Effect of Sustainable Report Disclosure on Investor Confidence of Energy Group in Thai Listed Company

Thanai Sriersan

A Thesis Submitted in Partial Fulfillment of Requirements for

degree of Doctor of Philosophy in Accounting

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ABSTRACT

Currently, interest is paid to public company's sustainability reports on the Thai listed companies. This is particularly true for companies in the energy group, whose business operations have an impact on sustainability reporting. Establishing fundamental reporting policies on sustainability for industry organizations whose energy consumption influences social responsibility. The extent of disclosure was determined in accordance with the global reporting initiative (GRI) concept. It is comprised of 30 indicators divided into three categories: environment side, social side, and governance side. The purpose of this investigation is to examine to answer research questions, the level of sustainability report disclosure affects investor confidence.: First, to study the sustainable report disclosure positively affects on corporate governance score of energy groups in Thai listed companies. Second, to study the sustainable report disclosure positively affects investor confidence in energy groups in Thai listed companies. Third, to study the corporate governance score positively affects investor confidence in the energy group in Thai listed companies. Fourth, to study factors influencing the disclosure of corporate social responsibility information of energy groups in Thai listed companies.

Samples of research were data investigation in the energy group of Thai listed companies. Fund corporations, excluding asset management companies, companies that have been in operation for less than three years and those that do not desire to disclose their good corporate governance score from the Thai Institute of directors' association composed of 46 research samples. Between 2019 and 2021 total 138 companies, data were collected from the annual report on sustainability report disclosure, the corporate governance report of Thai listed companies (CGR) Report, stock price data, and the annual report on the structure of the board of directors. To conduct a multiple regression analysis, the results indicated that the disclosure of the three categories of sustainability reports positively affected the good corporate governance score and investor confidence and that the good corporate governance score positively affected investor confidence. In addition, the results of four antecedent factors were as follows: first, antecedent chief executive office duality was negatively significant across all dimensions of the sustainability report; second, antecedent board size was positively significant across all dimensions of the sustainability report; third, antecedent board independence was not significant across all dimensions of the sustainability report; and fourth, antecedence accounting professional board was not significant across all dimensions of the sustainability report.

The conclusion of the study indicated that companies in the energy group among Thai listed companies. Considering the release of three categories of sustainability reports, the more sustainability reports that are produced, the greater investor confidence has increased. The more information is made available, the higher level of strong corporate governance scores has increased and the corporate governance score effect to the greater investor confidence has increased. These include non-chief executive office duality and an increase in the extent of the board of directors. Additionally, according to the three categories of sustainability report disclosure levels, except for the increase in the number of independent directors and the number of accounting professionals on their board, the board has no effect on the level of disclosure in sustainability reports of energy groups in Thai listed energy companies. Because sometimes impartial board members and executives with accounting experience, it is less concerned with the disclosure of sustainability reports and more concerned with financial performance.

Research limitations due to the limited number of energy group in Thai listed companies listed on the stock exchange. As a result, some variables do not support sustainability disclosure reports. The researcher recommends that future research choose a group of companies in Thai listed with a higher sample if companies, such as industrial materials group, etc. And chose criteria other than global reporting Initiative criteria can be recommended to be utilized, such as the sustainability accounting standard board, international sustainability standards board, and corporate sustainability reporting directive to examine the level of disclosure of sustainability reports in Thailand and other countries.

Keyword : Sustainabiliy Report, Investor Confidence, Energy Group

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CHAPTER I

INTRODUCTION

Overview

One area that is said to be focused on increasing efficiency is the energy sector. Because of this, campaigns on the subject of diversified energy consumption have been created and implemented globally, and one of the strategies to address energy efficiency in the industrial sector is doing so(Ozoliņa & Ros a, 2012).Currently, there is a demand for the energy sector, especially in the mining industry. It is a business that has a major detrimental impact on both society and the environment(Jiang et al., 2010).Emissions, like those that harm the environment, are significant problems seriously required to be solved. By announcing actions to maintain industrial group's energy efficiency to increase energy efficiency, the industrial sector is stimulating the production of SO2, NOX, and PM2.5 while also enhancing overall energy efficiency. Correspondingly, organizations must also take into account the fact that energy savings contribute to improving firm competitiveness, which boosts economic growth in the nation, in addition to lowering expenses and assuaging environmental concerns(Zhao, 2011). Furthermore, these emissions are created by businesses that harvest natural resources to harness the power of the environment. Other natural resources are frequently impacted by especially important minerals. Evidence illustrates that those who live near the plant, work there, or often visit there continue to be affected by these pollutants. Businesses should emphasize safeguarding nature as a result. This suggests that businesses can offer environmental solutions like trash management, recycling, etc. that effectively change how waste and pollutants are produced within the company. To support sustainable growth, organizations should act responsibly toward society and the environment(Wu & Hu, 2019).The creation of policies based on the efficient use of industrial energy in the nation has an impact on business operational strategy. Additionally, the company's policy of issuing sustainability reports acts as a crucial operational strategy for boosting long-term profitability in addition to serving as a sign of social responsibility (Simons, 2019).

Reporting Framework of the United Nations and the office of environmental projects is the organization of Global reporting initiatives since 1997, the organization's mission has been to help other organizations achieve financial independence and innovation in the creation of sustainability reports. Sustainability reports are those that are published by companies or organizations with an economic focus on the environment which is a result of daily activities (Ching & Gerab, 2017).Moreover, this report relates to the company's strategy to its responsibility to sustainability and serves as an illustration of the significance of corporate governance. The Thai listed company definition of sustainability is the sustainability of a firm from its economic activities with a focus. The company's core business operations involve both internal and external stakeholders (Christ & Burritt, 2013).It encompasses accountability in the areas of economy, society, and the environment. Initiatives that prioritize providing as are marketing campaigns that prioritize creation. In addition, images unrelated to the assembly performance data on economic aspects are distributed and reported as part of the core business of the 56-1 report and the one report information on social responsibility that is revealed. Sustainability reports, which highlight long-term business practices and are crucial to corporate governance of an organization or firm, offer information about society, the environment, and corporate governance of work to accomplish the company's three-dimensionally defined objectives and include examples of significant concerns: (1) The corporate world is cognizant of its effects on the environment at the levels of organizational policy and work processes. If an entity's actions have a negative influence on the environment, it must make arrangements and use resources effectively to repair the environment it receives. (2) The society takes into account how business and human rights may influence particular individuals or groups of individuals. Examples include encouraging suppliers to treat employees properly, implementing a fair and equitable human resource management strategy, continually training competent staff, promoting sustainable community growth, and so on. (3) In addition to timely tax payments to the government, corporate responsibility also takes care of stakeholders and has strong corporate governance to provide transparent operations, management policies, risk controls, and anticorruption measures. Sustainability reports are superior than reports on corporate social responsibility because the company's environmental, social, and corporate governance concerns are detailed in the sustainability report. This report's material demonstrates how the business can carry on. As a consequence, this study has additional information for investors. Social responsibility will be addressed in relation to the operations there. Information exchange with stakeholders was a crucial part of the company's social responsibility. The working process and results of this social responsibility effort are clear. The research on sustainable disclosure indicates investor confidence.

Evidently, the social responsibility information of the business, also known as corporate social responsibility due to the effects of the current state of the world, has a significant impact on the business, according to the announcement made by the Thai listed company in 56-1 report and the one report issuing company. In today's social age, communication investors and customers are becoming more interested in the ethical elements of corporate governance and its consequences on society and the environment. Participation of multinational corporations and international trade organizations, such as the organization for economic co-operation and development and the United Nations educational, scientific, and cultural organization, as well as national laws and regulations, association for workers worldwide due to this, many companies now believe in the creation of social value, sustainable growth, and a vision of compassion and social responsibility. The idea of social responsibility is fluid. It places emphasis on how stakeholders both inside and outside of the company are impacted by business activity(Fallah & Mojarrad, 2019).In order to build clearly defined strategies and goals, the firm has used the vision of conducting business with care and social responsibility as a guide. Corporate values therefore yield better benefits for the business than any other marketing plan. Furthermore, external businesses must prioritize consumer-focused conduct and reflect socially and environmentally acceptable behavior in order to compete(Revathy, 2012).Businesses that wish to stand out from the competition employ modern concepts as guidelines for doing business and acting responsibly. For the benefit of the company, environmental stewardship must be considered while developing the organization's strategy. Corporate social responsibility that can show tangible economic advantages influences development, supporting consumer spending and purchasing decisions, and is a key component in investors' investment decisions since today's firms place a high value on their brand's reputation by the international federation of accountants made the information public discussed the demands of investors, the environment, social and corporate governance, mentioned the considerations pertaining to information disclosure environment, society, and good governance are becoming more and more crucial and they play a major role in investors' decision-making. Additionally, the paper offers advice to corporate accountants on how to properly disclose pertinent data to investors in the sustainability report by the royal council of accounting professional committee on auditing. The report was released in order to increase the efficiency of social responsibility operations among accounting experts corporate social responsibility in agencies(Bai et al., 2020).

Stakeholders have faith in the management's commitment to demonstrating social responsibility in the areas of nature conservation and environmental protection as part of the internal strategy to support the organization's sustainability goals(Ahmad et al., 2013).In addition, management support might take the form of training in corporate law, environmental skill development, and social welfare and environmental protection cultivation. These are the goals of the organization to carry out its duties and utilize resources as effectively as possible to produce the most effective and efficient resources from its assets. An organization's use of technology to enhance environmental stewardship inside the organization is encouraged by individual competence. The more sustainable reporting, the more successful operational outcome(Phurahong, 2022).Utilizing technology within the workplace, such as building automation systems, helps to protect the environment. Also, the data center is environmentally conscious. With the use of this technology, the company has recently placed more of an emphasis on important subjects like renewable energy sources, etc. By disseminating information regarding its social responsibility, a company may satisfy its stakeholders and close gaps between them when it has efficient technology at its disposal(Beyne et al., 2021).

It can be seen from the above analysis that the board of directors should be independent so that the chairman of the board of directors can work together effectively. Obviously, the board of directors plays a very important role in formulating policies in the management of the division, as well as being involved in formulating strategies to allocate the resources available within the organization to maximize the benefits. Furthermore, the board of directors should also possess the necessary knowledge, experience, and competence to carry out their tasks of the effectively(Baysinger & Butler, 2019).Along with providing the greatest advantages to the company's owners, stakeholders must be considered in order to reveal enough information to them and demonstrate accountability to them on how they perceive the information and the company's performance. In other words, the release of sustainability reports will affect how things are done, particularly true for organizations that practice sound corporate governance(Thanjunpong et al., 2019).

Chief executive officer duality is a chairman who simultaneously serves as both chief executive officer and chairman. As there are occasionally disagreements among the agency's regulators, the chief executive officer is involved in explaining obligations to society. For this reason, investors in the financial industry advise separating the chief executive officer from the president because of the merger's potential for challenges with good corporate governance (Duru et al., 2016). Additionally, the merging of duality chief executive officers is occasionally less fully described in annual reports since stakeholders are dividing up tasks and hiding information that would not benefit stakeholders inside the firm (Dierynck & van Pelt, 2021).The nature of corporate governance significantly affects how sustainability disclosures are received, especially in European Nations where the chief executive officer relationship with major shareholders has a significant impact because the chairman of the company's board of directors is one of the major shareholders and is responsible for the creation of the sustainability report (Dias et al., 2017).

Shareholders anticipate extensive information from the board size of directors. Due to the fact that these committees are engaged in defending their interests, it increases work productivity and efficiency by increasing the proportion of the board. It can be claimed that the size of the board is a significant factor in determining the extent of corporate responsibility disclosures(Al-Janadi et al., 2013).Instead of including social responsibility information in their annual reports, firms with bigger boards might freely release it. Accordingly, there is a link between the board and the disclosure of sustainability reports, and expanding the board leads to improved coordination and communication(Giannarakis, 2014).

Board independence serves as a tool to oversee executive behavior and result in more voluntary disclosure of sustainability reporting. Admittedly, board independence is responsible for monitoring the organization's operations more effectively and limiting the opportunities for management under corrupt operations (Disli et al., 2022).Apart from this, the foundation of independent directors is the idea of effective corporate governance. In order to address the requirements of stakeholders, voluntary disclosure of corporate information will result from independent directors' increased contributions to the social responsibility landscape (Fuzi et al., 2016).

Moreover, the board's accounting professional education assist in increasing an organization's capacity and potential to apply newly acquired knowledge to quickly and accurately evaluate vast amounts of company data. As a result, people with higher levels of knowledge will be able to see issues more quickly and evaluate sustainability performance(Chancharat et al., 2012).In addition, the accounting professional is one of the working instruments for helping to regulate the organization's spending, and it plays a significant role in helping to achieve the objectives of corporate governance(Said et al., 2013).The audit committee works to ensure that the organization accomplishes goal of providing stakeholders with sustainability report information(Khan et al., 2013).

Evidence illustrates that Thai institute of director association has good corporate governance score in the stock exchange of Thailand. The Association has been effective in promoting the Thai Institute of Directors. The subject of effective corporate management is examined and audited throughout all organizational areas; therefore, stakeholders must be transparent and accountable (Khunkaew et al., 2021).The organization has received a rating level from the Thai Institute of Directors Association of Thailand has scores for good corporate governance have been calculated for levels 1 through 5, into the following percentages: 25% for shareholders' rights and equal treatment of shareholders 25% for taking into account the role of stakeholders and business development for sustainability 15% for transparent disclosure 35% for responsibilities of the board of directors(Thai instituted of director Association,2021).when it comes to disclosing information to reassure shareholders, ensuring that both large and small investors have access to the same information. Moreover, preventing corporate information from only benefiting the largest shareholders, companies with high scores on the corporate governance score will typically reassure investors that the company is run fairly and openly. A well-structured framework for building the board of directors' relationships that will affect the firm is effective corporate governance. Additionally, it helps create a competitive edge that will enable the company to grow and deliver fair returns to stakeholders(Fallah & Mojarrad, 2019).The use of beneficial benchmarks in corporate governance is common in Thailand. Thus, it significantly contributes to information facilitation when politicians, academics, experts, customers, and regulators give directors, executives, workers, and creditors scores for corporate governance in order to evaluate possible investments and establish capital pricing standards for securities, including rules and guidelines that will promote a comparative approach to good governance with neighboring nations and that will assist stakeholders in evaluating the firm's corporate governance practices(Sharma et al., 2021).Hence, positive score from the Thai Institute of Directors Association can help increase investor confidence and improve the disclosure of corporate governance information.

Additionally, sustainable report disclosure on the sustainability of the factors that support investor confidence to impact the equity market depending on investor sentiment, which will affect price variations of securities, and to keep investors' returns at a level that encourages investor confidence in the investment

(New York institute of finance, 2017).Furthermore, investors first perform a fundamental research on the security to make sure the investing choice is well-informed. Using cash flows that a trader anticipates receiving, such as dividends, it is possible to calculate a security's intrinsic value. The risks associated with purchasing securities determine the price of the projected future sale of the shares. Likewise, it is predicated on a number of deterministic elements, particularly the status of the economy, political climate, environmental management, and operational results, including the financial standing of the issuing corporation (Stock Exchange of Thailand, 2020).Besides, another tool used in the study is technical analysis, which examines securities based on price fluctuations and trading volume of historical securities to evaluate future securities(Fiorentino et al., 2020).Using both technical and fundamental analysis, investors decide which investments to make. Moreover, financial instruments of this kind are used while making investment decisions to boost trust in the entity's investment. Investors will consider how well the organization manages its operations. Consequently, the approach used to evaluate the efficiency of environmental responsibility disclosures is a good corporate governance grade from the Thai association of directors.

By giving pertinent information, transparent financial statement preparation promotes investor trust and ongoing operation without prejudice or factual errors. According to the premise of determining the accuracy of the information in the financial statements, the auditor will affirm or certify them. Completeness both propriety and accuracy as a result, investors will rely on the information provided in financial reports that include historical financial information(As' Ad, 2019).Annual in stock prices have been taken into consideration in historical empirical research. The bulk of investors are scared off by the significant share price fluctuations on the Thai capital market as a result of the risks that fluctuating stock prices pose(Jonwall et al., 2022). Because earnings per share is used in the financial report, it is possible to compare the performance of several firms over the course of one accounting period despite the fact that it is challenging to compare the earnings per share of various organizations due to the adoption of differing accounting rules(International

Accounting Standard 33,2020).When stock prices are extremely volatile, investment risks are increased. As a result, investor confidence is encouraged by the high value price of ordinary shares due to the increase in net profit. The success of a company's social responsibility disclosure and dividend payment announcements will increase investor confidence by driving up the price of common shares, which will increase investor motivation and confidence (Abeyratna, 2013).

Consequently, researcher is interested in learning more about for sustainability report disclosure has an impact on the company's investor confidence on the energy group in Thai listed companies. The goal to determine whether investors' confidence is impacted by the companies' disclosure of sustainable report in the energy group in Thai listed companies. How dividends were distributed over the past three years affects data gathered from the energy group on the Thai listed companies. As a result, the study's findings can be utilized to direct the creation of materials and procedures for the company's sustainable report disclosure in the energy group of Thai listed companies. Additionally, it serves as a framework for researching how investor confidence influences a company's social energy group in Thai listed companies.

Purpose of the Research

1. To study the sustainable report disclosure positively affects corporate governance score of energy group in Thai listed companies.
2. To study the sustainable report disclosure positively affects investor confidence of energy group in Thai listed companies.
3. To study the corporate governance score positively affects investor confidence of the energy group in Thai listed companies.
4. To study factors influencing the disclosure of corporate social responsibility information of energy group in Thai listed companies.

Research Question

1. How does the sustainable report disclosure positively affects corporate governance score of energy group in Thai listed companies?
2. How does the sustainable report disclosure positively affects investor confidence of energy group in Thai listed companies?
3. How does the corporate governance score positively affects investor confidence of the energy group in Thai listed companies?
4. How does factors influencing the disclosure of corporate social responsibility information of energy group in Thai listed companies?

Scope of The Research

1. Population and sample population energy group of Thai listed companies are utilized in study. These samples of research are used in research including financial statement notes and sustainability reports. Energy group have 46 companies corporate of sustainable report disclosures on the Thai listed companies.
2. Data of sustainability reports is collected from the website set.or.th, which is created by a Thai listed company.
3. Data collection is 2019 to 2021 firm years.
4. Research variables:

Independent variable includes sustainability report disclosure data from www.set.or.th/market /index/set/resoruce/energ.

Dependent Variable includes investor confidence, as measured by the the price of securities using the close price at the end of the year data form www.finomena.com/stock.

Mediator Variable includes corporate governance score form Thai institute of directors data from www.thai-iod.com/th/projects-2.asp.

Antecedent variable includes chief executive officer duality, board size, board independence and accounting profession board data form www.set/or.th/ market/product/stock/quote/company-profile/information

Control Variable includes firm size, firm age and leverage data form www.finomena.com/stock and www.set.or.th/market /index/set/resoruce/energ.

Research Definition

1. Energy group in Thai listed companies is defined as a public limited companies registering securities with the Thai listed companies. Those are energy companies such as the petroleum industry, electricity industry, coal industry, nuclear power industry, renewable energy industry, etc. The requirements of registration on the securities exchange of Thailand are authorized to issue and offer shares to public under the Thai Listed Companies.

2. Sustainable report disclosure is defined as reports on welded to corporate values and corporate governance published by companies or organizations that affect the economy and the environment. This research refers to all indicators derived from world federal exchange ESG guidance and metrics,(2018). as follows:

2.1 Environment side is defined as the degree of disclosure of organizational impacts affecting the natural systems of living and inanimate organisms it consists of 10 indicators as follows;

2.1.1. Greenhouse gas emission is defined as the number of emissions that affect the Earth's atmosphere by acting like a greenhouse gas, allowing wave rays to pass down to the Earth's surface.

2.1.2. Emissions Intensity is defined to the amount of concentration of greenhouse gas accumulation in the atmosphere, both naturally occurring and caused by the company's emitting parts.

2.1.3. Energy usage is defined as the number of periods during which energy is consumed in an organization.

2.1.4. Energy intensity is defined as the proportion of the final energy consumption to the gross product of the enterprise.

2.1.5. Energy mix is defined as the proportion of different types of energy consumption, such as chemical energy, thermal energy, and mechanical energy, radiant energy electric power, and nuclear energy in corporate.

2.1.6. Water usage is defined as the total amount of water used in an organization's processes or operations.

2.1.7. Environmental operations is defined as the proper implementation of mechanical systems for important resources generated by nature and man by the organization.

2.1.8. Environmental oversight climate-related risks is defined as the organization's policy to protect the environment and prevent it impact on the environment.

2.1.9. Environmental oversight other sustainability issues defined as the organization's policy formulation for the prevention and resolution of natural resources and the environment.

2.1.10. Climate risk mitigation is defined as putting in place corporate policies to reduce risk factors from climate change and environmental impacts.

2.2 Social side is defined as the degree of disclosure of official information to the statements of workers. human rights include product responsibility, which consists of 10 indicators as follows;

2.2.1. Chief executive officer pay ratio is defined to another employee is defined as the ratio of remuneration. chairman, shareholders, executives, and managers who are responsible for managing the work in the organization. compared to other employees.

2.2.2. Gender pay ration is defined as the ratio of remuneration among employees in an organization. when compared between males and females.

2.2.3. Employee turnover is defined as human resource turnover or turnover of former and new employees between organizations as a percentage.

2.2.4. Gender diversity is defined as the ratio of employees in an organization. when compared between males and females.

2.2.5. Temporary work ratio is defined as the ratio of the temporary workplace. Compared to all employees who are employed on a temporary basis. The period of employment must not exceed the budget.

2.2.6. Non-Discrimination defined as employment to the discrimination and treats individuals in different organizations, such as gender, religion, color, ethnicity, etc.

2.2.7. Injury rate is defined as the rate of injury to an employee in an organization, which is proportional to the number of employees injured in the performance of their work. per all employees

2.2.8. Global health and safety is defined as health and safety of employees in an organization.

2.2.9. Child and forced labor defined as the labor of individuals between the ages of 15 and 18 in an organization.

2.2.10. Human rights is defined as fundamental freedoms and equality rights that are not discriminated against on the grounds of race. Religion, gender, skin color, language, and race are all factors in the organization.

2.3 Governance side is defined as the disclosure of appropriate regulatory information to ensure transparent operation, consisting of 10 indicators as follows;

2.3.1. Board diversity defines the company's board of directors as diverse and culturally diverse to focus on the organization's success.

2.3.2. Board independence is defined as the independence of the board of directors who have formulated the corporate governance policy in accordance with the criteria of the stock exchange.

2.3.3. Incentivized pay is defined as the remuneration paid by the organization to the board of directors of the company in order to build good relationships and strengthen sustainability.

2.3.4. Collective bargaining is defined as an important mechanism that involves everyone in the organization, often using various strategies to raise the bargainer's needs.

2.3.5. Supplier code of conduct is defined as conducting business based on ethics, integrity and transparency. partner's legal practice

2.3.6. Ethics and anti-corruption is defined as the guidelines for corporate practices that demonstrate anti-corruption and whistleblowing practices.

2.3.7. Data privacy is defined as treatment information sheets, as well as details about those who provide information that is not generally perceived by the public.

2.3.8. Sustainability reporting is defined as reporting documents that disclose economic and operational information environment and society.

2.3.9. Disclosure practices is defined as the disclosure of sustainable information that is not corporate financial information. that's a cover for the economy society and environment.

2.3.10. External Assurance is defined as reporting the measurement and disclosure of information.

3. Chief executive officer duality is defined as the duality chairman of the board directors and the manager director in the organization. This is derived from Dierynck and van Pelt, (2021).

4. Board size is defined as the number of the board of directors, as well as the independence of the company's board of directors. This is derived from Al-Janadi et al, (2013).

5. Board independence is defined as number of the board independence of the company’s board of directors. This is derived from Fuzi et al, (2016).

6.Accounting profession board is defined as number of the board accounting graduate of the company’s board of director.This is derived from Chancharat et al., (2012).

7.Corporate Governance score is defined as ranking by the Thai Institute of Directors supported by the Thai listed regulatory commission with disclosure levels ranking corporate governance score level 3 to level 5. This is derived from Thai institute of director.

8.Firm size is defined as the size of the organization measured by the registered capital listed on Thai listed companies. This is derived from Waluyo, (2017).

9. Firm Age is define as The age of operation of the organization since it is listed on the Thai listed companies. This is derived from Waluyo, (2017).

10.Leverage is defined as measured by the ratio of debt to assets displayed on the Thai listed companies. This is derived from Waluyo, (2017).

11.Investor confidence define as the price of securities using the close price at the end of the year. This is derived from As' Ad, (2019).

CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Previous chapter provides an overview of sustainability report discloses key investor sentiments, and identifies the objectives of the research. Research questions and scope of research in this chapter focuses on understanding the concept of sustainability reporting for companies in the energy industry listed on the Thai listed companies including definition of the whole structure reviews of relevant literature and research hypotheses and conceptual frameworks. Therefore, this chapter is divided into three parts. The first section shows the theoretical basis consisting of stakeholder theory, legitimacy theory and signally theory. The second part discusses the disclosure of sustainability reports based on the hypothesized development as well as the concept of global reporting initiative relative to the level of corporate governance score and investor confidence. The third section presents a summary of the relationship of hypotheses during the analysis of the investigation data. Concurrently, the consequences and past are shown in this chapter.

Theoretical Background

Related to sustainable report disclosure to explain the growth of competence and sustainability, scholars have drawn on a range of theoretical frameworks. According to Bernard (1938), stakeholder theory proposes that the business must cultivate strong relationships with stakeholders in order to sustain care and social activities. This goes beyond its obligation to shareholders and includes all stakeholders in the company's potential and efficiency(Cho et al., 2019). Regarding stakeholder theory, most businesses will demonstrate responsibility for economic, legal, ethical, and social issues, as well as a social obligation to address the requirements of stakeholders(Guix et al., 2018).The second theory applied in research legitimacy theory of Suchman (1995).Suggests another way that the various motivations and important factors that go into developing a product, a reputation, a strategy, and sustainable development all have a role in how well-liked a corporation is by outside groups and raise the organization's trust with investors for long-term growth(Searcy & Buslovich, 2014).The third theory adopted by the research signaling theory of Spence, M.L (1973).According to the idea, a company's confidence in its future financial situation and expectations for dividend payments. Dividend payments to publicly traded firms are an indication of growing confidence (Goldstein et al., 2015).The choice about investments, which is made with the intention of finding new methods to raise funds, tells investors what management believes about the company's future course.

Stakeholder Theory

Stakeholder theory of Bernard, C.L. (1938) is a theory of business ethics and corporate management taken into account by many parties impacted by the business entity, such as employees, suppliers, local communities, creditors, and others. It discusses the virtues and values of corporate management, particularly those related to corporate social responsibility and the market economy. The limits of relationships between organizations and potential stakeholders show a spectrum of historical developments that change only negative correlations and lead to convergence of stakeholder theory. Further, this theory also helps in the analysis of the connection between organizations and their stakeholders, which is seen from the perspective of both the relationship between the organization and its stakeholders as well as from the perspective of the organization overall(Beck & Storopoli, 2021).Working with senior management teams to find the perfect balance for the long-term benefits between the business and the stakeholders, responding to the utility is based on both theory and practice. Similarly, developing for strengthening the business's strategy for the commonality of stakeholder concepts with methods and techniques that describe the resolution of the concept of stakeholder management can be used as a practical guideline(Jones & Wicks, 2018).Regarding stakeholder theory on the basis of descriptive correctness, the strength of instrumentality, and normative accuracy, with all three components of this theory being connected but very clearly so, it is progressive and reasonable to deal with. This idea absolutely helps stakeholders in three ways(Freeman, 2015). By describing the stakeholder theory as a vision of a strategic organization that balances the various interests of third parties, the instrumental approach describes how the two approaches connect to the organizational environment and how they relate to their own limited organizational control. In addition, there is an analytical unit, namely, the legitimacy of stakeholders and their rights, to fulfill the expectations of wide stakeholders and a normative approach.

Stakeholder theory begins by distinguishing between the shareholder structure and works with trade difficulties and value generation, social responsibility, business ethics, and management principles. Stakeholder theory is centered on the shareholder, a unilateral party, and their interests. The owner's commercial interests, which separate ethics and business, form the basis of this approach. Any individual impacted or impacted by a company's activities or policies, which are interrelated, forms the basis of stakeholder theory combined with business and ethics(Freeman et al., 2020).

Likewise, stakeholder theory holds that leaders should be concerned about more than only the organization's stakeholders. Instead, chief executive office should promote social responsibility and extend it to stakeholders in a wider company context. Stakeholders do not have the authority or voice to conduct business, on the contrary, they should consider the results on the part of employees, local communities of the manufacturer customers, the social responsibility and the government(Barnett & Salomon, 2012).According to the stakeholder theory, companies are motivated to voluntarily reveal their social responsibilities since shareholders are not their only stakeholders along with the general public. As a consequence, companies must freely provide information in order to promote the desire (Uyar et al., 2013).Moreover, whether social responsibility has an impact on an organization's operations is determined by research that demonstrates the company's accountability to other stakeholders, such as demonstrating environmental responsibility in addition to improving its reputation one of the indicators of support for the business' ethical principles is improved performance (Harrison et al., 2015).

It is important to state that stakeholder theory and environmental management challenges environmental operations and collaborative management with a focus on urban neighborhoods that meet stakeholder expectations by creating shared value in addition to focusing on urban sustainability and creating a networking force to disclose sustainable urban corporate governance, and management urban attractiveness also develops a sustainable urban strategy, urban planners, scholars, and local communities' domination of the topic of determinism in the context of social capital and partnerships in cities employing value creation (Beck & Storopoli, 2021).Additionally, studies on corporate social responsibility show effective collaboration amongst business stakeholders in furthering the idea of environment-friendly accounting. Research on civic engagement have a significant impact on how profitable an organization is. Moreover, studies on social responsibility have a favorable impact on the link between financial reporting.

Stakeholder theory, which takes the stance that stakeholders expect a corporation to social responsibility and environmental ethics, its operational actions should be directed toward maximizing benefits while minimizing negative effects on society and the environment to satisfy stakeholders' demands, which may include figuring out how to increase visibility through sustainability reporting so that the organization is aware of its expanding significance(Kok et al., 2015).Stakeholder theory claims that investing firm resources in getting stakeholders involved in social responsibility is a waste both financially and time-wise (Jones & Wicks, 2018).It can be seen from stakeholder theory and the data conflict that the company must provide the most profits for stockholders. The organization should often go beyond concise objectives like boosting short-term profitability in order to see rewards in the form of a rise in the company's long-term market value(Yusoff & Alhaji, 2012).

According to a review conducted by the stakeholder theory connection between the variables used in the study and antecedence variables; board of director characteristic to independent variable which is sustainability report disclosure in all three areas: environment side, social side, and governance side, according to a review conducted by stakeholder theory good practice of factor influencing to shareholder and stakeholder theory is contribute to promoting the idea of disclosure of executives' sustainability reports in accordance with society's expectations of disclosure, which leads to a positive image of the companies.

<u>Legitimacy Theory</u>

Legitimacy theory of Suchman, M.C. (1995) is a theory explaining how a company's operational legitimacy is determined by whether it is granted permission and authority by society to exploit both human and natural resources under the presumption that it must conduct its operations in a way that satisfies societal demands and expectations. Investor trust is positively impacted by corporate environmental accountability disclosure(Mousa & Hassan, 2015).One of the things that influences investors' investment decisions is the company's voluntary disclosure of social responsibility data. Likewise, communicating with stakeholders to show how to manage an organization's credibility in society is demonstrated by the legitimacy theory(Deegan, 2014).Further, the concept of legitimacy includes the authority to use an organization's resources both natural and human for personal gain. Generally speaking, organizations draw this right from a society that is defined by the ability to find work or get an employment license under the topic of employment in the business operations of the corporation to satisfy societal expectations. Notwithstanding, organizations need to reflect on corporate governance whether the business process harms society, there is a larger maintenance of society, which must be continuously observed to indicate the firm's success or existence, so if the company has behaved exactly as society expects. For businesses to develop knowledge and understanding to lead them, this idea is a key one. Social activities, since this indicates that the corporation has altered its conception of how business operations should be conducted, concentrating not just on internal organizational activities but also on social activities(Berger & Webster Jr, 2018).

Evidently, it is vital to explain how organizations must demonstrate the necessity of carrying out work within the limits and customs of the relevant society and how they will legitimately meet those expectations(Deegan, 2014).In order to pursue what society wants, righteousness refers to the general view of social assumptions and actions. We refer to these as social contracts and as convincing evidence which indicate social responsibility(Suchman, 1995).Using the legitimacy theory, we may lessen any inequity and inequality in various legitimacy-related areas (Islam & Kokubu, 2018).Correspondingly, management uses the fundamental idea of institutional theory to explain the relationship between the organization and the environment society in order to satisfy the needs and expectations of the community and to illustrate that the organization will maintain the constitutionality of the law through the disclosure aspects of corporate social responsibility (Powell & DiMaggio, 2012).Additionally, legitimacy theory disclosure in the context of organizational legitimacy-based tactics is an empirical theory and norm grounded on business ethics, which does not differentiate between the two components of clarity (Mousa & Hassan, 2015).In spite of this, the use of arguments related to legitimacy theory is relevant to the political and social cultural factors of each country. This includes frequent changes in policy and structural changes in governance politics. Stakeholder initiates to change and define roles based on community expectations.

It is significant to note that organizations are required to use this system voluntarily. Corporate executives must comply by regulations under the legitimacy theory because they affect organizations, investors, and other stakeholders who are impacted by their financial statements. Likewise, organizations must clearly define their social acceptance goals when spreading information about corporate social responsibility; when everything is in accordance with the organization's aims, social acceptance will occur the subsequent sequence(Leuz, 2010).The following action will finally result in a decrease in investment costs, raising the value in the financial statements and, consequently, the enterprise's liquidity. To fulfill the objectives of corporate social responsibility to direct excellent corporate governance in the future, it is necessary for the beneficiaries of businesses to adhere to additional rules and absorb the expenses associated with compliance (Pittroff, 2021).

In fact, sustainable report preparation has gained popularity since the turn of the twenty-first century and is now frequently used to define a company's financial reports for reporting on social and environmental policies, as well as practices and performance requirements (Hummel & Schlick, 2016). Although the interest and support legitimacy theory has recently garnered, there is a claim that the business will conduct a report on the environmental report legitimacy theory (Crossley et al., 2021).

Legitimacy theory, an organization's accountability to its constituents and to the structures, norms, and values of society as a whole is essential to its validity(Pittroff, 2014).With regards to legitimacy theory, a business that prioritizes social and environmental disclosure exhibits focuses and gives the image of being fundamentally operationally effective. This means that it fulfills the social rights of those who have political influence on the company's environmental standards(Mousa & Hassan, 2015).Evidence illustrates that the goal of legitimacy theory is to expose legitimacy. It also focuses on how management is controlled within the company and how it reacts to society (Hamm et al., 2022). The factors that influence the organization's legal actions serve as the basis for its social disclosures. Regarding legitimacy theory, it is paradoxical how the organization will behave to ensure that its management satisfies the community's demands, which the community's stakeholders will judge and consider, and which, if accepted, will be accepted. legitimacy theory also demonstrates the need for businesses to strengthen the distinctiveness of their constituents in order to maintain a positive social image in an effort to protect the environment, governance and the social value to show their dedication to upholding society's various standards and to create rewards for businesses that do so(Moloi & Marwala, 2020).It is obviously seen that one of the most regarded theories in society for an advocacy strategy for the environment is the legitimacy theory.

According to a review conducted by the legitimacy theory connection between the sustainability report disclosure in all three sides : environment side, social side, and governance side to mediator variable is corporate governance score, according to a review conducted by legitimacy theory state that organizations continuously try to ensure society and focus on the company interaction with corporate social responsibility that welds between the variables used in the study and the independence variables.

Signaling Theory

Signaling theory of Spence, M.L (1973) suggests that managers are better knowledgeable than shareholders. Therefore, management's views on the company's future direction or how to create rules for debt development are communicated to investors through investment decisions. If the employee is expected to decide to invest while the company loses, in order to entice new investors to share in losses, the business will cease to exist in some way, such as investing in debt borrowing or raising cash to raise common shares. The use of signals by management to urge investors to arrange debt repayments, dividend payments, and borrowings shows the market potential of the company's systems including announcement of the purchase of shares by common shareholders, debt creation, share repurchases, mergers, and acquisitions(Connelly et al., 2011). Evidently, strong share repurchases are associated with an increase in profitability and improved asset quality in the year that stock is traded on the stock exchange, demonstrating investors' expectations for profitability from share repurchasing. However, because the share price is lower than the initially offered share price and at a price below its intrinsic value, the negative correlation between the share price and the quality of the company will signal the company's ability to do so in the future(Taj, 2016).The signally hypothesis, also known as signals and concepts that exist from an organizational point of view, is frequently utilized for attraction, to obtain influence and knowledge, as well as numerous indications of organization in revelation.

Furthermore, the nature of signal analysis in the different categories that the signal sender will send to the receiver, and according to the circumstances of the organization toward interpreting and determining the role of the user based on the signal, the transmission based on the information about the nature of the signal and the receiver, the monitor, in which the person investigating the signal performs the function of the signal and displays it, are all factors that contribute to the signaling theory. Additionally, the chief executive officer, management, and managers, among others, serve as the signally theory's primary users, while the receivers might be consumers, staff members, or regulatory bodies shareholder investor, etc.(Taj, 2016).It can be explained that the signals that the transmitter produces may be split into three categories: signals that suggest future action, signals that are concealed in connection to the organization's flaws and disadvantages, and signals that are required for internal communication(Connelly et al., 2011).The signal's surroundings and point of origin determine how far it travels. Organizations frequently send signals to minimize information in a way that doesn't lead to imbalances between the company and its stakeholders, and are prepared to communicate the information and communication of the organization's image in accordance with its aims, behaviors, and actions(Bergh et al., 2014).The cornerstone of the signally theory is frequently utilized in consumer marketing communications(Bergh & Gibbons, 2011).Thus, many researchers have noted that signaling is a component of the signally theory, which is renowned for outlining the strategies and objectives of human resource management, governance and finance. This idea will be supported by research and practical recommendations that nonetheless show a dedication to society.

By way of a kind of social responsibility reporting, signaling theory shows a pattern of unbalanced data removal or information that may not be shared for personal gain. Data as signaling proposes that companies use corporate social responsibility as a stand-alone symbol to demonstrate a commitment that is more in line with data creation. Moreover, social responsibility of corporations (Mahoney et al., 2013).Explains how the data is mirrored in the sender's notation's boundaries based on dependability, and demonstrates how to exhibit the breadth of the auditor's information by providing unbiased verification of corporate responsibility(Omran & Ramdhony, 2015).In order to teach stakeholders on how to manage the organization's long term sustainability reports, signally theory explains the sustainability of the organization and includes managing sustainability reporting(Hassan et al., 2 0 2 0) .In order to facilitate decision-making, these sustainable disclosure methods take into account stakeholders' environmental concerns, financial stability, and openness. Consequently, the executive must not be coerced into giving the organization's sustainability information(Mahoney et al., 2 0 1 3) .In order to resolve environmental and social issues, including efficiency beyond financial efficiency, sustainability reporting should be seen as a positive indicator of management's commitment by the growing group of investors interested in starting their own business. These investors will pay attention to ethical reporting, such as paying bills to expand and strengthen corporate social responsibility funds in response to socially responsible investments(Riedl & Smeets, 2017).The accuracy of the data in the report determines the value of sustainability reporting. Likewise, the efficacy of costs related with environmental responsibility issues that are publicly known in compliance with the reporting rules is seen as one of the primary determinants for gauging signal performance. Information presentation is governed by the reporting framework of the Global of International Reporting Initiatives(Levy et al., 2010).Furthermore, the cost of the sustainability report is apparent, and its standout feature shows that stakeholders are credible in presenting accounting information without considerably obfuscating it(Kim & Lyon, 2015).

In fact, aspects of the rules that will be employed to present the sustainability disclosure reports have been described using signally theory. Performance is measured using the global reporting initiative's system(Ching & Gerab, 2017).The report on corporate social responsibility will be impacted by the transmission quality(Marquis & Qian, 2014).The significance of exhibiting care for society and the environment is represented by the signally hypothesis. The performance of the signally theroy hypothesis demonstrates the potency of signaling(Simoni et al., 2020).

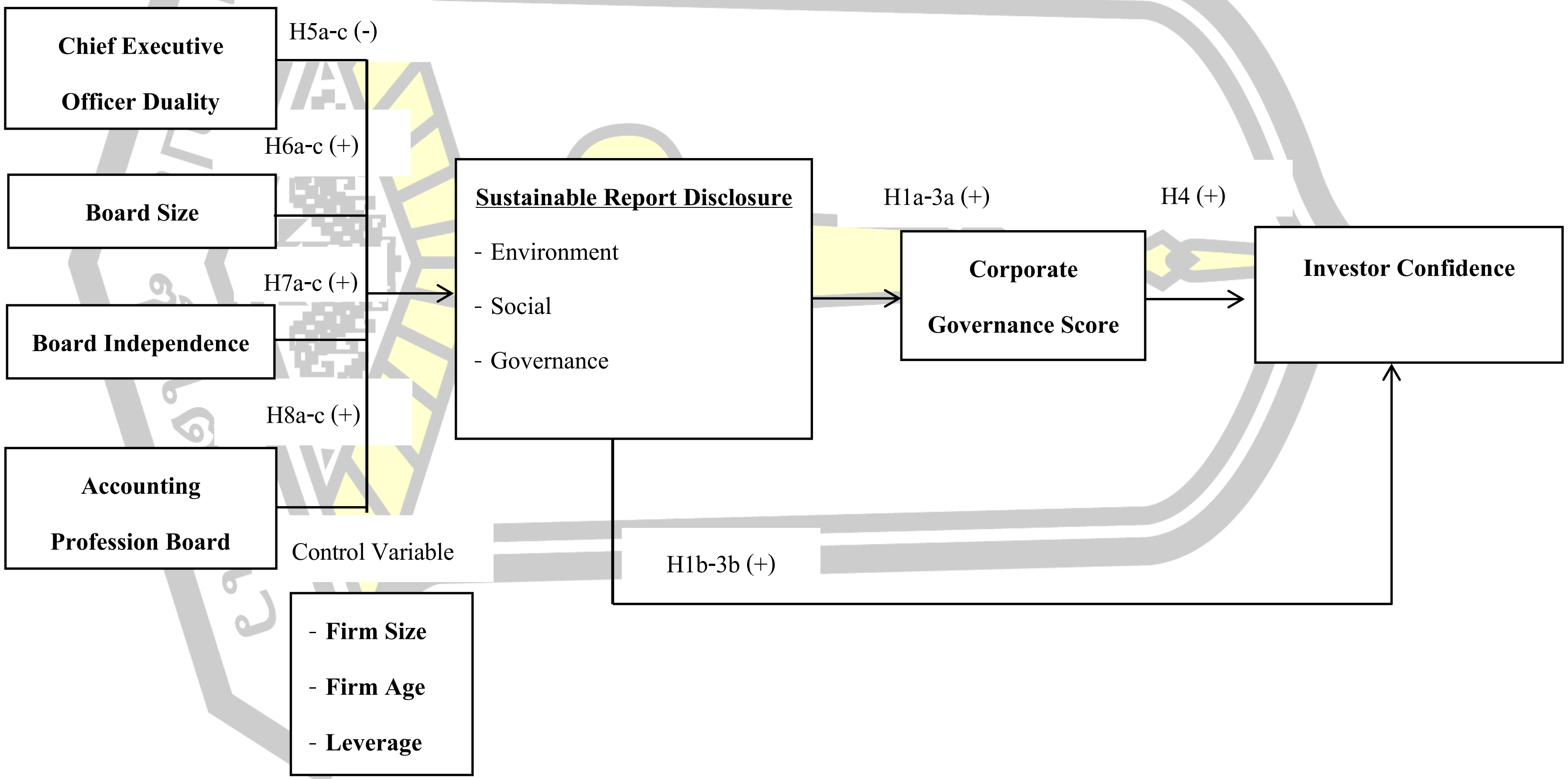
According to a review conducted by the signally theory, which is the idea of signal transmission and the idea of reliably transmitting information to stakeholders, there was a weld between the variables used in the study and dependence variable, which was investor confidence, and the mediator variable, which is corporate governance score, to independence variable disclosed in sustainability report disclosure in all three areas: environment side, social side, and governance side.

Hypothesis Development

The theoretic foundation of stakeholder theory, legitimacy theory and signaling theory is a concept used for the development of hypotheses in a conceptual model during the correlation test of sustainability report disclosures and investor confidence to ensure that all the variables for research are consistent with the concept of the theory, with the disclosure of sustainability reports being the main variables in this research. As the researchers initially explained, the disclosure of sustainability reports has a positive impact on corporate governance score and investor confidence of companies in the energy industry group in the Thai listed companies.

Finally, there are four factors influencing the disclosure that will affect the sustainability reports disclosure: chief executive office duality, board size, board independence and accounting professional board. In addition, control variable effect to firm size, firm age and leverage expected is correlate positively of the sustainability report disclosure as show in figure 1.

Figure 1 Conceptual Model Effect of Sustainable Report Disclosure on Investor Confidence



Sustainable Report Disclosure

The global reporting initiative creates standards for sustainable reports based on the information that must be disclosed in the sustainable development report, which shows how significant and influential the organization's operations are. There are three sustainability reporting frameworks for each category(Al Amosh et al., 2022).There are regulations in many places saying that all firms must publish sustainability data for the advantages of reporting, despite the fact that there are no accountability rules for energy corporations like oil and gas production companies. In every business, but especially in those that harm the environment, companies will have empirical data if companies don't engage in the reporting process (Adams, 2017).Regarding detrimental effects in a variety of ways, companies nowadays are aware of the benefits of transparency. Report on sustainability as a consequence, much-needed data has been added to the collection of data on corporate social responsibility in order to increase investors' importance and gives them a tool for comparing financial data with the company's duties(Sekhon & Kathuria, 2019).It should be noted that a thorough examination of sustainability incentives will take into account perspectives that are not socially significant. The integrated reporting framework and global reporting effort both explicitly cite the sustainability report's foundation in their own reports.

The global reporting initiative promoted the creation of reports in line with the sustainable framework as a goal of operation under the report used for establishing rules for sustainability reporting (Pizzi et al., 2022).The global reporting initiative's framework is based on three principles of environmental equilibrium according to the guidelines from the analysis to the reporting aspects of the sustainable reporting (Grainger-Brown & Malekpour, 2019). According to a different objective on its part, The United Nations' sustainable development objective is to create a society that is healthy and sustainable based on everyone's general well-being (Saxena et al., 2021).Interestingly, the United Nations educational, Scientific, and cultural organization member states have generally decided on seventeen goals for the creation of sustainability reports, in line with a comprehensive approach to leading reporting.

The global reporting initiative financial reporting standards are not the foundation of the reporting system. Hence, a company's ability to demonstrate the connection between financial capital and social and environmental capital, as well as concerns relating to sustainable development, is limited by the financial reporting system. The integrated reporting framework places a lot of emphasis on showing the relationship between capital and sustainability reporting to show the company's influence on society and the environment. Companies may assist sustainable development by providing sustainability reports using their resources (Boiral & Henri, 2017).

It is proposed that sustainability report meant to highlight achievements (Beyne et al., 2021).Importantly, development, internal equity, significance, and multiplicity are the fundamental ideas that support and guide sustainability, the requirement for social, economic, and environmental advancement as well as the requirement to stop human actions that would harm sustainability. Sustainable development methodologies, which are connected to the aforementioned five factors in sustainability reporting and have varying effects on each organization's productivity when used to produce a sustainability report(Pucker, 2021).It is essential that companies frequently publish both economic and post-sustainability results including the separation between society and the environment(Boiral & Henri, 2017).There are signs that the effect of sustainable outcomes should be the main emphasis of sustainability reporting since the effect suggests a long-term primary result(Compact, 2015).The industrial revolution really began the development of the reporting framework for sustainable reporting. Evidence illustrates that, since the 1950s, there has been an increase in the utilization of ecological resources, and since 1978,economic development has quadrupled.

The disclosure of sustainable reports, which are extremely popular in all businesses, all industries, especially those with public interests, and sustainable reports are increasingly being prepared every year, are a big part of the incentives associated with the preparation of sustainability reports and policy reviews related to the corporate social responsibility disclose(Carroll, 2015).Correspondingly, sustainable is a positive trend in conformance reporting as well as how to solve issues, even though it is well known that the energy group ecosystem has a large influence on the environment and is a crucial condition for companies to consider the value of the sustainable report (Fleck et al., 2011).In addition, the incentive to reduce of internal costs corresponds to developments that measure growth with corporate profits and the country's internal gross(Tai & Chuang, 2014).To the fact that when marketing strategies are used, consumption and technology do not develop together with the economy. According to the state of the environment's health, there is also a strategy to support the expenses incurred by promoting sustainability. For such transactions, the costs associated with social and environmental factors need to be considered from growth to development as well as economic integration. Realizing that the expenses of producing sustainability reports are related and beneficial to many different of people(Schwartz & Cragg, 2017).International reporting project additionally, a report on the global reporting initiative consultation to establish global standards from the sustainability standards committee to set sustainability reporting standards, starting with businesses in European Nations, has been created. Regarding avoiding fines for breaking regulations meant to safeguard and care for nature, the environment, and society as a whole, businesses that create sustainability reports may improve revenues and lower production costs (Bananuka et al., 2021).

Environment Side

Organizations must integrate environmental accounting into their management in order to follow realistic recommendations. Due to the fact that the environment must be the main concern, it is essential to attribute criteria out focusing primarily on financial success so that environmental management expands qualitative physical of performance(Ogmundarson et al., 2020).In addition, organizations must incorporate environmental accounting into their management in order to follow practical recommendations. The ecosystem must be the main concern to attribute criteria without focusing primarily on financial performance, environmental management accounting (Sarkis & Zhu, 2018).Specifically community’s environment may benefit the nation manage its economy and environment(Christ & Burritt, 2013).However, environmental data is insufficient for executives' ability to make adequately rational decisions in physical and financial areas as well as accounting efficiency. Environmentally relevant initiatives and practices are tools that help organizations compete, give them an advantage, and help them improve overall performance.

Correspondingly, the use of environmental accounting as a risk management technique to protect the standard of environmental stewardship within the business and nearby societies is another aspect of the interaction between environmental accounting and risk management in industrial of sector(Gond et al., 2018).Data centric environmental management analyzes risks across a variety of domains and defines sustainable strategically. Moreover, environmental accounting sustainability is a concept used in eco-regulation to decide how financial control is carried out as well as a strategic control over environmental arrangements used for planning and budgeting on environmental stewardship (Thangavel & Sridevi, 2016).

Corporate environmental related strategies the effects of the company's operational activities on the environment as consumers occur in nature, such as product processes, energy reduction policies, and policies on waste disposal using ecological resources, etc., are referred to as "environmental management systems" and can be used to explain this(Wiernik et al., 2013).Furthermore, environmental strategies are employed to demonstrate superiority against rivals. When establishing strategies and frameworks for putting environmental organizations' policies into practice, environmental performance will be a primary goal(Rodrigue et al., 2013).There are several methods for categorizing strategies, such as energy efficiency techniques, development approach for selling eco-friendly packaging, techniques utilizing environmentally conscious technology while developing methods for recycling (Olah et al., 2020).

Adopting environmentally technology to promote sustainable development technology connected to sustainability is heavily controlled, certified, and regulated when used as application software to aid in operations with the objective of conserving the environment to the preservation of natural resources and attaining the degree of financial performance demanded by the business(Tregidga et al., 2014).Although firms' adaptation to environmental policymaking is frequently focused largely on legal and regulatory policies, technology in environmental management is a significant mechanism of sustainability and involvement in environmental preservation. For instance, the development of new technologies to decrease the amount of materials that will contribute to environmental degradation, etc.(Tost et al., 2018).

Regarding disclosure of environment dimensions of information, the global sustainable standard board sets out social guidelines and indicators, based on the world federal of exchange concept, to display the data. In the environment dimensions of the sustainable report development report to provide environment sustainability reporting to stakeholders, the researchers defined environment disclosure issues as follows: global reporting initiative ten indicators are greenhouses gas emission, emissions Intensity, energy usage, energy intensity, energy mix, water usage, environmental operations, environmental oversight climate - related risks, environmental oversight other-sustainability issues and climate risk mitigation (World Federal Exchange ESG Guidance and Metrics,2018)

<u>Social Side</u>

The organization uses social responsibility as a tool to demonstrate to stakeholders that these groups have a right to acknowledge social responsibility. Information, in addition to the business's financial interests, determining social responsibility is something that the organization must undertake willingly and jointly to advance society(Eizenberg & Jabareen, 2017).These are a number of social responsibilities. Subsequently, it exhibits the potential for enhancing an organization's reputational wealth while adhering to the dictates of the law and the standards of that the society(Ross, 2015).Similarly, becoming socially responsible is intriguing because it demonstrates that a business is driven to make decisions that will boost stakeholders' wealth and strike a balance between shareholders' and stakeholders' interests(Woodcraft, 2015).

More importantly, employer safety is only one example of how socially responsible businesses that value sustainability and employee social responsibility take care of all facets of their job, employee well-being, working relationships with families, and opportunity for both genders to participate (Weingaertner & Moberg, 2014).Likewise, being socially responsive in order to compete internally and provide these advantages to stakeholders, the company has built social features surrounding the creation of work ethics and quality of life(Koonmee et al., 2010).Stakeholder confidence in a corporation is mostly dependent on business ethics in terms of labor responsibility. Thus, the organization must place importance on factors such as the workplace environment inside human organizations and the workers' brains. Moreover, being socially responsive is a component of evaluating the impact on employees' organizational commitment across six dimensions, including corporate involvement, volunteerism, expanding employment opportunities, basic work requirements, balancing work and family obligations, and fairness and equality within the organization. It is suggested that each employee requires these as the foundation for their work(Raziq & Maulabakhsh, 2015).

Evidently, employee satisfaction is measured by their willingness to work hard. According to Nam (2019), satisfaction with the organization is a component of being encouraged to be a good employee of the company. This is because both the recognition of performance and the compensation that employees receive from the company are partially dependent on the practice of social responsibility. Similarly, the satisfaction of the company towards the employee is regarded a good motivator in sustaining the personal performance of the employee, displaying a good acceptance of work inside the business, behavior displaying the capacity to work, and what level that employee is capable(Davidescu et al., 2020).

According to studies on social responsibility, employee dedication has a substantial impact. The psychological attachment of the person expressing sentiments to the organization is taken into consideration when interpreting the commitment (Carroll, 2015).There are two universally acknowledged varieties of emotional commitment, such as workers wanting to continue working under the tasks. This explains that they want to accomplish their work. It is generally referred to as an emotional reaction to the qualities that a company rewards by the commitment stated. Examples include normative commitments such as workers wanting to keep performing their tasks without wishing to change their work or positions and employees wanting to be a part of the organization to continually develop the company. From the above discussion, these two responsibilities will help tie employees to the company and lower the possibility of employee departure.

An important determinant that is measured in terms of an organization's loyalty to employees is the policy of defining the social responsibility. This policy is used to demonstrate a prediction of an employee's intention to stay at work or leave the organization, primarily due to organizational policies rather than the employee behavior and the employee commitment(Ditlev-Simonsen, 2015).Employees are therefore at the center of the organization's social responsibility policy and are their primary influence paying employees, etc. (Farooq et al., 2014).

Regarding disclosure of social dimensions of information, the global sustainable standard board sets out social guidelines and indicators, based on the world federal of exchange concept, to display the data. In the social dimensions of the sustainable report development report to provide social sustainability reporting to stakeholders, the researchers defined social disclosure issues as follows: global reporting initiative ten indicators are chief executive officer pay ratio, gender pay ration, employee turnover, gender diversity, temporary work ratio, non-discrimination,, injury rate, global health and safety, child and forced labor and human rights. (World Federal Exchange ESG Guidance and Metrics,2018)

Governance Side

Principles of governance of which the appointment of a committee to supervise the administration is necessary for good management. It is accountable for efficiently overseeing the management's activities, which must be completed in a transparent manner. Corporate governance reporting also helps to increase the accuracy and integrity of financial reporting and the process used to get financial data, which helps investors align the interests of the board of directors with those of shareholders(Tricker & Tricker, 2015).Reduced information sharing between managers and shareholders makes it possible to manage business profitability under appropriate corporate governance. Hence, this is made possible in part by the interaction between corporate governance and voluntary disclosure of accounting information(Salvioni & Gennari, 2014).

The board's corporate governance policy is varied and shifts in accordance with the organization's strategy, with the board's main goal being to show how well the organization's activities are conducted in accordance with its selected plan(Prugl, 2012).Board driver skills will increase shareholder value over time. The board's reliance on resources is crucial in determining an organization's performance(Naciti et al., 2022).According to this theory of board governance, firms should sometimes vary their search for committees inside the organization to join in order to build a mutually efficient connection between the company and resources within the organization(Hillman et al., 2000).Such a range will need knowledge, expertise, and networking, such as bargaining with customers to gain access to raw materials at discounted rates, etc. Therefore, a crucial role in the growth of the business is played by the external board of directors' independence and compensation.

The result that senior management delivers to the company are what they are paid for. Administrative management between senior and lower management jobs is reduced by pay or perks. Executive salary raises the value of shareholders. The capacity of labor growth has an effect on the trust of shareholders on the company (Byrd et al., 2010). Similarly, loyalty between the management and the business wins over the trust of the shareholders, who will pay close attention to what the management does for the business after shareholders have received a sufficient return and rewarded executives at all levels, from shareholders' remuneration increases to agents who manage the company on their behalf. From the above discussion, if the executives are paid less, though, it is expected that the outcome will be connected to the organization's poor management, making it more difficult to work for shareholders and decreasing the legitimacy of the organization's public image (Naciti, 2019).

The company's social responsibility exemplifies how corporate principles are welded together. The organization may be described as a philosophy that upholds fundamental human values while upholding corporate governance and the board of directors' integrity(Pupavac, 2 0 1 4) .Corporate culture includes moral management and standardization of value judgments, which lead to social responsibility decisions (Liu & Zhang, 2017).Unquestionably, the organizations that practice of corporate social responsibility and ethics should consider certain efficiency factors when expressing their social responsibility, such as costs incurred, business efficiency, the significance of special cases, etc., as doing so will reduce operational efficiency when dealing with complex issues because it affects how the business solves problems(Lagasio & Cucari, 2019).The development of ethics is influenced by personal characteristics. In a similar manner, corporate culture affects the factors impacting the board of directors' opinion of the value of ethics in communicating social responsibility to consumers (Lau et al., 2016).

Implementation of the business ethic principles in line with the responsibility principle, which involves consideration for the interests of stakeholders, taking that into account with the success principles, business responsibility, morals, and interests of stakeholders(Nour et al., 2020).It is essential that relationships are complicated by ethical standards, societal obligation, and financial achievement. It improves the management's reputation by adhering to the ethical and social responsibility norms. Publicity, which results in a favorable perception of the organization to achieve long-term success and growth and development, the company must operate inside the code of conduct and with social responsibility(Karim et al., 2020).

Regarding disclosure of governance dimensions of information, the global sustainable standard board sets out governance guidelines and indicators, based on the world federal of exchange concept, to display the data. In the governance dimensions of the sustainable report development report to provide governance sustainability reporting to stakeholders, the researchers defined governance disclosure issues as follows global reporting initiative ten indicators are board diversity, board independence, incentivized pay , collective bargaining, , supplier code of conduct, ethics and anti-corruption, data privacy, sustainability reporting , disclosure practices and external assurance. (World Federal Exchange ESG Guidance and Metrics,2018)

Table 1 Summary of Definition of Sustainable Report Disclosure

Author(s)	Definition of Sustainable Report Disclosure
Throsby (2017)	Reporting on sustainability to show contributions to sustainable development based on the environment, society, and governance are three dimensions of sustainability and development.
Athapaththu and Karunasena (2018)	Reduced negative effects of the firm on the environment and society play a significant role in promoting sustainability, maximizing governance advantages to sustainability in the future.
Bose et al. (2018)	The idea of "green business" is used to prepare the report by implementing environmentally friendly technology inside the company to minimize carbon dioxide emissions and environmental management.
Omisore (2018)	Report creation and information presentation on the environment. Acting in a way that demonstrates social responsibility to public organizations in an effort to win over stakeholders.
Kumar and Prakash (2018)	Applying corporate strategy and sustainability reports together to advance business without concentrating exclusively on economic success, sustainable company growth takes into account the impacts of social and environmental stewardship.
Manes-Rossi et al. (2018)	Increased responsibility and accountability for stakeholders according to the sustainable development report and the persistent effort to assist the decision-making process via behavior results from the disclosure of information centered on the environment, society, and socially conscious demand.

Table 1 Summary of Definition of Sustainable Report Disclosure (continued)

Author(s)	Definition of Sustainable Report Disclosure
Bebbington and Unerman (2018)	The creation of social responsibility reports to document the accomplishments and serve as a guide for controlling the organization's approach to its practices regarding matters that take into consideration the social role of shareholders.
Cerri et al. (2018)	Reporting on environmental, social, and economic sustainability is important, and organizations' stakeholders and communities should pay close attention to sustainable development principles.
Johnstone (2019)	Reporting preparation Sustainability reporting, investor confidence, and the company's reputation are all impacted by good governance.
Shao (2019)	Support sustainable consumption of socially, economically, and environmentally responsible goods using sustainability reporting.
Orazalin and Mahmood (2020)	The quality of sustainable report disclosure with global reporting initiative is affect to companies in different industries with their stakeholder.
Threlfall et al. (2020)	In attempt to solve the company's concerns for future sustainability, it is vital to consider capital as well as changes in sustainability levels for development to effect stakeholders.
Stefanescu (2021)	Report protecting and maintaining both assets and human resources in order to generate sustainability over the long term by recycling them. To satisfy the requirements of those under the community's care to effectively satisfy the interests of stakeholders in the future.

Table 1 Summary of Definition of Sustainable Disclosure (Continued)

Author(s)	Definitions of Sustainable Report Disclosure
Fekete and Hagen (2021)	Creating sustainability reports that take into account how environmental regulations affect water contamination. This involves monitoring the decreases in emissions of pollutants like greenhouse gases and the expenditures that companies will incur as a result of sustainability reporting.
Lichtenthaler (2021)	The purpose of creating sustainability reporting is to demonstrate how stakeholders have affected the organization's performance in global stewardship. Putting society and the environment above profits or growing expenses.
Dang and Pham (2022)	The sustainability report offers proof of good management. economic assessments on the environment, society, and corporate governance show both positive and bad consequences, similar to how financial disclosures aid firms in building trust in the information about their social responsibilities.
Nath and Agrawal (2022)	Reporting on trends in the use of natural resources and offering advice on how to change your life using eco-friendly materials to fulfill present and future demands.

Defined on a review of literature related to sustainability reports, the objective is to create performance and participation in sustainability and development for the company's future interests, including how to manage environmental stewardship practices to create sustainability and contribute to the development in the organization. Evidently, global reporting initiative focus on disclosures related to1)environment side , 2)social side , 3)governance side.

Table 2 Summary of Typologies of Sustainable report Disclosure

Author(s)	Typologies of Sustainable Report Disclosure		
	Environment Side	Social Side	Governance Side
Soh and Martinov-Bennie (2015)	Environmental regulation management reporting on issues related to energy, material use, greenhouse gas emissions, water and waste management.	Managing corporate expectations, transparency and social responsibility at the time of the organization's business.	Disclosure management and how to determine corporate governance Voluntary disclosure of corporate governance information to reduce organizational conflicts.
Velte (2019)	Measuring environmental performance and impacts related to the organization, as well as maintaining the integrity of organisms around the plant such as air, water, and ecological integrity.	Building trust and measuring the loyalty of employees, customers, and society.	Creating a process that ensures that board members and executives, as well as stakeholders, receive the best interests from the organization.
Melinda and Wardhani (2020)	Support economical use of resources; Emissions reduction Various innovations used for environmental promotion Limiting greenhouse gas to limit waste.	Social support such as workers' rights, human rights, product and community responsibility, as well as the value of industries affecting society.	Good governance support with management, shareholders, and the formulation of strategies within the organization for a good image of corporate governance.

Table 2 Summary of Typologies of Sustainable Report Disclosure(Continued)

Author(s)	Typologies of Sustainable Report Disclosure		
	Environment Side	Social Side	Governance Side
Mgbame et al. (2020)	Preserving the environment and ecological system in good shape supporting biodiversity through practices like wastewater treatment and observing environmental regulations for water emissions.	Social structure places a focus on the idea of social duty and regard for other people. Internal social investment components putting social policies into practice inside the companies.	Preparation of the governance corporate control structure to win the trust of stakeholders within the company, many techniques were used.
Rajesh and Rajendran (2020)	Guidelines for reducing waste in accordance with the philosophy of environmental conservation.	Labor, deciding on human rights, taking ownership of their goods, and affiliating communities.	Executives in governance develop policies. Methods for implementing corporate social responsibility.
Eng et al. (2021)	Preserving and reducing carbon dioxide emissions modifications to waste pollution, waste disposal, or the usage of renewable energy.	Corporate political support for workplace discrimination, workplace diversity, and human rights.	Directors in the business are allowed to make judgments while maintaining shareholder rights in the management of executive compensation.

Table 2 Summary of Typologies of Sustainable Report Disclosure (Continued)

Author(s)	Typologies of Sustainable Report Disclosure		
	Environment Side	Social Side	Governance Side
Rahi et al. (2021)	Internal waste disposal, greenhouse gas emissions, the use of renewable energy, and the use of dirty energy.	Human capital management, gender diversity, employee equity, and employee well-being.	Organizational internal control procedures for corporate governance and risk management.
Al Amosh et al. (2022)	Environmental effect regulations pertaining to water management, the environment, and industrial waste management the air layer's receiving of more energy output.	Employee and community well-being at the manufacturing facility Human rights laws that address issues including child labor, workplace accidents, and employee turnover.	Tax disclosure employee Guidelines for fair labor practices regarding bribery employee bonuses are paid power separation within organizations.
Lee and Isa (2022)	Promoting environmental health and safety, including the control of greenhouse gases that have an impact on other habitats, wastewater treatment, and waste recycling.	Promoting the social and cultural issues, human rights, and product responsibility of the workforce. fostering positive interactions with stakeholders, society, and customers.	Promoting facilitates confederation-related aspects. stakeholders, the organization's leadership abilities Corporate risk management's board of directors operating independently.

Table 2 shows the variables used to measure sustainability according to the global reporting initiative's sustainability Report : (1) Environment side policy related to airborne emission use of chemical energy, water use, energy reuse and use of renewable Energy. (2) Social side focus on employee-related policies, employee rights, employee equality, youth labor corporate human rights. (3) Governance side emphasis is placed on the independence of directors, business ethics, remuneration to the board of directors, confidentiality of supplier information.

Sustainable report affects variables accordingly, and the researchers requested that research related to sustainability reports affect investor confidence be used for data analysis to verify relevant research references in table 3.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure

Author(s)	Type of Research	Key Issue Examine	Main Finding
Davis and Searcy (2010)	Quantitative Research	The study comparison of existing content analyses of corporate sustainable development reports was conducted based on the comparison, identified for further research in the content analysis of Canadian corporate reports.	The finding content analysis highlighted several interesting trends in Canada reporting. For example, the analysis highlighted that relatively corporations explicitly identify the audience for the report, include an endorsement from the board chair, provide details on specific standards used for managing the supply chain, discuss linkages to public policy, or use third-party assurance.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Suttipun (2018)	Quantitative Research	The study investigates the nature and level of Sufficiency Economy Philosophy disclosure in the annual reports of companies listed in the Stock Exchange of Thailand (SET), to the influence of corporate governance on sufficiency economy philosophy disclosure, and to examine the influence of corporate governance, and sufficiency economics philosophy disclosure on corporate financial performance.	The finding results indicated that the average level of Sufficiency Economy Philosophy disclosure in the 2015 annual reports was 1,235 words. The most common theme of disclosure was morality disclosure followed by and moderation disclosures. There was a positive significant influence of firm size on level of sufficiency economy philosophy including positive significant influence of the level of sufficiency economy philosophy, financial performance.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Muñoz et al. (2021)	Quantitative Research	The study aims to examine style-deviation practices in the socially responsible mutual funds industry and how mutual funds game their stated financial objectives to earn a higher relative performance ranking. In addition, the consequences of such practices on sustainable scores and money flows are studied.	The Finding Socially Responsible mutual fund managers in the sample are engaged in style deviation practices. These practices positively impact the sustainable performance of socially responsible mutual and negatively impact their financial performance. One effect offset the other and they consequently do not affect money flows. Another finding is that only investors with lower portfolio sustainability scores

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Stefanescu (2021)	Quantitative Research	The study aims to explore the linkages between sustainable development and sustainability reporting by approaching the UNESICO agenda in connection with integrated reporting and global reporting initiative frameworks of sustainable development goals through appropriate reporting.	The results reveal that both sustainability reporting frameworks provide prerequisites to ensure sustainable development goal achievement due to the embedded sustainability issues. As there are more matches between sustainable development goals and the capitals implied in the pursuit of value creation, integrated reporting is better to become part of the sustainable development strategy as a viable option sustainable goals.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Rahi et al. (2021)	Quantitative Research	The purpose of this study is to explore the impact of sustainable environmental, social and governance practices on the financial performance of the Nordic financial industry.	Using statistic and dynamic estimators, the authors suggested both positive and negative impacts of sustainability practice on financial performance. The authors identified a negative relationship between ESG practices and financial performance (return on invested capital ratio, return on equity and earnings per share ration). The authors identified a positive relationship between governance and return on assets.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Jonwall et al. (2022)	Quantitative Research	Socially responsible investment is an upcoming investment strategy in India. Very few researches have been conducted on socially responsible investment in the India context. This study identifies the socially responsible investment awareness level, attitude towards the importance of environmental, social, and governance issues. .	The results indicated that Indian sustainability report investors integrated reporting awareness level is high. They are more concerned about broad and specific ESG issues Further, they are more into faith-based investing, and are responsible consumers conventional investors. Consequently, the results of cluster analysis indicated that Indian retail investors can be classified into three side based on their standard research institute awareness, intention to sacrifice financial return, attitude toward ESG issues made by consumers.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Lee and Isa (2022)	Quantitative Research	The study aims to examine the impact of environmental, social and governance (ESG) practices on the financial performance of Malaysian Shariah-compliant companies over the period 2010–2017.	This study finds a positive relationship between ESG practices and financial performance, suggesting that ESG practices can enhance firm value. Additionally, the authors also find evidence that double ESG Shariah screening can enhance the ESG relationship with performance. These results are consistent and robust across three proxies for financial performance and different estimation techniques.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Ozili (2022)	Quantitative Research	The study investigates the association between financial inclusion and sustainable development in a global context. The study employed the person correlation analysis and granger causality test to examine the correlation and pairwise causality between financial inclusion and sustainable development.	High levels of financial inclusion are significantly associated with higher electricity production from renewable sources, higher industry productivity, a higher adult literacy rate and a higher renewable electricity output. Also, higher financial inclusion is significantly associated with low combustible renewables and waste, sustainable development and global interest in internet information about financial inclusion, particularly in the period of the financial crisis but before the COVID-19 pandemic.

Table 3 Summary of Key Literature Review on Sustainable Report Disclosure (Continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Wasiuzzaman et al. (2022)	Quantitative Research	Analyze the extent to which culture may affect the relationship between environmental, social and governance disclosure and firm performance.	The results show that ESG disclosure has a significant negative impact on the profitability of energy firms. When cultural dimensions are taken into account, power distance and long-term orientation are found to significantly moderate the relationship between ESG development and firm performance.

Corporate Governance Score

Characteristics of good corporate governance, such as democratic legitimacy theory in organizations and the capacity to rule, the principles of good corporate governance are assessed. Employee involvement in the business and executive organization responsibility society and organizations employ the process of governance to make decisions(Alali et al., 2012).Internal operations connected the managers or shareholders inside the firm will be guided in their decisions by the principles of good governance. According to the requirements of the writers of the legislation inside the business and developing new criteria for good corporate governance, good governance may help direct the process of making financial decisions as well as be effective in minimizing the chance of fraud occurring(Akyel, 2012).Currently, many governments use the system of corporate governance as a criterion for calculating the corporate governance score and as a benchmark for ethical leadership. according to corporate governance standards evaluated(Tricker & Tricker, 2015).

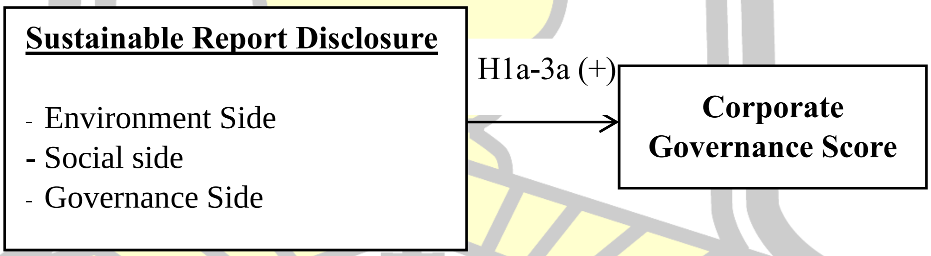
The Financial Institutions Directorate of Thailand's corporate governance score receives the Thai Institute of Directors Association reviews corporate governance score, which is supported by the Thai listed business and the securities and exchange commission, by assessing the firm's management for the efficiency of its operations. corporate responsibility each organization has a unique corporate governance score, which is classified into 5 levels, from level 1 to level 5, for consideration of all stake holders, including client, partners, shareholder, and adjacent communities (Khunkaew et al., 2021).Subsequently, the criteria are assessed in line with the good governance standards of the nations, which are an internationally recognized standard for businesses information data the connected to Thai listed companies. (Charoenkijjarukorn,2021).

The standards that were utilized to create the corporate governance score form the five categories of the Thai Institute of Director Association's internationally recognized standards are: (1) Shareholder rights, (2) Equity among shareholders, (3) Role of the stakeholders consideration, (4) Transparent disclosure,(5) Responsibility to directors. The effectiveness of a company in supporting the idea of good governance depends on the good governance principle(Alali et al., 2012).Additionally, the concept of good governance can refer to a type of government that produces results in accordance with needs, is compatible with democratic principles that are observed in organizations, and that promotes fairness in society(Ullah, 2012).The characteristic of excellent governance is that, if anything, it is not and is best used to explain and introduce the idea of practice.

The Relationship among Sustainable Report Disclosure and Corporate Governance Score

This section presents the relationship between opening up social responsibility data to be used for three dimensions: environment side, social side and governance side analysis. The objective of this research is to test the assumptions in the dimensions of the sustainable report that affect the corporate governance score and the relationship below:

Figure 2 The Relationship Among Sustainable Report and Corporate Governance Score



Astuti and Juwenah (2017) found that sustainable reporting has a performance positive relationship of corporate governance. In addition, the increase environment factor in sustainability reporting has a positive effect and has a significant influence on good corporate governance.

Erin et al. (2021) found that good governance capabilities of the organization if the quality is high and sustainability to corporate social responsibility, the system of good corporate governance affects the standards of sustainability reporting positive relationship for high-quality sustainability reporting to promote corporate confidence.

Li et al. (2021) found that good governance negative relationship impact on sustainability reporting corporate governance has a greater not impact on a company's value than sustainability reports. Sustainability reports cannot be used to mediate and positively influence the organization and their public image on the public doesn't affect the corporate governance score.

Wahyuni-TD et al. (2021)found that sustainable reports on a good corporate governance score can have a positive relationship with the performance of the governance organization because good governance reporting promotes the organization's image, passes to outsiders and is a key factor in corporate governance to increase value within the organization's performance.

Rely (2022)found that the positivity of corporate governance score affects the sustainability importance of governance companies and investor's role in the organization to help drive sustainability that companies with different geographies and different sizes affect the scope of corporate governance practices, which in turn affects business operations that are key factors in sustainability reporting.

According to these contrasting findings from empirical studies, research of Astuti and Juwenah (2017); Erin et al. (2021); Wahyuni-TD et al. (2021); Rely (2022) found that companies that disclose sustainable reports had a positive impact on corporate governance score. In contrasted with Li et al. (2021) found negative relationship between sustainable report disclosure and corporate governance score. Therefore, the research hypothesis is formulated as follow:

Hypothesis 1a: Sustainable Report Disclosure of Environment Side Positive Impact to Corporate Governance Score.

Hypothesis 2a: Sustainable Report Disclosure of Social Side Positive Impact to Corporate Governance Score.

Hypothesis 3a: Sustainable Report Disclosure of Governance Side Positive impact to Corporate Governance Score.

Investor Confidence

One of the factors that propels the capital market is investor confidence, and investors' risk may be gauged based on fluctuations in market prices compared to bonds with a yield. By convincing investors that there won't be any mistakes made with their investments when their returns are good, they will increase investor trust. Moreover, investors are given a small risk when it comes to choosing to ask investors feel the risk rather than the benefits they will receive from the investment because they believe their income from the investment will be declining, and they believe their lack of confidence in the investment will increase the risk(Hoffmann & Post, 2016).Investor confidence may be decreased by beginning with causes and keeping in mind the detrimental events that have happened to the company. Over time, this aspect will fade, and corporate confidence will be perceived in a more positive perspective(Nguyen et al., 2018). Evidently, investor behavior is a signally theory in which the idea of determining how much opportunity an investor will have to invest in securities will depend on the satisfaction of individual investors' interests who have different rates of return and risk tolerance requirements. Subsequently, these investors are divided into two categories: first categories risk-averse investors, for whom more risk increases the return rate on the securities, and second categories investors who do not care about risk(Frydman et al., 2014).Regarding this information, investors can choose to examine in order to show the likelihood of occurrences over time.

Studies on the association between sentiment indexes and market index returns have been conducted domestically and overseas. corporate securities yields are impacted by securities and the confidence index(Zhang et al., 2013).Investor confidence is attained through conducting business in accordance with the company's code of conduct, which includes providing clear information to investors. A specific time frame is established for the continuous reporting of the organization's success. According to the signally theory, the basis for judging the credibility of financial information must be helpful and compelling information that is free from bias and mistake.

The return on securities is impacted by institutional investor confidence and is susceptible to precise forecasting of returns when persuading ordinary investors frequently rely on personal judgments to guide decisions. Despite a similar impact on security returns, the projection for those returns is inaccurate(Meier, 2018). In addition to the organization's impact on security prices, investor confidence also has an impact on the stock market's variability. that the stock market would become more volatile when there is a recession or a drop in investor confidence(Hoffmann & Post, 2016). Furthermore, the characteristics of the company's securities determine how to research the price of securities. Studies have revealed a number of variables that influence the value, prices of securities that are synchronized and affected by production distribution of information, including economic aspects that influence value, synchronicity minimized, for example, by hiding corporate securities(Gupta et al., 2021).Moreover, the accessibility of information to the general public that indicates that information transparency and factors such as the environment, economics, and governance have an impact on both the organization's specific capital and the synchronization of the price of one's securities(Shahid & Abbas, 2019).

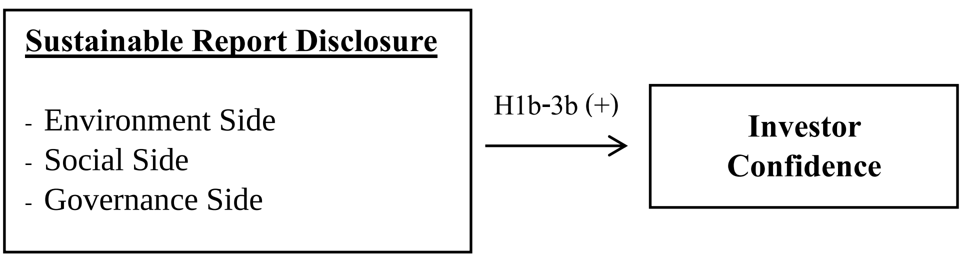
The signally theory connected to investor confidence is accurate to a certain extent when changes in the price of securities are taken into account. Thus, this takes into account the change in transactions for certain elements that have an impact on the price of the securities, as well as the price's volume and price reversal. The study discovered that conditions resulting from the announcement of corporate rewards serve as the primary driver of market price changes(Zhang & Wang, 2022).Strategy is predicated on predictions of a decline in post property values after the release of profits, as determined by economic circumstances. Investors believe that the odds of the firm losing money in a strong economy are low, hence share prices will rise if the economy is strong. As a result, investors are willing to buy additional securities. Market participants are willing to purchase more goods. Consequently, the company's profitability rises as a result of the large sales generated by the firm. The price of securities rises as the company's earnings grows and it is able to pay investors greater dividends. On the other hand, if the economy is weak, investors' concerns about business performance will drive the share price to decline proportionally. Profits for the company will likely decline or even disappear. As a result, it has an impact on dividend payments to investors and prompts some to sell their shares publicly. The share price decreases when many shares are sold(Wu & Tuttle, 2014).

Only the price of the stock market in the macroeconomic sector has a particular impact on the economic sector in general on the stock price, and if the economic sector experiences high inflation, the value of money decreases, the purchasing power decreases. The evidence illustrates that securities prices are caused by environmental fluctuations caused by positive movements or contracts derived from stock market returns, including inflation and interest rates, a clearer reflection of the investment's outcome and less profitability. Obviously, inflation demonstrates stock returns(Yun & Yoon, 2019).Thus, the present inflation rate is higher than what was anticipated, contrary to the theory that inflation will be brought on by dividend variations. The projected rate of return is provided by the rate of return as dividends. As a result, higher inflation will have an impact on the rate of return on investments in securities, which will raise their price and boost investors' confidence in the economy (Dusan et al., 2015).The overall state of the economy and domestic industrial situations, which arise when domestic industry is going through a period of rapid adjustment, are what drive inflation most of the time. Hence, investors anticipate the company's performance in the industry to improve in accordance with industry conditions, which will increase the price of securities in the sector. Opposite to that, the price of industry shares will decrease if the sector is experiencing a slump because investors will sell sector assets out of concern about these risks.

The Relationship Among Sustainable Report Disclosure and Investor Confidence

This section presents the relationship between opening up social responsibility data. To be used for three dimensional analyses. In terms of the environment, aspects of society the three dimensions of investor confidence on the subject of related theory, signally theory. The objective of this research is to test the assumptions in the dimensions of the sustainable report that affect investor confidence and the relationship below:

Figure 3 The Relationship Among Sustainable Report and Investor Confidence



Dimitrov and Davey (2011) found that investors believe that the difficulty of adopting sustainability practices result in negative stakeholder expectations for do not believe that sustainable development will reduce costs and increase profitability for the organization. Investors believe that paying the cost of sustainable development will not affect the movement of any organization.

Adams (2017) found that sustainability reporting in conjunction with UNESCO integration has sustainable goals to develop in environment industry and contributions increase investment. These goals are considered to be an important part of a positive relationship that affect investor confidence, as investors believe that this is a foresighted investment by the organization in improving the image.

Azmat et al. (2021) found that social sustainability disclosures of relationship increase the efficiency of investor engagement in determining the role of organizations in social responsibility development and include the results of creating a common goal between the sustainable development goals.

García-Sánchez et al. (2021) found that the role of investors in the preparation of sustainability reports and the role of investors in determining the benefits that society receives from sustainability are important factor. The findings show that the organization's disclosure of social responsibility reports has a positive effects investor confidence in corporate sustainability.

Erin et al. (2022) found that investor confidence stood in the interests of the company to demonstrate corporate governance through the provision of sustainable development goals and contributed to positive relationship investors made informed decisions to invest their money in a positive way for the organization. Thus, sustainability reporting is also important to stakeholders it builds trust in communication.

According to these contrasting findings form empirical studied found that research of found Adams (2017); Azmat et al. (2021); García-Sánchez et al. (2021); Erin et al. (2022) propose that companies disclose sustainable reports has a positive relationship on investor confidence. In contrast, Dimitrov and Davey (2011) found negative relationship between sustainable report disclosure and investor confidence. Therefore, the research hypothesis is formulated as follow:

Hypothesis 1b: Sustainable Report Disclosure of Environment Side Positive Impact to Investor Confidence.

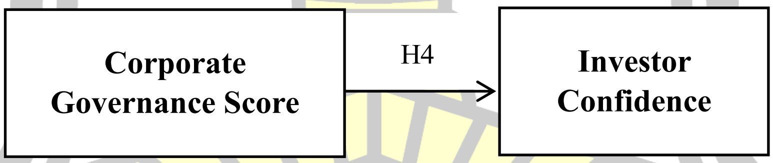
Hypothesis 2b: Sustainable Report Disclosure of Social Side Positive Impact to Investor Confidence.

Hypothesis 3b: Sustainable Report Disclosure of Governance Side Positive Impact to Investor Confidence.

The Relationship Among Corporate Governance Score and Investor Confidence

This section presents the relationship between the corporate governance score for use in conjunction with investor confidence's analysis on the subject of related theory, signally theory, with the objective of this research being to test the assumptions in the dimensions of the corporate governance score that affect investor confidence and the relationship below:

Figure 4 The Relationship Among Corporate Governance Score and Investor Confidence



Ghouma et al. (2018)found that the impact of the good corporate governance committees included that of the organization with regard to the structural composition of the board and the positive relationship of the board of directors. These are the priorities of shareholders in deciding the quality of their investments based on the disclosure of good corporate governance information.

As' Ad (2019) found that investor protection strengthened the influence of good corporate governance, which affected the quality of profitability, and also contributed to the protection of investors by having a positive impact on the quality of corporate governance in accordance with the policy of financial reports conducted by management in accordance with the principles of corporate governance.

Baysinger and Butler (2019) found that the investigation into the role of good corporate governance wasn't linked to investors' confidence that if an entity has a high corporate governance score, it will negative affect the investor's investment in shares, but if the entity has a low corporate governance score, the investor will withdraw the capital from the securities.

Thanapin Attarit (2019) found that companies with good corporate governance had a good audit process. There are auditors from large companies that have a high corporate governance score and good corporate governance principles in accordance with the principles of listed companies that have a positive affect to investors' investment confidence and information used for decisions related to the investor's accounting policy.

Mechelli and Cimini (2021) found that the environment created by high-quality investor protection is valuable to investors for good governance, and investors will value and give confidence to the organization. and a low corporate governance score result effect to poor quality investor protection.

According to these contrasting findings form empirical studied found that research Ghouma et al. (2018); As' Ad (2019); Thanapin Attarit (2019); Mechelli and Cimini (2021) suggest that corporate governance score has a positive relationship on investor confidence. In contrast, Baysinger and Butler (2019) found negative relationship between corporate governance score and investor confidence. Therefore, the research hypothesis is formulated as follow:

Hypothesis 4 : Corporate Governance Score Positive Impact to Investor Confidence.

Chief Executive office Duality

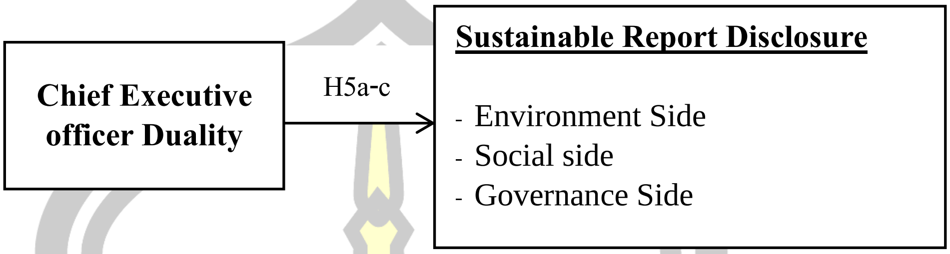
Chief executive officer duality describes a situation in which the same individual concurrently occupies the positions of chairperson and president(Krause et al., 2014).Chief executive office as part of the explanation of the scope of corporate social responsibility disclosure, it has been extensively analyzed in accordance with the stakeholder theory(Uyar et al., 2021).It demonstrates the impact of the chief executive office duality on corporate social responsibility, which will vary depending on the kind of industry. In the United States, these conflicts will arise less frequently. Because the chief executive office duality problem would be difficult with corporate governance, the governance body has recommend separating the role of chief executive office duality and the duties of the president (Yang & Zhao, 2014).Many claim that businesses with multiple chief executive offices would reveal less information in sustainability reports because people in dual jobs will conceal information that isn't in the best interests of other stakeholders(Duru et al., 2016).As a consequence, it is advised that the chairman and chief executive office be kept apart in Malaysia since the chairman's independence promotes more transparency and openness. The contentious board of directors from the chairman will boost board openness and disclosure of sustainability data(Mohamad & Sulong, 2010).

Corporate governance is crucial, united and consistent command structure to blame for the duality of roles between the board of directors and the chief executive office. Consequently, the duality helps the business make more operational decisions (Vo, 2010).In most companies, people who simultaneously hold the position of chief executive officer are more likely to advance their personal interests at the expense of the company. They also have the potential to use their positions of authority to lessen the effectiveness and efficiency of the board's audit and control procedures. On the other hand, not all businesses with two chief executive offices will experience shortcomings in sustainability supervision, and not all businesses with segregation will always be successful(Al-Shammari & Al-Sultan, 2010).

The Relationship Among Chief executive officer Duality and Sustainable Report Disclosure

This section presents the relationship between chief executive officer duality for analysis in conjunction with the preparation of the sustainable report disclosure with the objective of this research being to test the hypothesis in the dimensions of chief executive officer duality that affect the sustainable report disclosure and the relationship below:

Figure 5 The Relationship Among Chief Executive Officer Duality and Sustainable Report Disclosure



Razak and Mustapha (2013) found that the duality between the positions of chief executive officer and management executive officer results from the combination of these two positions which does not have a significant influence on the disclosure of corporate responsibility.

Jizi et al. (2014) found that the duality of the chief executive office with the chairman of the board had a negative impact on the environment disclosure social responsibility and impacted competition in the labor and capital markets in the United Stated.

Sundarasen et al. (2016) found that there was a relationship between the chief executive officer duality and found that the duality of the two positions positive affect the full disclosure of the corporate social responsibility. The results of the study showed that voluntary disclosure did not decrease when a duality of positions occurred in an organization.

Omair Alotaibi and Hussainey (2016) found that the association between chief executive organization duality of the chief executive officer with the position of president had a positive effect on the corporate social responsibility quality.

Dias et al. (2017) found that the duality of the position of chief executive officer with the president has a negative impact on the scope of social responsibility disclosures. The role of the duality limits the company's level of transparency to both internal and external stakeholders. The solution might be to separate the chief executive officer from the responsibilities of the president.

According to these contrasting findings from empirical studies, the research of Sundarasen et al. (2016); Omair Alotaibi and Hussainey (2016) states that chief executive officer duality had a positive relationship on sustainable disclosure. In contrast, to Razak; Mustapha (2013); Jizi et al. (2014);Dias et al. (2017) who found negative relationship between chief executive officer duality and sustainable report disclosure. Therefore, the research hypothesis is formulated as follow:

Hypothesis 5a : Chief Executive Officer Duality Negative Impact to Sustainable Report Disclosure of Environment Side.

Hypothesis 5b : Chief Executive Officer Duality Negative Impact to Sustainable Report Disclosure of Social Side.

Hypothesis 5c : Chief Executive Officer Duality Negative Impact to Sustainable Report Disclosure of Governance Side.

Board Size

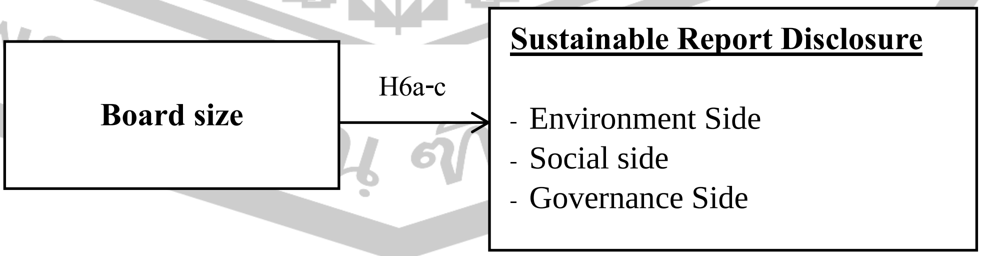
The efficacy of the board of directors is influenced by board size. The size of the board of directors is referred to as an organizational level influence mechanism. Besides, voluntary disclosures are defined by the stakeholder theory as providing information about corporate social responsibility(Allegrini & Greco, 2013).Board size presents several viewpoints on the size of the boards used to settle disputes, and it is stated that this will have an impact on the monitoring procedure. The board of directors has crucial roles in decision-making, transparency, consultation, and oversight. The disclosures made by the corporation are significantly impacted by the size of the board of directors(Ghabayen et al., 2016).The more directors, the better, according to the stakeholder theory. The board will support performance evaluation since the variety of board sizes will offer a range of board maturity and extra audit management expertise(Sun et al., 2010).The size of the board of directors has an impact on the disclosure of the company's annual report, according to the argument that corporate governance and the involvement of stakeholder representatives in monitoring the organization's operations result in an increase in the informational disparity between managers and other stakeholders (Moscu, 2013).Furthermore, the board's expanded size was a major factor in the organization's success in promoting corporate social responsibility(Abdullah et al., 2011).The size of the board of directors affects how voluntarily social reports are disclosed. The decision-making process is impacted by the board of directors' size. Information sharing and consultation are crucial duties of the board of directors. Because of its size, the board of directors has a substantial amount of influence over and oversight of sustainability reporting disclosures that have an impact on the organization's goals(Razak & Mustapha, 2013).

Contrary to the belief that a bigger board's size would generally make the chief executive office duality less effective and more challenging to administer and govern, (Hu & Loh, 2018).On the other hand, though, the board's number of directors is growing. Although the board's content has improved, the costs associated with the chief executive office audit will cause audit costs to rise. Additionally, good organizational coordination between the members of the board of directors is taken into consideration when making decisions on the kind and extent of environmental disclosures and communications(Hidalgo et al., 2011).

The Relationship Among Board size and Sustainable Report Disclosure

This section presents the relationship between board size for analysis in conjunction with the preparation of the sustainable report disclosure with. The objective of this research is to test the assumptions in the dimensions of board size that affect the sustainable report and the relationship below:

Figure 6 The Relationship Among Board Size and Sustainable Report Disclosure



De Andres and Vallelado (2008) found that the size of board director in large companies has the negative relationship effect on sustainability that creates value for the organization, as opposed to a board with knowledge and ability, and the independence of the board will greatly affect the efficiency of operations.

Akbas (2016) found that the size of the board of director is considered a variable that positive affects the scope of the company's environmental disclosures in Turkey. The higher the size of the board, the more positive the opening of social responsibility data.

Ghabayen et al. (2016) found that disclosure of social responsibility is associated positive impact with a higher number of independent directors of the sustainability disclosure.

Ahmad et al. (2017) found that the size of the board of director in relation to the company has a positive impact on its commitment the disclosure of sustainability reports will serve to serve the performance of independent directors, and the number of independent directors will contribute to better and more informed recommendations for decisionmaking.

Issa (2017) found that profitability and governance responsibility are factors in the size of a large and efficient independent board due to the positive improvement of the organization's governance image and initiatives. Companies with large independent boards promote clarity in sustainability reporting rather than demonstrating positive corporate outcomes.

According to these contrasting findings from empirical studies, research of Akbas (2016); Ghabayen et al. (2016); Ahmad et al. (2017); Issa (2017) found that board size director had a positive relationship on sustainability disclosure. In contrast, De Andres and Vallelado (2008) found negative relationship between board size and sustainable report disclosure. Therefore, the research hypothesis is formulated as follow:

Hypothesis 6a : Board Size Positive Impact to Sustainable Report Disclosure of Environment Side.

Hypothesis 6b : Board Size Positive Impact to Sustainable Report Disclosure of Social Side.

Hypothesis 6c : Board size Positive Impact to Sustainable Report Disclosure of Governance side.

Board Independence

In the majority of businesses, there are often two groups of directors. The first group is made up of internal directors who have agreements and connections that support the organization's management choices. Second, executives or outside directors who have the authority to act as rights representatives for significant shareholders or as independent boards of directors can do so, establishing parity with regard to the independence of the directors. Hence, in order to link sustainability reporting, these independent directors are in charge of making sure that shareholder interests are taken into account. The number of independent executive directors will impact conduct and accountability, as well as the degree of openness(Fuente et al., 2017).

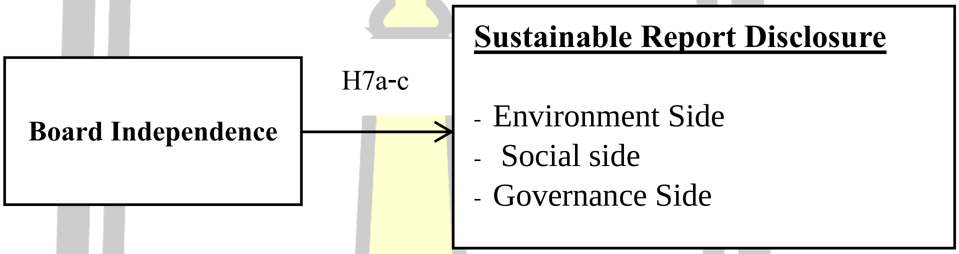
Non-executive directors' independence from internal directors will enable them to contribute to the best results(Baysinger & Butler, 2019).In addition, these directors will be more likely to pay and focus on stakeholders accordingly. The idea of stakeholder theory as they will have to be more responsive to society as needed and encouraging companies to engage more with sustainability reports non-executive directors will be involved in developing and formulating strategies to code with changes in the environment by expanding the size of the board of directors, it does not contribute to the promotion of good governance and sustainability practices in the organization (Liu et al., 2015).

It is expected that the existence of an independent committee will result in more effective audits to restrict the few management opportunities, which are viewed as a tool to monitor executive conduct, leading to more voluntarily shared information inside the business(Fuzi et al., 2016).Accordingly, the sustainability report demonstrates the link between voluntary disclosure, the percentage of independent committees on the board, and the addition of an independent board of directors, which will lead to the firm improving and covering the quality of sustainability report disclosures(Razak & Mustapha, 2013).

The Relationship Among Board Independence and Sustainable Report Disclosure

This section presents the relationship between board dependence for use in conjunction with the preparation of the sustainable report, with the objective of this research being to test the hypothesis in the dimensions of board dependence that affects the sustainable report and the relationship below:

Figure 7 The Relationship Among Board Dependence and Sustainable Report Disclosure



Majeed et al. (2015) found that the size of an independent board of directors that is negative relationship with the board of directors of the company in the view of corporate governance, from such studies. No increased number of independent committees was found to be associated with the disclosure of sustainability reports.

Ghabayen et al. (2016) found that the size of the independent board in the organization has a positive effect on the disclosure of corporate social responsibility development, with the number of independent committees increasing the disclosure of sustainability reports.

Yusoff et al. (2016) found that disclosure of sustainability reports, with positive relationship with the focus on the size of independent committees impacts large companies' general environment which involves good corporate social responsibility development practices in connection with the good practices of disclosing information to stakeholders.

Fuente et al. (2017) found that social responsibility disclosures have the highest average with companies facilitating independent committees to understand the organization's environmental operations in a positive effect to improve relationships with stakeholders.

Naseem et al. (2017) found that the nature of good governance and the disclosure of social responsibility is strongly linked in the context of national development and also supports socially supportive literature. Besides, the disclosure of social responsibility has a positive effect on increasing sustainability disclosure.

According to these contrasting findings form empirical studies, research of Ghabayen et al. (2016); Yusoff et al. (2016); Fuente et al. (2017); Naseem et al. (2017) found that board independence director had a positive relationship on sustainable disclosure. In contrast, Majeed et al. (2015) found negative relationship between board independence and sustainable report disclosure. Therefore, the research hypothesis is formulated as follow:

Hypothesis 7a :Board Independence Positive Impact to Sustainable Report Disclosure of Environment Side.

Hypothesis 7b :Board Independence Positive Impact to Sustainable Report Disclosure of Social Side.

Hypothesis 7c :Board Independence Positive impact to Sustainable Report Disclosure of Governance side.

Accounting Professional Board

Accounting a person's professional background has a significant role in determining their ability to complete a particular project successfully. The judgment maker's basis consists of their awareness of impending events, their capacity to assemble a range of options, and the effects of those options(Prabowo et al., 2017).The basis might be used to describe included or such, for example, educational background. This stakeholder theory is that the chairperson's ability to lead the board to the desired goal is influenced by their experience in accounting education(Cullinan & Roush, 2011).

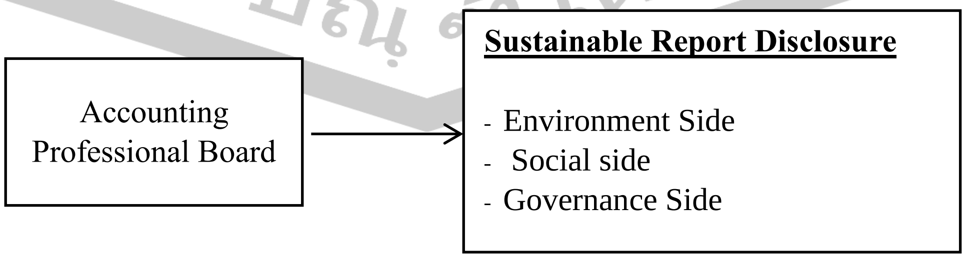
The vast majority of empirical studies examining how education affects personality traits make the assumption that education is directly related to cognitive ability. In particular, accounting education enhances one's capacity to quickly assimilate a variety of pertinent viewpoints and analyze a larger volume of information(Hu et al., 2017).Therefore, the individual with higher education would be better able to identify and formulate the problems and evaluate that education has been claimed as the foundation of creative problem solving tasks that education is the most important driver of an individual's ability to absorb new ideas that results in an individual attitude toward innovation(Ying & He, 2020).

The assumption that the team members are most affected by the leader's choice determines the significance of the team leader. The research supports and demonstrates how board leadership mediates the impact of the human capital of directors on organizational performance. Evidently, this suggests that among the board members, the chairman is the most influential. The authority eventually allows the board leader to direct board operations, including calling meetings and deciding the agenda Organizational performance and the corporate strategy choice(Bouaziz et al., 2014). Moreover, board leadership is alleged to have an impact on accounting results as well as the board's participation in develop a company strategy(Duru et al., 2016).

The Relationship Among Accounting Professional Board and Sustainable Report Disclosure

In this section present the relationship between the accounting professional board for use in conjunction with the preparation of the sustainable report, with the objective of this research being to test the hypothesis in the dimensions of accounting that affects the sustainable report and the relationship below:

Figure 8 The Relationship among Accounting Professional Board and Sustainability Report Disclosure



Akbas (2016) found that education level and accounting knowledge of the board of directors shows that such information has a negative relationship with the disclosure of social responsibility information.

Roach and Slater (2016) found that an accounting bachelor's degree in the chief executive office, especially qualifications in accounting and business administration, has a positive impact on disclosure corporate social responsibility, as well as the organization focus on the community.

Prabowo et al. (2017) found that board of trustees with a degree in accounting level of education leads to be ineffective on disclosure of environment disclosure responsibility, research outcomes, supporting ideas and education levels, and balancing stakeholder interests with boards.

Slater and Dixon-Fowler (2010) found that chief executive officer completed an education MBA degree and accounting education degrees has positive effects on knowledge and competence and influences the environmental performance of the organization.

Velte (2019) found that the level of education, competence, and experience of the chief executive office have a positive effect on building confidence and building important and relevant relationships in the preparation of corporate social responsibility.

According to these contrasting findings from empirical studies, research of Roach and Slater (2016); Slater and Dixon-Fowler (2010); Velte (2019) found that accounting professional board director had a positive relationship on sustainable report disclosure. In contrast, Akbas (2016); Prabowo et al. (2017) found negative relationship between accounting professional board director and sustainable report disclosure. Therefore, the research hypothesis is formulated as follow:

Hypothesis 8a :Accounting Professional Board Positive Impact to Sustainable Report Disclosure of Environment Side.

Hypothesis 8b : Accounting Professional Board Positive Impact to Sustainable Report Disclosure of Social Side.

Hypothesis 8c : Accounting Professional Board Positive Impact to Sustainable Report Disclosure of Governance side.

Summary

In conclusion, this chapter illustrates a conceptual model of sustainability reporting on investor confidence by applying the theories: foundation stakeholder theory, legitimacy theory and signally theory used to support relationships in conceptual ways. In this chapter, the review was also demonstrated and we proposed 7 base consensuses to describe the relationship by dividing it into the following 4 relationship groups: group 1. sustainable report relationship corporate governance score, group 2. sustainable report relationship investor confidence, group 3. corporate governance score relationship investor confidence, and group 4. factor influencing such as chief executive office duality, board size, board independence and accounting professional board relationship in the sustainable report. All summaries are shown in table 4.

Table 4 Summary of Hypothesized Relationship

Hypotheses	Description of Hypothesized Relationship
H1a	Sustainability report disclosure of environment side has a positive impact on corporate governance score.
H2a	Sustainability report disclosure of social side has a positive impact n investor confidence.
H3a	Sustainability report disclosure of governance side has a positive impact on corporate governance score.
H1b	Sustainability report disclosure of environment side has a positive impact on investor confidence.
H2b	Sustainability report disclosure of social side has a positive impact on investor confidence.
H3b	Sustainability report disclosure of governance side has a positive impact on investor confidence.
H4	Corporate governance score has a positive impact on investor confidence.
H5a	Chief executive office duality has a negative impact on sustainability report disclosure of environment side.
H5b	Chief executive office duality has a negative impact on sustainability report disclosure of social side.
H5c	Chief executive office duality has a negative impact on sustainability report disclosure of governance side.
H6a	Board size has a positive impact on to sustainability report disclosure of environment side.
H6b	Board size has a positive impact on sustainability report disclosure of social side.

Table 4 Summary of Hypothesize Relationship (Continued)

Hypotheses	Description of Hypothesized Relationship
H6c	Board size has a positive impact on sustainability report disclosure of governance side.
H7a	Board independence has a positive impact on sustainability report disclosure of environment Side.
H7b	Board independence has a positive impact on sustainability report disclosure of social side.
H7c	Board independence has a positive impact on sustainability report disclosure of governance side.
H8a	Accounting professional board has a positive impact on sustainability report disclosure of environment side.
H8b	Accounting professional board has a positive impact on sustainability report disclosure of social side.
H8c	Accounting professional board has a positive impact on sustainability report disclosure of governance side.

CHAPTER III

RESEARCH METHODS

The previous chapter reviews the research literature on the sustainable report disclosure on investor confidence and provides a conceptual framework and hypotheses development by presenting the theoretical foundations, the variables analyzed, and the relation expected between variables. consequently, this chapter provides the basis for the design of the research methods that help to clarify the understanding of the hypothesis testing process. It is divided into four sections as follows. The first section discusses population and sample selection and data collection procedures, including population and sample. The second section discusses the variable measurements. The third section discusses the instrumental verifications, including the test of reliability, and the statistical analysis is presented. Also, the related equations of regression analysis are depicted in this part. Finally, the fourth section provides the summary of constructs and the measurement items.

Sample Selection and Data Collection Procedures

Population and Sample

The population and sample the researchers chose to gather the conceptual framework and ability to analyze the sustainability report data of the energy industry were derived from stock exchange of Thailand, except for companies that are in the process of protecting their assets and are recovering their businesses. This is because they are not in a normal operating situation where annual reports may not be disclosed to the public through the stock exchange of Thailand, total 63 companies deduct group of provident fund 5 companies ,deduct companies with fewer than 3 years of operating results does not include 4 companies ,deduct corporate governance scores lower than level 3 do not disclose information form Thai Institute of Directors Association this was necessary for this research 8 companies , The sample of 46 companies that disclosed data form 2019 to 2021 total sample of research 138 firm as data of October 10, 2022. The research is derived from the website www.set.or.th.

Data population and samples used in the research include the sustainability report, corporate governance score and information on the change in the price of securities of energy industry companies on the Thai listed company that has been disclosed. Information related to variables includes the annual report, suitability report, financial report, The one report, corporate governance score and the price of securities at the close of the market for the past three years from 2019 to 2021 based on the website. www.set.or.th. The report draws from all the variables in the layout of the research answers the research hypothesis from past chapters.

Data Collection

The working paper is used to collect relevant variable data, including the working paper is used to collect data by the variable characteristics outlined in the suitability report and Thai one report form companies for independence variable is sustainable report disclosure. Corporate governance report form Thai Institute of Director for mediator variable data form corporate governance score. The data Stock Exchange of Thailand the closing price at the year for dependence variable is investor confidence. The detail of board director form annual report in companies for antecedence variable are chief executive office duality, board size, board independence and accounting professional board. The data Stock Exchange of Thailand for control variable are firm size, firm age and leverage.

Test factor loading of the item is significantly correlate to the specified construct that will contribute to the contrast validity comprehension. As a rule of thumb, that factor loading should be above 0.40 (Nunally and Berntein,1994).It indicates that each item of all variables is loaded on a single factor and the range of factor loading is between 0.617 – 0.886. All factor loadings are greater than 0.40, which demonstrate the acceptable construct validity. Thus, the construct validity of this research is tapped by the items in the measure as theorized.(see also Appendix B)

Test multicollinearity of the equation test all scientific experiments must undergo quality control. Each statistical test is predicated on fundamental hypotheses. If the assumptions are violated, the model's results describing the relationship are invalid. In this study, none of the equations indicated a violation of the regression assumptions. It indicates that each item of all equation the range of factor Torrance is between 0.299 – 0.894 Tolerance value of every variable was greater than 0.2 (Hair et al. ,2014). In this study, the lowest Tolerance value was 0.299 all equation were discovered to be unrelated to one another. Moreover test of constant variance of the error terms researcher use homoscedasticity to test the heteroscedasticity problem according to the concept of Breusch-Pagan all equations the demonstrate results of the Breusch-Pagan is critical value 3.84 homoscedasticity between 0.61 – 2.59 not exceed critical value Therefore, heteroscedasticity problem is not the serious problem of this research. (see also Appendix C).

Measurements

The structure of this research uses primary data to measure every variable, from independent variable, mediator variable, dependent variable, antecedent variable and control variable by using variables used in the checklist with the variables mentioned above, for the most part, all variables have gauges used for this research and ratio scale in the sustainability report data collection, that is the nature of checklist.

Furthermore, research related to sustainability reports is interesting in the use of data in various aspects of environmental side, social side and governance side, as well as the measurement of operational management used for measures related to management and operations (Tangpong, 2011).There is research using secondary data to access to data potential analysis to illustrate the empirical approach of research that uses data collection to measure the variables of support in the area of sustainability reporting following the guidelines of supporting research related to environmental stewardship(Goel, 2022).

According to the research effect of sustainable report disclosure on investor confidence of energy group company in Thai listed company, variables used to study the relationship between sustainability report disclosures and changes in securities prices from the previous year to the current year are divided into five groups: independent variable, mediator variable, dependent variable, antecedence variable, and control variable. The details are clarified as follows:

Independent Variable

Sustainability Report

Sustainability Report based on the disclosure of the sustainability report, 30 indicators data is 2019 to 2021 firm years based on the reference of all indicators of the global reporting initiative data from www.world-exchanges.org/our-work/articles/wfe-esg-revised-metric-june-2018.This details are included in the section of the reports devoted to sustainability disclosure that contains this the one report each company. The criteria in details in each three dimensions are below:

Environment Side (EM)

Environment side of 10 indicators includes (1) Greenhouses gas emission, (2)Emissions Intensity,(3)Energy usage,(4)Energy intensity,(5)Energy mix,(6)Water usage (7) Environmental operations, (8)Environmental oversight climate - related risks (9) Environmental oversight other-sustainability issues,(10)Climate risk mitigation

Social Side (SC)

Social side of 10 indicators includes (1) Chief executive office pay ratio (2)Gender pay ration,(3)Employee turnover,(4)Gender diversity,(5)Temporary work ratio, (6)Non-discrimination, (7)Injury rate, (8)Global health and safety, (9) Child and forced labor, (10) Human rights.

Governance Side (GN)

Governance side of 10 indicators includes (1) Board diversity,(2) Board independence, (3)Incentivized pay, (4) Collective bargaining, (5)Supplier code of conduct, (6)Ethics and anti-corruption, (7) Data privacy, (8) Sustainability reporting, (9)Disclosure practices ,(10)External assurance.

Mediator Variable

Corporate Governance Score (CG)

Corporate governance score of the Thai institute of director association is supported by the Thai listed company and the stock exchange commission. Corporate governance score of each company is calculated by data collection from 2019 to 2021 firm years. Corporate governance score is divided into 5 levels. However, regarding sample of research conducted in only companies with corporate governance scores from level 3 to level 5 that are disclosed by data from Thai Institute of Director Association, the criteria are evaluated following the good governance principles of the countries under the organization for economic co-operation and development which is a widely accepted international principle of companies affiliated with the Thai listed company. criteria used for corporate governance-based assessment is an internationally recognized criterion divided into 5 categories;(1) Shareholder rights,(2) Equal treatment of shareholders,(3)Taking into account the role of stakeholders,(4)Transparent disclosure,(5)Responsibility to the board of directors. Table 5 corporate governance score of energy group in Thai listed companies the details are included in the section of result presentation score in corporate governance score of Thai listed companies report. data from www.thai-iod.com /th/projects-2.asp.

Table 5 Corporate governance score of energy group in Thai Listed Companies

Companies	Corporate Governance Score		
	2019	2020	2021
Asia green energy pubic company limited	4	4	4
Ekarat engineering pubic company limited	5	5	5
Bangkok aiation fuel services pubic company limited	5	5	5
Banpu pubic company limited	5	5	5

Table 5 Corporate governance score of energy group in Thai Listed Companies (Continued)

Companies	Corporate Governance Score (Year)		
	2019	2020	2021
Bangchak corporation pubic company limited	5	5	5
BCPG pubic company limited	5	5	5
B.Grimm power pubic company limited	4	5	5
Banpu power pubic company limited	4	5	5
CK power pubic company limited	5	5	5
Demco pubic company limited	5	5	5
Energy absolute pubic company limited	5	5	5
Eastern water resources development and management pubic company limited	5	5	5
Electricity generating pubic company limited	5	5	5
Esso (Thailand) pubic company limited	3	3	4
Global power synergy pubic company limited	5	5	5
Green resources pubic company limited	3	3	3
Gulf energy development pubic company limited	4	4	5
Gunkul engineering pubic company limited	5	5	5
IRPC pubic company limited	5	5	5
The lanna resources pubic company limited	4	5	5
M.D.X pubic company limited	3	3	3
PTG energy pubic company limited	5	5	5
PTT pubic company limited	5	5	5
PTT exploration and production pubic company limited	5	5	5
QTC energy pubic company limited	5	5	5
Ratch group pubic company limited	5	5	5
RPCG pubic company limited	3	4	4
Sahacogen (Chonburi) pubic company limited	4	5	5
SCI electric pubic company limited	4	4	4

Table 5 Corporate governance score of energy group in Thai Listed Companies (Continued)

Companies	Corporate Governance Score		
	2019	2020	2021
Scan inter pubic company limited	5	5	4
Siamgas and petrochemicals pubic company limited	3	3	3
Sakol energy pubic company limited	4	4	4
Solatron pubic company limited	3	3	3
SPCG pubic company limited	4	4	4
Star petroleum refining pubic company limited	5	5	5
Sermsang power corporation pubic company limited	3	3	3
Super energy corporation pubic company limited	3	3	3
Susco pubic company limited	4	5	5
Thai agro energy pubic company limited	4	4	4
Thai capital corporation pubic company limited	4	4	4
Thai oil pubic company limited	5	5	5
TPI polene power pubic company limited	3	3	3
Thai solar energy pubic company limited	4	4	4
TTW pubic company limited	5	5	5
WHA utilities and power pubic company limited	5	5	5
WP energy pubic company limited	3	4	4

Dependence Variable

Investor Confidence (IC)

Investor confidence is measured by the price of securities using the closing price at the end of the year of the securities by searching data from www.set.or.th and using the data on closing prices for the past three years from 2019 to 2021. Moreover, measuring the dynamics of a securities price determines the accuracy of the signals coming from investor confidence. This considers the reversal of the securities price and the volume of the price at close of the market(Yingniran, 2019). This includes changes in transactions that affect the price of securities over a while of time.

Antecedence Variable

Antecedence variables including disclosure of characteristics board director is chief executive officer duality, board director number, board director independence and accounting professional board that affect the disclosure of sustainability reports across three sides are environmental side, social side and governance side by querying information in the one report data collection from 2019 to 2021 firm years this details are included in the section of the governance structure that contains this the one report of the each company data form www.set.or.th/market/product/stock/quate/company-profile/information.The detail are follow:

Chief executive office duality (CD)

Chief executive office duality is measured by the proportion of duality the chief executive office and the board of directors with the manager director, which is used as a dummy variable. It is measured as 1 if the chairman of the board of directors is the same person as the board of directors. On the contrary, it is measured as 0 if the chairman is not the only one on the committee information from the one report.

Board size (BS)

Board size is measured by the total number of chief executive directors in the company and all executives in the company information from the one report.

Board Independence (BI)

Board independence is measured by the independence of the board of directors in the company information from the one reports.

Accounting profession board (AP)

Accounting profession board is measure by accounting expertise of the board of directors graduated in accounting in the company information from the one reports.

Control Variable

Control variables are used for measuring the samples utilized in the research, firm size, firm age and leverage that affect the disclosure of sustainability reports across three dimensions, namely environmental dimension, social dimension and governance dimension by searching for information from 56-1 reports in data collection from 2019 to 2021 firm years. The details are as follows:

Firm Size (SIZE)

Firm size is measured by the size of the company's total assets and reflected in the financial reports based on data from www.set.or.th

Firm Age (AGE)

Firm age is measured by the date on which the company is listed with the Thai listed company (counting years) and displayed in the annual report, based on information data form www.set.or.th

Leverage (LEV)

Leverage is measured by the company's financial structure ratio, using the proportion of debt to asset. The measured value is proportionately represented by the financial reports based on data form www.set.or.th

Table 6 The Variable use in this study

Variables	Measurement	Source
Independence Variable	Sustainability report disclosure environment (EM) side , social side (SC) and governance (GN) side derived form World Federal of Exchange Global Reporting Initiative	www.set.or.th and www.world-exchanges.org/
Mediator Variable	Corporate governance score (CG) level 3 to level 5 disclosed by data form Thai Institute of Director Association. derived from Thai institute of director.	www.thai-iod.com
Dependence Variable	Investor confidence (IC) the price of securities using the closing price at the end of the year. derived from As' Ad, (2019).	www.set.or.th
Antecedence Variable	Chief executive office duality (CD) measured as 1 if the chairman of the board of directors is the same person as the board of directors, it is measured as 0 if the chairman is not the only one on the committee. derived from Dierynck and van Pelt, (2021)	www.set.or.th
	Board size (BS) is measured by the total number of chief executive directors in the company. derived from Al-Janadi et al, (2013).	www.set.or.th

Table 6 The Variable use in this study (Continued)

Variables	Measurement	Source
Antecedence Variable	Board independence (BI) is measured by the total number of board independence in the company derived from Fuzi et al, (2016).	www.set.or.th
	Accounting profession (AP) board is measure by number of the board of directors graduated in accounting in the company derived from Chancharat et al., (2012).	www.set.or.th
Control Variable	Firm size (SIZE) is measured by the size of the company's total assets derived from Waluyo, (2017).	www.set.or.th
	Firm age (AGE) is measured by the date on which the company is listed with the Thai listed company until the 2019,2020 and 2021 derived from Waluyo, (2017).	www.set.or.th
	Leverage (LEV) is measured by the proportion of debt to asset derived from Waluyo, (2017).	www.set.or.th

Methodology

This research collects data from sustainability reports that reveal information in all 3 dimensions: environmental side, social side and governance side. Using data in the manner of primary data to test research hypotheses, the data collection method uses a data collection method. The researcher conducted a search for information from disclosures in the financial statements 56-1 and the one report . It was searched for keywords related to disclosures in all dimensions of the sustainability report with global reporting initiative criteria. Further, keywords from PDF documents were searched by using Foxit PDF reader program. The program is a tool to help finding checklist data and it is a program with high confidence in words counting related sustainable report companies (independence variable) which can cause the data collected to be unexpected. Likewise, the researcher tested secondary data in advance to ensure that all data was adequate. It is the tool used in the research. Therefore, we have proposed a reliability testing tool to be used to test the following structures:

Statistical Techniques

Before testing hypotheses, raw data derived from the www.set.or.th database underwent a checklist data check to test the underlying assumptions of regression equation analysis. This research uses both descriptive statics. Descriptive statistics used variance inflation factors (VIF's) to test multicollinearity among independent variables. Subsequently, correlation analysis was used to determine primary correlations between two variables, robustness check used to homoscedasticity statistics for testing heteroscedasticity and the ordinary least squares method (OLS) was operated to statistically estimate the coefficient of hypotheses testing. Each of these methods is discussed below:

Descriptive Statistics

Descriptive statistics: mean, standard deviation ,min, max and are used to describe the basic features of key informants' sustainability report. Furthermore, they are used to describe the basic features of the data of each construct in this research.(see also in table 8)

Robustness Check

Statistics used for testing models. To ensure the accuracy of equations used for research tests homoscedasticity statistics for testing heteroscedasticity problem, both the Breusch-Pagan test and visual residual plots against the predictor variables are applied all equation not over critical value 3.84 their force, is not heteroscedasticity problem. (see also in appendix C)

Variance inflation factor

Variance inflation factor (VIF) is a value used for examining multiple independent relationships and multicollinearity to check the value of VIF to be able to indicate that if VIF Indicates variables are highly correlated. Between independent variables and other variables, the VIF value should not be greater than 10,(Hair et al., 2014).Result all equation maximum value is 3.347 there will be no multicollinearity problem in the analysis of regression equations.(see also in appendix C)

Correlation analysis

Pearson correlation analysis is used to examine the correlation between independent variables with each other whose value should be low, and to test independent variables with variables based on which the resulting value should be high. The values that the correlation comes out at range from -1 to negative linear correlations. If the value +1 has a positive linear relationship in multiple regression analysis, the tested of correlation analysis between three dimension independence variable, mediator variable and dependence variable, the test results are equal to 0.713,0.738,0.628 and 0.440 respectively. Correlation analysis indicates that the initial variable is correlated with other variables (Hoyt et al., 2006).In other words, independent variables can be described by other variables for use in multicollinearity analysis that demonstration of the relationship between variables must not exceed 0.80 (Hair et al., 2014).The result test of multicollinearity intercorrelation of each predictor variable maximum is 0.779 to eliminate the problem of non-multicollinearity (see also in table 9)

Mediator Variable Distinction Test

Analysis mediator variable for test the mediator variable relationship by repeating the measurement with independence variable and dependence variable for test the difference between statistical analysis multiple regression (Baron and Kenny,1986). the test is conducted in four stages with first stage test the effects between independence variable with dependence variable, second stage test the effects between independence variable with mediator variable, third stage test the effects between mediator variable with dependence variable if first stage too third stage find all significantly statistics so test fourth stage if the results of the test independence and mediator variable significant to dependence variable a result an instance of partial mediation , while a few independence or mediator variable significant to dependence variable a result an instance of full mediation (see also in table 10)

Multiple Regression analysis

The ordinary least square (OLS) regression analysis was used to test the hypothesis of this research, since such statistics make sense to study the relationship between an independent variable and dependent variable using data that qualifies as periods based on the categories of variables(Hair et al., 2014).In addition, it is often used to test the theory about causal influences on the outcome measure(Jaccard et al., 2006).It is also used to test the hypothesis of linear relationships between variables in order to determine the relationship between dual variables. While the control is more confusing through the use of statistics, complex relationships between multiple variables may be found, primarily to avoid mistakes made by the results used in the analysis. Likewise, regression analysis is used to test the hypothesis of multicollinearity, normality, heteroscedasticity, linearity, and outlier. To sum up, this research is represented by six equations to be consistent with the development of the hypothesis in the previous chapter, with the following equations:

The statistical equations examining the effects of the two dimensions of sustainability report on corporate governance score and investor confidence are presented in Equation 1-2 as shown:

Equation 1 : $CS = \alpha_{01} + \beta_1 LogEM + \beta_2 LogSC + \beta_3 LogGN + \beta_4 LogSIZE + \beta_5 AGE + \beta_6 LEV + \varepsilon$

Equation 2 : $LogIC = \alpha_{02} + \beta_7 LogEM + \beta_8 LogSC + \beta_9 LogGN + \beta_{10} LogSIZE + \beta_{11} AGE + \beta_{12} LEV + \varepsilon$

The statistical equations examining the effects of sustainability report, corporate governance score to investor confidence are presented in Equation 3 as shown:

Equation 3 : $IC = \alpha_{03} + \beta_{13}CS + \beta_{14}LogSIZE + \beta_{15}AGE + \beta_{16}LEV + \varepsilon$

The statistical equations examining the effects of the four-antecedence chief executive duality, board size, board independence and accounting professional board to dimension of sustainability report are presented in Equation 4-6 as shown:

Equation 4 : $LogEM = \alpha_{04} + \beta_{17}CD + \beta_{18}BS + \beta_{19}BI + \beta_{20}AP + \beta_{21}LogSIZE + \beta_{22}AGE + \beta_{23}LEV + \varepsilon$

Equation 5: $LogSC = \alpha_{05} + \beta_{24}CD + \beta_{25}BS + \beta_{26}BI + \beta_{27}AP + \beta_{28}LogSIZE + \beta_{29}AGE + \beta_{30}LEV + \varepsilon$

Equation 6: $LogTS = \alpha_{06} + \beta_{31}CD + \beta_{32}BS + \beta_{33}BI + \beta_{34}AP + \beta_{35}LogSIZE + \beta_{36}AGE + \beta_{37}LEV + \varepsilon$

Where;

EM	=	Environment Side
SC	=	Social Side
GN	=	Governance Side
CS	=	Corporate Governance Score
IC	=	Investor Confidence
CD	=	Chief executive office duality
BS	=	Board size
BI	=	Board Independence
AP	=	Accounting professional board
SIZE	=	Firm Size
AGE	=	Firm Age
LEV	=	Leverage
α	=	Constant
β	=	Regression Coefficient
ε	=	Error Term

Summary

This empirical research study is based on a review of literature on independent variables. The sustainability report uses 30 indicators in three dimensions: environment side, social side, and governance side using the criteria of Global Reporting Initiative according to the concept of world federal of exchange use the sampling method regarding 46 companies from energy companies on the Thai listed companies. Hence, it is secondary information, and the research uses a data collection method by counting keywords in the checklist of the mediator variable measured by the corporate governance score from Thai institute of director association by collecting data from the website www.thai-iod.com, the dependent variable measured by the change in the price value at the close of the market using data from the past three years since 2019 to 2021, and the antecedence variable in four dimension of the chief executive office duality, board size, board independence and accounting professional board by collecting data from 56-1 report and the one report each company.

Statistics used for research and descriptive analysis is mean, max min, standard deviation. The statistics used to test the seven hypotheses are robustness check for test homoscedasticity, variance inflation factor (VIF) to test the integrity of the data, correlation analysis to test the relationship between two variables, mediator variable distinction test for test mediator variable relationship by repeating and multiple regression analysis to be used for studying the effects of all variables in this research.

CHAPTER IV

RESULTS

The previous chapter presents the research methods comprising population and sample selection and data collection. Moreover, data analysis and hypothesis testing are described. Consequently, this chapter demonstrates the finding of data analysis and results of hypothesis testing. This chapter is organized as follows. The first section presents the analysis of distribution of sample data using the descriptive statistics. The second section is related to describe the correlation matrix and regression matrix among hypothesized variables and hypotheses testing are discussed in section. The final section presents a summary of all hypotheses testing is given is table 22 and figure 13.

Characteristics of the sample and Descriptive Statistics

Characteristics of the Sample

The research sample was chosen based on a conceptual framework and the ability to analyze the disclosure of the sustainability report data of the energy industry except for companies that are in the process of protecting their assets and are recovering their businesses because they are not in a normal operating situation where annual reports may not be disclosed to the public through the stock exchange of Thailand a total 63 companies with fewer than 3 years of operating results does not include companies with corporate governance scores lower than level 3 do not disclose information.(website set.or.th)form Thai Institute of Directors Association this was necessary for this research, with the Thai listed companies selected as a sample of 46 companies that disclosed data form 2019 to 2021 total sample of research 138 firm as data of October 10, 2022 the research from the website www.set.or.th.

The result from the sample of research 138 firm in energy industry as follow has the nature of disclosure of sustainability report information according to the criteria of world federal of exchange is global reporting initiative. Depending on the degree of each organization, different disclosure environmental side, social side, and governance side of the sustainability report in accordance with each company's strategy to encourage reporting on sustainability.

Table 7 Characteristics of the Sample

Characteristics of the Sample	**Companies**
Energy group Thai listed companies	63 Companies
Deduct group of provident fund companies	5 Companies
Deduct companies fewer than three years operating	4 Companies
Deduct companies with corporate governance scores lower than level three	8 Companies
Sample of Energy group Thai listed companies	46 Companies
Total sample of research three years	138 Companies

Firm Characteristics

Energy industry companies in stock exchange of Thailand the factors related to the board of directors are as follows chief executive officer duality, board size, board independence and accounting professional board. Control Variable measure is the size of companies is measured by net assets, The age of the company is measured by the maturity of the company since its listing on the stock exchange of Thailand, its financial structure is measured by total liabilities to equity.

Table 8 Descriptive Statistics

Variables	Mean	S.D.	Min	Max
LogEM	3.027	0.669	1.462	4.358
LogSC	3.236	0.680	1.690	4.673
LogGN	3.203	0.580	1.681	4.291
CS	4.390	0.778	3	5
LogIC	0.866	0.661	0.638	2.515
BS	11.240	0.500	7	19
BI	4.83	1.982	3	11
AP	1.81	1.984	0	5
LogSIZE	4.415	0.803	2.969	6.488
AGE	14.09	8.889	2	32

Results from the preliminary characterization of the samples used in the study. table 8 is show antecedence variable chief executive officer duality proportional 45 percent in sample.The number of board size was 11.24. The number of independent board directors was 4.83 and The ratio of directors who graduated in accounting to all directors was 1.81 members.The average size of the company is 4.415 million bath.The age of the company is maturity 14.09 years, the average financial structure is 0.5145204.

Correlation Analysis

One of the purposes of bivariate correlation analysis of Pearson Correlation is to explore the relationships among variables. Another purpose is to detect multicollinearity in multiple regression assumptions. According to Hair et al. (2014), multicollinearity might exist when the intercorrelation of each predictor variable maximum is 0.779 more than 0.80 in table 8.which assumes a high relationship. In this research, the bivariate correlation analysis is scaled to a two-tailed test with statistical significance at $p < 0.01$ and $p < 0.05$. This research employs a bivariate correlation analysis of Pearson correlation with all variables for two purposes: exploring the relationships among variables and examining multicollinearity problems. Table 9 shows the results of the correlation analyses of all variables. The results indicate that none of correlations exceed 0.80, which may not be concerned about multicollinearity problems. The details are as follows.

Table 9 Correlation Matrix of Sustainable Report Disclosure and All Constructs

Variables	LogEM	LogSC	LogGN	CS	LogIC	CD	BS	BI	AP	LogSIZE	AGE	LEV
LogEM	1.000											
LogSC	0.779**	1.000										
LogGN	0.639**	0.697**	1.000									
CS	0.599**	0.588**	0.540**	1.000								
LogIC	0.713**	0.738**	0.628**	0.440**	1.000							
CD	0.119	0.100	0.083	0.044	0.214*	1.000						
BS	0.502**	0.501**	0.449**	0.416**	0.516**	0.302**	1.000					
BI	0.387**	0.430**	0.384	0.383**	0.462**	0.136	0.575**	1.000				
AP	-0.188*	-0.125	-0.101	0.020	-0.302**	-0.203*	0.066	.006	1.000			
LogSIZE	0.608**	0.638**	0.511**	0.359**	0.770**	0.368**	0.514**	0.574**	-0.353**	1.000		
AGE	0.066	0.013	-0.020	-0.012	0.020	0.219**	0.360**	0.177*	0.087	0.144	1.000	
LEV	0.065	0.124	0.032	-0.066	0.194*	0.013	0.127	0.294**	0.080	0.362**	-0.192*	1.000

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

The result of the Pearson Correlation coefficient of the three dimensions of sustainable report disclosure (environment side, social side and governance side) is between r = 0.639 – 0.779

The Pearson Correlation coefficient of four antecedents of sustainable report disclosure (chief executive officer duality, board size, board independence and accounting professional) is between r = (-0.302) – (-0.502). The result indicates that none of correlation exceed 0.80. Thus, the multicollinearity problem is not concerned.

In parts of the correlation among independence variable and mediator variable it is found that three dimension of sustainable report disclosure (environment side, social side and governance side) was a significant and positive relationship as follow dimension of corporate governance score ($r = 0.540 - 0.599$, $P<0.05$)

Finally, the correlation among independence variable and dependence variable it is found that three dimension of sustainable report disclosure (environment side, social side and governance side) was a significant and positive relationship as follow dimension of investor confidence ($r = 0.440 - 0.738$, $P<0.05$).

Mediator Variable Distinction Test

Analysis mediator variable according to the concept of Baron and Kenny (1986) for test the mediator variable relationship by repeating the measurement with independence variable and dependence variable for test the difference between statistical analysis multiple regression to perform standardized coefficients beta find the difference between variables between comparison between a model with a variable interstitial and one without. There are four stages involved in this process : first stage test the effects between independence variable with dependence variable, second stage test the effects between Independence variable with mediator variable, third stage test the effects between mediator variable with dependence variable and fourth stage test the effects between independence variable with mediator variable and dependence variable.

Table 10 Interstitial Mediator Test Three Sides of Sustainable Report Disclosure

Variable	Unstandardized Coefficients		Beta (β)	T Stat	P-Value
	B	Std. Error			
First Stage					
Dependence Variable					
Investor Confidence (IC)					
Independence Variable					
Environment Side (EM)	0.307	0.088	0.311	3.512	0.001^{***}
Social Side (SC)	0.370	0.092	0.381	4.011	0.000^{***}
Governance Side (GN)	0.214	0.101	0.164	2.126	0.035^{**}
Second Stage					
Mediator Variable					
Corporate Governance Score (CG)					
Independence Variable					
Environment Side (EM)	0.361	0.125	0.311	2.882	0.005^{***}
Social Side (SC)	0.239	0.132	0.209	1.803	0.074^{*}
Governance Side (GN)	0.300	0.144	0.196	2.084	0.039^{**}
Third Stage					
Dependence Variable					
Investor Confidence (IC)					
Mediator Variable					
Corporate Governance Score (CG)	0.375	0.065	0.440	5.721	0.000^{***}
Fourth Stage					
Dependence Variable					
Investor Confidence (IC)					
Mediator Variable					
Corporate Governance Score (CG)	0.018	0.064	0.021	0.275	0.783
Independence Variable					
Environment Side (EM)	0.692	0.074	0.701	9.297	0.000^{***}
Mediator Variable					
Corporate Governance Score (CG)	0.008	0.061	0.010	0.139	0.890
Independence Variable					
Social Side (SC)	0.712	0.070	0.732	10.196	0.000^{***}
Mediator Variable					
Corporate Governance Score (CG)	0.121	0.067	0.142	1.811	0.072^{*}
Independence Variable					
Governance Side (SC)	0.717	0.102	0.552	7.015	0.000^{***}

* Significant Level 0.10
** Significant Level 0.50
*** Significant Level 0.01

Table 10 present the mediator variable distinction test three sides of sustainable report disclosure. First stage the test results affect the independent variables all three dimension significantly with the dependent variables presented environment side ($\beta = 0.311$, $P<.01$) social side ($\beta = 0.381$, $P<.01$) and governance side ($\beta = 0.164$, $P<.05$).Second stage the test results affect the independent variables all three dimension significantly with the mediator variables presented environment side ($\beta = 0.311$, $P<.01$) social side ($\beta = 0.209$, $P<.10$) and governance side ($\beta = 0.196$, $P<.05$).Third stage the test results affect the mediator variables significantly with the dependent variables. ($\beta = 0.440$, $P<.05$) from both tests three stages find all significantly statistics so test fourth stage the results affect the independence variables one dimensions significantly with the mediator variables is governance side ($\beta = 0.552$, $P<.01$) with mediator variable the consequence is ($\beta = 0.142$, $P<.10$) governance side significantly as a result such as sustainable report disclosure effect to corporate governance score and investor confidence as an instance of partial mediation. While mediator variable is ($\beta = 0.021$), ($\beta = 0.010$) not significant statistics, independent variable two dimension environment ($\beta = 0.701$, $P<.01$) and social side ($\beta = 0.732$, $P<.01$) significantly as a result such as sustainable report disclosure effect to corporate governance score and investor confidence as an instance of full mediation according Baron and Kenny (1986).

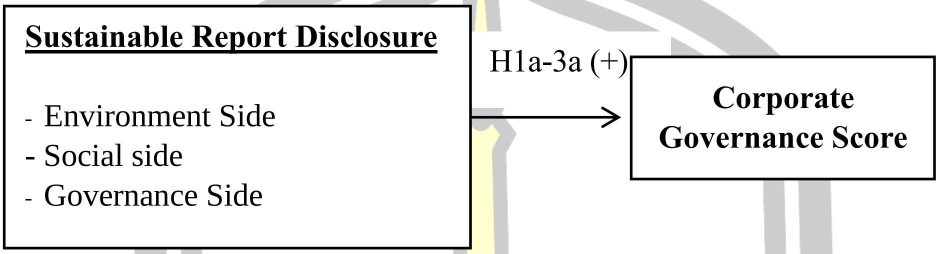
Hypothesis Testing and Results

This research uses multiple regressions by ordinary least squares (OLS) regression to investigate the hypothesis. All hypothesis in this research is transformed in to 6 equations. The results of both descriptive statistics and hypothesis tests are reports as follow.

<u>The Relationship between Sustainable Report Disclosure and Corporate Governance Score</u>

Figure 9 illustrates the effect of sustainable report disclosure which consists of environment side, social side and governance side on its consequences as proposed in hypothesis 1(a) to hypothesis 3(a).

Figure 9 The Relationship Between Sustainable Report Disclosure and Corporate Governance Score



This research proposes that the three dimensions of sustainable report that environment side, social side and governance side have a positive relationship on corporate governance score These hypotheses are transformed into the regression in equation 1 which are presented in chapter 3. Moreover, the correlation among each dimension of sustainable report and its corporate governance score were demonstrated in table 11.

Table 11 Descriptive Statistics and Correlation Matrix of Sustainable Report Disclosure and Corporate Governance Score.

Variables	LogEM	LogSC	LogGN	CS
Mean	3.027	3.236	3.203	4.390
S.D.	0.669	0.680	0.580	0.778
Min	1.462	1.690	1.681	3
Max	4.358	4.673	4.291	5
LogEM	1.000			
LogSC	0.779**	1.000		
LogGN	0.639**	0.697**	1.000	
CS	0.599**	0.588**	0.540**	1.000

**Correlation is significant at the 0.01 level (2-tailed)

Table 11 present the correlation coefficients among each dimension of the sustainable report disclosure and its consequences. Firstly the relationship of the environment side is positively and significantly correlated to social side (r=0.779, P<0.01) governance side (r= 0.639, P<0.01 and corporate governance score (r= 0.599, P<0.01).Secondly, social side is positively and significantly correlated to governance side (r= 0.697, P<0.01) and corporate governance score (r= 0.588, P<0.01).Finally, governance side significantly with corporate governance score (r= 0.540, P<0.01).

Regarding possible problems concerning multicollinearity, variance inflation factors (VIFs) are used to test inter-correlation coefficients among three dimensions of corporate governance score. which are independent variables. As the results, table 11 also shows that all correlations are less than 0.80.Additionly,table 12 point out the maximum value of VIF (Equation 1) is 3.347 which is below the cutoff value of 10 (Hair et al.,2014).This case defines that all dimensions of sustainable report are not seriously complementary to the other. In conclusion, the results of VIF and correlations certification that multicollinearity problems do not occur for this analysis.

Table 12 Results Regression Sustainable Report Disclosure Effect to Corporate Governance Score

Equation	**Independent Variables**	**Dependent Variables** : Corporate Governance Score				
		Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value
		B	Std. Error	Beta		
1	(Constant)	1.935	.378		5.116	.000
	Environment Side (H1a)	.375	.129	.322	2.909	.004***
	Social Side (H2a)	.285	.138	.249	2.070	.040**
	Governance Side (H3a)	.281	.145	.184	1.933	.055*
	Firm size	-.038	.097	-.039	-.392	.695
	Firm age	-.004	.006	-.051	-.722	.472
	Leverage	-.527	.334	-.120	-1.577	.117
	Adjust R^2	**.408**				
	F-test	**16.709**				
	Maximum VIF	**3.347**				

* Significant Level 0.10
** Significant Level 0.50
*** Significant Level 0.01

<u>The Results of OLS Regression Analysis of the Effects of Each Dimension of Sustainable Report Disclosure on Corporate Governance Score</u>

The results of OLS regression analysis of the effects of each dimension of corporate governance score on its consequences are show in table 12.The results indicates that independence variable significantly all three dimension is environment side(β_1 = 0.322, P<.01)social side(β_2 = 0.249, P<.05) and governance side.(β_3 = 0.184,P<0.10)in addition, it was found that adjust R^2 is 0.408 and F-test is 16.709

The agency theory incorporates the essence of corporate governance to enhance the capacity to govern in accordance with sound principles of corporate management environmental, social, and governance assure the incorporation of corporate social responsibility into the evaluation of an excellent corporate governance score.(Alali et al., 2012). In accordance with the aforementioned company growth concepts and strong corporate governance standards, strong governance will aid in making financial investment decisions reduce likelihood of fraud(Akyel, 2012).

The findings of the research indicate that environment side correlate significantly with corporate governance scores. When a business provides more information about its all dimension environment on sustainability reports., its score for corporate governance rises(Astuti & Juwenah, 2017).**Thus, the results support hypotheses H1a**

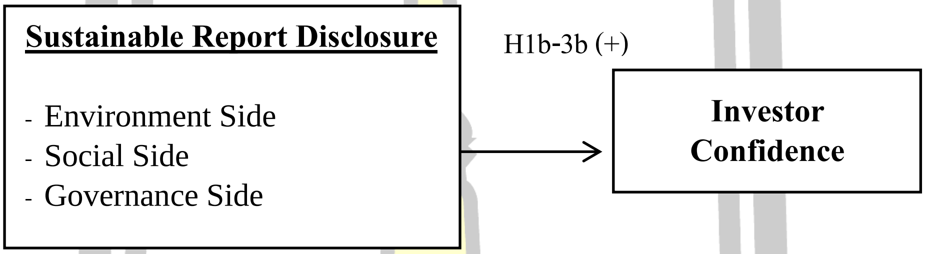
The compilation of high-quality sustainability reports motivates company confidence, and high-quality social responsibility disclosure influences the score for standards of sound corporate governance(Erin et al,2021).**Thus, the results support hypotheses H2a**

The level of good corporate governance score has a positive impact on the significance of sharing a factor in determining the role of investors in the organization in contributing to the increase the sustainability value of companies of varying sizes. The scope of such practices in sound corporate governance will have an impact on business operations, which is a crucial aspect of the company's sustainability reporting (Rely, 2022).The excellent corporate governance score is essential for prioritizing excellent governance to increase within organization and better the company's image outsiders(Wahyuni-TD et al., 2021).**Thus, the results support hypotheses H3a.**

The Relationship between Sustainable Report Disclosure and Investor Confidence

Figure 10 illustrates the effect of sustainable report which consists of environment side, social side and governance side on its consequences as proposed in hypothesis 1(b) to hypothesis 3(b).

Figure 10 The Relationship between Sustainable Report Disclosure and Investor Confidence



This research proposes that the three dimensions of sustainable report that the three dimensions of environment side, social side and governance side have a positive relationship on investor confidence these hypotheses are transformed into the regression equation in equation 2 which are presented in chapter 3. More over the correlation among each dimension of sustainable report and its investor confidence were demonstrated in table 13.

Table 13 Descriptive Statistics and Correlation Matrix of Sustainable Report Disclosure and Investor Confidence.

Variables	LogEM	LogSC	LogGN	LogIC
Mean	3.027	3.236	3.203	0.866
S.D.	0.669	0.680	0.580	0.661
Min	1.462	1.690	1.681	0.638
Max	4.358	4.673	4.291	2.515
LogEM	1.000			
LogSC	0.779**	1.000		
LogGN	0.639**	0.697**	1.000	
LogIC	0.713**	0.738**	0.628**	1.000

**Correlation is significant at the 0.01 level (2-tailed)

Table 13 present the correlation coefficients among each dimension of the sustainable report and its consequences. Firstly the relationship of the environment side is positively and significantly correlated to social side (r = 0.779, P<0.01) governance side (r = 0.639, P<0.01) and investor confidence (r = 0.713, P<0.01).Secondly, social side is positively and significantly correlated to governance side (r =0.697, P<0.01) and investor confidence (r= 0.738, P<0.01).Finally, governance side is significantly with investor confidence side (r= 0.628, P<0.01).

Regarding possible problems concerning multicollinearity, variance inflation factors (VIFs) are used to test inter-correlation coefficients among three dimensions of investor confidence which are independent variables. As the results, table 13 also shows that all correlations are less than 0.80.Additionly,table 14 point out the maximum value of VIF (Equation 2) is 3.347 which is below the cutoff value of 10 (Hair et al.,2014).This case defines that all dimensions of sustainable report are not seriously complementary to the other. In conclusion, the results of VIF and correlations certification indicate that the multicollinearity problems do not occur for this analysis.

Table 14 Results Regression Sustainable Report Disclosure Effect to Investor Confidence.

Equation	**Independent Variables**	**Dependent Variables** : Investor confidence				
		Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value
		B	Std. Error	Beta		
2	(Constant)	-2.453	.224		-10.967	.000
	Environment Side (H1b)	.190	.076	.192	2.487	.014**
	Social Side (H2b)	.195	.081	.201	2.400	.018**
	Governance Side (H3b)	.150	.086	.116	1.746	.083*
	Firm size	.403	.057	.490	7.053	.000***
	Firm age	-.005	.004	-.070	-1.445	.151
	Leverage	-.142	.198	-.038	-.718	.474
	Adjust R^2	**0.713**				
	F-test	**57.827**				
	Maximum VIF	**3.347**				

* Significant Level 0.10

** Significant Level 0.50

*** Significant Level 0.01

The Results of OLS Regression Analysis of the Effects of Each Dimension of Sustainable Report Disclosure on Investor confidence

The results of OLS regression analysis of the effects of each dimension of investor confidence on its consequences are show in table 14. The results indicates that independence variable significantly affects all three dimension is environment side (β_7 = 0.192, P<.05) social side (β_{28}= 0.201, P<.05) and governance side (β_9 = 0.116,P<.10) control variable is firm size (β_{10} = 0.490,P<.01) significant effect also independence variable in addition, it was found that adjust R^2 is 0.713 and F-test is 57.827

Investor confidence is measured by the companies return of variations in the price of securities prior to announcing the price of securities on the closing date. The price of securities and investor confidence in the stock price index are affected by the positive effects of numerous sustainable report disclosure (Zhang et al., 2013).Investors confidence in receiving business information in accordance with the company code of conduct, which discloses sustainability report information in a transparent manner. On the premise of signaling theory-based sustainability reporting, every company must establish credibility with financial data and stock prices. The signally theory is associated with boosting investor confidence by analyzing the factors influencing price fluctuations in securities. Changes related to sustainability reporting impact the accounting report on securities prices, and the company's awards related to changes in securities prices will also impact securities prices(Zhang & Wang, 2022).Defining diverse organizational strategies during economic conditions, investors risk losing their investments due to various economic factors. Consequently, if there are investors, there will be confidence if the price of the security increases relative to the economic climate. Investors are frequently concerned about dividend payments. This impacts the price of changed and decreased securities(Wu & Tuttle, 2014).

Fluctuations in the price of securities, as measured by the ratio of substitutes, are one of the factors that contribute to the growth of the capital market, investor confidence, and risk tolerance. These fluctuations are a result of investors being persuaded to increase their trust in the market(Hoffmann & Post, 2016).As a result of data insecurity a decline in sustainable report disclosure, investor confidence may decline. Consequently investor is regarded more favorably(Nguyen et al., 2018).

Environment side factors substantially correlate with investor confidence, according to the findings of this study. Due to the inclusion of sustainability report in the annual report. The objective is to develop of sustainability reports, to demonstrate empirically of investors confidence and to generate ideas that promote disclosure environment to relationship influences the confidence of stakeholders and demonstrates foresight and investment to modify the organization's public image(Adams,2017). **Thus, the results support hypotheses H2a**

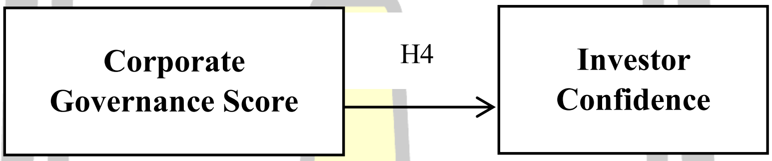
Reporting on social side sustainability it has a positive relationship with the efficiency and participation of investors in determining the organization's role in the development of social responsibility and sustainability development, which will result in the creation of common goals for the development of financial operations concurrent with the creation of corporate sustainability development goals(Azmat et al.,2021). Specifically, the role of investors in determining environmental sustainability reports is a significant indicator of the societal benefits of the organization's activities(García-Sánchez et al.,2021). **Thus, the results support hypotheses H2b**

The majority of the time, investor confidence is determined by demonstrating sustainable management. By establishing development objectives and fostering a positive relationship with investors who consider factors other than the price of securities, a company can increase its chances of attracting capital(Erin et al.,2022). is consistent with the findings. The disclosure of governance side sustainability reports in all aspects is extremely popular across all industries, particularly those that negatively impact the common good. Sustainability has increased the volume of sustainability reporting, and the company has reviewed its relevant policy on corporate social responsibility disclosure(Carroll, 2015).that the ecosystem of the energy industry has a significant impact on sustainability reporting is an effective and promising method to report for consistency and to find ways to solve problems. As a requirement for the company's consideration, the value of sustainability report information disclosure increases (Fleck et al., 2011). It is an additional guideline for the disclosure of sustainability report governance information that aims to create incentives to reduce costs within the company in accordance with development guidelines in order to assess corporate growth and establish investor confidence(Tai & Chuang, 2014).**Thus, the results support hypotheses H3b**

<u>The Relationship between Corporate Governance Score and Investor Confidence</u>

Figure 11 illustrates the effect of corporate governance score which consists of investor confidence on its consequences as proposed in hypothesis 4.

Figure 11 The Relationship between Corporate Governance Score and Investor Confidence



This research propose that the three dimensions of corporate governance score have a positive relationship on investor confidence. These hypotheses are transformed into the regression equation in equation 3 which are presented in chapter 3 more over, the correlation among each dimension of corporate governance score and its investor confidence were demonstrated in table 15.

Table 15 Descriptive Statistics and Correlation Matrix of Corporate Governance Score and Investor Confidence.

Variables	CS	LogIC
Mean	4.390	0.866
S.D.	0.778	0.661
Min	3	-0.638
Max	5	2.515
CS	1.000	1.000
LogIC	0.440**	1.000

**Correlation is significant at the 0.01 level (2-tailed)

Table 15 presents the correlation coefficients among each dimension of the corporate governance score and its consequences. The relationship of the corporate governance score is positively and significantly correlated to investor confidence (r = 0.440, P<0.01).

Regarding possible problems concerning multicollinearity, variance inflation factors (VIFs) are used to test inter-correlation coefficients among three dimensions of audit data analytics capability which are independent variables. As the results, table 15 also shows that all correlations are less than 0.80 Additionally, table 16 point out the maximum value of VIF (Equation 3) is 1.494 which is below the cutoff value of 10 (Hair et al.,2014).This case defines that dimensions of corporate governance score are not seriously complementary to the other. In conclusion, the results of VIF and correlations certification indicate that the multicollinearity problems do not occur for this analysis.

Table 16 Results Regression Corporate Governance Score Effect to Investor Confidence

Equation	**Independent Variables**	**Dependent Variables** : Investor confidence				
		Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value
		B	Std. Error	Beta		
3	(Constant)	-2.209	.253		-8.746	.000
	Corporate Governance Score (H4)	.136	.049	.160	2.753	.007**
	Firm size	.626	.053	.760	11.893	.000**
	Firm age	-.008	.004	-.104	-1.888	.061*
	Leverage	-.340	.225	-.091	-1.509	.134
	Adjust R^2	**.625**				
	F-test	**58.116**				
	Maximum VIF	**1.494**				

* Significant Level 0.10

** Significant Level 0.01

<u>The Results of OLS Regression Analysis of the Effects of Each Dimension of Corporate Governance Score on Investor Confidence</u>

The results of OLS regression analysis of the effects of each dimension of corporate governance score on its consequences are show in table 16. The results indicates that mediator variable significantly affects independence variable (β_{13} = 0.160, P<.01), control variable is firm size (β_{14} = 0.760,P<.01) positive significant effect to mediator variable and firm age (β_{15} = -.104,P<.10) negative significant effect to mediator variable in addition it was found that adjust R^2 is 0.625 and F-test is 58.116

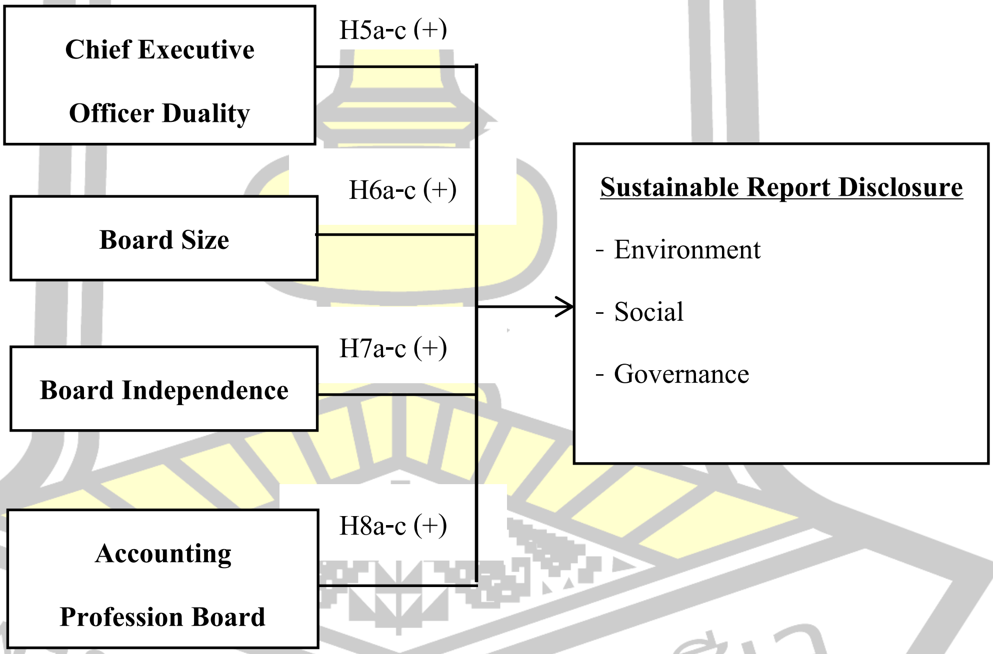
Corporate governance score is the administration of a company that is transparent, accountable, and efficient. Each company proposes the implementation of good corporate governance principles and encourages and promotes the use of indicators that demonstrate corporate governance scores. The securities and exchange commission Thailand and the Institute of Directors Association have implemented a project to assess corporate governance. Evaluation of corporate governance by the Association the Thai Institute of Directors has utilized publicly disclosed information, including stock exchange of Thailand news and information. To demonstrate corporate governance quality according to agency theory, news of wrongdoing by the business or its executives is a useful indicator of the organization for investors seeking information before making a decision to purchase an investment. The assessment score will be divided into 3-5 levels only, while businesses that have obtained the assessment results disclose a large amount of information, which will result in the strengthening of the governance score to assist investors consider investing in the company's securities (Verriest et al., 2013). In accordance with studies on good corporate governance, the Group's systemic risks from corporate governance score level 5 (Excellent Level). It correlates positively with the yield on securities and the overall operating results(Kuntangwattana, 2021). Good corporate governance score it has a positive effect on the market value of Thai Companies Listed on the Stock Exchange. Consequently, the stakeholders are concerned for corporate governance score(Charoenkijjarukorn, 2017).

Past research will conclude that the relationship between corporate governance management and investor confidence is found to create value from a variety of perspectives, and relevant theory demonstrates that corporate governance will increase investor confidence because, if a business has better financial performance along with good corporate governance scores, it will affect the management and operation of all departments of the organization. To enhance the organization's reputation and investor confidence(Siekkinen, 2017).**Thus, the results support Hypothesis H4.**

The Relationship among the Antecedents and Eash Dimension of Sustainable Report Disclosure

Figure 12 illustrates the antecedent variable chief executive officer duality, board size, board independence and accounting professional board effect of sustainable report disclosure which consists of environment side, social side and governance side on its consequences as proposed in Hypothesis 5(a-c) to Hypothesis 8(a-c).

Figure 12 The Relationship among the Antecedence Variable between Sustainable Report Disclosure



This research propose that antecedence variable is chief executive office duality, board size, board independent and accounting professional board have positive relationship on sustainable report that the three dimensions of environment side, social side and governance side these hypotheses are transformed into the regression equation in equation 4 to equation 6 which are presented in chapter 3.More over,the correlation among each dimension of factor influencing and sustainable report were demonstrated in table 17 and table 18 present the correlation coefficients among each dimension of the sustainable report and its consequences.

Table 17 Descriptive Statistics Matrix of Factor Influencing and Sustainable Report Disclosure

Variables	Mean	S.D.	Min	Max
LogEM	3.027	0.669	1.462	4.358
LogSC	3.236	0.680	1.690	4.673
LogGN	3.203	0.680	1.681	4.291
BS	11.240	2.757	7	19
BI	4.830	1.984	3	11
AP	1.810	1.015	0	5

Table 18 Correlation Matrix of factor Influencing and Sustainable Report Disclosure

Variables	LogEM	LogSC	LogGN	CD	BS	BI	AP
LogEM	1.000						
SC	0.779**	1.000					
GN	0.639**	0.697**	1.000				
CD	0.119	0.100	0.083	1.000			
BS	0.502**	0.501**	0.449**	0.302**	1.000		
BI	0.387**	0.430**	0.384	0.136	0.575*	1.000	
AP	-0.188*	-0.125	-0.101	-0.203*	0.066	0.009	1.000

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Table 18 Present the correlation coefficients among factor influencing and sustainable report and its consequences. The relationship of the environment side is significantly correlated to board size board independence and accounting professional board (r = 0.502, P<0.01;r = 0.387, P<0.01; r = -1.888, P<0.05) however chief executive office duality not significant (r = 0.119).The relationship of the social side is positively and significantly correlated to board size and board independence (r = 0.501, P<0.01; r = 0.430, P<0.05) however chief executive officer duality and accounting profession board not significantly(r = 1.000 ; r = -0.125) Finally governance side is positively and significantly correlated to board size (r = 0.449, P<0.05) however chief executive office duality, board independent and accounting profession board not significantly (r=0.083 ; r = 0.149; r=-1.01).

In the part of the correlation coefficient among four antecedences of sustainable report, the results from table 18 also show that all correlations are less than 0.80 future more, the maximum VIF values of equation 4 to 6 in table 19-21 is 2.549 which is below the cutoff value of 10 (Hair et al.,2014).Consequently there are no significant multicollinearity problems appearing in this analysis. It was found that environment side is Adjust R^2 is 0.460 F-test is 17.649,social side is adjust R^2 is 0.504 F-test is 20.914 and governance side is adjust R^2 is 0.374 F-test is 12.700

Table 19 Result of Regression Analysis for the Effects of the Antecedent on Sustainable Report Disclosure (Environment Side)

Equation	**Independent Variables**	**Dependent Variables** : Environment side				
		Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value
		B	Std. Error	Beta		
4	(Constant)	.536	.309		1.734	.085
	Chief Executive officer Duality (H5a)	-.232	.094	-.173	-2.459	.015*
	Board Size (H6a)	.083	.021	.341	3.902	.000**
	Board Independence(H7a)	-.020	.029	-.061	-.704	.483
	Accounting Professional Board (H8a)	.005	.050	.008	.103	.918
	Firm size	.527	.083	.633	6.310	.000**
	Firm age	-.011	.005	-.141	-1.987	.049*
	Leverage	-.816	.279	-.215	-2.922	.004**
	Adjust R^2	**0.460**				
	F-test	**17.649**				
	Maximum VIF	**2.549**				

* Significant Level 0.50
** Significant Level 0.01

Table 20 Result of Regression Analysis for the Effects of the Antecedent on Sustainable Report Disclosure (Social Side)

Equation	Independent Variables	**Dependent Variables** : Social Side				
		Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value
		B	Std. Error	Beta		
5	(Constant)	.425	.301		1.415	.160
	Chief Executive officer Duality (H5b)	-2.44	.092	-.179	-2.651	.009*
	Board Size (H6b)	.074	.021	.299	3.567	.001*
	Board Independence (H7b)	-.009	.028	-.027	-.323	.747
	Accounting Professional Board (H8b)	.068	.048	.102	1.413	.160
	Firm size	.597	.081	.705	7.346	.000*
	Firm age	-.015	.005	-.200	-2.947	.004*
	Leverage	-.793	.272	-.206	-2.913	.004*
	Adjust R^2	**0.504**				
	F-test	**20.914**				
	Maximum VIF	**2.549**				

* Significant Level 0.01

Table 21 Result of Regression Analysis for the Effects of the Antecedent on Sustainable Report Disclosure (Governance Side)

Equation	Independent Variables	**Dependent Variables** : Governance Side				
		Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value
		B	Std. Error	Beta		
6	(Constant)	1.572	.253		6.218	.000
	Chief Executive officer Duality (H5c)	-.144	.077	-.142	-1.866	.064*
	Board Size (H6c)	.056	.017	.306	3.250	.001**
	Board Independence(H7c)	.008	.024	.032	.349	.728
	Accounting Professional Board (H8c)	.043	.041	.086	1.065	.289
	Firm size	.348	.068	.549	5.089	.000**
	Firm age	-.014	.004	-.242	-3.174	.002**
	Leverage	-.768	.229	-.267	-3.359	.001**
	Adjust R^2	**.374**				
	F-test	**12.700**				
	Maximum VIF	**2.549**				

* Significant Level 0.10

** Significant Level 0.01

The Results of OLS Regression Analysis of the Effects of Each Dimension of on Chief Executive Office Duality on Sustainable Report Disclosure

Table 19-21 present the results also show that chief executive officer duality.(the first antecedence)has significant negative effects all dimesons sustainable report is environment side(β_{17} = -0.173, P<.05) social side (β_{24} = -0.179, P<.01) governance side (β_{31} = -0.142, P<.1) Because if the firm a merger chief executives officer duality has a considerable negative impact on disclosures regarding sustainability reporting.

The finding of this research chief office operation duality and president it signifies the consolidation of power between control over decision making and decision making itself. Less rigorous administrative audits will result in a lack of transparency and an imbalance of environment information. Consequently, businesses with consolidated positions will have fewer sustainability report disclosures(Jizi et al., 2014).Information is revealed There is no statistically significant correlation between the president and the board of directors, and there is empirical evidence of a negative correlation between of the president board directer and the company's level of voluntary disclosure(Cheng & Courtenay, 2006). **Thus, the results support Hypothesis H5a.**

Significant concerns pertaining to corporate governance a person must occupy a position. Two positions on the board of directors and the president the merger of positions may lead to conflict because it will impede the organization of a unified and consistent command structure in the opposite direction and effect the direction of decision making and swift action. This has an obvious effect on the performance of the company(Mamun et al., 2013).There is a tendency, from a competitive standpoint, for individuals who are both chief executive office and employees to create opportunities for personal benefit at the expense of the company. The independence of such mergers has contributed to the board of directors' audit and control becoming less efficient and effective(Dias et al., 2017). **Thus, the results support Hypothesis H5b.**

According The study discovered that the size of the chief executive officer duality was negatively correlated with the amount of corporate governance disclosures made voluntarily(Allegrini & Greco, 2013). Moreover, it was discovered that it has been reported that companies with board duality provide less information in their sustainability reports than companies without board duality(Razak & Mustapha, 2013). **Thus, the results support Hypothesis H5c.**

The Results of OLS Regression Analysis of the Effects of Each Dimension of Board Size on Sustainable Report Disclosure

The finding demonstrate that board size (the second antecedence) has significant positive effects all dimension sustainable report is environment side (β_{18} =0.341, P<.01) social side (β_{25} =0.299, P<.01) and governance side (β_{32} =0.306, P<.01) This demonstrates that the increase in the number of boards of directors has led to an increase in the disclosure of sustainability reports in environmental social and governance aspects to disclose information report.

The finding of this research board size and president previous research elements of sound corporate governance that have an impact on sustainability reports as a result of board of directors size. It has a significant impact on the environment operational efficacy of the company(García Sánchez et al., 2011). The size of the company is part of the key success features and mechanisms that have a significant influence on the company's operations, and the board should consist of experienced directors. Directors should have the full right to be completely considered and have a wide range of ideas about environment display and other decisions of the organization. While the number of small boards is beneficial for easy communication and coordination, the larger board size has a greater impact on efficiency than the size of smaller companies in managing sustainability reporting efficiency according to agency theory, the size of a large company dictates and controls the audit of its operations, which indicates that the size of the company is an essential and influential factor that determines its performance. It has received greater support(Akbas, 2016).**Thus, the results support Hypothesis H6a.**

It demonstrates that the company is large and has a professional demeanor. The larger number of board members will result in increased diversity and support for the organization's requirements(Dalton et al., 1999).Companies with a larger board size will have more experts and knowledgeable directors who can offer advice than those with a smaller board size. The recommendations received from the board of directors will encourage the board to act and express their opinions more effectively in accordance with their role. The scale of the large board will increase the transparency improvement's efficacy. During board of directors meetings, the company should consider the group of shareholders, maximize voluntary disclosure of social and environmental information, and establish social responsibility practices. Ghabayen et al., 2016).**Thus, the results support Hypothesis H6b.**

According the study the number of directors influences the company's commitment and exposure to social work positively. Governance the number of directors influences the quality of advice and the quantity of data used to support operational decisions (Ahmad et al.,2017).Profitability and board size director responsibility influence the scale and effectiveness of the company's global board of directors. Due to the enhancement of the organization's governance image and mentality, a new phase of growth should be initiated(Issa,2017).**Thus, the results support Hypothesis H6c.**

The Results of OLS Regression Analysis of the Effects of Each Dimension of Board Independence on Sustainable Report Disclosure

The finding demonstrate that board independence (the third antecedence) has not significant all dimension sustainable report on environment side (β_{19} = -0.061) social side (β_{26} = -0.027) and governance side (β_{33} =0.032)This demonstrates increase in independent directors hindered the board of directors' operational capacity. This not impacts the disclosure of information social responsibility in all three aspects.

The finding of this research not significant between the number of independent board members and the disclosure of corporate social responsibility information. In other words, the increase in independent directors does not contribute to the increase in disclosures in environment sustainability reports. According to Agency Theory, non-executive committees of a company are less involved with employee management, motivation, and closeness. Therefore, the management incentives and the sustainability reporting procedure have no effect. When the number of independent board members increases(Salehi et al., 2017).**Thus, the results not**

support Hypothesis H7a.

The existence of independent directors does not result in increased scrutiny and efficacy of sustainability reporting, and the internal board of non-independent companies assumes social responsibility for management and policy formulation (Razak & Mustapha, 2013).Therefore, the proportional level of independent directors with a higher number and a tendency to report a high level of social responsibility was rejected. In the disclosure of sustainability reports, the significance of independent directors in such matters may not be emphasized; in the majority of instances, independent directors prioritize the company's financial performance over its social performance. (Majeed et al., 2015).**Thus, the results not support Hypothesis H7b.**

The disclosure of sustainability reports indicate that there is no correlation between the disclosure of social responsibility information and the number of board director independence (Kashanipoor et al., 2009).In other words, the expansion of the independent director structure in the organizational chart has no effect on corporate governance responsibility.(Barako et al., 2006).**Thus, the results not support Hypothesis H7c.**

The Results of OLS Regression Analysis of the Effects of Each Dimension of Accounting Professional Board on Sustainable Report Disclosure

Finally finding demonstrate that accounting professional board (the last antecedence) not significant all dimension sustainable report environment side (β_{20} = 0.008) social side (β_{27} =0.102) and governance side (β_{34} =0.086) The accounting professional and qualifications of the board of directors and the independent committee have no bearing on the disclosure of sustainability reports in all three dimensions.

The finding of this research accounting professional board and president previous research the ability to balance social responsible and financial statement in order to make decisions and process work performance requires the knowledge and competence of the chief executive officer, particularly accounting knowledge, which will focus on operational efficiency in order to instill confidence in management's ability to execute appropriate strategies to maintain the company's financial stability.

Regarding environment responsibility (Fatemi et al., 2015).The basis may be used to describe the inclusion or other criteria, such as educational requirement. Previous research has determined that the benefits of higher education success are indicative of the advantages of focusing on sustainability report disclosure. However, no significant relationship between business administration and accounting credentials and increased corporate social responsibility disclosure has been identified.(Prabowo et al.,2017). **Thus, the results not support Hypothesis H8a.**

According to the stakeholder theory, the chairman's experience in accounting studies affects his ability to steer the board towards its desired objectives The accounting and economics degrees of a company's board of directors indicate that the qualification has no bearing on the disclosure of the company's social responsibility on the stock exchange(Akbas,2016).It was also found that board of directors and board independent of directors' educational background and level of higher education institution. **Thus, the results not support Hypothesis H8b.**

The accounting professional board the accounting expertise and qualifications of the board of directors play a crucial role in determining the capacity of company executives to manage business operations. However, the study found that such factors did not affect the corporate governance disclosure of sustainability reports, including(Cullinan & Roush, 2011).**Thus, the results not support Hypothesis H8c.**

The Results of OLS Regression Analysis of the Effects of Control Variables of Factors Influencing on Sustainable Report Disclosure

In addition control variable form table 19 to table 21 show that significant effect to between antecedence variable and independence variable. First control variable firm size is all positive significant all dimensions sustainable report environment side (β_{21} = 0.633, $P<.01$) social side (β_{28} = 0.705, $P<.01$) governance side (β_{35} = 0.549, $P<.1$) Indicate that a size of a large companies affects sustainable report disclosure. (Razak and Mustapha,2013). Second control variable firm age is all negative significant all dimensions sustainable report environment side (β_{22} = -.141, $P<.05$) social side (β_{29} = -.200, $P<.01$) governance side (β_{36} = -.242, $P<.01$) indicate that older businesses are less concerned with sustainable report disclosures than younger businesses. (Habbash (2016). Third control variable leverage is all negative significant all dimensions sustainable report environment side (β_{23} = -.215, P<.01) social side (β_{30} = -.206, P<.01) governance side (β_{37} = -.267, P<.01) indicate that Firms that possess a minimal leverage ratio The disclosure of sustainability reports is greater in comparison to companies that have a higher leverage ratio (Issa, 2017).

Summary

In this chapter, it illustrates descriptive statistics for a number of samples collected for research. The multiple regression analysis and specific correlation analysis were used to test the hypothesis developed in the study, as well as to investigate the relationship among the variables. The results are demonstrated that all dimensions of sustainability report including environment side, social side and governance side have a positive impact on corporate governance score (mediator variable) and investor confidence (dependence variable). In addition, the results of four antecedent factors are: first antecedence, chief executive office duality negative significant all dimension sustainability report; second antecedence, board size positive significant all dimension sustainable report; third antecedence, board independence not significant all dimension sustainable report; last antecedence, accounting professional board not significant all dimension sustainable report. The summary of the hypothesis testing and results is shown in table 22 and figure 13.

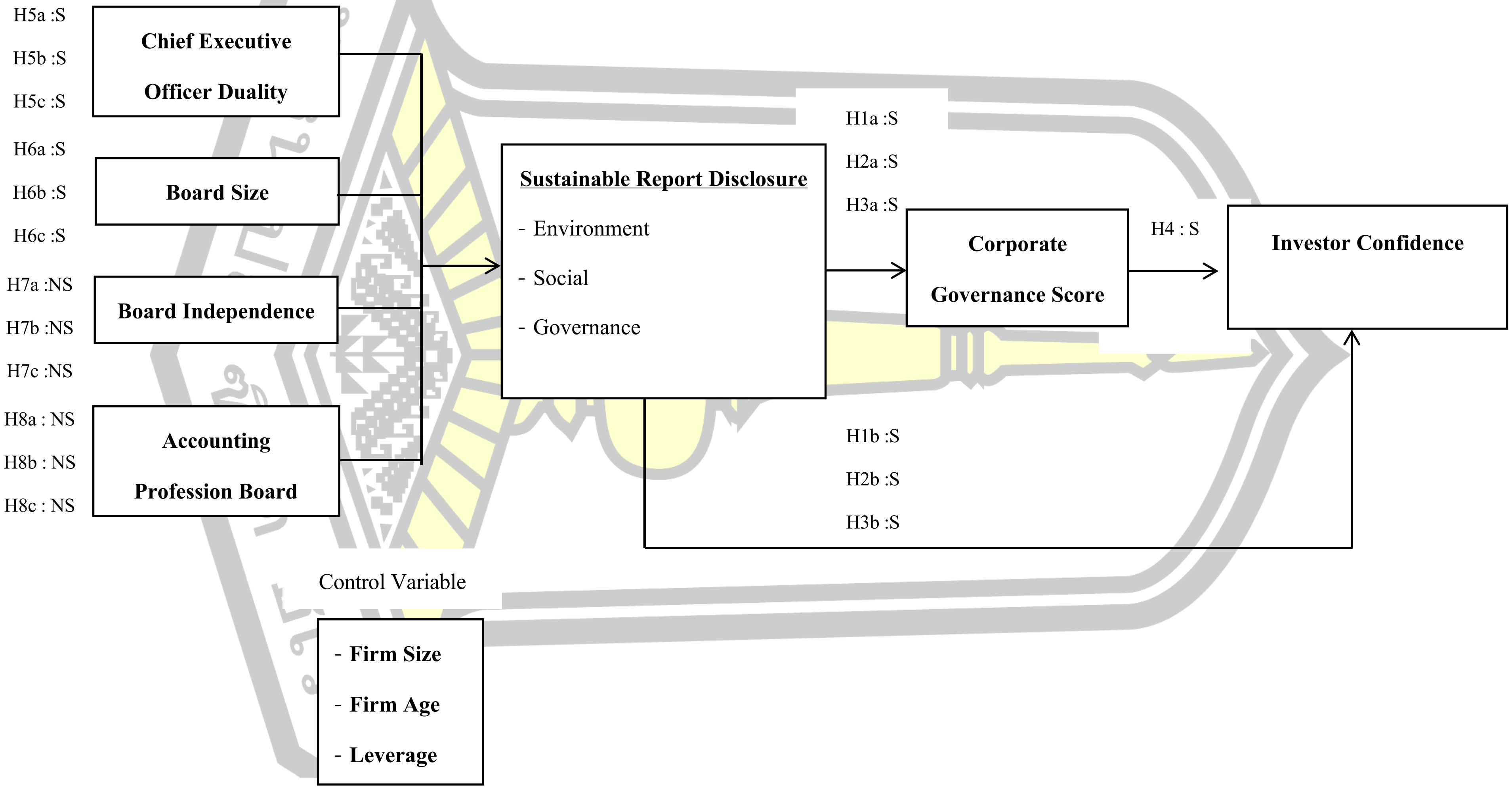
Table 22 The Results Summary of Hypotheses Testing

Hypotheses	Description of Hypothesized Relationship	Results
H1a	Sustainability report disclosure of environment side has a positive impact on corporate governance score.	Supported
H2a	Sustainability report disclosure of social side has a positive impact on investor confidence.	Supported
H3a	Sustainability report disclosure of governance side has a positive impact on corporate governance score.	Supported
H1b	Sustainability report disclosure of environment side has a positive impact on investor confidence.	Supported
H2b	Sustainability report disclosure of social side has a positive impact on investor confidence.	Supported
H3b	Sustainability report disclosure of governance side has a positive impact on investor confidence.	Supported
H4	Corporate governance score has a positive impact on investor confidence.	Supported
H5a	Chief executive office duality has a negative impact on sustainability report disclosure of environment side.	Supported
H5b	Chief executive office duality has a negative impact on sustainability report disclosure of social side.	Supported
H5c	Chief executive office duality has a negative impact on sustainability report disclosure of governance side.	Supported
H6a	Board size has a positive impact on to sustainability report disclosure of environment side.	Supported
H6b	Board size has a positive impact on sustainability report disclosure of social side.	Supported
H6c	Board size has a positive impact on sustainability report disclosure of governance side.	Supported

Table 22 The Results Summary of Hypotheses Testing (Continued)

Hypotheses	Description of Hypothesized Relationship	Results
H7a	Board independence has a positive impact on sustainability report disclosure of environment Side.	Not Supported
H7b	Board independence has a positive impact on sustainability report disclosure of social side.	Not Supported
H7c	Board independence has a positive impact on sustainability report disclosure of governance side.	Not Supported
H8a	Accounting professional board has a positive impact on sustainability report disclosure of environment side.	Not Supported
H8b	Accounting professional board has a positive impact on sustainability report disclosure of social side.	Not Supported
H8c	Accounting professional board has a positive impact on sustainability report disclosure of governance side.	Not Supported

Figure 13 Summary of the Results of Hypothesis Testing



Note :

(S) = Hypothesis Supported (13 Hypothesis)

(NS) = Not Hypothesis Supported (6 Hypothesis)

CHAPTER V

DISCUSSION AND CONCLUSION

The previous chapter has examined the outcome of the data and hypotheses testing. This chapter provides the overview of all finding, including the discussion and summary of the finding, contributions to the theoretical knowledge and the contribution to practice. Research limitations, and further research that could be extended.

Discussion and Conclusion

The discussion and conclusion of this research to the existing body of knowledge in the sustainability report are discussed below.

<u>Discussion</u>

According to the results of the research on effect of sustainable report disclosure on investor confidence of energy group in Thai listed companies supported by the following theories: stakeholder theory, signally theory and legitimacy theory.

First research purposes on sustainable report disclosure positively affects corporate governance score energy group in Thai listed companies. The multiple regression can be categorized and discussed in response to the following hypothesis based on statistical data analysis. First, hypothesis H1a was discovered that the disclosure of environmental side in sustainability report data to a highly significant level of 0.01 in the corporate governance score of the energy group in Thai listed companies. Second, hypothesis H2a was discovered that the disclosure of social side in sustainability data resulted in a very significant level of 0.05 in the corporate governance score of the energy group in Thai listed companies. Finally, hypothesis H3a was discovered that the disclosure of governance side in sustainability report data to significant level of 0.10 in the corporate governance score of the energy group in

Thai listed companies. This is consistent with the findings of Akbas (2016);Astuti and Juwenah (2017);Erin et al.,(2021);Wahyuni-TD et al.,(2021) and Rely (2022) which found that the dissemination of information regarding environment side social side and governance side positively influence sustainability reporting criteria relationship between high quality sustainability report and promote corporate confidence of which a strong corporate sustainability report was found to influence the corporate governance score. The corporate governance score promotes the company's image to be communicated to outsiders and is a crucial factor in corporate governance that adds value to the organization. In addition to displaying the enterprise's financial performance, the report also includes other information and in accordance with legitimacy theory of Suchman, M.C. (1995) a theory describing how a company's operational legitimacy is determined by the permission and authority granted by society. Because the board of directors' decisions will have an impact on stakeholders like investors who are affected by such decisions, the company is required to disclose all three dimensions of sustainability report voluntarily by the organization, and the board of directors is bound by the regulations. The company shall explicitly focus on and define social acceptance in order to establish a label for communicating information linked to the corporate social responsibility in the company form of a corporate governance score(Alali et al., 2012).Furthermore, legitimacy theory demonstrates the necessity for businesses to establish corporate isolation in their reports in order to maintain a positive social image and safeguard environmental, social, and governance concerns.

Second research purposes on sustainable report disclosure positively affects on investor confidence energy group in Thai listed companies. The multiple regression can be categorized and discussed in response to the following hypothesis based on statistical data analysis. First, hypothesis H1b was discovered that the disclosure of environment side sustainability report data to a very significant level of 0.05 in the investor confidence of the energy group in Thai listed companies. Second, hypothesis H2b was discovered that the disclosure of social side in sustainability data resulted in a very significant level of 0.05 in the investor confidence of the energy group in Thai listed companies. Finally, hypothesis H3b was discovered that the disclosure of governance side in sustainability data resulted in a significant level of 0.1 in the investor confidence of the energy group in Thai listed companies. This is consistent with the findings of Adams (2017); Azmat et al.,(2021); García-Sánchez et al.,(2021) and Erin et al.,(2022) which found that sustainability for the environment side , social side and governance side reporting targets to demonstrate correlations affecting investor confidence. In order to better the company's image among its stakeholders, it improves the effectiveness of investors' participation in determining the organization's role in sustainable development and contributes to the creation of social benefits for directors, employees, and investors. Through sustainability reports, we aim to assist the company in demonstrating its stance on social responsibility. The decision to invest in the company will be favorable for investors if the company demonstrates confidence. As the price fluctuations of securities reflect changes in the economy and financial data, signally theory specifies how businesses can display balanced data formats and share information to demonstrate their concern for the environment. This signifies a greater commitment and alignment with the preparation and disclosure of the company's sustainability report in order to inspire investor confidence (Mahoney et al.,2013).The company's operations are progressed in accordance with the chief executive officer's directives and decisions regarding environment, social, and governance under the assumption that the affairs must be conducted to society's satisfaction to strengthen investor confidence. In accordance with the legitimacy theory, the disclosure of the company's sustainability information. As suggested by Moloi & Marwala,(2020) and Hamm et al.,(2022) factors which influence the implementation of sustainability reporting disclosure ensure that the management company meets community needs and community constituents make decisions and consider the effects of the company's actions on the group. Based on the signally theory, the character of the organization's signaling is used to interpret and determine the user's role. The sender signally of compensation will be the chief executive officer, management, and manager, etc., in accordance with the policy of the company. The recipients signally include investors, shareholders, consumers, employees, and regulatory agencies, among others (Taj, 2016).As proposed by Mahoney et al., (2013); Omran & Ramdhony, (2015) and Hassan et al., (2020) based on signally theory, social responsibility reporting demonstrates the equilibrium of data that demonstrates social responsibility sharing. The nature of the signal is consistent with the disclosure of information regarding security prices to stakeholders in order to demonstrate the methodology of those responsible for the information to the corporate sustainability report utilizing the signally theory concept. Based on a review of the three theories, as well as various researches and an analysis of the sample's results using the prescribed research instruments and statistics.

Third research purposes corporate governance score positively affects investor confidence of energy group in Thai listed companies. The multiple regression can be categorized and discussed in response to the following hypothesis based on statistical data analysis. Hypothesis H4 was discovered that the corporate governance score resulted in a very significant level of 0.05 in the investor confidence of the energy group in Thai listed companies. This is consistent with the findings of Ghouma et al., (2018); As' Ad (2019); Thanapin Attarit (2019) and Mechelli and Cimini (2021) which found that the corporate governance score is a factor that has an impact on the work of the board of directors and shows how well the board of directors interacts with shareholders in terms of investor confidence. It demonstrates the level of profitability and also supports the organization's favorable brand impact in the management of monetary policy, in keeping with the guidelines of sound governance.

Final research purpose factor influencing the disclosure of corporate social responsibility information of energy group in Thai listed companies, the multiple regression can be categorized and discussed in response to the following hypothesis based on statistical data analysis.

First antecedent chief executive officer duality this was caused by the merger of positions between chief executive office and manager that show negative impact on sustainable report disclosure in hypothesis H5a was discovered that the chief executive office duality to a very negative significant level of 0.05 in the environment side sustainability report of the energy group in Thai listed companies, hypothesis H5b was discovered that the chief executive office duality to a highly negative significant level of 0.01 in the social side sustainability report of the energy group in Thai listed companies. Besides, hypothesis H5c was discovered that the chief executive office duality to a highly negative significant level of 0.10 in the governance side sustainability report of the energy group in Thai listed companies. This is consistent with the findings of Razak and Mustapha (2013); Jizi et al.,(2014) and Dias et al.,(2017) which found negative relationship between chief executive officer duality and sustainability disclosure the similarity between the duality of the chief executive officer position and the manager officer position. It impacts environment side and social side responsibility negatively. The degree of disclosure diminishes role of the merger of the two positions led to reduction in transparency, which negatively impacted stakeholder confidence in the company. The duality of the positions of chairman and chief executive officer has a detrimental effect on decision-making and limits social responsibility. Evidently, disclosure of the role of the merger will decrease the company's internal and external transparency in the eyes of its stakeholders. Consequently, the solution is a distinct separation of responsibilities between the board of directors and the president.

Second antecedence board size positive impact on sustainable report disclosure in hypothesis H6a was discovered that the board size to a highly significant level of 0.01 in the environment side sustainability report of the energy group in Thai listed companies. Hypothesis H6b was discovered that the board size to a highly significant level of 0.01 in the social side sustainability report of the energy group in Thai listed companies, and hypothesis H6c was discovered that the board size to a very significant level of 0.05 in the governance side sustainability report of the energy group in Thai listed companies. This is consistent with the findings of Akbas (2016); Ghabayen et al., (2016); Ahmad et al., (2017) and Issa (2017) which found the size of the chief executive officer has contributed positively to the extent of sustainability disclosure in the report's environment, social, and governance side. A large commission's size will affect its efficacy and contribute to enhancing its image, initiative, and clarity in sustainable report. The board of directors should place equal emphasis on nurturing social responsibility in order to extend the benefits to stakeholders in a broader context by Freeman et al., (2020) and Uyar et al., (2013); the foundation of stakeholder theory is a division of labor structures for the creation of social value. Social accountability business ethics avoid focusing solely on shareholders and proprietors' interests, particularly those affected by the company's business operations who have relationships with stakeholders.

Third antecedence board independence not impact on sustainable report disclosure in hypotheses H7a, H7b and H7c were discovered that the board independence is not significant in the all dimension environment side, social side and governance side in sustainability report of the energy group in Thai listed companies. This is consistent with the findings of Razak and Mustapha (2013) Majeed, Aziz and Saleem (2015); Habbash (2016); Salehi, Tarighi and Rezanezhad (2017) and Ahmad, Rashid and Gow (2017).The number of an increase in the number of independent directors in a company indicated that there was no correlation with an increase in sustainability disclosure. In other words, the transfer of the independent board's structure in the organizational chart has no effect on increased social responsibility.

Fourth antecedence accounting professional board not impact on sustainable report disclosure in hypotheses H8a, H8b and H8c were discovered that the accounting profession board is not significant in the all dimension environment side, social side and governance side in sustainability report of the energy group in Thai listed companies. This is consistent with the findings research of Prabowo et al.,(2017).Additionally, the accounting knowledge and accounting graduate degrees of the chief executive officer play an important part in determining the competence and structure of the board of directors and board of independent directors. Nevertheless, the study found that these qualifications did not influence the disclosure of sustainability reports in terms of environment side, social side, and governance side.

Consequently, the present research examines the impact of board size and chief executive office duality on the level of sustainable report disclosure, as determined by the results of four research objectives. Investor confidence and the corporate governance score are both influenced by the extent to which sustainable report information is disclosure.

Conclusion

This study's goal is to develop a theoretical framework for sustainability disclosure capabilities from sustainable report and annual report of energy group in Thai listed companies, the operating results are a minimum of three years. According to data corporate governance score released by the Thai institute of directors, businesses companies' data from 2019 to 2021 and had a corporate governance score of level three or higher. The companies has a policy to disclosure sustainable reports in all three dimensions are environment side, social side, and governance side, resulting in higher corporate governance scores respectively which can respond to the research findings in according to hypothesis H1a sustainability report disclosure of environment side has a positive impact on corporate governance score, hypothesis H2a Sustainability report disclosure of social side has a positive impact on corporate governance score and hypothesis H3a sustainability report disclosure of governance side has a positive impact on corporate governance score.

The study on the level of disclosure of sustainability report data for the energy group in Thai listed companies, it is clearly seen that investor confidence is based on the stock price at the close date of stock exchange. The study empirically demonstrated the dimensions of sustainability reports in all three dimensions according to the global reporting initiative criteria for environment side, social side, and governance side. which can respond to the research findings in according to hypothesis H1b Sustainability report disclosure of environment side has a positive impact on investor confidence, hypothesis H2b sustainability report disclosure of social side has a positive impact on investor confidence and hypothesis H3b sustainability report disclosure of governance side has a positive impact on investor confidence.Moreover,the increase in corporate governance scores from the Thai Institute of Directors has also contributed to an increase in investor confidence. which can respond to the research findings in according to hypothesis H4 corporate governance score has a positive impact on investor confidence.

From the perspective of the chief executive officer, this research provides fascinating and comprehensive information, particularly in support of the quantity of sustainability report disclosures that reveal the organization's reputation. The quantity of information disclosed in sustainability reports demonstrates the investor confidence, particularly with regard to environment side ,social side and governance side. According to signally theory of Spence, M.L. (1973) it is proposed that the chief executive officer possesses the knowledge and ability to present information to shareholders and the authority to manage the disclosure of sustainability reports. Information from sustainability report disclosure has decreased as a result of the combination of the manager and board of directors posts. which can respond to the research findings in according to hypothesis H5a chief executive office duality has a negative impact on sustainability report disclosure of environment side,H5b chief executive office duality has a negative impact on sustainability report disclosure of social side and H5c chief executive office duality has a negative impact on sustainability report disclosure of governance side. Apart from this, the results of the research support the stakeholder theory of Bernard C.L.(1936).The addition of the chief executive office has resulted in an increase in the disclosure of sustainability report information which can respond to the research findings in according to hypothesis H6a board size has a positive impact on to sustainability report disclosure of environment side, hypothesis H6b board size has a positive impact on sustainability report disclosure of social side and , hypothesis H6c board size has a positive impact on sustainability report disclosure of governance side. However, the results of the research on the number of independent directors increased and the number of directors with accounting professional board. It does not affect the increased disclosure of sustainability reports, so it does not support hypothesis H7a board independence has a positive impact on sustainability report disclosure of environment side, hypothesis H7b board independence has a positive impact on sustainability report disclosure of social side, H7c board independence has a positive impact on sustainability report disclosure of governance side, H8a accounting professional board has a positive impact on sustainability report disclosure of environment side, H8b accounting professional board has a positive impact on sustainability report disclosure of social side, H8c accounting professional board has a positive impact on sustainability report disclosure of governance side.

Consequently, the ability to disclose sustainability report information will contribute to determining the future direction of the company's sustainability or to the formulation of the company's development criteria through communication with the company's shareholders and important stakeholders in order to benefit the company's investment decisions. It is evidently demonstrated that this study's conceptual framework is supported by three theories: stakeholder theory, legitimacy theory, and signally theory. The theories are employed to explain the connection between sustainability disclosure under the global reporting initiative criteria and investor confidence. Obviously, these different theories support this study. In environmental reporting, this research has contributed to various theories regarding the value of sustainability report disclosure through excellent corporate governance scores and the development of investor confidence in energy group in Thai listed companies.

Theoretical Contributions and Managerial Implications

Evidently, this research is supported by different hypotheses, including stakeholder theory, legitimacy theory, and signally theory for sustainability this study has contributed to various theories regarding the value of sustainability report disclosure through excellent corporate governance scores and the development of investor confidence in energy group in Thai listed companies.

Considering the viewpoint of management, this research provides data for investor decision, particularly when there is a connection between theory and research, such as stakeholder theory. Bernard, C.L.(1938) explains that administrators within the organization should demonstrate the virtues and values of effective management, particularly in terms of environmental and social responsibility to preserve the organization's reputation. Correspondingly, legitimacy theory by Suchman, M.C. (1995) explains that the legality of the company's operations conforms to the principles of sound governance. Regarding utilization of human and natural resource laws in accordance with the needs and expectations of society, these have a favorable effect on investor confidence. Signally theory by Spence, M.L.(1973) explains that the guidelines determine the future direction of the company. According to relations with investors, these are the items that management must signal the recipient to deliver. Moreover, organizational conduction determines the company's role, its future direction, or the criteria for the company's development collectively with investors and other stakeholders.

In addition, the research focuses on the managerial implications capacity to disclose sustainability report information. According to chief executive office characteristics, in this way, executives are aware of the disclosure of sustainability report information in accordance with the global reporting initiative criteria for investor confidence, as measured by the corporate governance score of the Thai Institute of Directors in accordance with stakeholder theory, legitimacy theory, and signally theory. Specifically, the disclosure of information concerns the company's environmental protection. This includes the disclosure of environmental data such as greenhouse gas emissions, waste management, and the reduction of hazards associated with air impacts. This includes the release of social information such as employee treatment policies, injury rate of workers disclosed in the company's occupational health and safety, and social responsibility report, which supports the research of Akbas (2016); Adams (2017); Astuti and Juwenah (2017); Azmat et al.,(2021); Erin et al.,(2021);García-Sánchez et al.,(2021);Wahyuni-TD et al., (2021) and Rely (2022).

Consequently, the discovery provides information on the concepts of management efficiency and practices regarding sustainability disclosure capabilities. Subsequently, the disclosure of environmental and social sustainability reports has been found to correlate due to the fact that research has a positive relationship with corporate governance score and investor confidence.Correspondingly, it also establishes the relationship of board of directors toward sustainable report disclosures on the ground chief executive officer duality, board size and board duality for the purpose of enhancing sustainability information disclosure of energy group in Thai listed companies.

Limitations and Future Research Directions

When interpreting the outcomes of the research, several limitations need to be considered. Firstly, there were 63 companies of energy group in Thai listed companies, but the companies were reduced and only have under three years of operating performance for the companies, provident fund of company group, and company group with a corporate governance score of less than three points that the Thai Institute of Directors has not disclosed. As a consequence, 17 companies were deducted from the sample of 46 companies from 2019 to 2021 total 138 sample companies used for statistical data analysis to test the hypothesis and disclosure of sustainability report, which is the disclosure of information for the voluntary report preparation of the company. However, smaller companies (as measured by total assets) and companies with a short operating tradition (as measured by age from the date of listing on a stock exchange) have greater public exposure low level of disclosure in sustainable reports specifically. In terms of the number of words used for disclosure, environment side disclosure will contain the fewest words. Furthermore, it suggests that the company continues to disregard environment activities. Therefore, this investigation will assist the company in focusing more on environment activities. In addition to enhancing the company's reputation, it encourages investors to contemplate making an investment.

Secondly, as a result of research limitations, the sample size of energy companies in Thai listed has decreased this may result in an increase in the number of independent committees and the number of the accounting professional board, not affecting the sustainability disclosure reports with not support hypothesis of the researchers. Moreover, the investigator needs to compared to other industries; the energy industry contributes the most to the use of the environment. Environment and social sustainability report disclosure is intriguing.

Future research introducing sample categories, such as the telecommunications or auto industries, at the companies in Thai listed. As these industrial entities are primarily active in the environment and energy industries, it is important to examine the level of disclosure in sustainability reports. Additionally, in second future research, there are criteria other than global reporting Initiative criteria can be recommended to be utilized, such as the sustainability accounting standard board, international sustainability standards board , and corporate sustainability reporting directive to examine the level of disclosure of sustainability reports in other group in Thai listed companies.

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APPENDICES

APPENDIX A

The Original Item

Table A : Original Items in Variable

Constructs	**Items**
Independent Variable	
Environment Side (EM) with Global Reporting initiative	
EM1	Greenhouse gas emissions detail as: the number of emissions that affect the Earth's atmosphere by acting like a greenhouse gas, allowing wave rays to pass down to the Earth's surface.
EM2	Emission intensity detail as: the amount of concentration of greenhouse gas accumulation in the atmosphere, both naturally occurring and caused by the company's emitting parts.
EM3	Energy usage detail as: total amount of energy directly and indirectly consumed.
EM4	Energy intensity detail as the proportion of the final energy consumption to the gross product of the enterprise.
EM5	Energy mix detail as: the proportion of different types of energy consumption, such as chemical energy, thermal energy, and mechanical energy, radiant energy electric power, and nuclear energy in corporate.
EM6	Water usage detail as: the total amount of water used in an organization's processes or operations.
EM7	Environmental operations detail as: the proper implementation of mechanical systems for important resources generated by nature and man by the organization.
EM8	Environmental oversight climate related risks detail as : the organization policy to protect the environment and prevent it impact on the environment.
EM9	Environmental oversight other sustainability issues detail as : the organization's policy formulation for the prevention and resolution of natural resources and the environment.
EM10	Climate risks mitigation detail as: putting in place corporate policies to reduce risk factors from climate change and environmental impacts.
Social Side (SC) with Global Reporting initiative	
SC1	Chief executive officer pay ratio detail as: the ratio of remuneration. chairman, shareholders, executives, and managers who are responsible for managing the work in the organization. compared to other employees.
SC2	Gender pay ratio detail as: the ratio of remuneration among employees in an organization. when compared between males and females.
SC3	Employee turnover detail as: human resource turnover or turnover of former and new employees between organizations as a percentage.
SC4	Gender diversity detail as : the ratio of employees in an organization. when compared between males and females.
SC5	Temporary worker ratio detail as : conducting business based on ethics, integrity and transparency. partner's legal practice

Table A : Original Items in Variable (Continued)

Constructs	Items
Independent Variable (Continued)	
Social Side (SC) with Global Reporting initiative continued	
SC6	Non Discrimination detail as : in the workplace is defined as employment discrimination and treats individuals in different organizations, such as gender, religion, color, ethnicity, etc.
SC7	Injury rate detail as: the rate of injury to an employee in an organization, which is proportional to the number of employees injured in the performance of their work. per all employees
SC8	Global health and safety detail as: health and safety of employees in an organization.
SC9	Child and Forced labor detail as : the labor of individuals between the ages of 15 and 18 in an organization.
SC10	Human right detail as : fundamental freedoms and equality rights that are not discriminated against on the grounds of race. Religion, gender, skin color, language, and race are all factors in the organization.
Governance Side (GN) with Global Reporting initiative	
GN1	Board Diversity detail as: Board independence detail as: the company's board of directors as diverse and culturally diverse to focus on the organization's success.
GN2	Board Independence detail as: the independence of the board of directors who have formulated the corporate governance policy in accordance with the criteria of the stock exchange.
GN3	Incentivized pau detail as: the remuneration paid by the organization to the board of directors of the company in order to build good relationships and strengthen sustainability.
GN4	Collective Bargaining detail as: important mechanism that involves everyone in the organization, often using various strategies to raise the bargainer's needs.
GN5	Supplier code of conduct detail as: conducting business based on ethics, integrity and transparency. partner's legal practice
GN6	Ethics and anti corruption detail as: the guidelines for corporate practices that demonstrate anti-corruption and whistleblowing practices.
GN7	Data Privacy detail as: treatment information sheets, as well as details about those who provide information that is not generally perceived by the public.
GN8	Sustainability reporting detail as: reporting documents that disclose economic and operational information environment and society.
GN9	Disclosure Practices detail as the disclosure of sustainable information that is not corporate financial information. that's a cover for the economy society and environment.
GN10	External assurance detail as: reporting the measurement and disclosure of information.

Table A : Original Items in Variable (Continued)

Constructs	Items
Mediator Variable	
Corporate governance score (CG)	a classification by the Thai Institute of Directors, supported by the Thai listed regulatory commission, ranging from level 3 to level 5 in terms of corporate governance score. This study references the Thai Institute of directors following evaluation criteria are applied: The internationally recognized standards of the Thai Institute of Director Association consist of five categories: (1) Shareholder rights; (2) Equity among Shareholders; (3) Role of Stakeholders Consideration; (4) Transparent Disclosure; and (5) Director responsibility.
Dependence Variable	
Investor Confidence (IC)	Stock closing price announced by the Stock Exchange of Thailand for the fiscal years 2019, 2020, and 2021
Antecedence Variable	
Chief executive officer duality (CD)	The organization's dual chief executive office of the board of directors and manager director
Board size (BS)	The number chief executive office of board director and the independence of the board of directors of a company.
Board Independence (BI)	The proportion of all independent board members to the total number chief executive office of board members at the company.
Accounting professional board (AP)	The number of chief executive office board members with an accounting degree .
Control Variable	
Firm size (SIZE)	The size of the firm's total assets for the fiscal years 2019, 2020, and 2021
Firm age (AGE)	The company's maturity started on the date of its listing on the Stock Exchange of Thailand.
Leverage (LEV)	The financial structure ratio predicated on the debt to equity ratio for the fiscal years 2019, 2020, and 2021

APPENDIX B

Factor Loading and Reliability Analyses

Table B : Item Factor Loadings and Reliability Analyses

Constructs	Factor Loading
Independence Variable Environment Side (EM)	.776
Social Side (SC)	.806
Governance side (GN)	.691
Mediator Variable Corporate governance score (CG)	.671
Dependence Variable Investor Confidence (IC)	.799
Antecedence Variable Chief executive officer duality (CD	.617
Board size (BS)	.750
Board Independence (BI)	.647
Accounting professional board (AP)	.810
Control Variable Firm size (SIZE)	.861
Firm age (AGE)	.754
Leverage (LEV)	.886

APPENDIX C

Testing Assumption of Regression Analysis

Appendix C – Results of testing basic assumption of regression analysis

The basis assumption of regression analysis (multicollinearity, normality of error term, heteroscedasticity, and nonlinearity of regression function) is tested when testing the relationship between the dependent variable and independent variable, based on the regression analysis conducted on sample data, in order to obtain reliable results in this study.

All scientific experiments must undergo quality control. Each statistical test is predicated on fundamental hypotheses. If the assumptions are violated, the model's results describing the relationship are invalid. In this study, none of the equations indicated a violation of the regression assumptions.

Table C1 : The results of multicollinearity testing (Sustainability report Corporate governance score and Investor confidence)

<u>Test of Multicollinearity</u>

Independent Variables	**Dependent Variables**			
	Corporate Governance Score (CS)		Investor Confidence (IC)	
	Equation 1		Equation 2	
	Tolerance	VIF	Tolerance	VIF
Environment side (EM)	.352	2.842	.352	2.842
Social side (SC)	.299	3.347	.299	3.347
Governance side (GN)	.478	2.094	.478	2.094
Size	.434	2.305	.434	2.305
Age	.880	1.136	.880	1.136
Leverage	.752	1.331	.752	1.331

Table C2 : The results of multicollinearity testing (Corporate governance score and Investor confidence)

Independent Variables	**Dependent Variables**	
	Investor Confidence (IC)	
	Equation 3	
	Tolerance	VIF
Corporate Governance Score (CS)	.811	1.233
Size	.669	1.494
Age	.894	1.119
Leverage	.756	1.323

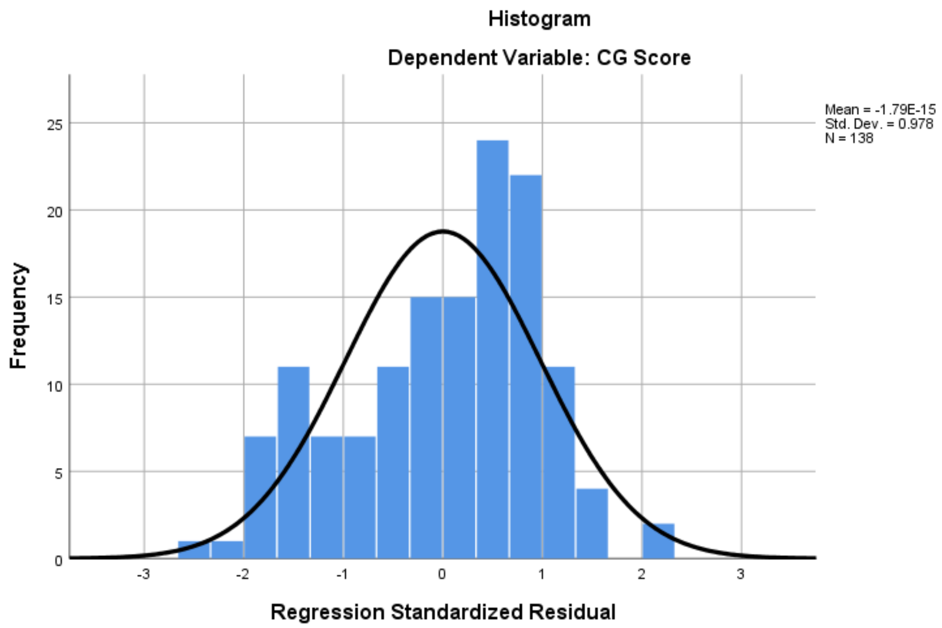
TableC3 : The results of multicollinearity testing (Sustainability and its antecedences)

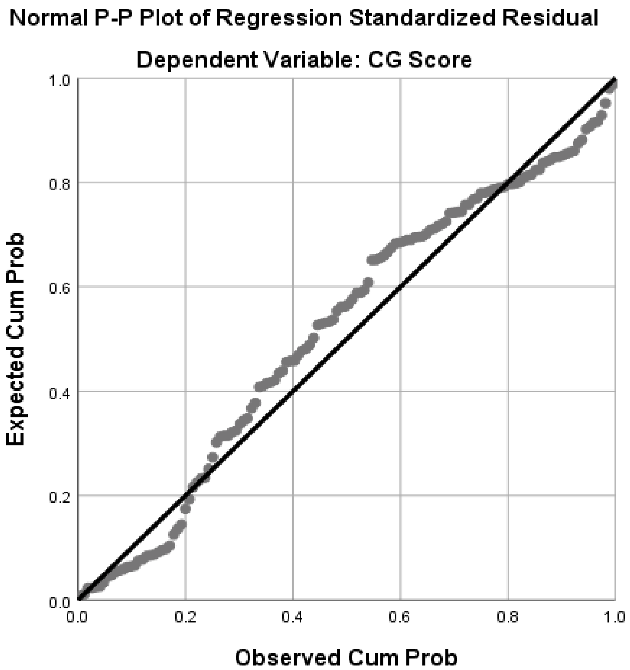
Independent Variables	**Dependent Variables**					
	Environment side (EM)		Social Side (SC)		Governance Side (GN)	
	Equation 4		Equation 5		Equation 6	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
Chief executive office duality (CD)	.793	1.261	.793	1.261	.793	1.261
Board size (BS)	.515	1.942	.515	1.942	.515	1.942
Board Independence (BI)	.530	1.889	.530	1.889	.530	1.889
Accounting professional board (AP)	.699	1.430	.699	1.430	.699	1.430
Size	.392	2.549	.392	2.549	.392	2.549
Age	.784	1.275	.784	1.275	.784	1.275
Leverage	.726	1.378	.726	1.378	.726	1.378

Normality of the error term distribution

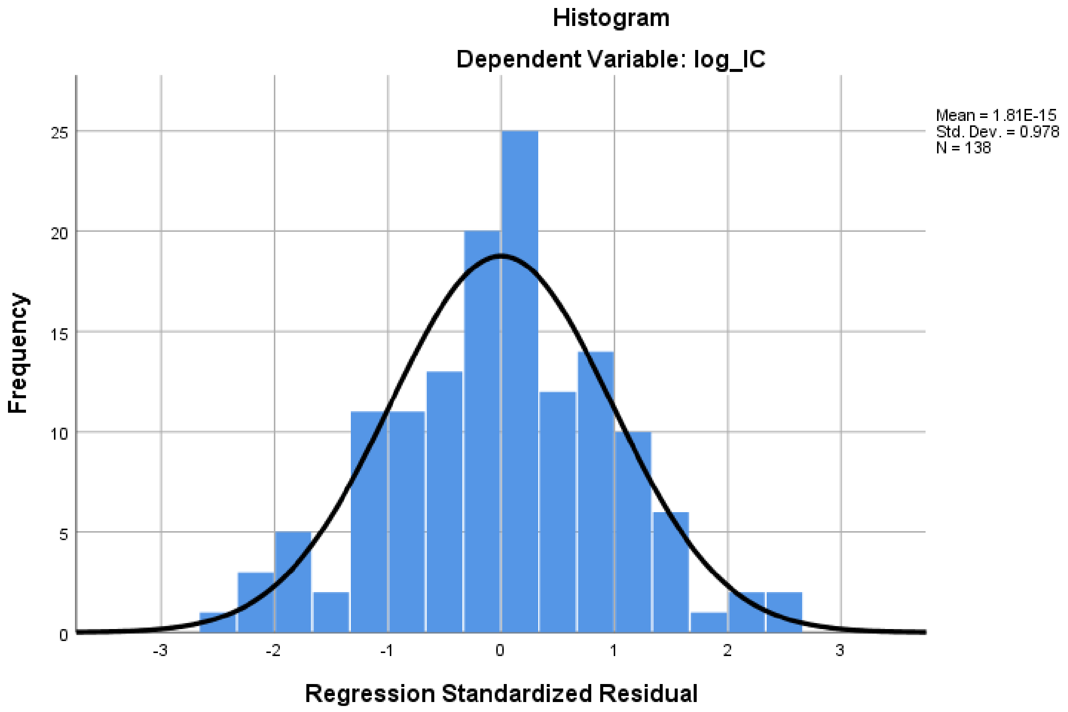
Non-normality of error terms can distort relationships and statistical significance tests. Normal P-P plots therefore provide the statistical value for the normality test. (Hair et al., 2014) All P-P plots in this section display information about normality. Therefore, normality of error term does not result in significant issues.

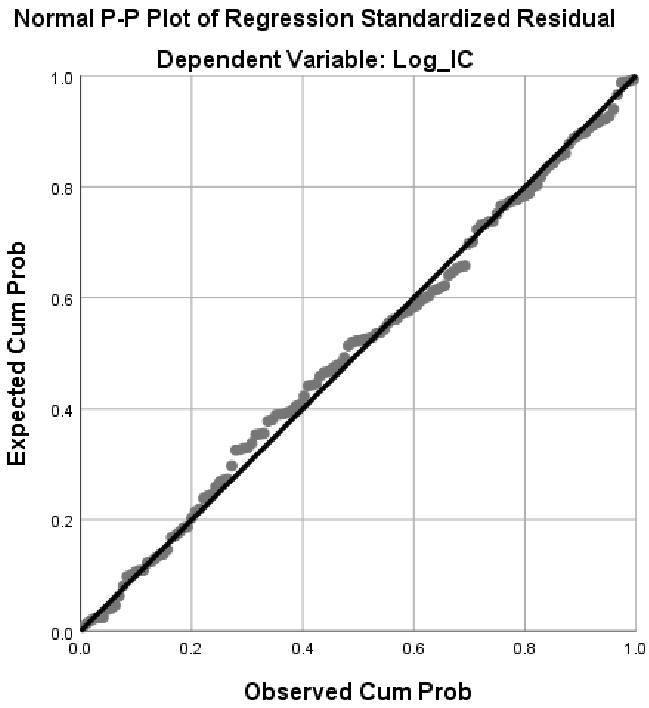
Equation 1 : $CS = \alpha_{01} + \beta_1 LogEM + \beta_2 LogSC + \beta_3 LogGN + \beta_4 LogSIZE + \beta_5 AGE + \beta_6 LEV + \varepsilon$



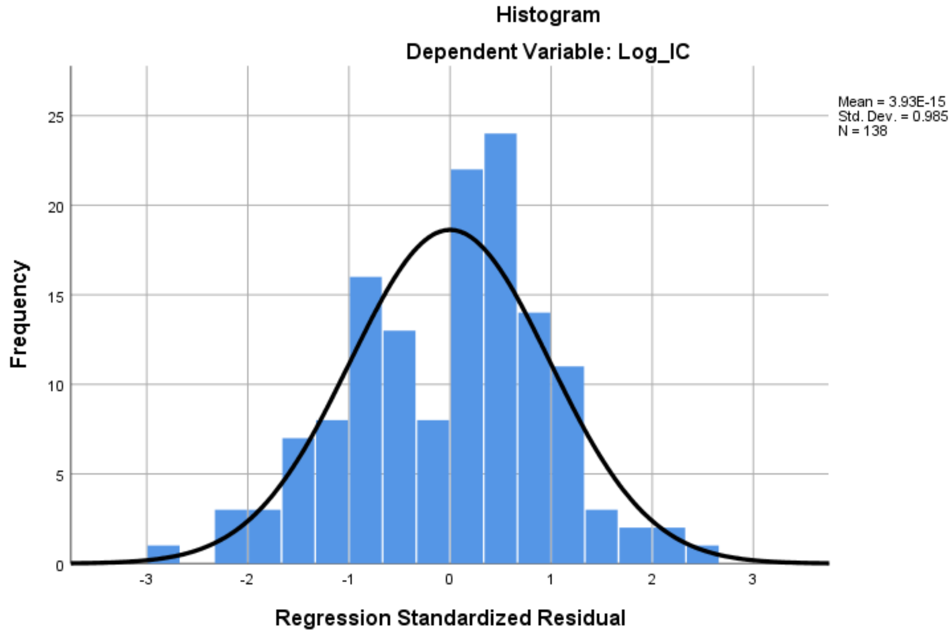


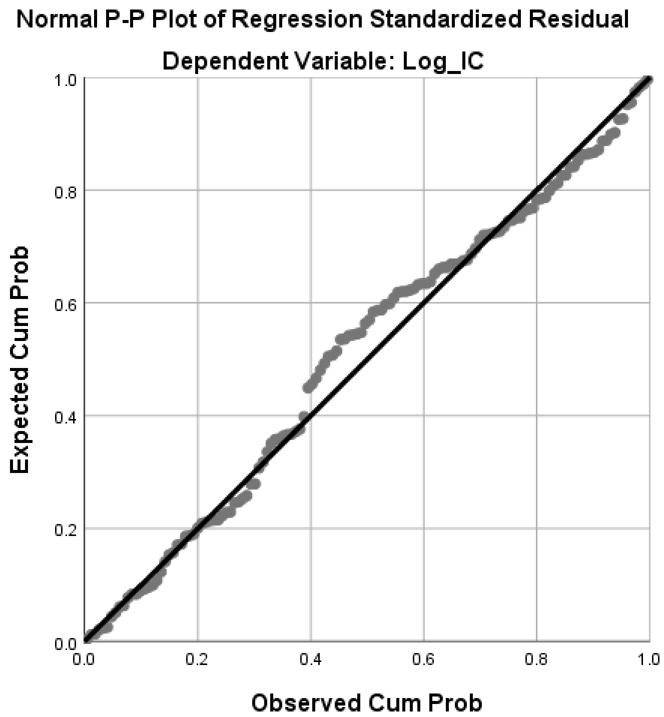
Equation 2 : $LogIC = \alpha_{02} + \beta_7 LogEM + \beta_8 LogSC + \beta_9 LogGN + \beta_{10} LogSIZE + \beta_{11} AGE + \beta_{12} LEV + \varepsilon$



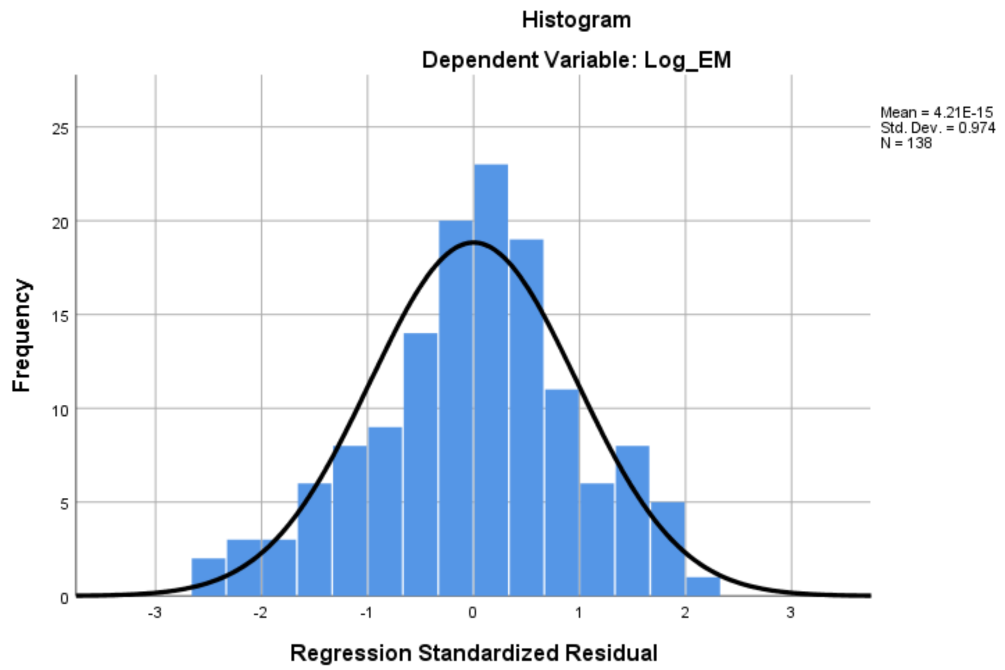


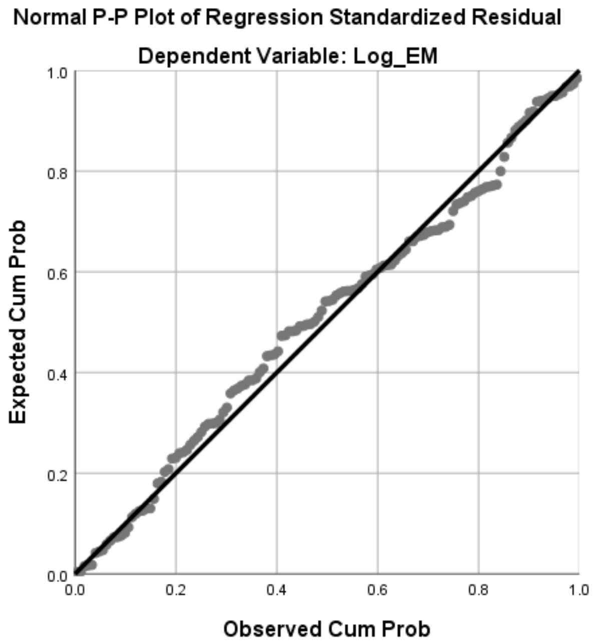
Equation 3 : $IC = \alpha_{03} + \beta_{13}CS + \beta_{14}LogSIZE + \beta_{15}AGE + \beta_{16}LEV + \varepsilon$



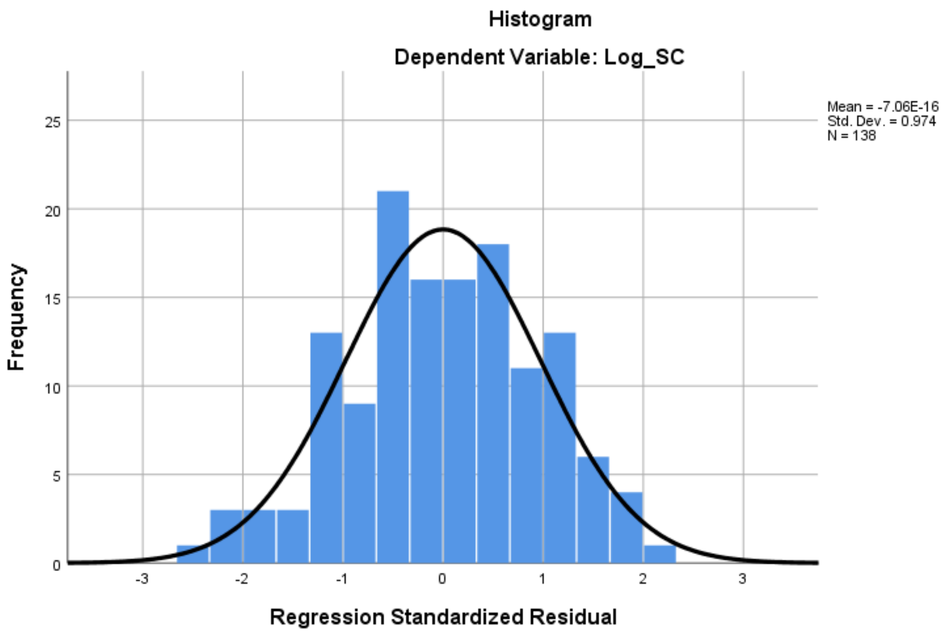


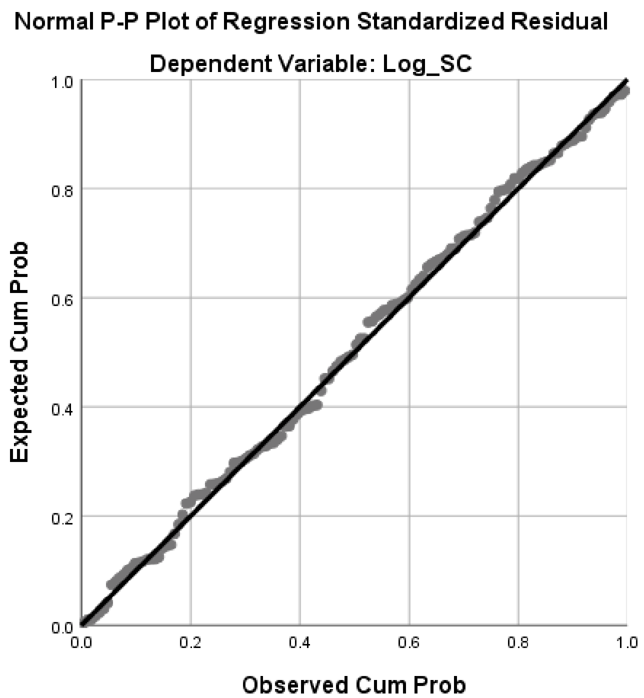
Equation 4 : $LogEM = \alpha_{04} + \beta_{17}CD + \beta_{18}BS + \beta_{19}BI + \beta_{20}AP + \beta_{21}LogSIZE + \beta_{22}AGE + \beta_{23}LEV + \varepsilon$



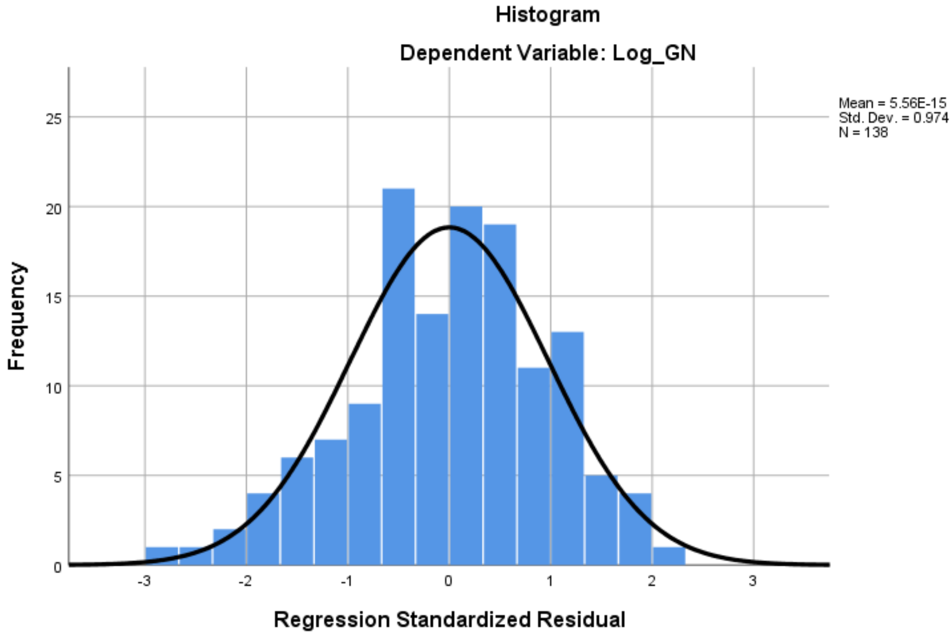


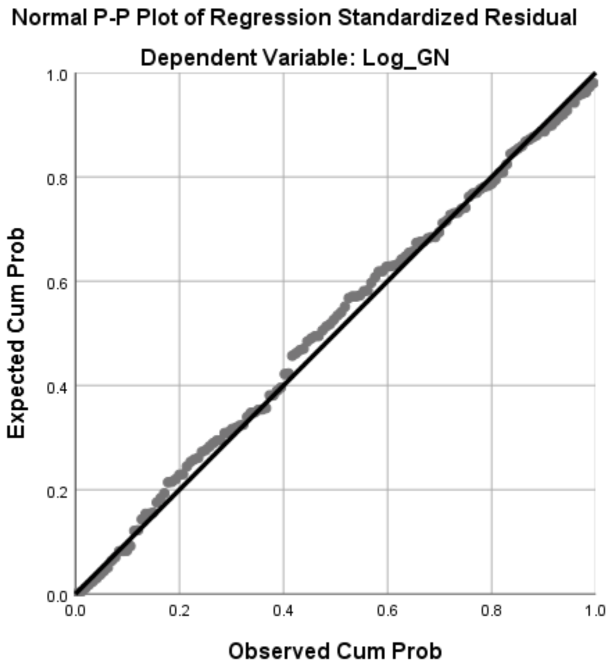
Equation 5: $LogSC = \alpha_{05} + \beta_{24}CD + \beta_{25}BS + \beta_{26}BI + \beta_{27}AP + \beta_{28}LogSIZE + \beta_{29}AGE + \beta_{30}LEV + \varepsilon$





Equation 6: $LogGN = \alpha_{06} + \beta_{31}CD + \beta_{32}BS + \beta_{33}BI + \beta_{34}AP + \beta_{35}LogSIZE + \beta_{36}AGE + \beta_{37}LEV + \varepsilon$





Test of constant variance of the error terms (Homoscedasticity)

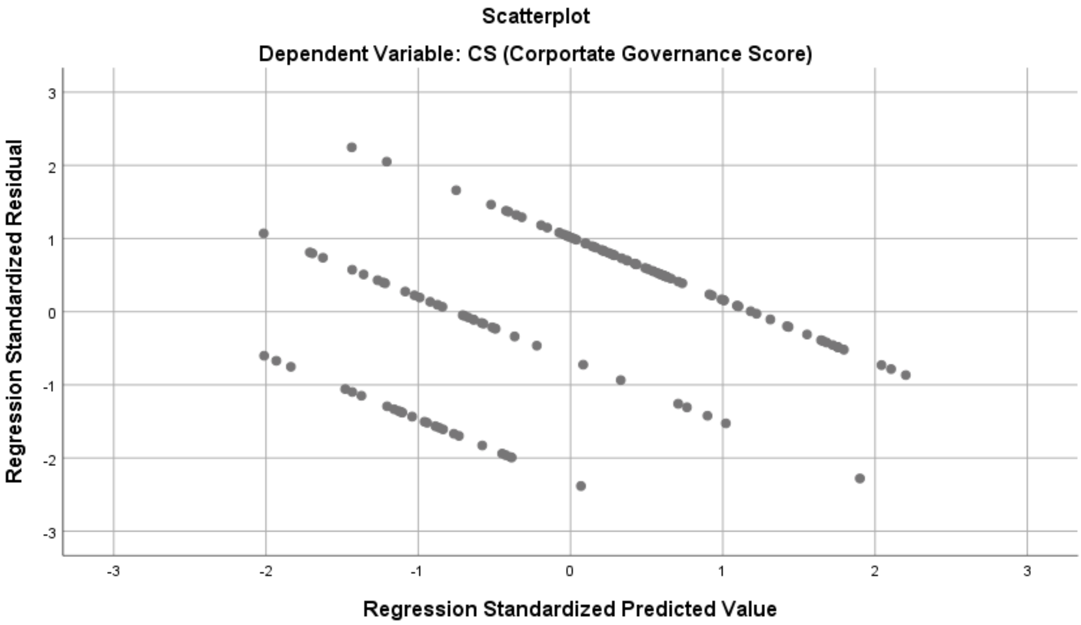
The constant variance of the error terms or the heteroscedasticity problem can distort the results through increasing the likelihood of a Type I error. For testing heteroscedasticity, both the Breusch-Pagan test and visual residual plots against the predictor variables are applied.

From all equations the demonstrate results of the Breusch-Pagan is not encounter non-constancy variance of the error terms Therefore, heteroscedasticity problem is not the serious problem of this research.

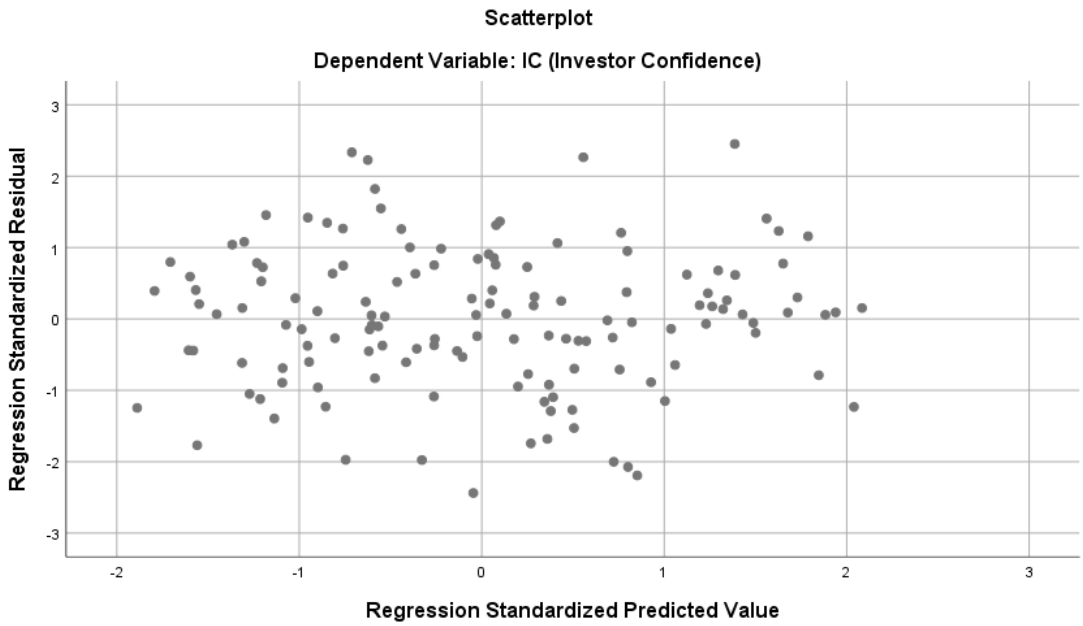
Table C4 : Test of constant variance of the error terms (Homoscedasticity)

Equations	Breusch-Pagan	
	Breusch-Pagan test X^2_{BP} = (SSR*2) $(SSE/n)^2$	Critical value ($x^2_{(.05,1)}$ =3.84)
1	= $(35.926*2)*(46.944/138)^2$ = 2.31	Value of Breusch-Pagan test does not exceed critical value
2	= $(43.491*2)*(16.421/138)^2$ =1.23	Value of Breusch-Pagan test does not exceed critical value
3	= $(38.108*2)*(21.803/138)^2$ = 1.90	Value of Breusch-Pagan test does not exceed critical value
4	= $(35.464*2)*(25.867/138)^2$ = 2.49	Value of Breusch-Pagan test does not exceed critical value
5	= $(37.849*2)*(25.564/138)^2$ = 2.59	Value of Breusch-Pagan test does not exceed critical value
6	= $(16.292*2)*(19.166/138)^2$ = 0.62	Value of Breusch-Pagan test does not exceed critical value

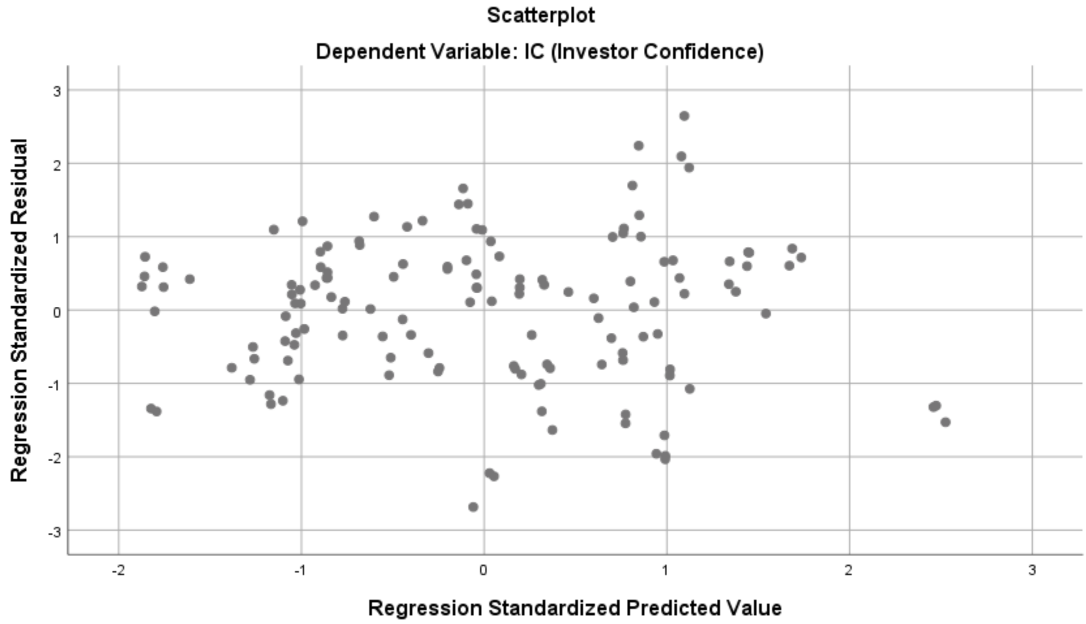
Equation 1 : $CS = \alpha_{01} + \beta_1 LogEM + \beta_2 LogSC + \beta_3 LogGN + \beta_4 LogSIZE + \beta_5 AGE + \beta_6 LEV + \varepsilon$



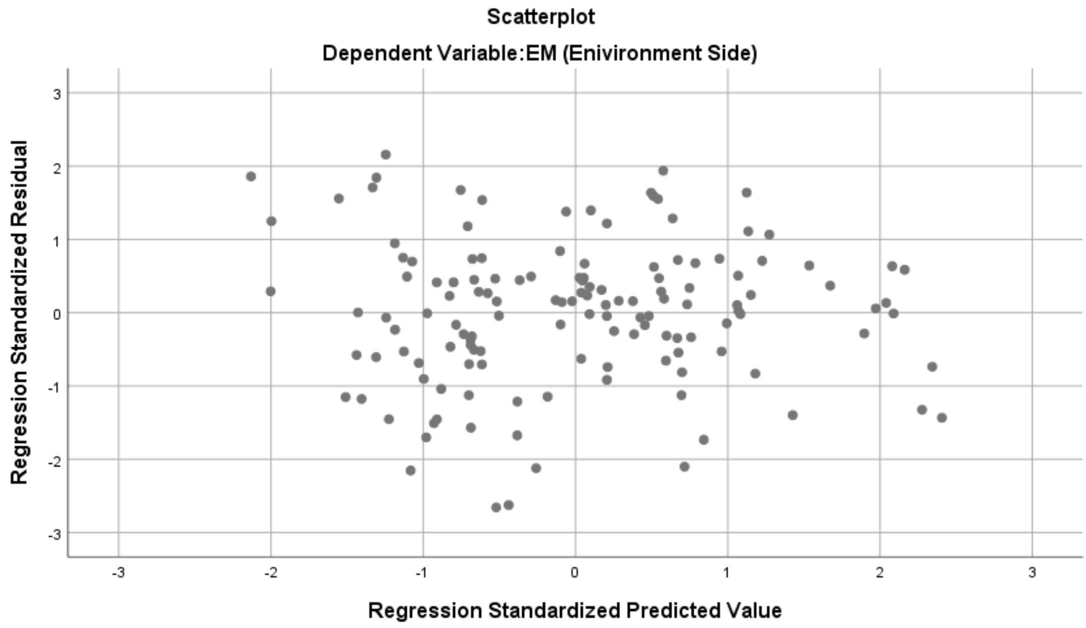
Equation 2 : $LogIC = \alpha_{02} + \beta_7 LogEM + \beta_8 LogSC + \beta_9 LogGN + \beta_{10} LogSIZE + \beta_{11} AGE + \beta_{12} LEV + \varepsilon$



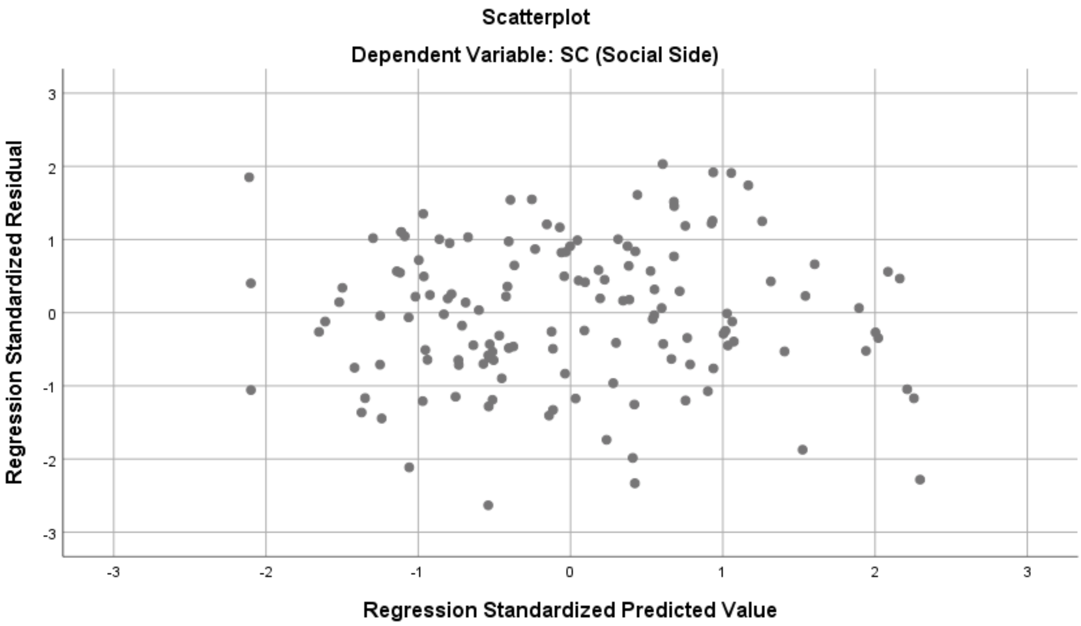
Equation 3 : $IC = \alpha_{03} + \beta_{13}CS + \beta_{14}LogSIZE + \beta_{15}AGE + \beta_{16}LEV + \varepsilon$



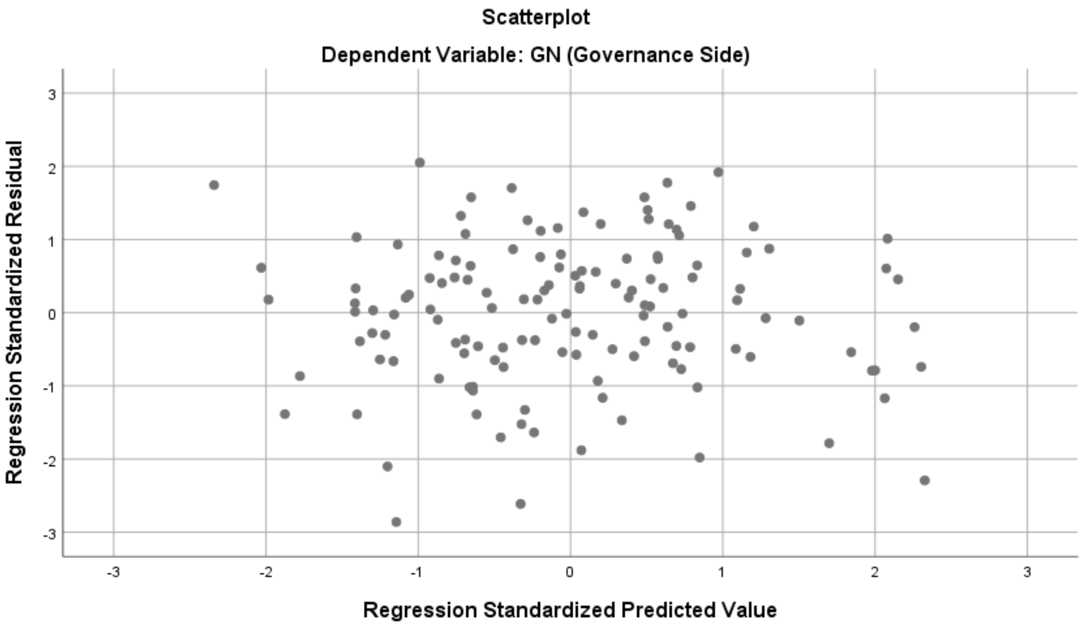
Equation 4 : $LogEM = \alpha_{04} + \beta_{17}CD + \beta_{18}BS + \beta_{19}BI + \beta_{20}AP + \beta_{21}LogSIZE + \beta_{22}AGE + \beta_{23}LEV + \varepsilon$



Equation 5: $LogSC = \alpha_{05} + \beta_{24}CD + \beta_{25}BS + \beta_{26}BI + \beta_{27}AP + \beta_{28}LogSIZE + \beta_{29}AGE + \beta_{30}LEV + \varepsilon$



Equation 6: $LogGN = \alpha_{06} + \beta_{31}CD + \beta_{32}BS + \beta_{33}BI + \beta_{34}AP + \beta_{35}LogSIZE + \beta_{36}AGE + \beta_{37}LEV + \varepsilon$



Test independence of the error terms (Test of Autocorrelation)

Table C5 : The results of independence of error terms assumption testing

Equation	R	R Square	Adjusted R Square	Durbin-Watson (d Statistic)
1	.658	.434	.408	1.960
2	.852	.726	.713	2.308
3	.798	.636	.625	2.384
4	.698	.487	.460	2.005
5	.728	.530	.504	1.999
6	.637	.406	.374	2.069

APPENDIX D

List of Energy group in Thai listed Companies for Research

Table D: List of Energy group in Thai Listed Companies for Research

Abbreviation	Companies
AGE	Asia green energy pubic company limited
AKR	Ekarat engineering pubic company limited
BAFS	Bangkok aiation fuel services pubic company limited
BANPU	Banpu pubic company limited
BCP	Bangchak corporation pubic company limited
BCPG	BCPG pubic company limited
BGRIM	B.Grimm power pubic company limited
BPP	Banpu power pubic company limited
CKP	CK power pubic company limited
DEMCO	Demco pubic company limited
EA	Energy absolute pubic company limited
EASTW	Eastern water resources development and management pubic company limited
EGCO	Electricity generating pubic company limited
ESSO	Esso (Thailand) pubic company limited
GPSC	Global power synergy pubic company limited
GREEN	Green resources pubic company limited
GULF	Gulf energy development pubic company limited
GUNKUL	Gunkul engineering pubic company limited
IRPC	IRPC pubic company limited
LANNA	The lanna resources pubic company limited
MDX	M.D.X pubic company limited
PTG	PTG energy pubic company limited
PTT	PTT pubic company limited
PTTEP	PTT exploration and production pubic company limited
QTC	QTC energy pubic company limited
RATCH	Ratch group pubic company limited
RPC	RPCG pubic company limited
SCG	Sahacogen (Chonburi) pubic company limited
SCI	SCI electric pubic company limited
SCN	Scan inter pubic company limited
SGP	Siamgas and petrochemicals pubic company limited
SKE	Sakol energy pubic company limited
SOLAR	Solatron pubic company limited
SPCG	SPCG pubic company limited
SPRC	Star petroleum refining pubic company limited

Table D : List of Energy group in Thai Listed Companies for Research (Continued)

Abbreviation	Companies
SSP	Sermsang power corporation pubic company limited
SUPER	Super energy corporation pubic company limited
SUSCO	Susco pubic company limited
TAE	Thai agro energy pubic company limited
TCC	Thai capital corporation pubic company limited
TOP	Thai oil pubic company limited
TPIPL	TPI polene power pubic company limited
TSE	Thai solar energy pubic company limited
TTW	TTW pubic company limited
WHAUP	WHA utilities and power pubic company limited
WP	WP energy pubic company limited

APPENDIX E

Certificate of Approval form Mahasarakham University Ethics Committee for Research Involving Human Subject and Certificate Center for Ethics in Human Research

MAHASARAKHAM UNIVERSITY ETHICS COMMITTEE FOR

RESEARCH INVOLVING HUMAN SUBJECTS

Certificate of Approval

Approval number: 005-448/2023

Title : Effect of Sustainable Report Disclosure on Investor Confidence of Energy Group in Thai Listed Company.

Principal Investigator : Mr. Thanai Sriersan

Responsible Department : Faculty of Accountancy and Management

Research site : Faculty of Accountancy and Management, Mahasarakham University

Review Method : Exemption Review

Date of Manufacture : 12 January 2023 **expire :** 11 January 2024

This research application has been reviewed and approved by the Ethics Committee for Research Involving Human Subjects, Mahasarakham University, Thailand. Approval is dependent on local ethical approval having been received. Any subsequent changes to the consent form must be re-submitted to the Committee.

Ratree S.

(Asst. Prof. Ratree Sawangjit)

Chairman

Approval is granted subject to the following conditions: (see back of this Certificate)

บัณฑิตวิทยาลัย มหาวิทยาลัยมหาสารคาม

ร่วมกับ

ศูนย์จริยธรรมการวิจัยในมนุษย์ มหาวิทยาลัยขอนแก่น

ขอมอบเกียรติบัตรฉบับนี้ ไว้เพื่อแสดงว่า

ธนัย ศรีอิสาณ

ได้ผ่านการฝึกอบรม

"จริยธรรมการวิจัยในมนุษย์ หลักสูตรทางด้านสังคมศาสตร์"

วันที่ 23-24 เมษายน พ.ศ. 2565

ให้ไว้ ณ วันที่ 25 เมษายน พ.ศ. 2565 หมดอายุ วันที่ 24 เมษายน พ.ศ. 2570

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ประธานคณะกรรมการจริยธรรมการวิจัยในมนุษย์
มหาวิทยาลัยขอนแก่น ประจำชุดที่ 3

รองศาสตราจารย์ ดร.กริสน์ ชัยมูล
คณบดีบัณฑิตวิทยาลัย มหาวิทยาลัยมหาสารคาม

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