THE SCIENCE
PUBLISHING HOUSE

International Journal of Accounting and Management Sciences
IJAMS - ISSN: 2832-8175 (Vol.1 No.2 October 2022)
https://scipubhouse.com/?page_id=1035

IJAMS
International Journal Of Accounting And Managment Sciences

Analyzing The Influencing Factors Associated with Environmental Reporting in The Context of Green Accounting Implementation

Huda M. Abdallah

Associate Professor, Accounting and Auditing Department, Suez Canal University, Egypt

hadahedy@yahoo.com

Abstract

The research aims to analyze the influencing factors associated with environmental reporting in the context of green accounting implementation. The research is organized to present a discussion on green/environmental accounting, a literature review related to environmental reporting, and concepts, benefits, obstacles, and influencing factors associated with environmental reporting. The study methodology was based on a field survey the researcher directed the questionnaire to the stakeholders (investors, financial analysts, creditors, and auditors) of the Egyptian listed firms. Only 427 questionnaires with responses Were collected and included 11 incomplete questionnaires. Only 416 questionnaires were statistically valid and free of missing data, with a response rate of 88.89%.

The researcher concluded that external and internal factors associated with environmental reporting have a significant direct positive impact on the benefits of environmental reporting. External and internal factors associated with environmental reporting have a significant direct negative impact on the obstacles of environmental reporting.

Keywords: Environmental Reporting, Environmental Disclosure, Green Accounting.

1. Introduction

Companies are increasingly being held responsible for the effects of their decisions and actions on the environment because many have come under fire for contributing to issues like climate change, the depletion of natural resources, waste production, and a lack of corporate environmental responsibility. These changes have been linked to an increase in the trend for businesses to publish a range of environmental information in corporate environmental or sustainability reports, in which a range of environmental information is disclosed voluntarily (Braam et al., 2016). Environmental sustainability includes maintaining biodiversity, achieving atmospheric balance, and increasing the productivity of many natural environmental systems. It was suggested that environmental sustainability must be given the highest priority because it means the conservation and responsible use of natural capital (Ismail et al., 2018). The requirement for mandated economic and financial disclosures in the current era of external reporting has forced companies to broaden the scope of disclosures in annual reports to include social and environmental disclosures (Nuskiya et al., 2021).

Companies are being encouraged to voluntarily disclose social and environmental information to stakeholders and society at large as a result of the public's growing concern over environmental issues. This information demonstrates the companies' commitment to and responsibility for the ecosystem in which they operate (Kouloukoui et al., 2019). According to (Shahab et al., 2020), business and strategy scholars have been focusing more on these concerns in recent years as a result of global climate change, extreme atmospheric conditions, and deteriorating environmental settings.

Businesses that manage natural resources have the potential to put the environment in danger. Due to this, businesses must commit to treating the environment and the social sphere as the primary and integral components of their daily operations (Endiana et al., 2020).

Customers are pressuring businesses to accept responsibility for creating environmental problems as a result of increased public knowledge of the contribution of businesses to environmental concerns. Companies release corporate environmental reports to demonstrate that they are reasonably decent environmental performers in response to these pressures and as proof of their desire to take accountability and responsibility towards the environment. It has drawn interest from researchers as well as industry experts to determine whether businesses are truly acting responsibly to merit their enhanced corporate public image (Shwairef et al., 2021).

Environmental issues have expanded to be a global problem for enterprises that are sustainable. A number of laws have been created requiring corporations to comply with environmental protection standards because economic development has become a crucial factor for emerging and developing nations (Rahim 2021). The notion of environmental performance includes efficient, environmentally friendly operations that have led to a forward-looking ecological perspective for the business. It includes aspects of strengthening environmental compliance, enhancing business image, obtaining environmental certification, reducing emissions, and recycling (Susanto & Meiryani 2019).

In recent decades, society's concern for the environment has become one of the key topics of debate around the world. Environmental issues are becoming more global in scope and constitute a severe threat to the planet's health. Only companies that adhere to environmental regulations will continue to hold the top positions and acquire a competitive edge as the world's businesses become more and more competitive on a daily basis as a result of globalization and environmental change. Lack of environmental reporting and social accountability may have a negative influence on a company's financial performance by leading to the formation of actual or potential liabilities as well as lower asset values (Adeyemi et al., 2021).

A corporation is required to provide additional details about its operations, environmental policies, and environmentally friendly performance due to tighter restrictions and more outside pressures. As a result, the manager must make sure that accurate, thorough, and timely information is being shared about the environment. The extent of information, the quality of its transmission, and its verification are therefore improved by better engagement of governance systems within organizations, and this is due to the numerous mechanisms put in place (Moalla et al., 2021).

Increasingly, investors and other stakeholders have demanded that businesses also report on their impact on the environment and society. As a result, reporting is no longer limited to a company's financial performance. The impact of an organization's environmental and social performance on its financial state has led to an increase in stakeholders' and organizations' interest in environmental accounting and reporting (Maama &Appiah 2019).

The study is organized as follows: the next section presents a discussion on green/environmental accounting; section 3 presents a literature review related to environmental reporting and includes concepts, benefits, obstacles, and influencing factors associated with environmental reporting; section 4 provides empirical study; explains the results of the questionnaire survey; and section 5 presents conclusions and future research.

2. Green / Environmental Accounting

Environmental accounting is a developing field that aims to provide crucial information on environmental expenses and earnings, assist businesses and project owners in making economical choices, and motivate them to take initiatives to use natural resources wisely, minimize environmental damage, reduce waste and pollution, and alter behavior regarding the environment (Nguyen 2020). Accounting for environmental issues is a method of accounting that takes into account how a company interacts with the environment. In this sense, it can be defined as the communication of an entity's economic operations and how those actions affect the environment and community (Maama et al., 2021).

The annual financial statements that accounting provides to the community with regard to current financial facts are no longer enough for the environment and the wider community. Because of this, the accounting profession has been obliged to modify its traditional function of maximizing owners' wealth for the benefit of society as a whole. Companies must, in accordance with that, meet stakeholders' demands for more transparency regarding the way environmental, social, governance, and other aspects affect their strategy, activities, and future plans. One of the contemporary accounting ideas is green or environmental accounting, which has captured the interest of numerous academics, associations, and governmental bodies. They have put pressure on organizations to address this issue (Al-Dhaimesh 2020).

Environmental or green accounting, both terms of which can be used as oxymorons (Deegan 2013). Environmental accounting, sometimes known as green accounting, integrates assets related to the environment and their place of origin, sink, and functionalities into national and business accounts (Rounaghi 2019).

Both nationally and corporately, the idea of environmental accounting is applied. It is predicated on the idea of considering life quality rather than life standard. Prior to the development of environmental accounting, the measurement aspects of accounting and disclosure methods were limited to the evaluation of organizational revenues, expenses, resources, and commitments but did not include a means of gauging the environmental impact that enterprises were having. The goal of an environmental accounting information system depends on how it responds to the need to adopt environmentally friendly procedures and practices in order to achieve social accountability and sustainability. When environmental costs are measured or understood incorrectly, the true goal is diminished (Meiryani et al., 2019).

Identification, assessment, allocation, and integration of environmental expenses into businesses are all part of environmental accounting. It also includes ways of getting this information across to stakeholders in the company's operations. This aids in keeping track of all environmental costs paid by the company and identifying ways to cut back on them so that profits can rise. It also makes a company's commitment to the environment more apparent to the public (Adeyemi et al., 2021).

Green accounting must be used by the company to strike a balance between its production operations and the need for ecologically friendly practices. Green accounting may assist a business in making more sustainable improvements to the effectiveness and efficiency of its resources, which will help the local society as well as the business as it develops its environmental activities. The concept of green accounting can be defined as the methods of production in a company that use their resources with greater effectiveness and efficiency in order to achieve the company's sustainability. The practice of green accounting appears to have an impact on environmental performance. A corporation is required to have a clear understanding of how to guarantee the company's own sustainable development in addition to creating a positive impact on environmental sustainability (Ulupui et al., 2020).

When businesses are held responsibility for any sort of adverse environmental effect, they always make an effort to reduce the negative consequences of their operations on the environment. This is why green accounting is crucial. Additionally, it requires businesses to anticipate any environmental harm from their operations and make plans to mitigate it. so, ensuring that businesses keep an eye on their behavior to reduce environmental dangers (Lee et al., 2020).

Green accounting is a cost concern connected to the environment, which is more evident with firm accounting reports and methods. Environmental accounting includes identifying, measuring, and assigning environmental costs; incorporating these costs through business; determining environmental obligations, if they exist; and finally conveying this information to firm stakeholders. It is a system that strives to make the most accurate quantitative assessment (Riyadh et al., 2020).

By assessing the environmental factors that have an impact on a company's sustainability, contributing to its sustainability and its social balancing reports, complementary to and connected to its economic performance, green accounting makes environmental data accessible. Environmental policies, initiatives, accounts, sustainability reports, and social balance are all important components of green accounting (Gonzalez &Mendoza 2021).

Users of the business's financial reports will receive an overview of environmental initiatives and costs in the annual report, which may assist users in deciding on future business policies for environmental preservation. Green accounting is one of the factors that affects the financial performance of a business, It aims to boost the effectiveness of environmental management by evaluating environmental operations from the perspective of expenses, benefits, or impacts, as well as providing environmental protection impacts. In brief, the application of green accounting can determine the degree to which an organization or firm contributes favorably or negatively to the quality of people's lives and the environment (Endiana et al., 2020). The goal of green accounting is to generate expenses while gaining environmental advantages. Managers can use the information it offers to evaluate, operate, control, decide, report, and safeguard the environment. Numerous businesses are struggling with environmental problems and are searching for a suitable strategy to inform the public and use this knowledge for environmental development and protection, environmental accounting is therefore used in an attempt to safeguard the environment (Rounaghi 2019).

Solving the issues of environmental management effectiveness, restoration, and environmental protection becomes a critical necessity. An effective environmental policy must be created in order to preserve natural resources and the environment. In this context, there is an increasing need for a fundamental reorganization of environmental accounting, which produces, analyzes, and releases information on these crucial topics and acts as a knowledge base for the formulation and making of environmentally viable choices. Environmental accounting is a highly crucial tool for putting the idea of sustainable development into practice, which is development that doesn't erode the resources required for the continuation and growth of future generations (Yermolenko et al., 2020).

The necessity to account for how an enterprise's operations affect the environment and the community arises in the context of financial accounting, in addition to taking economic factors into account. However, practically all accounting methods continue to be oriented toward the business's financial perspective, and evaluations of the company's current state of social and environmental performance are still uncommon. These traditional accounting systems do not allow for the measurement of multivariate business efficiency (Vallišová et al., 2018).

(Anh et al., 2020) utilized a sample of 672 firm-year observations from firms listed on the Vietnam stock market between 2013 and 2017. The findings indicated that the effectiveness of environmental financial accounting policies is negatively and significantly correlated with each of the cost of equity and the cost of debt. As a consequence, the effectiveness of environmental financial accounting policies may assist enterprises in decreasing the cost of equity and debt capital, which not only enhances their reputation and enables them to conform with the law but additionally lowers the costs of transactions associated with obtaining external financing.

Social responsibility accounting frequently includes environmental accounting. The magnitude of a company's environmental impact is referred to as the environmental side of corporate social responsibility, which encourages businesses to participate in environmentally friendly practices. Businesses are probably going to have a conflict between revenues and expenses if dangers to the environment materialize because of the rise in pollution prevention expenses, penalties, and the cost of compensation (Nguyen et al., 2020).

Enterprise economic effectiveness today and in future periods is influenced by the extent of reporting of environmental accounting information. Consequently, the purpose of disclosing environmental accounting information is to strengthen the business's reputation and raise its financial efficacy, as well as stay in line with environmental law and prevent legal problems (Nguyen &Tran 2019).

(Giang et al., 2020) relied on the data of 80 enterprises chosen from the manufacturing, mining, and processing industries. The findings demonstrated that numerous elements, including managers' views regarding costs and benefits, changes in the environment, features of the range of production and business operations of enterprises, and pushes to release sustainable environmental information, have an important impact on the advancement of environmental accounting for sustainable development. Modern sustainable accounting still faces difficulties due to the absence of clear standards, laws, and plans, despite the great number of endeavors for sustainable development. To address sustainable development, accounting must be more pragmatic.

Accounting and environmental management are the two criteria used to evaluate environmental accounting. Environmental accounting makes available data outside the business to stakeholders, including financial services firms, environmental management institutions, societies, etc., in addition to assisting internal decision-makers in the operation of the company with the goal of enhancing financial and environmental performance. Thus, it benefits companies. increase competitive advantage through sustainable product use, Transform and raise awareness of environmental concerns among organizations and stakeholders in each business and the economic system as a whole (Nguyen &Tran 2019).

Management of the firm must have a high degree of awareness because environmental accounting is an integral component of the firm's annual financial statements. Legislation from the government requiring corporations with the possibility of harming the environment to bear environmental costs for those corporations, as a result, businesses must disclose all of their actions in their annual reports, including those that are connected to both their financial and environmental performance. This is relevant to the Sustainable Development Goals (SDGs) initiative, in which businesses are required to safeguard the environment, and provides crucial data for all stakeholders to evaluate overall performance, especially investors who wish to have an investment in the business (Taqi et al., 2021).

(Nguyen 2020) demonstrated how the pressure from stakeholders, business features, compelled compliance from government agencies, senior managers' concern for the environment, and accountant skills for environmental accounting can all have an impact on the adoption of environmental accounting in mining enterprises, but stakeholder pressure has a little impact. (Olubukola et al., 2021) cleared up that environmental accounting application improves a firm's reputation, enhances customer loyalty, lowers litigation, and assists investors in making decisions that are in the best interests of the business and the public as a whole.

The problems that prohibit businesses from properly implementing green accounting include When management offers little to no motives for controlling environmental costs, when qualified accountants are unfamiliar with the basic principles of green accounting, when there are few to no financial incentives for directing the adoption of environmental accounting policies, and when a company's accounting processes do not prioritize environmental information, there is a lack of a standard framework for handling these situations. Challenges to the adoption of green accounting include all of the aforementioned. Some approaches to overcoming these challenges include (a) the production of new studies that strengthen the green accounting strategy through the establishment of a standardized approach and (b) the influence of institutional factors that can encourage the adoption of environmental responsibility throughout businesses (Gonzalez &Mendoza 2021).

The lack of a unified framework that directs environmental accounting and reporting procedures is one of the elements preventing the adoption of environmental accounting processes. Environmental concerns' dependability and quality are not evaluated on a common scale. Environmental accounting cannot be implemented due to insufficient funding and commitment (Olubukola et al., 2021).

A number of procedures known as "environmental accounting" are designed to provide accounting systems with more ability to detect, document, and communicate the impacts of environmental pollution and deterioration. Environmental accounting's goal is to give managers information they may use to assess performance, make decisions, maintain control, and produce reports. It is crucial for users of environmental reporting to be knowledgeable about environmental performance and the release of information about environmental expenses in order to raise shareholder wealth, which in turn increases the value of the company. Environmental accounting needs to be accompanied by environmental reporting. As a result, environmental (green) disclosure will eventually result in an increase in the value of the company, increase profits for shareholders, sustainable business development, and other outcomes (Rounaghi 2019).

Most of the information is descriptive in nature, which is a crucial thing to remember because business green information reporting is not an easy phenomenon that can be properly clarified by only one conceptual framework (Maama &Appiah 2019).

3. Literature Review for Environmental Reporting

3.1. Conceptual Background

Significant theoretical bases for social and environmental accounting studies include those provided by institutional theory, legitimacy theory, stakeholder theory, and resource dependence theory (Bhattacharyya 2014).

Due to social challenges brought on by expanding environmental consciousness among people and associated groups, environmental accounting and disclosure have been seen as a developing issue in recent years. Official and non-official agencies have shown a significant amount of concern in environmental reports published by businesses with industries that have an impact on the environment. Environmental accounting is an important area of accounting that makes a significant contribution to the safeguarding of the environment by determining the environmental costs caused by the company in order to do so and, as a result, releasing financial statements determining the outcome of the company's operation and its financial state while taking into account the environmental effect of the company (Saleh et al., 2018).

Disclosure regarding the environment is the practice of sharing information on environmental topics via multiple reporting channels, such as annual statements and independent standalone environmental-related reports (such as reports relating to the environment as well as sustainability reports). It is expected that increasing the quantity and quality of environmental releases by businesses will positively impact environmental performance while enhancing economic performance, a process that in turn will result in improved environmental performance (Ismail et al., 2018). Identification, measurement, allocation, and/or integration of costs associated with greenhouse gas emissions and other environmental problems into a company's financial statements is known as environmental disclosure (Jeroh 2020).

The results of the study by (Alipour et al., 2019) showed a significant beneficial association between environmental disclosure quality and firm performance, in addition to the moderating effect of board independence in this connection.

The problem of the environmental crisis motivates businesses to create plans and initiatives that integrate social and environmental concerns into their operations. Encouragement from society will have an impact on the continuation of a business' operations and, consequently, the future viability of that business. Including effects on business performance along with social and environmental reporting can demonstrate the level to which a firm contributes to the well-being of society as a whole and to the protection of the environment (Indrasari et al., 2021).

Through the creation of policies and regulations, committees of nations, international organizations, and governments from all over the world have demonstrated their care for the environment. Examples include the Global Reporting Initiative (GRI), the International Financial Reporting Standards Board (IFRSB), and the Association of Chartered Certified Accountants (ACCA). For example, the Financial Reporting Standard (FRS) 101, Presentation of Financial Statements, which was adopted by the IFRSB, mandates that companies disclose environmental information regarding human actions that may have an impact on the environment. In contrast, GRI is an organization founded not for financial gain but to advance social, economic, environmental, and sustainable development through the creation of a reporting on sustainability framework that is used extensively worldwide for all sizes of enterprises (Aliyu 2019).

With an awareness of the idea of responsible management, investors can more accurately evaluate the risks associated with investments and possibilities by using the growing significance of information that is not financial in nature, environmental information, and social information (Alipour et al., 2019).

The purpose of environmental reports is to inform stakeholders about the most important environmental issues through the publication of documentation by businesses. Despite the fact that environmental reporting is a process that is becoming more and more important, the information that is gathered for these reports is not often of a high enough standard for stakeholders to assess a company's real environmental performance. Businesses have been compelled to create and enhance their environmental performance as a result of numerous focus groups, including environmental organizations, community groups, employees, shareholders, financial institutions, and customers. The goal of the GRI's recommendations is for businesses to provide information on their economic, environmental, and social performance as frequently as and comparable to their financial reporting, which includes reporting about the environment as a component of corporate social responsibility (CSR) reporting (Said et al., 2013). Making relationships with society at large and keeping open about organizational activities are the key goals of environmental reporting, rather than incorporating additional types of information or increasing the reporting load. The fundamental objective is to give information on environmental efficiency that might have influenced stakeholders' decisions in some way, whether direct or indirect (Kassim 2021).

When it comes to external reporting, stakeholder groups are particularly interested in the broader context, which shows how the firm manages the environmental effects of its operations. Therefore, disclosures about present and previous activities, along with future objectives and plans, should be included in external environmental reports (Raiborn et al., 2011). Alongside conventional financial statements, reports regarding sustainability also include important information for outsiders. Such reports enable businesses to mitigate detrimental effects on the environment while increasing their environmental responsibility from the perspective of stakeholders (Rahim 2021).

(Helfaya et al., 2019), a multifaceted strategy for evaluating the extent of corporate environmental reporting, the examination of the 177 users' and 86 preparers' reactions revealed that quantity was not thought to be the most important factor in determining quality. In addition to quantity, participants considered the following factors to be important aspects of environmental reporting quality: information categories, metrics utilized, topics reported, adoption of reporting rules, inclusion of an assurance statement, and use of visualization tools.

All information shared with stakeholders concerning environmental concerns at frequent intervals and as needed is included in environmental reporting. Increasing consciousness about the company's operations, performance, and relationships with the environment among stakeholders is the goal (Iredele 2020).

A positive attitude toward environmental disclosures is linked to a higher chance of being good environmental participants in the future, and the strength of this association depends on the board of directors. A CSR-related release can be a tool to show stakeholders that businesses are committed to reducing the environmental effects of their operations. The entire organization must be committed to CSR, beginning at the top of the structure, or the board level, where all major decisions are made, including those pertaining to CSR and sustainability. In attempting to win over stakeholders' trust, establish the groundwork for improved reputation, and ultimately change the public's view of the industry, businesses in some contentious industries, like oil firms, should place a special emphasis on this kind of dedication (Arena et al., 2015).

An effective way to raise the degree of involvement that these reports are meant to achieve is to acknowledge that there is a gap that exists between a business's environmental reporting and its stakeholders' awareness of environmental concerns. This discrepancy is distinct from the conventional expectation gaps, which have pointed out discrepancies between the data presented in business reports and the data that stakeholders want. Instead, this difference is a mismatch between how management conveys environmental challenges to stakeholders via business environmental reporting. Stakeholders must be able to interact with environmental reports in a manner consistent with their awareness of environmental problems. If this is not accomplished, the idea will not be understood, and the stakeholders' view of the company may be unfavorable and even inaccurate (Morrison et al., 2018). Businesses provide information about their environmental actions because stakeholders expect them to. Company environmental reporting and what is expected of stakeholders are closely related (Borgstedt et al., 2019).

Financial reporting has an essential function in informing those with financial interests regarding the financial performance of an organization, and it could be very effective at performing so, but there are a lot of central presumptions and rules, making it a highly insufficient vehicle for informing them about the business's social and environmental performance (Deegan 2013). Financial reporting is no longer regarded as the exclusive source of data on the efficiency and responsibility of corporations. In order to explain the full story of a company, how it generates value, the strategy, dangers, challenges, and opportunities of its operations, as well as to assess performance towards strategic goals, it is crucial for firms to publish environmental information in the same way (Maama &Appiah 2019).

We live in a world which decisions about how to allocate resources are decided based on their commercial value, which adds to social and environmental problems. The measure of a valuation's contribution to allocating resources to projects with favorable social and environmental results. Society needs choices regarding resource allocation to take into account social and environmental impacts more and more. While some reporting-related law now exists, the majority of actions are voluntary. As a result, the business case for monitoring and providing information on social and environmental consequences has received more attention (Nicholls 2020).

Both financial reporting and accounting, along with the concepts of convergence and uniformity in accounting, are impacted by the rules of sustainable development. The current accounting procedure and financial reports need to be expanded with respect to reporting specific sustainability-related issues in order to guarantee that the needs of every social and environmental stakeholder are properly met. This comprises revenue and expenditures associated with social, environmental, and economic factors included in the period's profit and loss report, along with additional comprehensive income and corresponding liabilities and assets on the balance sheet at the close of the time period (Vallišová et al., 2018).

3.2. Benefits and Obstacles

Environmental reporting can be used as a method of interaction to shift public opinions, achieve competitive benefits including a better business reputation and lower cost of capital, and serve as a tool for management to establish business legitimacy (Braam et al., 2016). Despite taking into account financing disparities as well as expansion potential, voluntary environmental disclosure enables business value optimization at levels that are closer to optimum debt levels. A company's capacity to obtain external finance more easily and at a lower cost increase with voluntary disclosure of environmental reports (Hussain et al., 2020).

According to the underlying premises of the legitimacy theory, management is inspired to engage in behavior that fully discloses environmental information in order to establish or preserve the legitimacy of the company in society. Greater societal support may come from increased information about environmental disclosure. The firm might see equity gains as a result of this support. Therefore, the firm's profitability and returns on equity will increase in direct proportion to the extent of environmental information sharing. Contrarily, the theory of proprietary costs makes the assumption that the firm will incur expenses as a result of disclosing information, which may suggest a likelihood of a negative correlation between disclosure and the financial benefits realized by the company (Pedron et al., 2021).

Based on a sample of 46 big companies for the years 2011 to 2018. The findings indicated that environmental transparency greatly improves business efficiency (Rahim 2021).

Implementation of environmentally friendly practices and environmental reporting are very essential and should have a particular place in the company's decision-making of management. The more managers enhance environmental reporting, the greater will be the quality of the company's earnings. Companies have the opportunity to enhance their earnings quality among competitors through attempts to improve their release and disclosure of additional non-financial information (Alipour et al., 2019).

Environmental reporting is thought to have many advantages, including avoiding government interference, fostering trust between businesses and the community, avoiding government penalties, enhancing businesses' reputations by gaining environmental awards, lowering the amount of risk, and reducing operational failures (Agyei & Yankey 2019).

(Mathuva et al., 2019) investigated if Kenyan listed firms' environmental reporting increases stock liquidity. The findings showed that environmental reporting has a positive relationship with stock liquidity via a panel dataset of 244 firm-year evaluations from 50 listed firms in Kenya from 2011 to 2015. The results also suggested that publicly traded firms in Kenya that involve higher environmental reporting appear to be more appealing to investors. The informational environment appears to be improved by the greater environmental reporting, which reduces information asymmetry and draws in investors. The findings showed some evidence of the beneficial economic effects of participating in further disclosure over and beyond the customary company financial reporting; environmental reporting offers additional benefits and pertinent data that investors can use to guide their investment choices. Investors might be more inclined to invest in a business that is known for championing environmental preservation because of the priority that is put upon environmental conservation.

(Pedron et al., 2021) discovered that there is no correlation between changes in the accounting profits of enterprises and environmental disclosure using a sample of 69 Brazilian companies that were surveyed during 2006 and 2012. However, it plays a role in establishing the value that Brazilian publicly traded enterprises are given. The idea that environmental disclosure lowers information asymmetry, enabling the investor to view lower risks in a firm and thus assigning a greater value to it, means that the financial market determines value in businesses that disclose details regarding their environmental difficulties.

Being aware of environmental costs and the performance of the item's production process can lead to better reliable and thorough costing, which can assist businesses in designing their process of producing goods with an increased focus on environmental concerns (Rounaghi 2019).

Different techniques are used by shareholders and customers to understand and analyze environmental information presented by businesses. The degree of environmental reporting has a significant and positive relationship with market-based performance but is adversely and significantly connected with performance that is tied to customers (for instance, sales growth and profit share). This suggests that the primary goal of the environmental reporting approach is to maximize the value of shareholders. Customers are more likely to be focused on the performance of the environment, which improves sales growth and operational efficiency. A greater degree of environmental performance, however, causes shareholders to respond unfavorably. This could be justified by the shareholders' consideration of the costs and benefits of making such environmental measures (Radhouane et al., 2018).

As environmental accounting becomes more prevalent, a growing number of publicly traded corporations are paying attention to the reporting of environmental accounting information. Environmental governance charges, disclosure expenses, and penalties from appropriate departments are only a few of the challenges that come up throughout the disclosure process of environmental information. Numerous parties participate in the disclosure process, primarily investors, the media, publicly traded firms, and governments. Many publicly traded corporations understand how crucial it is to maintain the environment, but they will decide to avoid disclosing environmental accounting information throughout the whole disclosure procedure in order to maximize their own corporate profits (Qi et al., 2021).

(Omar et al., 2021) highlighted that the community's right to know about social and environmental reporting practices will be hampered by the lack of a robust legislative framework.

Due to measurement problems, environmental costs from processes are frequently added to other costs, buried deep in accounts, or completely ignored. If environmental issues are not reported, users may not be able to determine factors that pose substantial long-term risks or benefits to an organization, and their decision-making may be shifted toward immediate financial performance metrics rather than a holistic perspective on the future (Raiborn et al., 2011).

Although the fact that environmental reporting is strategically significant to external stakeholders, increased levels of environmental disclosure are seen unfavorably by shareholders of companies that operate in ecologically sensitive industries. In accordance with the cost-benefit evaluation, it has been discovered that shareholders evaluate the value of environmental reporting for companies in environmentally sensitive industries mainly in terms of profitability-based efficiency rather than revenue-based efficiency (Radhouane et al., 2018).

The lack of obligatory standards is often identified as the main cause of insufficient availability of social and environmental information; however, the voluntary character of environmental information leads to an ununiform specific of information, and the lack of the necessary expertise in assessing, pricing, and incorporating operational effects on the environment onto financial statements are also internal issues that contribute to the low quality of disclosed environmental data (Kassim et al., 2019).

A sample of the biggest publicly listed French companies included in the SBF120 index revealed that shareholders gave voluntarily environmental disclosure by ecologically vulnerable industries a negative rating. In spite of the advantages of such releases by firms, shareholders continue to be worried about the greater expenses associated with these firms releasing such information. Unless there are considered advantages that exceed the cost of environmental reports, shareholders view companies' voluntary disclosure of environmental information adversely (Radhouane et al., 2020).

The improper allocation of resources caused by social and environmental disclosure activities can cause the underlying economy to fail in cases where localized reporting requirements for non-monetary disclosures do not meet those of international markets (Bhattacharyya &Agbola 2018).

The lack of an environment general legitimacy, a clear lawful demand, a lack of consciousness and understanding, an absence of government incentives, a distrust of change, and a lack of civil society groups are thought to be the main obstacles preventing the growth of social and environmental reporting. Companies hardly appear to participate extensively in voluntary disclosure of social and environmental data in a developing country setting (Alshbili et al., 2021).

3.3. Influencing Factors

Varying legal structures, cultural diversity, and disparate industries are just a few of the variables that can lead to discrepancies in the release of environmental information, especially when businesses are involved in high-risk environmental industries (Alvarez &Martínez 2020).

Push caused by government or legal demand, pressure from social media, shareholder impact, the presence of a sustainability group or department within the firm, and the type of the company's operation are some of the major factors that affected firms' extent of environmental accounting reporting (Agyei & Yankey 2019).

The study by (Braam et al., 2016) examined the connection among external assurance, several company environmental performance indicators, and the extent and kind of voluntary environmental reporting procedures. For a sample of Dutch corporations between 2009 and 2011, measurements of emissions of greenhouse gases, waste generation, and water utilization were analyzed, and a differentiation was created among corporate environmental disclosures that included or did not include external assurance. Results revealed that water use, emissions of greenhouse gases, and external assurance all significantly and incrementally contribute to the heterogeneity in environmental reporting's degree and type. The findings are consistent with the idea that corporations' decisions regarding environmental disclosure are heavily influenced by legitimacy. According to the study, in order to push businesses to take greater responsibility for their environmental performance, reporting requirements for sustainability should be made obligatory in addition to voluntary ones.

The amount and nature of the information on climate hazards disclosed in the sustainability reports of companies listed on the Brazilian Stock Exchange were examined by (Kouloukoui et al., 2019), and it was determined whether there were any correlations between this information and certain corporate traits between 2009 and 2014. The study's final sample of 67 businesses had 402 observations. The findings showed that although Brazilian businesses have a propensity to publish information on climate hazards, the volume of this kind of disclosure is still quite low. Findings revealed that firm size, financial success, and country of origin are significantly and favorably correlated with corporate hazards related to climate disclosures. Findings also showed a negative correlation between corporate climate hazards disclosures and degree of debt.

(Bhattacharyya 2014) studied Australia's social and environmental reporting landscape and chose the Global Reporting Initiative. Using a sample of 47 small and large Australian companies taken from five industries, social and environmental reporting requirements were used to assess the relationship between corporate features and degrees of social and environmental reporting and to investigate the magnitude of the correlation. The results showed that the scope of social and environmental reporting by Australian corporations was relatively low and that large enterprises in the industrial transportation sector had much greater levels of total disclosure. Age, profitability, and the size of the outside auditor had no connect to the level of overall disclosure.

The study by (Indrasari et al., 2021) utilized the terms proactive and reactive methods to describe the reasons why businesses adopt social and environmental reporting. The incentive for the corporation may come from its knowledge of the need to contribute to bettering people's lives or from outside forces or encouragement. This study revealed that social and environmental disclosure had an impact on corporate performance, both financially and non-financially, using a sample of firms listed on the Indonesia Stock Exchange. Influences on non-financial outcomes can be evident in support from the community, which is crucial for enhancing the reputation of the company and its products and boosting operational effectiveness. The company's immediate and prospective advantages can be used to quantify the effects on financial performance.

In the instance of the Libyan oil and gas business, research was done by (Omar et al., 2021) on the management attitudes towards reporting social and environmental initiatives as well as variables that affect their choice. The results showed that managers are aware of their own motivations for doing so, along with the potential detrimental effects that a company's operations may have on society and the environment. On the other hand, because of the growing knowledge of the potential detrimental effects of the oil and gas business, oil and gas firms feel compelled to publish their social and environmental activities. However, because Libyan enterprises don't have access to a complete framework, the disclosure of these activities is still restricted.

(He &Loftus 2014) analyzed environmental disclosures provided by Chinese businesses operating in environmentally delicate sectors from 2010 annual reports and independent environmental or sustainability reports revealed that firms with enhanced environmental performance provide more environmental information compared to firms with poorer environmental performance, and these firms additionally present a higher percentage of hard disclosure objects. That is, companies that do well in terms of the environment are more inclined to disclose their environmental impacts in a more unbiased and reliable manner.

In the study by (Otchere et al., 2020) which examined the environmental disclosures made by 25 companies in Ghana, including manufacturing and mining firms, in their annual reports from 2009 to 2012, it was discovered that mining firms made higher levels of environmental disclosures than manufacturing firms. The level of environmental disclosures made by mining and industrial enterprises appears to be statistically significantly influenced by environmental performance. The extent of environmental disclosures made by Ghana's mining and manufacturing enterprises is negatively impacted by their environmental performance. There is evidence that companies with bad environmental practices reveal more environmental data. Additionally, discovered to be statistically significant predictors of the extent of environmental disclosures were business size, business age, and capital concentration. However, Business age and capital concentration have a negative impact on environmental disclosures, but business size has beneficial effects.

(Bhattacharyya &Agbola 2018) used 312 annual reports of publicly traded Indian companies for the fiscal years 2006, 2012, and 2014. The results showed that the choice to present voluntary other than financial disclosure has a positive relationship to a company's age, profits, industrial type, and leverage. The choice to present social and environmental disclosures, however, was found to be negatively associated with consumer accessibility, leverage, and participation in the industrial transport industry.

(Gerged et al., 2021) studied the relationship with company value and company environmental disclosure in Gulf Cooperation Council GCC countries. Company environmental disclosure was discovered to be significantly and favorably correlated with company value as determined by Tobin's Q in a sample of 500 firm-year observations using a 55-item. Additionally, there is some proof that company environmental disclosure is favorably associated with return on assets.

(Ifada et al., 2021) examined 117 manufacturing and coal mining enterprises in Indonesia between 2017 and 2019. The findings demonstrated a favorable relationship between environmental performance, firm size, and financial performance. The independent board of directors has little impact on the financial performance, however. Additionally, environmental disclosure is positively impacted by corporate size, financial performance, and environmental performance. Nevertheless, environmental disclosure is unaffected by the independent board of directors. According to the study's results, financial success and environmental performance are significantly positively correlated. As a result, businesses that are aware of environmental issues and employ eco-efficient practices will be more profitable.

According to the strategic legitimacy hypothesis, businesses operating in environmentally sensitive industries are anticipated to disclose more environmental information compared to businesses in less environmentally sensitive industries (Chelli et al., 2018).

(Wahyuningrum et al., 2020) collected data from 36 firms from 2014 to 2016 at the Indonesia Stock Exchange. The level of environmental disclosures was shown to be influenced by both firm size and environmental performance variables. The number of board members and the financial performance variable, which is evaluated by a company's profitability and leverage, have little impact on the level of environmental disclosures.

(Nguyen 2020) gathered information from 87 businesses listed on the Vietnamese stock exchange between 2009 and 2019. The findings demonstrated that company size, availability, and external auditing are all important factors that affect the amount of information related to environmental accounting disclosure. These variables have a positive impact on the extent of environmental accounting information disclosure. Managers must concentrate on allocating enough funds for environmental accounting and information disclosure with the goal of acquiring and sustaining their competitive advantage and state.

The study by (Agyemang et al., 2021) used data from mining companies listed in China from 2000 to 2018 and found that there is a significant and positive connection between the environmental performance of a company and environmental information disclosure, while return on equity and leverage showed an unfavorable and insignificant relationship with environmental disclosure and environmental performance. This means that as the mining business's profitability and financing via debt ratio rise, it becomes more important for environmental disclosure and environmental performance.

Using information from Ghana's publicly traded companies. Environmental disclosure ratings were created by conducting content studies on 422 annual reports of the listed companies. The analyses revealed that environmental disclosures are significantly influenced by profitability, leverage, and market share pricing, among other factors (Maama et al., 2021).

Corporate governance and corporate reporting on the environment have long been important topics that are debated on a global scale. An effective corporate governance system inspires trust among investors and guarantees a transparent procedure that makes it possible for additional disclosures and high-quality reporting. (Aliyu 2019) analyzed how corporate governance factors such as board size, board independence, board meetings, the structure of the risk management committee, and environmental disclosure relate to each other in Nigeria. The data used in this study was taken from the annual reports of 24 publicly listed businesses on the Nigerian Stock Exchange, which were in the industrial products, natural resources, and oil and gas industries and covered the years 2011 through 2015. The findings showed that board independence, board meetings, and environmental reporting have a positive, statistically significant association. The other possibility variables and environmental reporting, however, do not significantly relate to one another. To ensure that there are more environmental reporting disclosures, there must be convergence between environmental reporting and corporate governance.

(Jeroh 2020) examined in comparison the internal factors that influence how companies in Sub-Saharan Africa (SSA) disclose environmental issues. Results showed that while the size, gender diversity, and independence of the audit committee, as well as the characteristics of the board, were found to be significant factors influencing environmental disclosure for companies in Kenya and Nigeria, this is not the case for companies in South Africa.

The study by (Ismail et al., 2018) looked into the factors that influence how well oil and gas businesses in DCs disclose environmental information. A total of 116 oil and gas businesses from 19 DCs were incorporated into the sample in order to attain this goal. Just five variables were positively and substantially correlated with the level of environmental disclosure, business size, foreign ownership, profits, leverage, and participation in industry or trading groups. However, company type, proximity to the market, ownership concentration, institutional ownership, state ownership, multi-nationality, and environmental accreditation are not.

In a sample of Sri Lankan publicly traded firms from 2015 to 2019, the research of (Nuskiya et al., 2021) explored the factors that influence environmental disclosures in a developing country context. The results showed that the sampled corporations' use of environmental disclosures was on the rise. This study also revealed that the level of environmental disclosures is positively correlated with board independence, board size, industry type, board meetings, profitability, and firm size. Contrarily, the quantity of environmental information that has been disclosed has a detrimental impact on CEO duality.

A survey was implemented to examine the corporate drivers behind voluntary reporting of social and environmental data in New Zealand. The survey's findings showed that the majority of firms in New Zealand do not depend on reporting guidelines to establish their sustainability reporting, and they do not assure these reports. In these businesses, top management, particularly the CEO, CFO, or sustainability manager, is typically the one driving the sustainability agenda. The most significant variables influencing a company's decision to report are social concerns and the rights of shareholders (Dobbs & Staden 2016).

(Moalla et al., 2021) demonstrated that the presence of an environmental audit committee, the environmental auditor's BIG 4, the company size, the amount of debt, earnings management, and the industry type are effectively significant factors in the voluntary disclosure of environmental information. They did this using a sample of French publicly traded companies in SBF120 for the years 2012 to 2017. The involvement of an environmental audit committee, the availability of a CSR committee, the participation of the environmental auditor in the BIG 4, the rating of corporate governance, the size of the company, earnings management, and the sector are also systematic major factors for timely disclosure of environmental information.

To determine the level of social and environmental reporting, (Nurhayati et al., 2016) assessed the 2010 annual reports of a sample of the top 100 Indian TA companies registered on the Bombay Stock Exchange. According to the survey, there was fewer social data in annual reports than was reported by corporations for environmental data. Significant determinants of the difference in social and environmental reporting include firm size, brand growth, and audit committee size; however, board independence, extent of ownership, and social and environmental reporting were not shown to be significantly correlated.

(Baalouch et al., 2019) investigated how different variables affected the levels of environmental disclosure, focusing on variables associated with the vision and strategy of the company, such as environmental audit, existence of an environmental committee, variety among and within boards, such as independence of the board, gender diversity, and variables associated with the environment, such as environmental performance and level of business pollution. Showing a sample of SBF120 French publicly traded companies for the years 2009 through 2014. The study discovered that disclosure quality is still comparatively poor. The results also showed that a company's strategy and vision act important roles in determining variances in the quality of environmental reporting.

In order to figure out the extent of environmental reporting, (Rao et al., 2012) examined the 2008 annual reports of the top 100 Australian companies listed on the Australian Stock Exchange. This information was compared with different corporate governance indicators, and analysis revealed a significant positive correlation among the level of environmental reporting, the percentage of independent and female directors on a board, institutional financiers, and board size. Therefore, it is crucial to take into account the organization's level of environmental reporting in relation to how the company is controlled, as well as the connection between non-financial disclosure and governance procedures. The wider view of corporate governance contends that shareholders and stakeholders should be at the center of corporate governance, expanding the scope of corporate duty and accountable.

The study by (Kilincarslan et al., 2020) used a sample of 121 publicly traded companies from 11 countries in the Middle East and Africa (MEA) between the years 2010 and 2017 to examine the effects of corporate governance systems on environmental disclosure procedures across these countries. The findings from the experiments substantially suggested that MEA enterprises that have significant governance disclosures have improved procedures for environmental disclosure. In contrast to board independence, which has an adverse effect, board characteristics such as diversity in gender, size, CEO duality, and audit committee size have had a positive effect on MEA enterprises' voluntary environmental disclosures.

(Usman & Aliyu, 2021) investigated the impact of ownership structure determinants on Nigeria's practice of social and environmental reporting. In order to collect social and environmental disclosure data from the corporate reports of 80 businesses listed on the Nigerian Stock Exchange between 2012 and 2017, the article used the Global Reporting Initiative (GRI) disclosure methodology. Indicators of social and environmental disclosure include management ownership, foreign ownership, block ownership, and dispersed ownership. The outcome of the qualitative investigation revealed proof of modest social and environmental information disclosure in business reports. It has been discovered that block ownership, foreign ownership, and dispersed ownership all improve how social and environmental data is disclosed in corporate reports. On the other hand, it was discovered that management ownership had little impact on social and environmental disclosure.

The impact of the board of directors' qualities on the amount of environmental disclosure by Brazilian corporations was confirmed by (Fernandes et al., 2019). A sample of 152 firms that are listed on the S&P stock market was employed in the study. According to the results, the total number of independent board members was statistically significant, indicating that board independence can enhance administrative control and promote better environmental disclosure. With an average age reaching 60, environmental disclosure increased on boards before decreasing after that age.

In order to determine whether corporate governance (CG) policies affect the connection between environmental disclosure quality (EDQ) and company risk, (Rezaee et al., 2021) assessed this relationship. The study analyzed information for a sample of 762 listed Iranian companies with firm years from 2011 to 2016. The findings showed a connection between company risk and EDQ that was detrimental. Other CG policies, such as CEO duality and board size, do not appear to have any impact on the association between EDQ and risk; however, board independence mitigates this connection and decreases the adverse relationship between EDQ and risk.

(Said et al., 2013) evaluated the extent of environmental disclosure in annual reports submitted by Malaysian publicly traded companies for the year ended 2009 and explored any connections between board, company, and human capital characteristics and environmental disclosure. The study's findings showed a correlation between the level of environmental disclosure and the presence of an independent non-executive chairman, the age of the chief executive, the presence of a CEO with a profession in law, and the industry category. The most important factor that affects the extent of environmental disclosure is determined to be the category of industry.

One of the biggest problems confronting the company in promoting its sustainability is establishing strong corporate governance and sustaining effective environmental performance. The study by (Buniamin et al., 2011) examined the annual reports of 243 businesses listed on Bursa Malaysia in an effort to analyze the relationship among these two crucial elements. Management ownership, board size, board independence, financial expert, CEO duality, and meeting frequency were the six corporate governance characteristics that were chosen. In general, it was discovered that there is limited environmental reporting. Board size and management ownership are the two most important corporate governance characteristics that have a substantial impact on the level of environmental reporting.

Using an extensive dataset of 2,854 Chinese publicly traded companies from 2010 to 2017, the study by (Shahab et al., 2020) investigated the effect of chief executive officer (CEO) qualities on sustainable performance, environmental performance, and environmental reporting. The results of the research are divided into four categories. CEOs with research experience are more likely to participate in initiatives that enhance sustainable performance, environmental performance, and environmental reporting. CEOs with financial knowledge are associated favorably with improved environmental reporting and sustainable performance. CEOs with international experience are more interested in participating in actions that improve sustainable and environmental performance. Younger CEOs often make decisions that have a negative impact on the environment and sustainability.

(Gerged 2021) examined how company environmental disclosure in developing countries is impacted by inner corporate governance procedures. utilizing a sample of 500 company-year observations made in Jordan between 2010 and 2014. According to the study, there are beneficial correlations between company environmental disclosure and board size, board independence, CEO duality, and foreign ownership. On the contrary, there is a negative correlation between the level of environmental information given and management ownership, institutional ownership, and ownership concentration.

(Shwairef et al., 2021) provided an explanation of how the intermediary influence of strategic positioning on corporate governance influences environmental reporting. The chief executive officers and chief financial officers of 197 major Malaysian corporations provided the information. The findings demonstrated that the effect of four corporate governance factors board size, board independence, the inclusion of a CSR committee, and institutional ownership on environmental reporting is moderated by managers' strategic posture. The number of CSR committee members and the size of the board also directly affect how much information businesses provide about the environment. The effects of ownership concentration on environmental disclosure, direct as well as indirect, were disregarded.

(Osemene et al., 2021) conducted a comparative analysis of corporate governance practices and environmental accounting reporting in Egypt, Nigeria, Kenya, and South Africa. The results of the content review conducted to determine the environmental disclosure and reporting rating showed that the board committee has an important influence on environmental accounting disclosure in African nations, board independence in Egypt and Kenya, board size in South Africa and Nigeria, board diversity in Kenya and Nigeria, and institutional ownership in Nigeria, Egypt, and South Africa. This conclusion suggests that current corporate governance regulations and codes deserve to be complied with.

Corporate governance systems for businesses incorporate social and environmental reporting. Both of these structures were primarily concerned with business ethics, stakeholder response, and the environment in which businesses operate. Therefore, a business's social and environmental reporting practices must be incorporated into its governance frameworks in order for it to behave ethically. To be able to guarantee that stakeholders' interests are taken into account and their obligations are met, a strong framework for corporate governance is necessary (Usman & Aliyu 2021).

4. Empirical Study:

4.1. Population and Sampling

All stakeholders make up the study's population, and the sampling unit is everyone who has any involvement with a publicly traded company. The stakeholders were the target audience for the questionnaire since it was deemed likely that they would be familiar with the research constructs and the nature of the study in the firms. The stakeholders must get the questionnaire because of the nature of the study constructs. The Influencing Factors, which reflect the research variables, allow stakeholders to assess their satisfaction with them. The population of this study, which is connected to environmental reporting and the Green Accounting Implementation, is geographically spread, surpasses 100,000 items, and the appropriate sample shouldn't be less than 384 observations.

The researcher directed the questionnaire to the stakeholders (Investor, Financial analyzer, creditor, Auditor) of the Egyptian listed firms. In order to increase the questionnaire response rate, the researcher connected with the stakeholders and discussed the objective of the study and the questionnaire's contents with them. Basically, the questionnaire was directed to 468 stakeholders, only

435 of them accepted the questionnaire. Finally, the researcher collected only 427 questionnaires with a response and including them 11 incomplete questionnaires, then became only 416 questionnaires were statistically valid and free of missing data with a response rate 88.89% (416/468).

4.2. Reliability:

The Cronbach alpha is the most commonly used indicator of reliability, and a questionnaire is considered reliable if its Cronbach's alpha value is greater than or equal to 0.7 (Hair et al., 2010). The tables below demonstrate that all items have corrected item-total correlation values above 0.3, which is considered to be an acceptable level of internal consistency. All stakeholders in the study were given the questionnaire, which they were asked to complete online using a Google form. The results were used to evaluate the questionnaire's reliability and validity. The following table provides a summary of each construct's Cronbach's alpha and corrected item-total correlation results:

Table (1): Corrected Item-Total Correlation and Cronbach's Alpha for all variables

Variables	Measurement Item	corrected item-total correlation	Cronbach's Alpha if item deleted	Reliability	
				No. of Questions	Total Cronbach's Alpha
Benefits of environmental reporting	Q1	0.425	0.742	16	0.821
	Q2	0.381	0.676		
	Q3	0.449	0.841		
	Q4	0.372	0.711		
	Q5	0.440	0.843		
	Q6	0.423	0.857		
	Q7	0.447	0.723		
	Q8	0.457	0.839		
	Q9	0.443	0.673		
	Q10	0.450	0.797		
	Q11	0.391	0.737		
	Q12	0.431	0.748		
	Q13	0.391	0.653		
	Q14	0.461	0.745		
	Q15	0.362	0.839		
	Q16	0.411	0.676		
Obstacles of environmental reporting	Q17	0.449	0.670	11	0.795
	Q18	0.408	0.717		
	Q19	0.450	0.725		
	Q20	0.458	0.814		
	Q21	0.369	0.739		
	Q22	0.424	0.686		
	Q23	0.450	0.765		
	Q24	0.416	0.761		
	Q25	0.453	0.705		
	Q26	0.401	0.763		
	Q27	0.395	0.751		
External Factors Associated with Environmental	Q28	0.410	0.763	5	0.782
	Q29	0.439	0.690		
	Q30	0.454	0.792		

Variables	Measurement Item	corrected item-total correlation	Cronbach's Alpha if item deleted	Reliability	
				No. of Questions	Total Cronbach's Alpha
Reporting	Q31	0.370	0.696		
	Q32	0.459	0.681		
Internal Factors Associated with Environmental Reporting	Q33	0.450	0.708	17	0.887
	Q34	0.401	0.702		
	Q35	0.358	0.668		
	Q36	0.404	0.740		
	Q37	0.387	0.685		
	Q38	0.427	0.835		
	Q39	0.458	0.843		
	Q40	0.370	0.808		
	Q41	0.446	0.760		
	Q42	0.381	0.829		
	Q43	0.393	0.716		
	Q44	0.381	0.672		
	Q45	0.408	0.674		
	Q46	0.354	0.704		
	Q47	0.437	0.662		
	Q48	0.394	0.833		
	Q49	0.433	0.708		

Table (1) shows some results for all variables as follow:

- For the Dependent Variables Benefits & Obstacles of environmental reporting the Cronbach's alpha is 0.821 &0.795 respectively which represents a good indicator of the reliability of this construct.
- For the Independent Variables the influencing factors Associated with Environmental Reporting (external & Internal) the Cronbach's alpha is 0.782 & 0.887 respectively which represents a good indicator of the reliability of this construct.
- In addition, the value of the corrected item's overall correlation is greater than 0.3, which is considered to be a sign of strong internal consistency.

4.3. Sample Description:

This section outlines the characteristics of the sample concerning the stakeholders' gender, experience and job titles. These characteristics are presented in table (2):

Table (2): Description of the sample of stakeholders (N=416)

	Demographic Characteristics	Frequency	Percentage	Cumulative Percentage
Gender	Male	156	37.50%	37.50%
	Female	260	62.50%	100.00%
Experience	Less than 5 years	45	10.82%	10.82%
	Greater than 5 and less than 10 years	161	38.70%	49.52%
	Greater than 10 and less than 15 years	175	42.07%	91.59%

	Greater than 15 years	35	8.41%	100.00%
Position	Investor	115	27.64%	27.64%
	Financial analysts	98	23.56%	51.20%
	creditor	106	25.48%	76.68%
	Auditor	97	23.32%	100.00%

According to Table (2), 62.50% (260) female, followed by 37.5% (156) males. Additionally, there is 42.07% (175) who have an experience Greater than 10 and less than 15 years, followed by 37.70% (161) who have an experience Greater than 5 and less than 10, followed by 10.82% (45) who have an experience less than 5 years and finally 8.41% (35) who have an experience greater than 15 years.

In terms of Position, the highest distribution was related to Investors by 27.64% (115), followed by 25.48% (106) creditors, 23.56% (98) financial analysts, finally 23.32% (97) auditors.

4.4. Descriptive analysis:

Table (3) shows the descriptive statistics for the study variables. This table contains the mean, standard deviation, skewness, and kurtosis for the items used to measure each variable as follows:

Table (3): Descriptive statistics (N=416)

Variables	Measurement Item	Mean	Std. deviation	Skewness	Kurtosis
Benefits of environmental reporting	Q1	3.841	1.221	-1.068	0.394
	Q2	4.018	1.144	-1.289	1.129
	Q3	3.857	1.210	-1.108	0.533
	Q4	4.060	1.091	-1.333	1.484
	Q5	3.836	1.206	-0.940	0.222
	Q6	3.914	1.258	-1.198	0.540
	Q7	4.109	1.039	-1.386	1.810
	Q8	3.906	1.358	-1.187	0.199
	Q9	4.146	1.057	-1.628	2.521
	Q10	4.036	1.039	-1.280	1.533
	Q11	4.164	0.898	-1.286	2.259
	Q12	4.258	0.890	-1.869	4.598
	Q13	3.974	1.330	-1.303	0.494
	Q14	3.398	1.493	-0.571	-1.066
	Q15	4.211	1.009	-1.598	2.539
	Q16	3.948	1.177	-1.191	0.764
Benefits of environmental reporting		3.981	0.839	-1.112	1.030
Obstacles of environmental reporting	Q17	4.003	1.083	-1.295	1.468
	Q18	3.984	1.181	-1.347	1.170
	Q19	3.948	1.177	-1.191	0.764
	Q20	3.914	1.258	-1.198	0.540
	Q21	3.826	1.228	-1.161	0.543
	Q22	4.018	1.261	-1.323	0.764
	Q23	3.935	1.238	-1.302	0.838
	Q24	4.003	1.083	-1.295	1.468
	Q25	3.836	1.206	-0.940	0.222
	Q26	3.521	1.348	-0.700	-0.580
	Q27	3.878	1.219	-1.137	0.457

Obstacles of environmental reporting		3.906	0.948	-1.144	0.856
External Factors Associated with Environmental Reporting	Q28	3.724	1.307	-0.986	-0.033
	Q29	4.031	1.131	-1.369	1.386
	Q30	3.737	1.225	-0.961	0.217
	Q31	4.055	1.014	-1.122	1.113
	Q32	3.841	1.221	-1.068	0.394
External Factors Associated with Environmental Reporting		3.821	0.975	-1.125	0.951
Internal Factors Associated with Environmental Reporting	Q33	3.857	1.210	-1.108	0.533
	Q34	3.927	1.220	-1.213	0.709
	Q35	3.865	1.123	-1.021	0.690
	Q36	4.146	1.044	-1.511	2.136
	Q37	3.729	1.354	-0.997	-0.163
	Q38	4.164	0.898	-1.286	2.259
	Q39	4.018	1.144	-1.289	1.129
	Q40	4.146	1.057	-1.628	2.521
	Q41	4.211	1.009	-1.598	2.539
	Q42	4.258	0.869	-1.580	3.465
	Q43	4.214	0.932	-1.372	2.112
	Q44	4.188	1.012	-1.476	2.169
	Q45	4.289	0.844	-1.531	3.220
	Q46	4.221	0.920	-1.505	2.729
	Q47	4.188	1.025	-1.669	2.808
	Q48	4.036	1.039	-1.280	1.533
	Q49	4.109	1.039	-1.386	1.810
Internal Factors Associated with Environmental Reporting		4.165	0.749	-1.267	2.261

According to (Blanca et al., 2013), the absolute values of skewness and kurtosis must fall within the ranges of -2.49 and 2.33 and -1.92 and 7.41, respectively, in order for the data to have a normal distribution. Table (3) shows that these two requirements are met and that the data are normally distributed. Additionally, all items mean are higher than 3, which tends respondents to agree, leading to their responses of "agree, strongly agree." As a result, no responder has provided a negative reaction to any item.

4.5. Structural Equation Modeling & testing hypotheses:

4.5.1. Assessing the Measurement Model:

Testing the validity and reliability of the measurement model is necessary to determine the importance of the relationships in the structural model. The degree of model goodness of fit and the construct validity are the two variables that determine if the measurement model is valid in this situation (Blunch 2012).

4.5.1.1. Exploratory Factor Analysis:

Because there is no one fixed approach for conducting EFA, the researcher must make a number of crucial considerations. As indicated in table (4), the study used EFA to perform the Kaiser-Meyer-Olkin (KMO) scale as follows:

Table (4): KMO & Bartlett's Test for all variables

Variables	Kaiser-Meyer-Olkin	Bartlett's Test of Sphericity	
		Chi Square	Sig.
Benefits of environmental reporting	0.779	1152.744	0.000
Obstacles of environmental reporting	0.682	666.040	0.000
External Factors Associated with Environmental Reporting	0.730	558.657	0.000
Internal Factors Associated with Environmental Reporting	0.631	300.665	0.000

All variables' KMO scales are more than 0.5, as shown in table (4). Additionally, all variables passed the Bartlett's Test, indicating that the data are reliable and of excellent quality for the structural equation model.

4.5.1.2. The Model Fit of the Measurement Model

According to (Byrne 2010), goodness of fit indicates how well the measurement model fits the data gathered from the sample. As indicated in table (5), the study utilized the most used indices to assess the model's fit.

Table (5): The indices of model fit for the measurement model

Measure	Estimate	Threshold	Interpretation
GFI	0.981	Closer to 1	Accepted
RMR	0.027	Closer to 0	Accepted
CFI	0.977	Closer to 1	Accepted
TLI	0.980	Closer to 1	Accepted
RMSEA	0.035	Less Than 0.08	Accepted

The CFI value of 0.977 is approved because it is higher than 0.95. Additionally, the RMR index value is satisfied because it is less than 0.05. In a similar vein, the RMSEA value of 0.035 is less than the 0.08 suggested by (Byrne 2010). Given that it is more than 0.08, the GFI value of 0.981 is approved (Byrne 2010). As a result, the measurement model corresponds to the information gathered from the stakeholders.

4.5.1.3. The Construct Validity of the Measurement Model:

Additionally, (AVE), which can only be used to measure convergent validity, accepts values that are higher than 0.5. Moreover, Composite Reliability (CR) and Cronbach's alpha were used to assess the measurement model's reliability. The following list of criteria was used to evaluate the model's validity:

Table (6): The validity and reliability of the measurement model

Variables	Factor Loading and Reliability			Convergent Validity	
	Questions	Factor Loading	Cronbach's Alpha	AVE	CR
Benefits of environmental reporting	Q1	0.726	0.821	0.702	0.751
	Q2	0.619			
	Q3	0.812			
	Q4	0.635			
	Q5	0.661			
	Q6	0.727			
	Q7	0.673			
	Q8	0.805			
	Q9	0.780			
	Q10	0.703			
	Q11	0.760			
	Q12	0.645			
	Q13	0.755			
	Q14	0.647			
	Q15	0.616			
	Q16	0.665			
Obstacles of environmental reporting	Q17	0.653	0.795	0.699	0.782
	Q18	0.747			
	Q19	0.638			
	Q20	0.749			
	Q21	0.725			
	Q22	0.719			
	Q23	0.629			
	Q24	0.639			
	Q25	0.803			
	Q26	0.734			
	Q27	0.655			
External Factors Associated with Environmental Reporting	Q28	0.780	0.782	0.747	0.727
	Q29	0.720			
	Q30	0.764			
	Q31	0.684			
	Q32	0.789			
Internal Factors Associated with Environmental Reporting	Q33	0.710	0.887	0.709	0.786
	Q34	0.774			
	Q35	0.660			
	Q36	0.652			
	Q37	0.694			
	Q38	0.733			
	Q39	0.640			
	Q40	0.804			
	Q41	0.698			
	Q42	0.731			
	Q43	0.626			
	Q44	0.690			
	Q45	0.766			
	Q46	0.769			
	Q47	0.717			
	Q48	0.717			
	Q49	0.669			

Table (6) shows that acceptable Cronbach's alpha values are those that are higher than 0.6.

Additionally, the composite values for reliability are better than 0.6 and the AVE values are greater than 0.5, which allows for acceptance. In table (7), discriminant validity is also evaluated. This table demonstrates the correlations between the factors and the AVE square roots as well as the fact that the square root of AVE values is larger than the correlations between constructs. The discriminant validity is thus attained. Finally, the measurement model satisfies every requirement set forth to evaluate its reliability and validity.

Table (7): Construct Correlations and Square Root of Average Variance Extracted

	Benefits of environmental reporting	Obstacles of environmental reporting	External Factors Associated with Environmental Reporting	Internal Factors Associated with Environmental Reporting
Benefits of environmental reporting	0.838			
Obstacles of environmental reporting	0.753	0.836		
External Factors Associated with Environmental Reporting	0.817	0.776	0.864	
Internal Factors Associated with Environmental Reporting	0.793	0.822	0.779	0.842

Finally, the measurement model was established as shown in figure (1) after analyzing its validity and reliability as well as model fit. The measurement model contains four main constructs namely, Benefits of environmental reporting, Obstacles of environmental reporting, External Factors Associated with Environmental Reporting and Internal Factors Associated with Environmental Reporting.

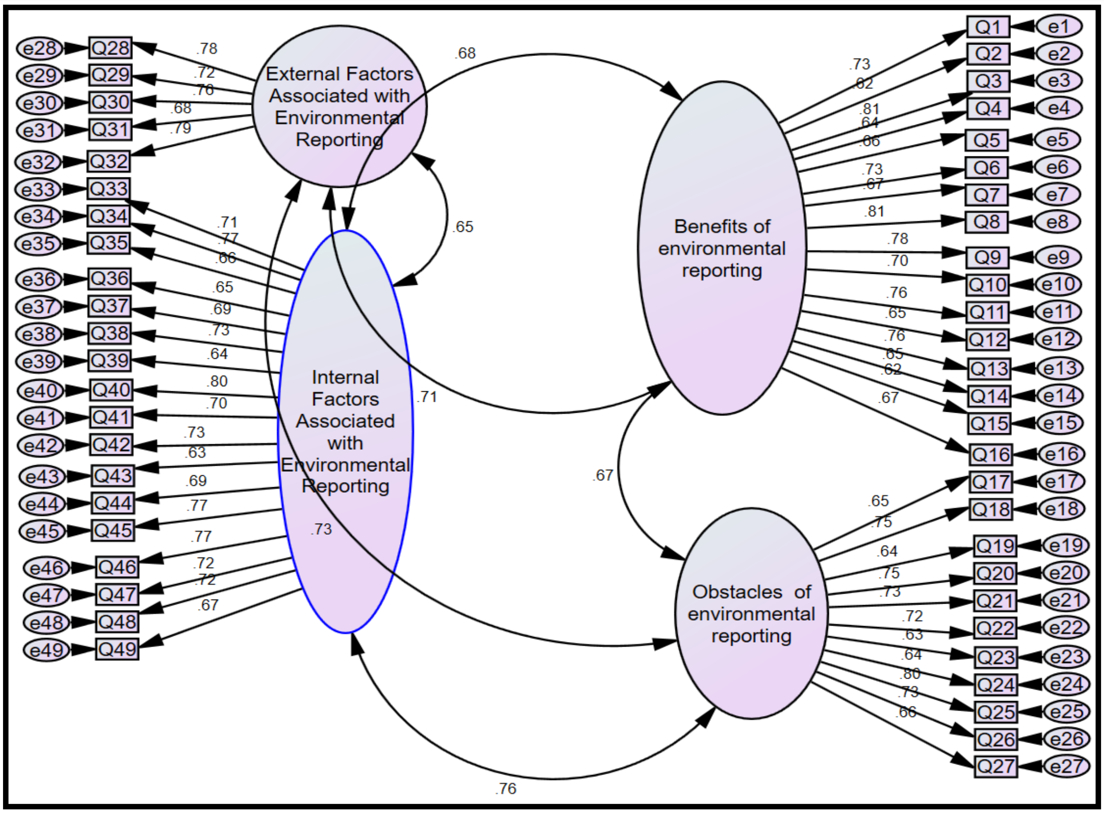

Figure (1): The measurement model

4.5.2. Assessing the correlation coefficients among variables' dimensions:

In this study, Pearson's r correlation among variables' dimensions can be shown in table (8), The results included in this table ensure a significant relationship among all dimensions for each variable. Additionally, the results ensure a positive significant relationship between both external and internal factors associated with environmental reporting and the Benefits of environmental reporting (where R = 0.658, 0.721 respectively). Moreover, there is negative significant relationship between both external and internal factors associated with environmental reporting and the obstacles of environmental reporting (where R = -0.521, -0.635 respectively). These results indicate that both external and internal factors associated with environmental reporting improve the environmental reporting by increasing the benefits and decreasing the obstacles.

Table (8): Pearson Correlation among variables

	Benefits of environmental reporting	Obstacles of environmental reporting	External Factors Associated with Environmental Reporting	Internal Factors Associated with Environmental Reporting
Benefits of environmental reporting	1			
Obstacles of environmental reporting	-0.457	1		
External Factors Associated with Environmental Reporting	0.658	-0.521	1	
Internal Factors Associated with	0.721	-0.635	0.318	1

Environmental Reporting				

4.5.3. Assessing the structural model and hypotheses testing

Table (9) involves the indices used to test the fit structural model as follows:

Table (9): The indices of model fit for the structural model

Measure	Estimate	Threshold	Interpretation
GFI	0.977	Closer to 1	Accepted
RMR	0.023	Closer to 0	Accepted
CFI	0.979	Closer to 1	Accepted
TLI	0.983	Closer to 1	Accepted
RMSEA	0.037	Less Than 0.8	Accepted

The value of CFI is 0.979 which is accepted as it is greater than 0.95. Furthermore, the value of RMR index is also satisfied because it is lower than 0.05. Similarly, RMSEA equals 0.037 which lies under 0.08 as proposed by (Byrne, 2010). The value of GFI which equals 0.977 is accepted as it is higher than 0.8 (Byrne, 2010). Therefore, the measurement model fits the data collected from the stakeholders.

Therefore, based on the above indices, the structural model utilized in the current study shows an acceptable degree of fitness. The structural model is presented in figure (2).

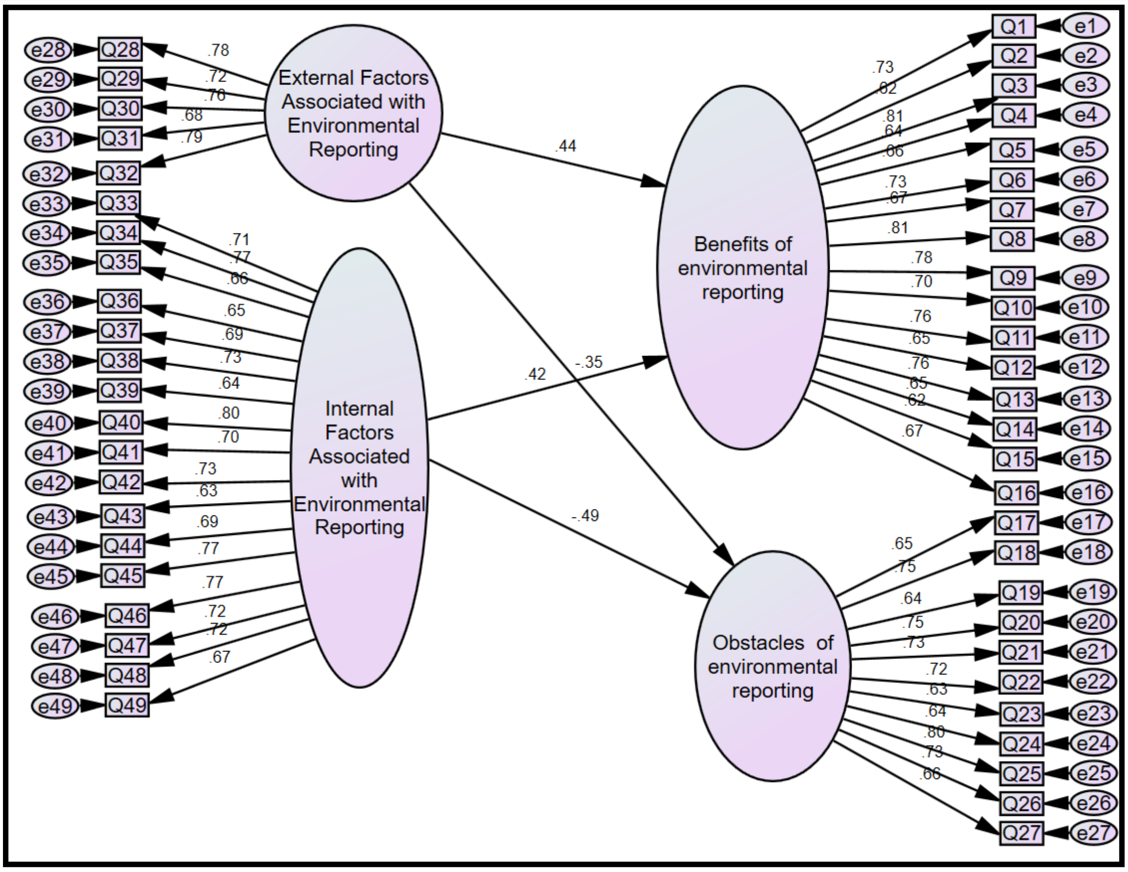

Figure (2): The structural model

In this section, the results of testing research hypotheses among study constructs are presented. Such hypotheses were tested using SEM with AMOS 23. Hypothesis H1 proposed that External Factors Associated with Environmental Reporting has a direct impact on Benefits of environmental reporting; while H2 posited that Internal Factors Associated with Environmental Reporting has a direct impact on Benefits of environmental reporting; besides H3 proposed that External Factors Associated with Environmental Reporting has a direct impact on Obstacles of environmental reporting; Finally, H4 suggested that Internal Factors Associated with Environmental Reporting has a direct impact on Obstacles of environmental reporting.

Table (10): The results of testing direct relationships

Hypothesis	Hypothesis direction			Estimate	Sig.	Hypotheses result
H1	External Factors Associated with Environmental Reporting	⇨	Benefits of environmental reporting	0.438	0.000	accepted
H2	Internal Factors Associated with Environmental Reporting	⇨	Benefits of environmental reporting	0.421	0.000	accepted

H3	External Factors Associated with Environmental Reporting	⇨	Obstacles of environmental reporting	-0.351	0.001	accepted
H4	Internal Factors Associated with Environmental Reporting	⇨	Obstacles of environmental reporting	-0.487	0.004	accepted

4.5.3.1. The direct effect of External Factors Associated with Environmental Reporting on Benefits of Environmental Reporting:

According to table (10), it is clear that external factors associated with environmental reporting has a significant direct positive impact on benefits of environmental reporting where ($\beta = 0.438$; $P < 0.05$). Therefore, H1 which represents the effect of external factors associated with environmental reporting on benefits of environmental reporting can be accepted in the alternative form in a positive effect, which indicates that increasing the level of external factors associated with environmental reporting lead to increasing the benefits of environmental reporting.

4.5.3.2. The direct effect of Internal Factors Associated with Environmental Reporting on Benefits of Environmental Reporting:

According to table (10), it is clear that internal factors associated with environmental reporting has a significant direct positive impact on benefits of environmental reporting where ($\beta = 0.421$; $P < 0.05$). Therefore, H2 which represents the effect of internal factors associated with environmental reporting on benefits of environmental reporting can be accepted in the alternative form in a positive effect, which indicates that increasing the level of internal factors associated with environmental reporting lead to increasing the benefits of environmental reporting.

4.5.3.3. The direct effect of External Factors Associated with Environmental Reporting on Obstacles of Environmental Reporting:

According to table (10), it is obvious that external factors associated with environmental reporting has a significant direct negative impact on obstacles of environmental reporting where ($\beta = -0.351$; $P < 0.05$). Therefore, H3 which represents the effect of external factors associated with environmental reporting on obstacles of environmental reporting can be accepted in the alternative form in a negative effect, which indicates that increasing the level of external factors associated with environmental reporting lead to decreasing the obstacles of environmental reporting.

4.5.3.4. The direct effect of Internal Factors Associated with Environmental Reporting on Obstacles of Environmental Reporting:

According to table (10), it is obvious that internal factors associated with environmental reporting has a significant direct negative impact on obstacles of environmental reporting where ($\beta = -0.487$; $P < 0.05$). Therefore, H4 which represents the effect of internal factors associated with environmental reporting on obstacles of environmental reporting can be accepted in the alternative form in a negative effect, which indicates that increasing the level of internal factors associated with environmental reporting lead to decreasing the obstacles of environmental reporting.

5. Conclusions and Future Research

Based on the theoretical and statistical study, the researcher arrived at a set of results as follows:

1. Environmental data can be accessed thanks to green accounting. Important elements of green accounting include environmental policies, efforts, accounts, sustainability reporting, and social balance.
2. The use of green accounting can establish the extent to which a company or organization contributes positively or negatively to the environment and the quality of people's lives.
3. The objective of green accounting is to incur costs while reaping environmental benefits. Managers can assess, operate, control, determine, report, and protect the environment using the information it provides.
4. Environmental reporting can be used as a means of communication to influence public opinion and to gain competitive advantages, such as a better reputation for the company.
5. Companies have the chance to improve the release and disclosure of extra non-financial information in order to distinguish themselves from rivals in terms of the quality of their results .
6. One of the most important external factors influencing environmental reporting is disparate industries, especially high-risk environmental industries.
7. The most important internal factors influencing environmental reporting is a business's profitability and the efficiency of governance mechanisms.
8. External factors associated with environmental reporting has a significant direct positive impact on benefits of environmental reporting where ($\beta = 0.438$; $P < 0.05$).
9. Internal factors associated with environmental reporting has a significant direct positive impact on benefits of environmental reporting where ($\beta = 0.421$; $P < 0.05$).
10. External factors associated with environmental reporting has a significant direct negative impact on obstacles of environmental reporting where ($\beta = -0.351$; $P < 0.05$).
11. Internal factors associated with environmental reporting has a significant direct negative impact on obstacles of environmental reporting where ($\beta = -0.487$; $P < 0.05$).

Based on the results, the researcher recommends:

1. It is necessary to pay attention to the internal and external factors affecting environmental reports and focus on the most influential of these factors.
2. Creating a legislative framework for preparing environmental reports, with the need for mandatory standards that regulate the preparation of these reports.
3. Conducting further studies on addressing the problems of measuring environmental costs, especially in industrial organizations.
4. Conducting studies on evaluating and pricing operational environmental impacts in financial statements.

References

- Adeyemi A., Bakare O., Akindele A. & Soyode O., 2021, "Impact of the oversight role of NGOS on the environmental reporting and social responsibility of listed manufacturing companies in Nigeria", Advances in Environmental Accounting & Management, Vol. 9, 107–121.
- Agyei S. & Yankey B., 2019, "Environmental reporting practices and performance of timber firms in Ghana Perceptions of practitioners", Journal of Accounting in Emerging Economies, Vol. 9, No. 2, 268-286.
- Agyemang A., Yusheng K., Twum A., Ayamba E., Kongkuah M. & Musah M., 2021, "Trend and relationship between environmental accounting disclosure and environmental performance for mining companies listed in China", Environment, Development and Sustainability, 23, 12192–12216.
- Al-Dhaimesh O., 2020, "Green accounting practices and economic value added: An applied study on companies listed on the Qatar Stock Exchange", International Journal of Energy Economics and Policy, 10(6), 164-168.
- Alipour M., Ghanbari M., Jamshidinavid B. & Taherabadi A, 2019, "The relationship between environmental disclosure quality and earnings quality: a panel study of an emerging market", Journal of Business Studies, Vol. 13, No. 2, 326-347.
- Alipour M., Ghanbari M., Jamshidinavid B. & Taherabadi A., 2019, "Does board independence moderate the relationship between environmental disclosure quality and performance? Evidence from static and dynamic panel data", Corporate Governance, Vol. 19, No. 3, 580-610.
- Aliyu U., 2019, "Board characteristic and corporate environmental reporting in Nigeria", Asian Journal of Accounting, Vol. 4, No. 1, 2-17.
- Alshbili I., Elamer A. & Moustafa M., 2021, "Social and environmental reporting, sustainable development and institutional voids: Evidence from a developing country", Corporate Social Responsibility and Environmental Management, 28, 881–895.
- Alvarez I. & Martínez M., 2020, "How cultural dimensions, legal systems, and industry affect environmental reporting? Empirical evidence from an international perspective", Business Strategy and the environment, 29, 2037–2057.
- Anh N., La Soa N. & Hanh H., 2020, "Environmental accounting practices and cost of capital of enterprises in Vietnam", Cogent Economics & Finance, 8, 1-17.
- Arena C., Bozzolan S. & Michelon G., 2015, "Environmental Reporting: Transparency to Stakeholders or Stakeholder Manipulation? An Analysis of Disclosure Tone and the Role of the Board of Directors", Corporate Social Responsibility and Environmental Management, 22, 346–361.
- Baalouch F., Ayadi S. & Hussainey K., 2019, "A study of the determinants of environmental disclosure quality: evidence from French listed companies", Journal of Management and Governance, 23, 939–971.
- Bhattacharyya A. & Agbola F., 2018, "Social and Environmental Reporting and the Co-creation of Corporate Legitimacy", Contemporary Management Research, Vol. 14, No. 3, 191-223.
- Bhattacharyya A., 2014, "Factors Associated with the Social and Environmental Reporting of Australian Companies", AABFJ, Vol. 8, No. 1, 25-50.
- Blanca, M. J., Arnau, J., López-Montiel, D., Bono, R., & Bendayan, R., 2013, Skewness and kurtosis in real data samples, Methodology, 9(2), 78-84.
- Blunch, N., 2012, Introduction to structural equation modeling using IBM SPSS statistics and AMOS, 2nd ed., SAGE Publications Ltd.

- Borgstedt P., Nienaber A., Liesenkötter B. & Schewe G., 2019, "Legitimacy Strategies in Corporate Environmental Reporting: A Longitudinal Analysis of German DAX Companies' Disclosed Objectives", Journal of Business Ethics, 158, 177–200.
- Braam G., Weerd L., Hauck M. & Huijbregts M., 2016, "Determinants of corporate environmental reporting: the importance of environmental performance and assurance", Journal of Cleaner Production, 129, 724-734.
- Buniamin S., Alrazi B., Johari N. & Abd Rahman N., 2011, "Corporate Governance Practices and Environmental Reporting of Companies in Malaysia: Finding Possibilities of Double Thumbs Up", Jurnal Pengurusan, 32, 55 – 71.
- Byrne B.M., 2010, Structural equation modeling with AMOS: Basic concepts, applications, and programming, 2nd ed., New York: Routledge.
- Chelli M., Durocher S. & Fortin A., 2018, "Normativity in Environmental Reporting: A Comparison of Three Regimes", Journal of Business Ethics, 149, 285–311.
- Clarkson P., Overell M. & Chapple L., 2011, "Environmental Reporting and its Relation to Corporate Environmental Performance", ABACUS, Vol. 47, No. 1, 27-60.
- Deegan C., 2013, "The accountant will have a central role in saving the planet . . . really? A reflection on 'green accounting and green eyeshades twenty years later", Critical Perspectives on Accounting, 24, 448-458.
- Dobbs S. & Staden C., 2016, "Motivations for corporate social and environmental reporting: New Zealand evidence", Sustainability Accounting, Management and Policy Journal, Vol. 7, No. 3, 449-472.
- Endiana D., Dicriyani L., Adiyadnya S. & Putra P., 2020, "The Effect of Green Accounting on Corporate Sustainability and Financial Performance", Journal of Asian Finance, Economics and Business, Vol. 7, No. 12, 731–738.
- Fernandes S., Bornia A. & Nakamura L., 2019, "The influence of boards of directors on environmental disclosure", Management Decision, Vol. 57, No. 9, 2358-2382.
- Gerged A., 2021, "Factors affecting corporate environmental disclosure in emerging markets: The role of corporate governance", Business Strategy and the environment, 30, 609–629.
- Gerged A., Beddewela E. & Cowton C., 2021, "Is corporate environmental disclosure associated with firm value? A multicountry study of Gulf Cooperation Council firms", Business Strategy and the environment, 30, 185–203.
- Giang N., Binh T., Thuy L., Haa D. & Loan C., 2020, "Environmental accounting for sustainable development: An empirical study in Vietnam", Management Science Letters, 10, 1613–1622.
- Gonzalez C. & Mendoza K., 2021, "Green accounting in Colombia: a case study of the mining sector", Environment, Development and Sustainability, 23, 6453–6465.
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C., 2010, Multivariate data analysis: A global perspective, Upper Saddle River, NJ: Pearson.
- He C. & Loftus J., 2014, "Does environmental reporting reflect environmental performance?", Pacific Accounting Review, Vol. 26, No. 1/2, 134-154.
- Helfaya A., Whittington M. & Alawattage C., 2019, "Exploring the quality of corporate environmental reporting Surveying preparers' and users' perceptions", Accounting, Auditing & Accountability Journal, Vol. 32, No. 1, 163-193.
- Hussain H., Kot S., Thaker H. & Turner J., 2020, "Environmental reporting and speed of adjustment to target leverage: Evidence from a dynamic regime switching model", Organizacija, 53(1), 21-35.

- Ifada L., Indriastuti M., Ibrani E. & Setiawanta Y., 2021, "Environmental Performance and Environmental Disclosure: The Role of Financial Performance", Journal of Asian Finance, Economics and Business, Vol. 8, No. 4, 349–362.
- Indrasari A., Nugraheni P., Hamzah N., Maelah R., 2021, "Motivational Factors of Implementing Corporate Social and Environmental Reporting and Its Impact on Performance", Journal of Asian Finance, Economics and Business, Vol. 8, No. 2, 883–892.
- Iredele O., 2020, "Measuring performance in corporate environmental reporting in Nigeria", Measuring Business Excellence, Vol. 24, No. 2, 183-195.
- Ismail A., Rahman Y. & Hezabr A., 2018, "Determinants of corporate environmental disclosure quality of oil and gas industry in developing countries", International Journal of Ethics and Systems, Vol. 34, No. 4, 527-563.
- Jeroh E., 2020, "An assessment of the internal determinants of the environmental disclosure practices of firms across Sub-Saharan Africa", Ekonomski Horizonti, Vol. 22, No. 1, 47-59.
- Kassim C., Nasir N., Ahmad S., Nori W. & Arifin N., 2021, "Institutional Isomorphism on Environmental Reporting Practices in Malaysian Local Governments", Management and Accounting Review, Vol. 20, No. 2, 1-34.
- Kassim C., Nasir N., Ahmad S., Nori W. & Arifin, 2019, "Environmental reporting by the Malaysian local governments", Meditari Accountancy Research, Vol. 27, No. 4, 633-651.
- Kilincarslan E., Elmagrhi M. & Li Z., 2020, "Impact of governance structures on environmental disclosures in the Middle East and Africa", Corporate Governance, Vol. 20, No. 4, 739-763.
- Kouloukoui D., Anna A., Gomes S., Marinho M., Jong P., Kiperstok A. & Torres E., 2019, "Factors influencing the level of environmental disclosures in sustainability reports: Case of climate risk disclosure by Brazilian companies", Corporate Social Responsibility and Environmental Management, 26, 791–804.
- Lee H., Liub C., Yaina Y & Lin C., 2020, "Intellectual capital for green accounting in agribusiness", International Food and Agribusiness Management Review, Vol. 23, Iss. 5, 759-765.
- Maama H. & Appiah K., 2019, "Green accounting practices: lesson from an emerging economy", Qualitative Research in Financial Markets, Vol. 11, No. 4, 456-478.
- Maama H., Akande J. & Doorasamy M., 2021, "NGOs' engagements and Ghana's environmental accounting disclosure quality", Advances in Environmental Accounting & Management, Vol. 9, 83–106.
- Martínez M., Oms I. & Rodrigues L., 2020, "Does stakeholder engagement encourage environmental reporting? The mediating role of firm performance", Business Strategy and the environment, 29, 3025–3037.
- Mathuva D., Wachira M. & Injen G., 2019, "Does corporate environmental reporting improve stock liquidity? evidence from Kenyen listed firms", Advances in Environmental Accounting & Management, Vol. 8, 9-34.
- Meiryani1, Susanto A. & Warganegara D., 2019, "The Issues Influencing of Environmental Accounting Information Systems: An Empirical Investigation of SMEs in Indonesia", International Journal of Energy Economics and Policy, 9(1), 282-290.
- Moalla M., Salhi B. & Jarboui A., 2021, "An empirical investigation of factors influencing the environmental reporting quality: evidence from France", Social Responsibility Journal, Vol. 17, No. 7, 966-984.
- Morrison L., Wilmshurst T. & Shimeld S., 2018, "Environmental Reporting Through an Ethical Looking Glass", Journal of Business Ethics, 150, 903–918.

- Nguyen L. & Tran M., 2019, "Disclosure levels of environmental accounting information and financial performance: The case of Vietnam", Management Science Letters, 9, 557–570.
- Nguyen M., Nguyen K. & Nguyen T., 2020, "Factors Affecting the Implementation of Environmental Accounting by Construction Companies Listed on the Ho Chi Minh Stock Exchange", Journal of Asian Finance, Economics and Business, Vol. 7, No. 8, 269–280.
- Nguyen T., 2020, "Factors Influencing Environmental Accounting Information Disclosure of Listed Enterprises on Vietnamese Stock Markets", Journal of Asian Finance, Economics and Business, Vol. 7, No. 11, 877–883.
- Nguyen T., 2020, "Studying Factors Affecting Environmental Accounting Implementation in Mining Enterprises in Vietnam", Journal of Asian Finance, Economics and Business, Vol. 7, No. 5,131 – 144.
- Nicholls J., 2020, "Integrating financial, social and environmental accounting", Sustainability Accounting, Management and Policy Journal, Vol. 11, No. 4, 745-769.
- Nurhayati R., Taylor G., Rusmin R., Tower G. & Chatterjee B., 2016, "Factors determining social and environmental reporting by Indian textile and apparel firms: a test of legitimacy theory", Social Responsibility Journal, Vol. 12, No. 1, 167-189.
- Nuskiya M., Ekanayake A., Beddewela E. & Gerged A., 2021, "Determinants of corporate environmental disclosures in Sri Lanka: the role of corporate governance", Journal of Accounting in Emerging Economies, Vol. 11, No. 3, 367-394.
- Olubukola O., Tafadzwa S., Obert S. & Kudzanai M., 2021, "Making Environmental Accounting Work: Case of the Zimbabwe Mining Industry", Universal Journal of Accounting and Finance, 9(4), 722-734.
- Omar M., Echchabi A., Ayedh A. & Al-Hajri S., 2021, "Determinants of Social and Environmental Reporting Practices Disclosure in Libyan Oil and Gas Industry: A Managerial Perspective", International Journal of Energy Economics and Policy, 11(4), 504-510.
- Osemene O., Adinnu P., Fagbemi T. & Olowookere J., 2021, "Corporate Governance and Environmental Accounting Reporting in Selected Quoted African Companies", Global Business Review, 1–24.
- Otchere F., Simpson S. & Kusi J., 2020, "The influence of environmental performance on environmental disclosures: An empirical study in Ghana", Business Strategy and Development, 3, 98–111.
- Pedron A., Macagnan C., Simon D. & Vancin D., 2021, "Environmental disclosure effects on returns and market value", Environment, Development and Sustainability,23, 4614–4633.
- Qi Y., Yao j. & Liu L., 2021, "Research on evolutionary game of environmental accounting information disclosure from the perspective of multi-agent", Plos One, 16(8), 1-23.
- Radhouane I., Nekhili M., Nagati H. & Pache G., 2018, "Customer-related performance and the relevance of environmental reporting", Journal of Cleaner Production, 190, 315-329.
- Radhouane I., Nekhili M., Nagati H. & Paché G., 2018, "The impact of corporate environmental reporting on customer-related performance and market value", Management Decision, Vol. 56, No. 7, 1630-1659.
- Radhouane I., Nekhili M., Nagati H. & Paché G., 2020, "Is voluntary external assurance relevant for the valuation of environmental reporting by firms in environmentally sensitive industries?", Sustainability Accounting, Management and Policy Journal, Vol. 11, No. 1, 65-98.
- Rahim I., 2021, "Environmental disclosure and firm efficiency: a study of Pakistani firms", Asian Review of Accounting, Vol. 29, No. 3, 269-290.

- Raiborn C., Butler J. & Massoud M., 2011, "Environmental reporting: Toward enhanced information quality", Business Horizons, 54, 425-433.
- Rao K., Tilt C. & Lester L., 2012, "Corporate governance and environmental reporting: an Australian study", Corporate Governance, Vol. 12, No. 2, 143-163.
- Rezaee Z., Alipour M., Faraji O., Ghanbari M. & Jamshidinavid B., 2021, "Environmental disclosure quality and risk: the moderating effect of corporate governance", Sustainability Accounting, Management and Policy Journal, Vol. 12, No. 4, 733-766.
- Riyadh H., Al-Shmam M., Huang H., Gunawan B. & Alfaiza S., 2020, "The Analysis of Green Accounting Cost Impact on Corporations Financial Performance", International Journal of Energy Economics and Policy, 10(6), 421-426.
- Rounaghi M., 2019, "Economic analysis of using green accounting and environmental accounting to identify environmental costs and sustainability indicators", International Journal of Ethics and Systems, Vol. 35, No. 4, 504-512.
- Said R., Omar N., & Abdullah W., 2013, "Empirical investigations on boards, business characteristics, human capital and environmental reporting", Social Responsibility Journal, Vol. 9, No. 4, 534-553.
- Saleh M., Jawabreh O., Alsarayreh M. & Malkawi E., 2018, "Environmental accounting as perspective for hotels of Aqaba special economic zone authority (ASEZA)", Problems and Perspectives in Management, Vol. 16, Iss. 4, 169-185.
- Shahab Y., Ntim C., Chen Y., Ullah F., Li H. & Ye Z., 2020, "Chief executive officer attributes, sustainable performance, environmental performance, and environmental reporting: New insights from upper echelons perspective", Business Strategy and the environment, 29, 1–16.
- Shwairef A., Amran A., Iranmanesh M. & Ahmad N., 2021, "The mediating efect of strategic posture on corporate governance and environmental reporting", Review of Managerial Science, 15, 349–378.
- Susanto A. & Meiryani, 2019, "The impact of Environmental Accounting Information System Alignment on Firm Performance and Environmental Performance: A case of Small and Medium Enterprises s of Indonesia", International Journal of Energy Economics and Policy, 9(2), 229-236.
- Taqi M., Rusydiana A., Kustiningsih N. & Firmansyah I., 2021, "Environmental Accounting: A Scientometric using Biblioshiny", International Journal of Energy Economics and Policy, 11(3), 369-380.
- Ulupui I., Murdayanti Y., Marini A., Purwohedi U., Mardi & Yantob H., 2020, "Green accounting, material flow cost accounting and environmental performance", Accounting, 6, 743–752.
- Usman B. & Aliyu U., 2021, "The effect of ownership structure on social and environmental reporting in Nigeria: the moderating role of intellectual capital disclosure", Journal of Global Responsibility, Vol. 12, No. 2, 210-244.
- Vallišová L., Černá M. & Hinke, J., 2018, "Implementation of sustainability aspects in the financial reporting system: an environmental accounting standard", Accounting, Analysis and Audit, 173(9-10), 55-59.
- Wahyuningrum I., Budihardjo M., Muhammad F., Djajadikerta H. & Trireksani T., 2020, "Do environmental and financial performances affect environmental disclosures? Evidence from listed companies in Indonesia", Entrepreneurship and Sustainability Issues, Vol. 8, No. 2, 1047-1061.
- Yaya R., Wibowo S., Ulfaturrahmah & Jalaludin D., 2018, "Environmental disclosure practices after mandatory disclosure policy in Indonesia", Journal of Business and Retail Management Research, Vol. 12, Iss. 4, 88-100.

- Yermolenko V., Gafurova O., Krasnova M. & Krasnova Y., 2020, "Legal Principles of Environmental Accounting as Means of Identifying Sustainable Development Indicators in Ukraine", European Journal of Sustainable Development, 9 (2), 263-279.

Appendix (1)

Benefits of environmental reporting:

Benefits	References
1. A tool for management to establish business legitimacy.	(Braam et al., 2016, Pedron et al., 2021)
2. A method of interaction to shift public opinions.	(Braam et al., 2016)
3. Achieve competitive benefits.	(Braam et al., 2016)
4. Improve business reputation.	(Braam et al., 2016, Agyei & Yankey 2019)
5. Enable business value optimization.	(Hussain et al., 2020)
6. Increase company's capacity to obtain external finance more easily and at a lower cost.	(Hussain et al., 2020)
7. Raise firm's profitability and returns on equity.	(Pedron et al., 2021)
8. Improve business efficiency.	(Rahim 2021)
9. Enhance the quality of company's earnings.	(Alipour et al., 2019)
10. Avoide government interference and penalties.	(Agyei & Yankey 2019)
11. Lowering the amount of risk and operational failures.	(Agyei & Yankey 2019)
12. Enhance the information environment and beneficial economic effects.	(Mathuva et al., 2019, Alipour et al., 2019)
13. Reduce information asymmetry and draw in investors.	(Mathuva et al., 2019, Pedron et al., 2021)
14. Offer pertinent information that investors can use to guide their investment choices.	(Mathuva et al., 2019)
15. Recognise environmental costs and performance can lead to better reliable and thorough costing.	(Rounaghi 2019)
16. Maximize the value of shareholders.	(Radhouane et al., 2018)

Obstacles of environmental reporting:

Obstacles	References
17. Environmental governance charges, disclosure expenses, and penalties.	(Qi et al., 2021, Raiborn et al., 2011, Radhouane et al., 2018)
18. The lack of a robust environmental reporting legislative framework.	(Omar et al., 2021)
19.Environmental disclosure are seen unfavorably by shareholders for companies that operate in ecologically sensitive industries.	(Radhouane et al., 2018)
20. The lack of obligatory standards.	(Kassim et al., 2019)
21. Restricted available resources to the company.	(Kassim et al., 2019)
22. The lack of the necessary expertise in assessing, pricing, and incorporating	(Kassim et al., 2019)

operational environmental effects onto financial statements.	
23. The absence of consciousness and understanding about the importance of environmental issues.	(Alshbili et al., 2021)
24. Distrust of change.	(Alshbili et al., 2021)
25. A lack of civil society groups role.	(Alshbili et al., 2021)
26. Measurement problems of environmental costs leads to inappropriate accounting treatment and disclosure.	(Raiborn et al., 2011)
27. An absence of government incentives.	(Alshbili et al., 2021)

Influencing Factors Associated with Environmental Reporting:

Influencing Factors	References
External Factors:	
28. Push caused by government or legal demand, pressure from social media, shareholder impact.	(Agyei & Yankey 2019, Indrasari et al., 2021)
29. Strict obligatory requirements for environmental reporting.	(Braam et al., 2016)
30. Cultural diversity.	(Alvarez &Martínez 2020)
31. Varying legal structures.	(Alvarez &Martínez 2020)
32. disparate industries, especially high-risk environmental industries.	(Alvarez &Martínez 2020, Bhattacharyya &Agbola 2018, Nuskiya et al., 2021, Chelli et al., 2018, Moalla et al., 2021, Said et al., 2013).
Internal Factors:	
33. The presence of a sustainability department within the firm.	(Agyei & Yankey 2019, Baalouch et al., 2019, Shwairef et al., 2021)
34. Using external assurance for environmental reports.	(Braam et al., 2016)
35. Size of the company.	(Kouloukoui et al., 2019, Bhattacharyya 2014, Otchere et al., 2020, Ifada et al., 2021, Wahyuningrum et al., 2020, Nguyen 2020, Ismail et al., 2018, Nuskiya et al., 2021,Moalla et al., 2021)
36. Company financial performance.	(Kouloukoui etal.,2019, Ifada et al., 2021)
37. Knowledge of the need to contribute in making people's lives better.	(Indrasari et al., 2021, Omar et al., 2021)
38. Company environmental performance.	(He &Loftus 2014, Otchere et al., 2020, Ifada et al., 2021, Wahyuningrum et al., 2020, Agyemang et al., 2021, Baalouch et al., 2019)
39. Age of the company.	(Otchere et al., 2020, Bhattacharyya &Agbola 2018)
40. Capital concentration.	(Otchere et al., 2020)
41. Business's profitability.	(Agyemang et al., 2021, Maama et al., 2021,

	Ismail et al., 2018, Nuskiya et al., 2021)
42. Leverage.	(Bhattacharyya &Agbola 2018, Agyemang et al., 2021, Maama et al., 2021, Ismail et al., 2018)
43. Market share pricing.	(Maama et al., 2021)
44. Board characteristics (independence, meeting, size, gender diversity, CEO duality, age).	(Nuskiya et al., 2021, Aliyu 2019, Jeroh 2020, Nurhayati et al., 2016, Baalouch et al., 2019, Rao et al., 2012, Kilincarslan et al., 2020, Fernandes et al., 2019, Rezaee et al., 2021, Said et al., 2013, Buniamin et al., 2011, Shahab et al., 2020, Gerged 2021, Shwairef et al., 2021, Osemene et al., 2021
45. Determinants of ownership structure (foreign, management, block, dispersed, institutional).	(Ismail et al., 2018, Usman &Aliyu 2021, Buniamin et al., 2011, Gerged 2021, Shwairef et al., 2021, Osemene et al., 2021)
46. Participation in industry or trading groups.	(Ismail et al., 2018)
47. Audit committee indicators (size, variety and independence).	(Jeroh 2020, Moalla et al., 2021, Nurhayati et al., 2016, Kilincarslan et al., 2020)
48. The amount of debt.	(Moalla et al., 2021)
49. Earnings management.	(Moalla et al., 2021)