as the interests of shareholders or the profits of the company itself, because of the existing social rules and norms in running its business. Company can disclose emission carbon disclosure on the financial report to explore, control, and protect nature and the environment and maintain legitimacy in society.

2.2 Stakeholder Theory

Stakeholder theory states that companies try to align their activities with stakeholder expectations (Barako and Brown, 2008). Stakeholder theory states that companies in carrying out their operations are not only selfish, but must provide benefits to stakeholders, such as shareholders, creditors, consumers, suppliers, government, society, and other stakeholders (Pratiwi & Sari, 2016). Ghomi and Leung (2013) argue that stakeholders have different expectations of the company, to pursue these expectations stakeholders can exert pressure on the company directly or indirectly in making environmental disclosures. One important way to meet the needs and expectations of stakeholders is to provide information about the activities and performance of the organization (Rankin, 2012).

Carrying out social responsibility by carrying out environmental disclosures is one of the strategies for communicating with stakeholders, namely in the hope that stakeholder wishes can be fulfilled so that there is a harmonious relationship with the stakeholders. So that the sustainability of the company and stakeholder relationship can continue in the future.

2.3 Carbon Emission Disclosure

2.3.1 Corporate Voluntary Disclosure

Disclosure of information that is done voluntarily by companies outside of mandatory disclosure is called voluntary disclosure. Voluntary disclosure is disclosure that is not required by regulation which is believed by management to be relevant accounting information to assist decision making. There are no regulations regarding voluntary disclosure, so there is a wide variety or variety of voluntary disclosures between companies depending on the respective business units. Cost and benefit factors that are considered by management to disclose information voluntarily (Yolanda, 2019). Voluntary disclosure is often carried out by companies because of dissatisfaction with mandatory disclosures, resulting in demands from stakeholders to increase company reporting (Rankin, 2012).

2.3.2 Carbon Emission Definition

Carbon emission is the release of carbon into the atmosphere. the main contributors to climate change are carbon dioxide composes 64.3%. Since the industrial revolution the burning of fossil fuels has increased, which directly correlates to the increase of carbon dioxide levels in our atmosphere and thus the rapid increase of global warming. With carbon dioxide levels continuing to increase, in recent years the temperature on earth has always increased to become warmer. Each country's carbon dioxide level is in accordance with the Paris Agreement at a maximum of 450 fpm by 2030. Carbon dioxide (CO2) is the largest major GHG produced by human activities (Lisasari, 2017). The main factor CO2 is the burning of fossils for coal, natural gas and petroleum. Indutry, mining, agriculture and transportation produce carbon dioxide large enough so that climate change is rapidly occurring faster.

2.3.3 Carbon Emission Disclosure

Environmental disclosures are stated in PSAK No. 1 (revised 2019) in paragraph 14, which reads: “Some entities also present, from financial reports, reports on the environment and reports on added value, especially for industries where environmental factors are significant and when employees are considered a group of users of financial statements that are plays an important role." Carbon emissions disclosure is one of the applications of environmental disclosure related to climate change.

Measurement of carbon emission disclosure in this study uses a carbon emission disclosure index adopted from the research of Choi et al. (2013). In their research, Choi et al. (2013) developed a check list based on the information request sheet provided by the CDP (Carbon Disclosure Project). The carbon emission disclosure index adopted from Choi et al. (2013) consists of five categories related to climate change and carbon emissions with 18 identified items. The following is a carbon emission disclosure index used in this study:

Category	
1. Climate change: risk and opportunities	CC1 – assessment / description of the risks (regulatory, physical, or general) relating to climate change

	and action taken or to be taken to manage risk
	CC2 - assessment / description of current (and future) financial implications, business implications and opportunities of climate change
2. GHG emissions accounting	GHG1 – description of the methodology used to calculate GHG emissions) e.g GHG protocol or ISO)
	GHG2 – existence external verification of quantity of GHG emission – if so by whom and on what basis
	GHG3 – total GHG emissions – metric tons CO2-e emitted
	GHG4 – disclosure of Scopes 1 and 2, or Scope 3
	GHG5 – disclosure of GHG emission by sources (e.g. coal, electricity, etc)

	GHG6 – disclosure of GHG emissions by facility or segment level
	GHG7 – comparison of GHG emission with previous year
3. **Energy consumption accounting**	EC1 – total energy consumed (e.g. tera-joules or peta joules)
	EC2 – qualification of energy used from renewable sources
	EC3 – disclosure by type, facility or segment
4. Reduction and Cost	RC1 – detail of plans or strategies to reduce GHG emissions
	RC2 – specification of GHG emissions reduction target level and target year
	RC3 – emissions reduction and associated cost or saving achieved to date as a result of the reduction plan
	RC4 - Future costs that are calculated in capital expenditure planning.

5. Carbon emission accountability	AEC1 – indication of which board committee (or other executive body) has overall responsibility for actions related to climate change
	AEC2 – description of the mechanism by which the board (or other executive body) reviews the company's progress regarding climate change

Source: Choi et al. (2013)

2.4 Corporate Governance

The OECD defines corporate governance as follows distribution of rights and responsibilities among the different participants in the organization – such as the board, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making. While the World Bank define Corporate governance is about promoting corporate fairness, transparency and accountability. When implementing the principles of good corporate governance, the company can maintain sustainability especially in public traded company. The principles of good corporate governance according to the World bank

a) Fairness: protecting shareholder rights and ensure the equitable treatment of all shareholders including minority and foreign shareholders

b) Responsibility: Recognizing the rights of all stakeholders as established by law, and encouraging active co-operation between the corporation and stakeholders in creating wealth, jobs and sustainable enterprises.

c) Transparency: Ensuring adequate and timely disclosures of all material matters regarding the company, including its financial situation, performance, ownership and governance structure.

d) Accountability: Providing for the strategic guidance of the company, effective monitoring of management and its accountability to the stakeholders.

Each company has a different corporate governance structure. The corporate governance characteristic that will be examined in this study are the board of directors, environmental committee, gender diversity, and audit committee.

2.4.1 Board of Director

According to the Undang- Undang Perseroan Terbatas (PT), the board of directors is a corporate organ that is fully responsible for the management of the company for the interests and objectives of the company and represents the company both inside and outside the court with the provisions of the articles of association. It can be concluding the short- or long-term decisions that are implemented by the company are strongly influenced by the board of directors as the holder of responsibility for implementing the rules (government rule) and norms (social norms) that exist in the company.

The size of the board of directors is one of the most important corporate governance mechanisms in determining company performance and making company policies. The larger the size of the board of directors, the greater the company's ability to carry out corporate social responsibility (Ali & Atan, 2013; Krisna & Suhardianto, 2016; Pebriana & Sukartha, 2012; Suryono & Prastiwi, 2011). The size of the board of directors is the total number of boards of directors in the company.

2.4.2 Environmental Committee

Environmental committees allow companies to collect, record and account for GHG emissions credibly and therefore tend to see the importance of GHG reporting (Michelon and Parbonetti, 2012). Having an environmental committee that seeks to voluntarily disclose carbon dioxide emissions will provide added value for the company. Voluntary disclosures about carbon emissions will be appropriately disclosed by environmental committees and these disclosures will be difficult for other companies to replicate. The company is aware that environmental aspects are important for the company's sustainability with the existence of an environmental committee.

2.4.3 Gender Diversity

Gender is a status, which is built through social, cultural, psychological means based on personal characteristics. In general, there are differences in perceptions between men and women even though they have started to decrease (Rohail Hassan, Maran Marimuthu, 2015). A board that includes women and individuals from various racial, ethnic, and other minority characteristics broadens company resources and adds multiple perspectives to the problem solving and strategic planning process (Carpenter, Geletkanycz, and Sanders in

Van Ness et al, 2010). Adams & Ferreira, 2009) found that more women on the board of commissioners improved the decision-making process, increased board effectiveness and that women had better attendance or participation. This shows that women on the board of directors have a significant influence on environmental disclosure. Women are more committed to the company, therefore the problems and risks of climate change will be more concerned.

2.4.4 Audit Committee

In the regulation Otoritas Jasa Keuangan Nomor 55/POJK.04/2015 concerning the size and guidelines for implementing the work of the audit committee, it is explained that the audit committee is a committee formed by and responsible to the board of commissioners in helping carry out the duties and functions of the board of commissioners. The audit committee has an important role. in the supervision and control of the company, including in environmental disclosures. According to Suryono and Prastiwi (2011)

The effectiveness of the audit committee through its number of meetings can increase the disclosure of corporate environmental information (Ayoib & Peter, 2015). the intensity of these meetings with the audit committee will make the company even more transparent. By conducting a joint meeting there will be an exchange of ideas about problems or risks facing the company.

2.5 Previous Research

Research conducted by Manurung et al. (2017) has four independent variables, namely the independent board of directors, the board of directors, gender diversity, and the environmental committee, as well as the dependent variable, namely the disclosure of carbon emissions. The object of this research is non-financial companies listed on the Indonesia Stock Exchange in 2014 and 2015. The results show that the board of directors and environmental committees have a negative effect on disclosure of carbon emissions, while independent boards of commissioners and gender diversity have no effect on disclosure of carbon emissions.

Research conducted by Akhiroh and Kiswanto (2016) examined the effect of environmental performance, organizational visibility, financial condition, and corporate governance mechanisms on carbon emission disclosure. The object of this research is non-financial companies listed on the Indonesia Stock Exchange in 2012-2014. The results showed that organizational visibility, profitability, managerial ownership, and audit committee had a significant effect on carbon emission disclosures, while environmental performance, financial difficulties, institutional ownership, and the proportion of independent commissioners had no effect on carbon emission disclosures.

Research conducted by Liao et al. (2014) examined the effect of gender diversity, independent boards, and environmental committees on carbon emission disclosures with board size as the control variable. The object of this research is non-financial companies listed on the Indonesia Stock Exchange in 2014 and 2015. The results show that gender diversity, environmental committees, and the board of directors have a positive effect on disclosure of carbon emissions, while the independent board of commissioners has no effect on disclosure of carbon emissions.

Research conducted by Ayoib & Peter (2015) examined Directors Culture and Environmental Disclosure Practice of Companies in Malaysia. The object of thius study is all companies in the non-financial sector in the main board of the Bursa Malaysia as at 2013. The results for number of board meetings (BM) and audit committee meetings (ACM).

Research conducted by Putri (2020) examined the effect of corporate governance structure on carbon emission disclosure. The object of this research is companies listed on the Indonesia Stock Exchange in 2016 – 2018. The result show that the size of the board of directors and the proportion of the independent board of commissioners do not affect the disclosure of carbon emissions, while the environment committee has a positive effect on disclosure of carbon emissions.

Research conducted by Kilic and Kuzey (2019) examined the effect of board size, proportion of independent boards, foreign directors, gender diversity, and environmental committees on carbon emission disclosures. The object of this study is Turkish non-financial companies listed on the Istanbul Stock Exchange during the 2011 - 2015 period. The results of Kilic and Kuzey's (2019) research show that foreign directors and environmental committees have a positive effect on carbon emission disclosure. Board size, proportion of independent directors, and gender diversity have no influence on carbon emission disclosure.

2.6 Hypothesis Development

2.6.1 Effect Board of Director on Carbon Emission Disclosure

By stipulating a climate change emergency, efforts to reduce greenhouse gases must be implemented by each country. Carbon dioxide contributes most of the greenhouse gases through the operations of companies. By a theory of legitimacy there is a "social contract" that occurs between the company and the community where the company operates and uses economic resources. With the existence of a social contract, companies are required to make efforts to reduce the causes of greenhouse gases. Disclosure of carbon emissions can be carried out by companies to show their legitimacy in the community that the company is aware of the problems or risks of climate change.

The board of directors is the highest important element of management which is responsible for obtaining legitimacy from all stakeholders. The board of directors, as one of the organs of corporate governance, has the responsibility to develop a sustainable business strategy so it is necessary to ensure that the impact of company activities on the environment that has material risks is properly monitored and fully disclosed (Ben-Amar, 2017). The size of the board of directors describes the corporate governance, because decision making by the directors takes into account the opinions of the members of the board of directors (Krisna & Suhardianto, 2016). The inclusion of more boards of directors can increase the monitoring capacity of the board and the ability to increase value creation activities (Putri, 2020). With this increased monitoring, the problems and risks of climate change will be of great concern. In addition, the strategies or decisions taken by the company regarding efforts to reduce carbon emissions can be in accordance with what is planned by the government. Therefore, the greater the size of the board of directors, the better the management of the company, so that the greater the company's ability to carry out its environmental responsibility (Manurung, 2017)

The results of previous research by Liao et al. (2014) found a positive relationship between board size and disclosure of carbon emissions. This indicates that the larger the size of the board of directors in the company, the wider the disclosure of carbon emissions. Based on the theory and research results above, the hypotheses for this study are as follows:

Ha1: Board of Directors Size Has a Positive Effect on Carbon Emission Disclosure.

2.6.2 Effect Environmental Committee on Carbon Emission Disclosure

By stipulating a climate change emergency, efforts to reduce greenhouse gases must be implemented by each country. Carbon dioxide contributes most of the greenhouse gases through the operations of companies. by a theory of legitimacy there is a "social contract" that occurs between the company and the community where the company operates and uses economic resources. With the existence of a social contract, companies are required to make efforts to reduce the causes of greenhouse gases. Disclosure of carbon emissions can be carried out by companies to show their legitimacy in the community that the company is aware of the problems or risks of climate change. The environmental committee aims to deal with environmental issues from the perspective of risks, strategic opportunities and commitment to stakeholders. Environmental committees are driven by legitimacy and reputation management motives that aim to influence companies to reduce carbon emissions. The company's environmental committee motivates companies to implement strategies and practices to measure and report levels of Greenhouse Gas emissions (Ashforth & Gibbs, 1990; Yunus et al., 2016).

The results of previous research by Putri et al. (2020) found a positive relationship between Environmental Committee and disclosure of carbon emissions. This indicates that the existence of an environmental committee has an impact on the wider disclosure of carbon emissions by companies. Based on the theory and research results above, the hypotheses for this study are as follows:

Ha2: Environmental Committee Has a Positive Effect on Carbon Emission Disclosure.

2.6.3 Effect Gender Diversity on Carbon Emission Disclosure

Huse and Solberg (2006) found that women are more committed and involved, more diligent and ultimately create a good atmosphere on the board. Similarly, female directors were found to be less self-interested in orientation, so they enhance the decision-making process and increase board effectiveness (Coffey & Wang, 1998). Women will have a concern about climate change issues and also push company strategies and decisions that are useful for the common interest to reduce carbon emission gases. Liao et al., 2015) show that the greater the proportion of women on the board of directors have a tendency to be more transparent about environmental disclosures. Even a small number of women in the sample conducted had differences in decisions for greenhouse gas disclosures.

The results of previous research by Liao et al. (2014) found a positive relationship between gender diversity and disclosure of carbon emissions. This indicates that the gender diversity has an impact on carbon emission disclosure. Based on the theory and research results above, the hypotheses for this study are as follows:

Ha3: Gender Diversity Has a Positive Effect on Carbon Emission Disclosure.

2.6.4 Effect Audit Committee on Carbon Emission Disclosure

Audit committee supervision encourages effective GCG implementation by holding meetings with companies. In depth supervision from the audit committee is able to encourage companies to carry out better supervision so that GCG principles can be fulfilled, one of which is transparency. Because companies are required to be open to all activities carried out, then report on these activities (Aniktia & Khafid, 2015). Often the audit committee holds meetings, the more often the members of the audit committee will exchange ideas and knowledge about decisions that must be taken in the interests of all stakeholders, one of which is decisions regarding corporate social disclosure.

The results of previous research by Akhiroh & Kiswanto et al. (2016) found a positive relationship between audit committee and disclosure of carbon emissions. This indicates that the audit committee has an impact on carbon emission disclosure. Based on the theory and research results above, the hypotheses for this study are as follows:

Ha4: Audit Committee Has a Positive Effect on Carbon Emission Disclosure.