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The Impact of Environmental Social Governance Management for Improving Gas Firm Performance

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Abstract

Purpose: Gas firms often fall victim to disregarding the importance of sensitivity, thus leading to many unprecedented repercussions. To ensure that gas firms fully contribute to sustainability and ethical standards, environmental Social Governance (ESG) has been identified as the ideal framework. This study aims to investigate the impact of ESG management for improving gas firm performance. **Research design, data and methodology:** The prior qualitative literature analysis was to figure out adequate past research for the topic based on the major portal web databased, such as ‘Google Scholar’ and ‘Scopus’ to make sure resources’ credibility. **Results:** Gas firms are among the pertinent organizations vis-à-vis environmental destruction issues. Gas firms emit dangerous gases such as ethane, carbon dioxide and methane that are dangerous for the people and the environment. Thus, many pro-environmental conservation stakeholders have had rallying calls for such gas firms to mitigate environmental pollution intentionally. **Conclusions:** This study may be used to human resources in improving employee results elsewhere. Besides, it can be of the essence in improving the relationship between such firms and society. Therefore, the study findings are of greater significance and implications to multiple parties, users and stakeholders regarding the research topic and beyond the current scope of the study.

Keywords : Business Management, Environmental Social Governance (ESG), Firm Performance, Gas Corporation

JEL Classification Code: E30, M14, P47, C35

1. Introduction^a

The issue of the sensitivity of some investments to critical life elements has been a raging debate for years. Essentially it refers to a debate on how responsive some investments are to emerging and pertinent aspects and obligations as warranted by existing legal/ regulatory frameworks, conventionality or moral requirements. Two leading aspects that investments, firms or organizations ought to be responsive to are life's social and environmental

components (Gillan et al., 2021). Gas firms often fall victim to disregarding the importance of sensitivity to the above, thus leading to many unprecedented repercussions. To ensure that gas firms fully contribute to sustainability and ethical standards of the above components, Environmental Social Governance (ESG) has been identified as the ideal framework to enable the same.

Environmental Social Governance (ESG) refers to a framework of governance that stipulates some standards that stakeholders such as gas firms ought to attain to ensure the utmost safeguarding and improvement of the environmental

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and social elements they ought to (Amel-Zadeh & Serafeim, 2018). In other words, it improves the extent of sustainability, compliance and ethical standards of a given investment. Investments disregarding the ESG often suffer several blows, such as negative perception as less desirable and insensitive investments. Proactiveness in implementing ESG standards and guidelines often enhances an organization's compliance level.

ESG is a critical framework in the gas firm's performance and the general energy production sector. Gas firms deal with producing natural gases such as methane and carbon dioxide. Such firms often fall victim to accusations for their significant contribution to air pollution and associated effects such as climate change. Hence there is always significant pressure on firms to protect the environment for current and posterity. Therefore, the ESG comes in handy as a fundamental framework to help such firms improve their performance and compliance with such needs. It suffices to state that many gas firms have taken significant steps toward safeguarding the environment. For instance, some have invested significant resources in using natural carbon sinks, while others have rolled out entirely various carbon capture technologies. However, the gas firms' compliance with environmental safeguarding has not been perfect. As such, the thriving misses and problems on the same ought to be solved, and the ESG is viewed as the right solution to help gas improve their performances and compliance towards environmental protection (Friede et al., 2015).

The recent increases in scrutiny and focus on the intensity of gases have renewed the vigor and call for environmental protection. Stakeholders such as investors now seek ways of reducing footprints and intensity of gases such as carbon and methane. The above aims to reduce negative perceptions and blame them as the weak link in environmental protection (Dimson et al., 2020). Recent unfolding of several events, such as the rejoining of the US to the Paris Climate Agreement, have been the driving forces behind the renewed focus on improving gas firm performances vis-à-vis environmental protection. Therefore, many gas firms proactively offer unequivocal support to combating climate change and environmental pollution as guided by the ESG.

The social element is equally important as the environmental element in the ESG for gas firms. Despite the ostensibly less focus on the social element, getting it right regarding the social element is very critical for gas firms. Striking the right note on the social element is synonymous with benefits such as robust employee engagement and higher capital access, reinforcing a firm's operation license. Elsewhere it also enhances the reputation of an institution or gas firm in public. The latter comes with benefits such as attracting many clients and easing employees' attraction and

retention. The social aspect is increasingly becoming the future of gas and other firms' success. Such firms can utilize the social component to create more value and thrive in an increasingly competitive and dynamic environment. It also suffices to state that the social element takes care of society. It refers to a firm's responsibility to create and maintain the proper rapport with society (Pedersen et al., 2021). The above entails multiple aspects, such as sensitivity to society's needs, cordial relationships with society and corporate responsibility toward society's development and needs. It can also refer to correctly comprehending the client's needs and satisfying them as needed.

The environmental and social components are intertwined. It means they are related and linked to each other in several ways. For instance, people live in a society and environment. Besides, environmental pollution's effects significantly impact people and vice versa. It is, therefore, difficult to discuss one element in complete isolation. The above implies that a gas firm or any other firm that gets it right in its obligations and expectations to the above scores it highly. As such, there is a need to improve such firms' compliance with the two elements.

Gas firms are expected to articulate, create and drive critically thought and purpose-driven social and environmental narratives that contribute to the greater good using the ESG. Besides, such narratives and undertakings ought to attract investments and retain or acquire new talents (Van Duuren et al., 2016). The above collectively are essential in defining and characterizing a gas firm's performance improvement. Elsewhere it is crucial in driving sustainable growth. However, it suffices to note that a gas firm cannot achieve that without some set standards and guidelines. Otherwise, it would be acting in complete darkness without some guiding aspects or standards to compare with its quest to achieve such an improvement.

Despite identifying the ESG as the correct framework for achieving the above, how exactly the ESG management works to improve gas firms' performance is unclear. Many researchers have either overly focused on how gas firms can reduce gas emissions without addressing the social element or have focused on ESG management regarding other types of organizations other than gas firms. This paper, therefore, seeks to explain how gas firms can improve their performance using ESG management. This paper explores the role of gas firms in environmental protection and social relations as critical performance indicators in such firms. Environmental Social Governance provides a framework that enhances the sustainability, perception, growth and performance of firms and organizations vis-à-vis their processes and responsiveness to environmental and social elements in a given environment of operation or society.

The research findings would have several implications for several stakeholders. It would be instrumental to

policymakers and reviewers in crafting policies that would ensure greater compliance of gas firms with the ESG standards. Secondly, it would explain explicitly the importance and how gas firms can achieve the highest possible adherence to the ESG requirements and guidelines. It implies a more significant resource for the firms' management concerning environmental protection. The findings can be of significant use to human resources in improving employee results elsewhere. Besides, it can be of the essence in improving the relationship between such firms and society, i.e., the social element. Therefore, the study findings are of greater significance and implications to multiple parties, users and stakeholders regarding the research topic and beyond the current scope of the study.

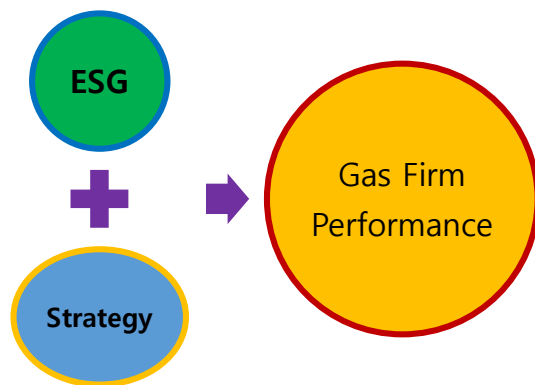


Figure 1: Study Framework

2. Literature Review

2.1. Introduction to Literature Review

This section reviews the current and past literature and scholarly works pertinent to the research topic. The aim is to find other writers and scholars and contributions to the topic. Elsewhere the review seeks to identify any gaps within the topic that need further research and to be addressed by existing and future researches.

2.1. Review of Literature

Escrig-Olmedo et al. (2019) define Environmental Social Governance (ESG) as a framework that guides and ensures compliance of organizations and firms towards environmental protection and enhancement of social relations. The writers describe the ESG as a set of standards that explicitly explain what firms such as gas firms out to attain to achieve reasonable or significant safeguard of the

environment. Equally, it stipulates the obligations of ESG towards achieving the best possible social responsibilities and expectations in a fast-evolving world.

On the other hand, Fatemi et al. (2018) define the ESG as a critical framework geared towards enhancing sustainability and ethical standards in investments. The writers explain the sustainability of the environment as an aftermath of proactiveness and deliberate efforts such as reduction in carbon emissions and effective use of carbon sinks by gas firms. Additionally, they explain ethical standards as norms and standards of the association and relating to society, with employees or between employees. The writers define the above as two critical elements that are interlinked. Per the writers, any gas firm that attains the highest standards in the above elements is perceived as sensitive and thus becomes desirable amongst the relevant stakeholders, such as the public.

Giese et al. (2019) explore the environmental impact of gas firms and the implications of the topic. The writers explain that gas firms often emit dangerous gases such as ethane and methane that have dire ramifications for the environment and lives of people. Therefore, some collective efforts, such as the Paris climate accord, remain significant driving forces of such firms to achieve the highest possible levels of environmental protection. According to the writers, gas firms have made considerable progress in achieving the highest possible standards of adherence to environmental protection standards. However, the target remains elusive and therefore needs to find the correct framework to help achieve the above. As such, the writers tout the ESG as the solution to the above.

Dorfleitner et al. (2015), in similar research, reveal that over a third of greenhouse gases is due to human emissions. The writers point out the US gas and oil industries as significant contributors to methane gas. As such, stakeholders concerned with environmental destruction have increased their scrutiny and pressure on such firms to rethink how to reduce such gases that are dangerous to the environment. To be compliant with environmental protection requirements, the writer explores how the ESG policies have recently gained prominence as investors and the public demand more actions to safeguard the environment.

Li et al. (2021) Interrogate the social element concerning the gas firms' operations and processes. According to the writer, gas firms cannot operate in a vacuum. Essentially the writers paint the picture of how such firms coexist with society. For instance, they employ people from society and thus need a good reputation. Besides, they need customers and clients from the same society and thus need the society. Broadstock et al. (2021) underscore the above by reiterating that the worth and perception of such firms remain paramount if they attract

and retain the best possible talents. On the same note, gas firms need to maintain the best possible rapport with society to care and sustain a market they desire. It implies that they must be sensitive to the social issues and responsibilities as firms.

Christensen et al. (2022), in similar research as Li et al. (2021), review the social element of the ESG framework. They explain how the social element has long been forgotten or ignored. Many stakeholders focus less on it than the environmental elements, oblivious of its repercussions. The writers explain that gas firms must improve their performance, which can only be achieved in multiple ways. They include having a solid team, having the best reputation and better access to capital. The above refers to the "social" aspects, i.e., the relationship between human elements. As such, the writers hail the ESG as the correct framework that sets the required standards and guidelines that would help gas firms to better their performance courtesy of addressing the above core sub-elements of the broader social element of a firm. Broadstock et al. (2021) support the above by explaining the role of the social element in perception improvements which transcends even the impact on investments and investors' decisions.

Christensen et al. (2022) also explain the importance of compliance with the ESG's social element. Per the writers, it enables a gas firm to create the required value and thrive robustly in the energy industry. Specifically, the writers advocate for such firms to articulate and achieve purpose-driven and critically thought social narratives that would ensure the achievement of various aspects. It would also be fundamental in attracting more investments and also keep talents; elsewhere, it is critical in fostering the sustainable growth of such firms.

Drempetic et al. (2020) explore the importance of ESG and its role in the sustainability and performance of multiple industries, firms and organizations. Their findings reveal that the recent focus on ESG is evidence of renewed focus and optimism that the recent climate change effects can be mitigated. The writers explain that ESG has two broad benefits: substantive gains and perceptions. The substantive gains, per the writers, are the quantitative achievements in reducing the negative consequences of various firms on the environment. For instance, it is about reducing the quantity of waste by a production company to align with the ESG standards. On the other hand, the qualitative achievements include improving the perception that such firms are sensitive, responsive and compliant with the ESG and the environment. The intertwining nature of the ESG's broader elements refers to how satisfying them makes a firm score high and thus benefit from various aspects such as increased investments and returns.

Alareeni and Hamdan (2020), in nearly similar research, gives some intriguing findings. They explain that

ESG is critical for the sustainability of the environment, society, and business. The writers specifically explore the role of ESG in evaluating the values of a firm. The purpose is to determine whether they align with the company's desires and commitments. The above gives the company worth and credibility perception amongst the various stakeholders. Lokuwaduge and Heenetigala (2017) add that ESG also considers governance aspects in addition to the above. They, therefore, expound that it is a critical framework for analyzing an organization's risks, practices and compliance.

Mervelskemper and Streit (2017) explore the fundamental sub-components of the framework vis-à-vis the social, environmental and governance aspects of the approach. Per the writers, the ESG explores and addresses environmental specs such as carbon-related emissions, energy usage and efficiency or wastes, pollution and how the different environmental opportunities are utilized. Additionally, it explores the use of natural resources available within a given environment. Buallay (2019), in similar research, explains that ESG framework addresses the sub-elements of workforce issues, people's rights and diversity issues in an organization. Elsewhere, it examines an organization's supply chain and related aspects.

Regarding the governance element, ESG interrogates sub-elements such as board diversity, how corporate ethics enforcement is done and how independent is the board and the management team. Elsewhere it explores the shareholders and their rights and how the organization avails them. Eliwa et al. (2021) pontificate that the above sub-elements provide insightful findings and details that are critical in the success of using the ESG framework for various firms.

Auer and Schuhmacher (2016) evaluate the ESG and its implications for various businesses, focusing on the energy and gas firms. Per the writers, ESG addresses pertinent issues for the organization's and its stakeholders' long-term benefit. The writers emphasize that it is essential to use the ESG approach because the risks around environmental and social issues are costly and could have long-term implications. For example, climate change poses a threat to the current generations and for posterity. Hence addressing them is impart for current generations and posterity. Therefore, the ESG approach is suitable for both current and future times.

Aouadi and Marsat (2018), in similar research, explains why ESG matters in their findings. They explain that the framework offers an approach to risk management that allows for sustainability and long-term growth. The writers particularly point out the championing for proactiveness and detailed evaluation of potential dangers and issues around climate change. Besides, it gives timely knowledge of risks and mitigation steps that could be adopted. It, therefore,

points to the responsiveness and proactiveness of the ESG coupled with its impacts across a widespread area that are important for any firm focused on bettering its performance in the above areas (Drempetic et al., 2020).

Verheyden et al. (2016) explore the popular ESG approaches and how various stakeholders can use them. They reveal the major strategies regarding the ESG approach and why they are essential. Firstly is the ESG integration strategy. It implies looking for various environmental, social and governance risks and identifying the right policies to achieve various ESG goals. Berg et al. (2022) agree with the above by explaining that the criterion involves assessing whether a firm's risk profile demands specific policy actions. The importance of ESG is that it even avails tailor-made solutions to various challenges that a firm could be experiencing. Therefore, it helps in improving the performance of such organizations or firms.

The second criterion, per Avramov et al. (2022), is the exclusionary assessment of firms. This criterion calls for rejecting or backlisting firms that fail to meet ESG standards. In other words, it calls for lawful actions against such firms, including revoking their practice license. The above could have far-reaching ramifications, including denting its image before the public and adverse effects on investments by the company. The third criterion is the inclusionary assessment, which includes only the firms meeting the ESG criteria and standards. It works similarly to the second criterion. Elsewhere there is the impactful screening that crafts certain portfolios. The above can be used to recommend positive changes regarding a firm's environmental and social aspects. Duque-Grisales and Aguilera-Caracuel (2021) explain that the above critical strategies of the ESG impact either positively or negatively on the existence and performance of a firm depending on the compliance of a firm with the ESG needs, requirements or standards. Essentially, they show the impacts of the ESG in multiple dimensions, such as perception in public, effect on investments, social engagements and commitment to sustainability enhancement by a firm.

3. Findings

The present author conduct the prior qualitative literature analysis to figure out adequate past research for the topic of this study. The investigation was conducted based on the major portal web databased, such as 'Google Scholar' and 'Scopus' to make sure prior resources' credibility (Woo & Kang, 2020; Nguyen et al., 2022; Han & Kang, 2020). Environment Social Governance (ESG) refers to a framework or set of standards used in mitigating risks and utilizing opportunities in environmental, social and governance elements to improve their operations, positive

perception and compliance with various set regulatory and moral standards (Dimson et al., 2020). In other words, it refers to standards used to enhance sustainability and adhere to ethical standards of safeguarding the environment and attaining the best possible social relations with other or among stakeholders. The ESG is among the products of the recent upturn in focus on the importance and responsibility of corporates and organizations in safeguarding the environment. Equally, it emanates from realizing the need for a strong social element for the future success of organizations.

Gas firms are among the pertinent organizations vis-à-vis environmental destruction issues. Gas firms emit dangerous gases such as ethane, carbon dioxide and methane that are dangerous for the people and the environment (Pedersen et al., 2021). Thus, many pro-environmental conservation stakeholders have had rallying calls for such gas firms to mitigate environmental pollution intentionally (Gibson Brandon et al., 2021). Further, the ESG has been touted as the proper framework to help gas firms to achieve the above and to improve in multi-dimensional ways.

The ESG framework offers a solution to improving the gas firm's performance in three broad areas: environmental matters, social and governance elements. Regarding the environmental elements, the ESG approach provides standards geared to improving environmental sustainability through compliance with measures to reduce pollution and improve the environment's health (Nirino et al., 2021). The framework interrogates environmental aspects such as carbon emissions and energy efficiency (Escrig-Olmedo et al., 2019). Additionally, it looks at pollution, waste and how natural resources are used in an organization (Van Duuren et al., 2016). The ESG sets some standards for any organization to achieve the above. For instance, the requirements by a firm to attain a 75% energy efficiency or more tap into a significant level of utilization of environmental opportunities (Wong et al., 2021).

The ESG uses different strategies in implementing and evaluating an organization's compliance with the above and many more environmental requirements. Approaches such as exclusionary screening assess a firm's compliance level and reject it if it fails to meet some set minimum threshold of the criteria (Fatemi et al., 2018). Elsewhere there is the inclusionary criterion that works similarly, with the differences being the inclusion of only those firms meeting the criteria (Zhao et al., 2018). Elsewhere the approach offers guidelines on how to achieve changes for a gas firm to comply with environmental standards and requirements. For instance, it offers guidelines on choosing, adopting and sustaining the usage of carbon sinks to reduce carbon emissions and their related effects.

The social factor or element is another critical element many gas firms overlook. As the name suggests, social refers to people and their interactions. The ESG provides a

framework and standards for interrogating the level of compliance of a firm with critical aspects regarding sub-components such as workforce, workers' rights, diversity of various forms in employment and how the supply chain is handled (Huang, 2021; Woo & Kang, 2021). For instance, there a requirement to have not more than 40% of a certain race is to ensure that a gas firm is diverse in employment. Additionally, the approach checks how a gas firm complies with human rights provisions. For example, it assesses the above by looking at the number of complaints regarding human rights abuse and their magnitudes over a given period, such as yearly (Dorfleitner et al., 2015). Elsewhere the ESG also offers standard guidelines on how to foster human interactions, which is critical in the motivation of employees when all the grievances of employees are appropriately handled (Kotsantonis et al., 2016). Hence, focusing on social issues results in a gas firm's better workforce, higher standards of human rights and top-notch diversity in a gas firm. The above results in better compliance with regulatory frameworks, enhanced perception of the firm to the public and the ability to attract customers and quality employees (Kang & Lee, 2021).

The social element is also critical for enhancing a good rapport with society. It improves how a gas firm addresses concerns, suggestions, inputs and general interactions with society (Broadstock et al., 2021). A timely, cordial and meaningful undertaking of the above further improves the firm's stature before the public. For instance, a gas firm can easily explain to the public measures it has put into reducing water and rain pollution around the area of existence, which could concern people's health, farming and general well-being (Cornell, 2021).

Governance is another critical element that ESG looks at and addresses in a firm. The approach evaluates and provides reliable guidelines for achieving robust organizational governance. Notably, the ESG approach evaluates aspects such as respecting shareholders' rights and how the management is compensated. Additionally, it looks into the organization's ethics and the extent of upholding them (Clementino & Perkins, 2021). Elsewhere it evaluates the board, its independence and how diverse it is to represent diverse people's interests. A higher rating of an organization in the above core areas results in good governance.

Similarly, an average rating implies average governance. Elsewhere a poor rating in the above has a more substantial influence on the poor governance of a gas firm. The above criteria, strategies and findings inform the course of action to be taken by a firm or to a firm by the regulators. A gas firm could change its approach, focus or policy change to improve the above areas. Elsewhere the authority, such as the government, could impose lawful actions such as fines, penalties and license revocation to compel such a firm to comply correctly with all the above (Christensen et al., 2022).

The stipulated mechanisms and approach details enable a gas firm to improve regarding the above courtesy of the ESG. The approach clearly defines what is to be done, how and specific steps to achieving the above. Besides, it stipulates the potential repercussions and penalties if the above is not achieved, further reinforcing a firm's ability and chances of compliance (Capelle-Blancard & Petit, 2019).

When a gas firm's management understands and complies with the above therefore are several effects on the business. It improves its perception of the public and employees. It can attract quality employees and enjoy a good rapport with the public, especially the customers. Equally, it makes such a firm attract investors and more investments since investors perceive it as desirable. Secondly, it improves the sustainability of the business and the environment. It is because the business remains compliant with the regulatory framework and contributes to safeguarding the environment (Birindelli et al., 2018). Elsewhere it puts such a firm to be part of more significant environmental conservation efforts. Additionally, it fosters better governance of an institution leading to success in operations and attaining the set objectives.

Alsayegh et al. (2020) explain how the elements of the ESG are interdependent. For instance, the social and environmental aspects are highly intertwined. People in society live in a given environment. Equally, the activities of such people directly affect the environment, either positively or negatively. It is, therefore, difficult to discuss one element in isolation. The ESG, therefore, provides a framework for evaluating the above elements and detailed aspects related to a gas firm's activities. Improving the elements enables such a firm to benefit from the above and many more aspects. Essentially it benefits the firm several folds and to multiple stakeholders. For instance, to the employees, the public and the authority (Arayssi et al., 2020). It underscores the importance of complying with the above to accrue the above benefits and many more such as sustainability of the environment, sensitivity to the people and respect for existing laws and regulations. A careful analysis and use of the correct strategy of implementation and analysis using the ESG would.

Table 1: The Result of the Literature Analysis

Key Description	Total 22 Past studies Found.
- ESG enhances sustainability and adhere to ethical standards of safeguarding the environment and attaining the best	Dimson et al. (2020), Pedersen et al. (2021), Gibson Brandon et al. (2021), Nirino et al. (2021), Escrig-Olmedo et al. (2019), Van Duuren et al. (2016), Wong et al. (2021), Fatemi et al. (2018), Zhao et al. (2018), Huang (2021), Woo and Kang (2021), Dorfleitner et al. (2015), Kotsantonis et al. (2016),

possible social relations with other or among stakeholders	Kang and Lee (2021), Broadstock et al. (2021), Cornell (2021), Clementino and Perkins (2021), Christensen et al. (2022), Capelle-Blancard and Petit (2019), Birindelli et al. (2018), Alsayegh et al. (2020), Arayssi et al. (2020)
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4. Implications

The study findings have far and wide-reaching implications for multiple stakeholders and aspects. Firstly, it is critical for the management in good governance and administration of any gas firm. The ESG provides explicit details on what the management is expected to attain regarding the main areas of environmental conservation, achieving good governance and attaining robust social relations (Birindelli et al., 2018). It is similar to a guide that outlines the expectations, requirements, how to achieve and possible ramifications. Essentially it offers insightful details that managers use to achieve the best possible in these areas. For example, the management can use the ESG to understand that they need to check on the areas of carbon emissions, pollution or waste and how to tap into environmental opportunities (Alsayegh et al., 2020). Specifically, it can evaluate the set minimum levels of environmental pollution and strive to adhere to them. It is critical in ensuring compliance and enhancing an organization's perception of being sensitive to the environment and its concerns.

Governance is a critical area regarding management duties. Many managerial personnel would find the ESG helpful in guiding them on critical areas requiring focus to achieve the best possible governance. For instance, they can examine shareholder rights issues. Alternatively, they can focus on ensuring that the corporate ethics and values are robust and relevant to the organization's expectations. Elsewhere courtesy of the ESG, the management can better approach board independence and diversity issues to have top-notch governance of a gas firm (Raimo et al., 2021). Good governance can steer a gas firm toward achieving its objectives and compliance with environmental conservation requirements and related regulations (Reber et al., 2022).

Secondly, the findings would help to significantly reduce the effects of environmental pollution. The ESG provides an approach for gas firms to evaluate, comply with and constantly analyze their position regarding environmental conservation. Keeping pollution or waste levels in check constantly is essential for reducing environmental destruction (Ashwin Kumar et al., 2016). Equally, reducing carbon emissions and tapping into environmental opportunities further improves compliance

with regulations and the environment. The above actions by gas firms would reduce pollution significantly and increase the sustainability of their operations and the environment (Engelhardt et al., 2021).

Findings on ESG and its impacts on gas firms benefit policymakers. The findings of the compliance and non-compliance levels help to rethink the right strategy. For instance, it informs of the effectiveness of some reinforcement policies by the existing authorities. Additionally, it can inform of the need to increase the compliance threshold by reviewing the existing policies to achieve even better compliance levels to environmental protection by the various gas firms (Capelle-Blancard & Petit, 2019).

Elsewhere the findings of the topic have a significant implication for achieving robust governance in gas firm institutions. The governance element of the ESG outlines various aspects that need to be looked into, such as shareholders and board issues (Wong & Zhang, 2022). Additionally, the social issues look at aspects such as employee engagement and how to achieve success courtesy of better handling of employees and society—combining the above results in robust governance of such institutions and hence formidable gas firms, operations and profitability (Arayssi et al., 2020).

The ESG is also critical in fostering a better firm–society relationship. A sensitive firm would address the public's concerns in the best way possible and on time. Hence it helps in ensuring a good co-existence and rapport with the public. In turn, it leads to advantages such as an increased customer base, harmonious co-existence and better perception of the firm by the public and all stakeholders such as investors.

5. Limitations of the Research

Despite taking time to research the above details, the following limitations are acknowledged concerning this paper. Firstly, limited resources and scholarly works were available on the specific topic of interest. Most resources talked about other issues with little relevance to the topic. However, the available resources and scholarly works were used with a thorough evaluation to arrive at the current findings.

Second, there were biased views and lots of personal information and ideas in some resources used. The above threatened the credibility of some sources that were used. However, this research carefully separated such from credible findings and relied upon the latter only.

Elsewhere there were time constraints for more research. This paper admits that the allocated time was deemed sufficient but proved slightly little with the need to

research and evaluate bulks of information from various sources. Nevertheless, the available time was well utilized to come up with these research findings and conclusions herein.

6. Limitations of the Research

The ESG is one of the most influential frameworks in improving gas firms' performance, especially regarding the three main elements of the environment, social and governance aspects. It is a framework geared at improving the sustainability of the environment and the organization. Besides, it improves fidelity to an organization's improvement and safeguarding of the environment.

The ESG achieves the above by interrogating a firm's responsiveness and responsibility towards the sub-components of the above three components. They include pollution management, carbon emissions, energy efficiency levels, human rights and workforce treatment. Besides, it also checks and guides on issues such as the rights of shareholders and how an organization's ethics are upheld. The above is critical in ensuring compliance of an organization to the above which translates to many benefits. The benefits include compliance with the regulatory framework, better employee management and motivation, improved public perception of the organization and robust co-existence between a firm and society. The above is critical in influencing the success of the business.

The ESG is viewed as the solution to the current and future issues revolving around the above elements. It is prudent for the stakeholders, such as firm management, to properly understand the framework and use it in the best way possible to benefit from its numerous benefits. Indeed, it is a game changer that many hail as fundamental in improving a great deal the performance of gas firms, especially vis-à-vis the three elements or areas highlighted and discussed above.

References

- Alareeni, B. A., & Hamdan, A. (2020). ESG impact on the performance of US S&P 500-listed firms. *Corporate Governance: The International Journal of Business in Society*, 20(7), 1409-1428.
- Alsayegh, M. F., Abdul Rahman, R., & Homayoun, S. (2020). Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure. *Sustainability*, 12(9), 3910.
- Amel-Zadeh, A., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal*, 74(3), 87-103.
- Aouadi, A., & Marsat, S. (2018). Do ESG controversies matter for firm value? Evidence from international data. *Journal of Business Ethics*, 151, 1027-1047.
- Arayssi, M., Jizi, M., & Tabaja, H. H. (2020). The impact of board composition on the level of ESG disclosures in GCC countries. *Sustainability Accounting, Management and Policy Journal*, 11(1), 137-161.
- Ashwin Kumar, N. C., Smith, C., Badis, L., Wang, N., Ambrosy, P., & Tavares, R. (2016). ESG factors and risk-adjusted performance: A new quantitative model. *Journal of Sustainable Finance & Investment*, 6(4), 292-300.
- Auer, B. R., & Schuhmacher, F. (2016). Do socially (ir) responsible investments pay off? New evidence from international ESG data. *The Quarterly Review of Economics and Finance*, 59, 51-62.
- Avramov, D., Cheng, S., Lioui, A., & Tarelli, A. (2022). Sustainable investing with ESG rating uncertainty. *Journal of Financial Economics*, 145(2), 642-664.
- Berg, F., Koelbel, J. F., & Rigobon, R. (2022). Aggregate confusion: The divergence of ESG ratings. *Review of Finance*, 26(6), 1315-1344.
- Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. *Sustainability*, 10(12), 4699.
- Broadstock, D. C., Chan, K., Cheng, L. T., & Wang, X. (2021). The role of ESG performance during the financial crisis: Evidence from COVID-19 in China. *Finance research letters*, 38, 101716.
- Buallay, A. (2019). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality: An International Journal*, 30(1), 98-115.
- Capelle-Blancard, G., & Petit, A. (2019). Every little helps? ESG news and stock market reaction. *Journal of Business Ethics*, 157, 543-565.
- Christensen, D. M., Serafeim, G., & Sikochi, A. (2022). Why is corporate virtue in the eye of the beholder? The case of ESG ratings. *The Accounting Review*, 97(1), 147-175.
- Clementino, E., & Perkins, R. (2021). How do companies respond to environmental, social and governance (ESG) ratings? Evidence from Italy. *Journal of Business Ethics*, 171, 379-397.
- Cornell, B. (2021). ESG preferences, risk and return. *European Financial Management*, 27(1), 12-19.
- Dimson, E., Marsh, P., & Staunton, M. (2020). Divergent ESG ratings. *The Journal of Portfolio Management*, 47(1), 75-87.
- Dorfleitner, G., Halbritter, G., & Nguyen, M. (2015). Measuring the level and risk of corporate responsibility—An empirical comparison of different ESG rating approaches. *Journal of Asset Management*, 16, 450-466.
- Drempetic, S., Klein, C., & Zwergel, B. (2020). The influence of firm size on the ESG score: Corporate sustainability ratings under review. *Journal of Business Ethics*, 167, 333-360.
- Duque-Grisales, E., & Aguilera-Caracuel, J. (2021). Environmental, social and governance (ESG) scores and financial performance of multinationals: Moderating effects of international geographic diversification and financial slack. *Journal of Business Ethics*, 168(2), 315-334.
- Eliwa, Y., Aboud, A., & Saleh, A. (2021). ESG practices and the cost of debt: Evidence from EU countries. *Critical*

- Perspectives on Accounting*, 79, 102097.
- Engelhardt, N., Ekkenga, J., & Posch, P. (2021). ESG ratings and stock performance during the COVID-19 crisis. *Sustainability*, 13(13), 7133.
- Escrig-Olmedo, E., Fernández-Izquierdo, M. Á., Ferrero-Ferrero, I., Rivera-Lirio, J. M., & Muñoz-Torres, M. J. (2019). Rating the raters: Evaluating how ESG rating agencies integrate sustainability principles. *Sustainability*, 11(3), 915.
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global finance journal*, 38, 45-64.
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of sustainable finance & investment*, 5(4), 210-233.
- Gibson Brandon, R., Krueger, P., & Schmidt, P. S. (2021). ESG rating disagreement and stock returns. *Financial Analysts Journal*, 77(4), 104-127.
- Giese, G., Lee, L. E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG investing: How ESG affects equity valuation, risk, and performance. *The Journal of Portfolio Management*, 45(5), 69-83.
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66, 101889.
- Han, S., & Kang, E. (2020). The marketing strategy to stimulate customer's interest in art-gallery business plan. *Journal of Distribution Science*, 18(8), 47-54.
- Huang, D. Z. (2021). Environmental, social and governance (ESG) activity and firm performance: A review and consolidation. *Accounting & Finance*, 61(1), 335-360.
- Kang, E., & Lee, H. (2021). Employee compensation strategy as sustainable competitive advantage for HR education practitioners. *Sustainability*, 13(3), 1049.
- Kotsantonis, S., Pinney, C., & Serafeim, G. (2016). ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance*, 28(2), 10-16.
- Li, T. T., Wang, K., Sueyoshi, T., & Wang, D. D. (2021). ESG: Research progress and prospects. *Sustainability*, 13(21), 11663.
- Lokuwaduge, C. S. D. S., & Heenetigala, K. (2017). Integrating environmental, social and governance (ESG) disclosure for sustainable development: An Australian study. *Business Strategy and the Environment*, 26(4), 438-450.
- Mervelskemper, L., & Streit, D. (2017). Enhancing market valuation of ESG performance: is integrated reporting keeping its promise? *Business Strategy and the Environment*, 26(4), 536-549.
- Nguyen, L. T., Nantharath, P., & Kang, E. (2022). The sustainable care model for an ageing population in Vietnam: Evidence from a systematic review. *Sustainability*, 14(5), 2518.
- Nirino, N., Santoro, G., Miglietta, N., & Quaglia, R. (2021). Corporate controversies and company's financial performance: Exploring the moderating role of ESG practices. *Technological Forecasting and Social Change*, 162, 120341.
- Pedersen, L. H., Fitzgibbons, S., & Pomorski, L. (2021). Responsible investing: The ESG-efficient frontier. *Journal of Financial Economics*, 142(2), 572-597.
- Raimo, N., Caragnano, A., Zito, M., Vitolla, F., & Mariani, M. (2021). Extending the benefits of ESG disclosure: The effect on the cost of debt financing. *Corporate Social Responsibility and Environmental Management*, 28(4), 1412-1421.
- Reber, B., Gold, A., & Gold, S. (2022). ESG disclosure and idiosyncratic risk in initial public offerings. *Journal of Business Ethics*, 179(3), 867-886.
- Van Duuren, E., Plantinga, A., & Scholtens, B. (2016). ESG integration and the investment management process: Fundamental investing reinvented. *Journal of Business Ethics*, 138, 525-533.
- Verheyden, T., Eccles, R. G., & Feiner, A. (2016). ESG for all? The impact of ESG screening on return, risk, and diversification. *Journal of Applied Corporate Finance*, 28(2), 47-55.
- Wong, J. B., & Zhang, Q. (2022). Stock market reactions to adverse ESG disclosure via media channels. *The British Accounting Review*, 54(1), 101045.
- Wong, W. C., Batten, J. A., Mohamed-Arshad, S. B., Nordin, S., & Adzis, A. A. (2021). Does ESG certification add firm value? *Finance Research Letters*, 39, 101593.
- Woo, E. J., & Kang, E. (2021). Employee environmental capability and its relationship with corporate culture. *Sustainability*, 13(16), 8684.
- Woo, E. J., & Kang, E. (2020). Environmental issues as an indispensable aspect of sustainable leadership. *Sustainability*, 12(17), 7014.
- Zhao, C., Guo, Y., Yuan, J., Wu, M., Li, D., Zhou, Y., & Kang, J. (2018). ESG and corporate financial performance: Empirical evidence from China's listed power generation companies. *Sustainability*, 10(8), 2607.