CHAPTER II

LITERATURE REVIEW AND HYPHOTESIS DEVELOPMENT

2.1. Legitimacy Theory

The notion of legitimacy has been applied to comprehend the acts and undertakings of corporations, particularly those pertaining to social and environmental concerns (Rankin, 2018). This complies with study by O'Donovan (2002), which indicates that an explanation for an organization's environmental disclosure is legitimacy theory. This theory has the advantage of assisting in a company's survival. Companies will keep working to make sure that people see them as adhering to social norms and limitations.

This idea is part of the body of knowledge that firmly advocates for corporate disclosure of environmental performance in order to positively impact the disclosure of carbon emissions. This is based on the current context. According to study by Pradini and Kiswara (2013), environmental performance has a favourable impact on the disclosure of carbon emissions, which is consistent with this theory. As a social and environmental issue-related activity, environmental performance disclosure is also necessary, particularly to establish credibility with the local community. After obtaining legitimacy, the business can carry on because it has complied with all relevant community and environmental rules and criteria.

2.2. Stakeholders Theory

Stakeholder theory focuses on the interactions between various stakeholders rather than society (Rankin, 2018). The parties in question are organizations or

people who have the power to influence and/or are impacted by the accomplishment of organizational goals. Governments, suppliers, investors, political organizations, trade associations, clients, neighbourhoods, and workers are examples of stakeholders. Stakeholder theory can be classified into two categories, according to Rankin et al. (2018):

a. Ethical branch of stakeholder theory

The moral treatment of firm stakeholders is related to the ethical branch of stakeholder theory. According to this principle, businesses must treat all stakeholders fairly and equally, and management must ensure that all stakeholders receive advantages. The allocation of resources to the company in this scenario does not only influence the status of stakeholders. Companies have a moral responsibility to consider how their operations will impact all stakeholders. This undoubtedly motivates businesses to think beyond just generating profits for shareholders.

b. Managerial branch of stakeholder theory

How stakeholders can affect a company's decisions is a topic that the management branch of stakeholder theory addresses. According to this notion, the corporation considers stakeholders depending on their influence or power. Stakeholder power is the ability they must influence the resources the business needs. Businesses will react more to stakeholders that have greater sway over the resources they require. A management may view this as the best strategy to accomplish business objectives. However, depending

on the situation and the passage of time, stakeholders' influence or power may shift.

Harrison & Wicks (2013) assert that organizations will produce more value if they can accommodate the needs of numerous stakeholders. It can eliminate these interests by giving information about business operations and performance. The best strategy to win over or retain the support of stakeholders is to disclose information on conformity to strategic direction, mission, company goals, as well as financial and environmental performance against stakeholder expectations (Rankin et al, 2018).

Stakeholders are involved in the issue since PT. Adaro will be handling the task of establishing a new PLTU. A significant portion of the decisions made for the company's sustainability are made with the input of shareholders. Furthermore, if rules governing companies' disclosure of carbon emissions become stricter, shareholders will take part in pressuring corporations to reveal carbon emissions more frequently in order to extend their lifespan.

2.3. Carbon Emissions Disclosure

2.3.1. Definition of Carbon Emissions Disclosure

Carbon emissions are gases released from the combustion of carbon-containing compounds such as CO², diesel, LPG, and other fuels. This phenomenon is the process of releasing carbon into the earth's atmosphere. One of the contributors to carbon emissions is the company's operational activities. Currently, companies are required to be more open regarding carbon emissions disclosure. Carbon emissions

disclosure is an activity carried out by companies to disclose information related to emissions produced as a result of their operational activities. Carbon emissions disclosure, according to the Carbon Disclosure Project (CDP), is a venue for disseminating thorough and transparent information on greenhouse gas emissions, as well as organizational plans and activities in addressing the effects of climate change.

2.3.2. Measurement of Carbon Emissions Disclosure

According to study by Choi et al. (2013), a carbon disclosure inventory employing a dichotomy, or what is more commonly known as a CDP checklist, can be used to determine the extent of carbon emissions disclosure practiced by a company. The Carbon Disclosure Project's (CDP) request sheet served as the foundation for this disclosure index. The extent to which a corporation has revealed carbon emissions in its sustainability report is evaluated using the CDP checklist.

Each disclosure item on the carbon disclosure checklist will be graded on a dichotomous scale. Each item has a value of 1, so the maximum score that can be attained is 18 if the corporation fully reveals each item in the report. The company will receive a minimum score of 0 if the item is not completely disclosed in the report. The 18 checklist items are divided into five major groups. These are the five groups:

a. An overview of the business that identifies the operational processes that are impacted by the risk of weather changes and describes how the business can reduce these risks.

- b. Pay special attention to the disclosure of carbon emissions (calculation methodology, verification of emission quantity, volume of corporate emissions, and sources of emissions).
- c. Information on the company's energy usage and its utilization of renewable energy sources as backup energy sources.
- d. A description of the company's plans to cut carbon emissions and the associated costs.
- e. Pay attention to the company's contribution to carbon emissions (i.e., its accountability for the operational practices that contribute to global warming).

2.4. Environmental Performance

2.4.1. Definition of Environmental Performance

Environmental performance refers to how a company interacts with the environment in terms of how its resources are used, how organizational processes affect the environment, how products and services affect the environment, how product processing is recovered, and how it complies with work environment laws. This is what's known as efficiency, and it's done with the intention of fostering a positive atmosphere (Tahu, 2019). The legitimacy argument is supported by the definition of environmental performance. According to legitimacy theory, businesses must abide by social norms in order to be accepted by society. Preserving the environment is one such standard, and businesses must adhere to it if they hope to be accepted by society. According to Majid and Gozali (2015), businesses that

do well in terms of the environment would make an effort to share that information through environmental disclosure. This is done to demonstrate the company's dedication to the environment and win over the community's support.

2.4.2. Types of Environmental Performance Indicators

Based on the Global Environmental Management Initiatives (GEMI, 1998), the types of environmental performance indicator measure generally consist of two groups:

a. Lagging Indicator

Lagging indicators are used to evaluate process output, such as pollutants emitted, as a means of assessing the performance of the end process. The simplicity of use and comprehension of a lagging type of indication is its primary advantage. This indicator's flaw, though, is that it depicts a scenario in which remedial action cannot be done until after the fact. Additionally, using this indicator is very expensive. Furthermore, this signal does not indicate the underlying cause of an issue or the way in which an incidence might be avoided. Performance measures will be too late because the results of the activities won't become apparent until the following year.

b. Leading Indicator

Leading indicators, also known as in-process indicators in most cases. This indicator tracks the steps taken to establish processes or tracks the variables that are thought to improve environmental performance. This indicator's primary advantage is that it allows for the taking of corrective

action prior to the occurrence of flaws that lower environmental performance. This indicator's drawback is that, because cindering is qualitative rather than quantitative, it is frequently challenging to compute. Neither the public nor the shareholders took notice of the outcomes.

2.4.3. Environmental Performance Factors

There are several factors that influence environmental performance based on Hansen and Mowen (2009):

- a. Consumers desire ecologically friendly items that are both environmentally friendly to use and dispose of, while yet being clean.
- b. Workers are more productive in organizations that practice environmental responsibility because they want to work there.
- c. Enhancing environmental performance has the potential to motivate managers to explore novel ideas and prospects.
- d. Businesses that practice environmental responsibility and perform well in the environment typically get benefits from the outside world and have the potential to have a big social impact.

2.4.4. Measurement of Environmental Performance

Environmental performance can be measured in two ways (Purwanto, 2000), namely:

a. Qualitative Environmental Performance

The measurement of non-physical assets (such as procedures, innovation processes, motivation, and work enthusiasm) experienced by people carrying out tasks in order to achieve the organization's

environmental policies, goals, and targets is known as qualitative environmental performance. An observable outcome of the environmental management system concerning the regulation of elements of the physical environment is qualitative environmental performance. This statistic has the benefit of being comparatively simple to apply and gather data for. This metric's flaw is that it indirectly incorporates subjectivity, which makes validation challenging.

b. Quantitative Environmental Performance

The foundation of quantitative environmental performance is empirical data and numerical outcomes that describe performance in terms of assets, money, or other variables. This statistic has the benefit of being objective, which makes verification simple. Nonetheless, this metric's drawback is how hard it is to get the necessary data. Depending on the indications employed, several performance benchmarks may be used. Many environmental performance indicators are frequently used, including the Global Reporting Initiative (GRI), ISO (ISO 14001 for environmental management systems and ISO 17025 for environmental test certification from independent institutions), PROPER, AMDAL (wastewater BOD and COD test), and Global Reporting Initiative (GRI).

2.5. Institutional Ownership

2.5.1. Definition of Institutional Ownership

Institutional denotes the existence of an organization with a stake in a certain investment ownership of shares by specific entities like banks, mutual funds, pension funds, insurance companies, investment corporations, and other entities. Institutional ownership refers to ownership of firm shares by a body capable of exercising significant control over, restraining, and influencing managers in order to compel them to abstain from acting selfishly (Darsani, 2021). Whether the ownership percentage is high or low, there will be more scrutiny of both domestic and international management performance.

2.5.2. Measurement of Institutional Ownership

Through a strong monitoring system, institutional ownership has the power to actively regulate management. (Boediono, 2005). The company may benefit from this in the long run. As a result, percentages are used in this institutional ownership measurement method. Results in percentages might have an impact on a company's institutional stability. The strength of institutional oversight over the corporation is inversely correlated with the percentage of outstanding shares held by institutions.

2.6. Previous Research

International research conducted by Benlemlih et al (2023) regarding the influence of institutional ownership on Greenhouse Gas (GHG) emissions on companies. The results show that high levels of institutional ownership are related, even to low levels, to Greenhouse Gas (GHG) Emissions. This research took

samples from the FTSE All-share Index and the Russell 3000 Index on companies in United States and United Kingdom. The total companies in the sample were 354 United States companies and 247 United Kingdom companies with a period of 2010 and 2019.

Research conducted by Sekarini and Setiadi (2021) on the influence of environmental performance on carbon emissions disclosure. The results state that environmental performance has not been able to encourage management to disclose carbon emissions. This research uses a sample of manufacturing companies on the Indonesia Stock Exchange for the 2014-2018 period.

Research conducted by Aini et al (2021) regarding the influence of institutional ownership on carbon emissions disclosure. This research states that institutional ownership does not affect carbon emissions disclosure. This research took a sample of manufacturing companies with the materials and chemicals sub-sector in companies listed on the Indonesian Stock Exchange and the sampling period was 2017-2019.

Research conducted by Ratmono et al (2020) on the influence of environmental performance on carbon emissions disclosure states that environmental performance does not affect carbon emissions disclosure. This research took a sample of companies listed on the Indonesia Stock Exchange in the 2013-2017 period.

Research conducted by Pradini and Kiswara (2013) regarding the influence of environmental performance on carbon emissions disclosure states that environmental performance has a positive effect on carbon emissions disclosure. This research uses samples of mining, agriculture, forestry and manufacturing

companies based on Presidential Regulation 61/2011, Presidential Regulation 71/2011, Law 40/2007, and Government Regulation 47/2012. This sample was taken over the period 2010 to 2011.

Table 2. 1
Prior Research Results

Researcher	Variable	Subject	Research Result
Benlemlih,	Dependent	FTSE All-	H ₁ : Institutional
Arif, and	Variable:	share Index	Ownership has an effect
Nadeem	X ₁ : Institutional	dan Russell	with low effect of GHG
(2023)	Ownership	3000 Index on	Emissions.
3		US and UK	H ₂ : The relationship
	Independent	Companies	between Institutional
	Variable:	2010 and 2019	Ownership and GHG
	Y ₁ : Greenhouse	period.	Emissions is stronger in
	Gas Emissions		the UK compared with
			the US.
	Moderating		H ₃ : Institutional
	Variable:		Ownership use as an exit
	Z ₁ : Litigation		and selection approach
	Risk		to influence Corporate
	Z2: Board		GHG Emissions.
	Gender		H ₄ : Litigation risk
			moderate the
			relationship between
			Institutional Ownership
			and GHG Emissions.
			H ₅ : Board Gender
			Diversity moderates the
			relationship between

			Institutional Ownership
			and GHG Emissions.
Sekarini and	Dependent	Manufacturing	H ₁ : Debt to Asset Ratio
Setiadi (2022)	Variable:	Sector with	(Leverage) has a positive
	X ₁ : Leverage	Mining as	impact on Carbon
	X ₂ : Profitability	Sub-Sector on	Emissions Disclosure.
	X ₃ : Firm Size	the Indonesia	H ₂ : Return on Assets
	X ₄ :	Stock	(Profitability) has a
	Environmental	Exchange	positive impact on
C	Performance	2014-2018	Carbon Emissions
4		period.	Disclosure.
	Independent		H ₃ : Firm Size has a
5	Variable:		positive impact on
	Y ₁ : Carbon		Carbon Emissions
	Emissions		Disclosure.
	Disclosure		H ₄ : Environmental
			Performance has no
			effect on Carbon
			Emissions Disclosure.
Aini,	Dependent	Manufacturing	H ₁ : Financial Slack has a
Murtininingsih,	Variable:	Sector with	significant positive effect
Barorok, and	X ₁ : Financial	Materials dan	on Carbon Emissions
Jati (2021)	Slack	Chemicals as	Disclosure
	X ₂ : Institutional	Sub-Sector on	H ₂ : Institutional
	Ownership	the Indonesia	Ownership has no
	X ₃ : Media	Stock	significant effect on
	Exposure	Exchange	Carbon Emissions
		2017-2019	Disclosure
	Independent	period.	H ₃ : Media Exposure has
	Variable:		a significant positive

	Y ₁ : Carbon		effect on Carbon
	Emissions		Emissions Disclosure
	Disclosure		H ₄ : Solvability Ratio
			significantly moderates
	Moderating		the effect of Financial
	Variable:		Slack on Carbon
	Z ₁ : Solvability		Emissions Disclosure
	Ratio	JAYAL	H ₅ : Solvability Ratio
	KPS MI		significantly moderates
C	, ,		the effect of Institutional
4			Ownership on Carbon
\$ /			Emissions Disclosure
5			H ₆ : Solvability Ratio
			significantly moderates
			the effect of Media
			Exposure on Carbon
			Emissions Disclosure.
Ratmono,	Dependent	All Listed	H ₁ : Carbon Performance
Darsono, and	Variable:	Companies on	has positive effect on
Selviana	X ₁ : Carbon	the Indonesia	Carbon Emissions
(2020)	Performance	Stock	Disclosure
	X ₂ : Company	Exchange	H ₂ : Company Size has
	Characteristics	2013-2017	positive effect on Carbon
	X ₃ :	period.	Emissions Disclosure
	Environmental		H ₃ : Profitability has
	Performance		positive effect on Carbon
			Emissions Disclosure
	Independent		H ₄ : Leverage has
	Variable:		negative effect on
			Carbon Emissions
			Disclosure

	Y ₁ : Carbon		H ₅ : Capital Expenditure
	Emissions		has positive effect on
	Disclosure		Carbon Emissions
			Disclosure
			H ₆ : Information
			Asymmetry has negative
			effect on Carbon
	ATMA	JAYA.	Emissions Disclosure
	SAS ATMA	"A K	H ₇ : Environmental
٥	, ,		Performance has no
4			effect on Carbon
			Emissions Disclosure
Pradini,	Dependent	Mining,	H ₁ : Environmental
Kiswara (2013)	Variable:	Agriculture,	Management has
	X_1 :	Forestry, and	positive effect on
	Environmental	Manufacturing	Greenhouse Gas
	Management	Sector based	Emissions Disclosure
	X_2 :	on	H ₂ : Environmental
	Environmental	Presidential	Function has positive
	Function	Regulation	effect on Greenhouse
	X ₃ :	61/2011,	Gas Emissions
	Environmental	Presidential	Disclosure
	Performance	Regulation	H ₃ : Environmental
	X ₄ : Firm Size	71/2011, Law	Performance has positive
	X ₅ : Leverage	40/2007, and	effect on Greenhouse
	X ₆ : Profitability	Government	Gas Emissions
		Regulation	Disclosure
	Independent	47/2012 2010-	H ₄ : Firm Size has
	Variable:	2011 period.	positive effect on
			Greenhouse Gas
			Emissions Disclosure

Y ₁ : Greenhouse		H ₅ : Leverage has
Gas Emissions		positive effect on
Disclosure		Greenhouse Gas
		Emissions Disclosure
		H ₆ : Profitability has
		positive effect on
		Greenhouse Gas
ATMA	JAYA	Emissions Disclosure

2.7. Hypothesis Development

2.7.1. The Effect of Environmental Performance on Carbon Emissions Disclosure

The International Energy Agency reports that as of 2022, carbon dioxide emissions from industrial processes and energy combustion worldwide amounted to 36.8 gigatons. Emissions from petroleum have risen to 11.2 gigatons in the interim. With regard to the largest carbon emissions in 2018, Indonesia comes in at number eight. As a result, Indonesia adopted Presidential Regulation No. 71 and Presidential Regulation of the Republic of Indonesia Number 61 of 2011 requiring businesses to begin disclosing carbon emissions.

Environmental performance disclosure is one way that carbon emissions can be disclosed. Paragraph 14 of PSAK No. 1 revision 2019 additionally mentions disclosure of environmental performance. Since it affects the company's and the community's social relations, environmental performance disclosure is crucial. Businesses that do well in terms of the environment will gain favour with stakeholders and the general public. Businesses who provide information about

their environmental performance in their reports are also in favor of increased carbon emission disclosure.

Businesses that perform well in terms of the environment are more likely to support and positively influence the disclosure of carbon emissions and to be open about their environmental practices. Disclosure of environmental performance is one way to assist the acknowledgement of carbon emissions and is regarded as significant. This is also consistent with study from Pradini and Kiswara (2013), who found that environmental performance has influence on carbon emissions disclosure. Based on this description, researchers want to test the effect of Environmental Performance on Carbon Emissions Disclosure. So, the first hypothesis of this research can be structured as follows:

H₁: Environmental Performance has a positive influences on Carbon Emissions Disclosure

2.7.2. The Effect of Institutional Ownership on Carbon Emissions Disclosure

The argument is that shareholders do have a say in decisions made by a corporation, based on the difficulties PT Adaro has encountered with respect to shareholders' dissatisfaction with the construction of a new PLTU. Institutional and private investors are both possible. An institutionalized kind of ownership is commonly referred to as institutional ownership. Because institutional ownership is involved in overseeing the managers that run the business, it can have an impact on how well the company performs. Furthermore, if it possesses a higher proportion of the shares, it is evident that it possesses more resources than individual shareholders.

Institutional ownership plays a significant role in decision-making and the sustainability of businesses; therefore, it may pressure them to reveal more carbon emissions in order to extend their lifespan. This is also consistent with studies by Benlemlih et al. (2023) showing that institutional ownership has influence carbon emissions disclosure. Based on this description, researchers want to test the influence of Institutional Ownership on Carbon Emissions Disclosure. So, the second hypothesis of this research can be structured as follows:

H₂: Institutional Ownership has a positive influences on Carbon Emissions Disclosure.