

# CORPORATE GOVERNANCE IMPLEMENTATION IN NIGERIA'S OIL AND GAS SECTOR: INVESTIGATING THE INFLUENCE OF REGULATORY COMPLIANCE ON ENVIRONMENTAL SUSTAINABILITY

**Oladele Kehinde, Covenant University**  
**Kehinde Segun, Covenant University**  
**Ayodotun Ibidunni, Covenant University**  
**Busola Kehinde, Covenant University**

## ABSTRACT

*The need for Nigerian energy firms to maintain (oil and gas industry) regulatory compliance cannot be over emphasized, considering they account for highest amount of gas emissions to the environment. Yet, the existing studies have not sufficiently explained the relationship between regulatory compliance and environmental sustainability roles of oil and gas firms in Nigeria. This Research work examines the influence of regulatory compliance on environmental sustainability of oil and gas companies in Nigeria. This study used both primary and secondary data, and distributed questionnaires to employees of selected oil and gas firms. Findings based on the analysis that Regulatory compliance does have a significant effect on environmental sustainability of oil and gas firms. It was then concluded that stakeholders and oil and gas firms have a huge role to play in enforcing regulatory compliance in their respective firms. It was then recommended that solutions to prevent environmental disasters lies not on more regulations, but rather that the existing regulations be better enforced and implemented.*

**Keyword:** Regulatory Compliance, Environment, Sustainability, Energy, Oil and Gas.

## INTRODUCTION

The oil exploration and production activities of Foreign and local companies in Nigeria are guided by a few regulations. Corporate governance can be described as a framework through which firms are coordinated and controlled for long haul results (Cortese, 2010). It offers a structure to monitor the firms performance. This variability is due to the diversified cultures, differences in company structures and competitive conditions (Idemudia, 2014). Corporate governance debates have with time shifted towards sustainability, popularly articulated through the three E's, i.e., Environmental Performance, Economic Performance and, Social Equity (Rogers & Hudson, 2011). The accompanying concerns have resulted in changes in regulation, and more attention on investors and customer perception (e.g, towards the so-called green products & services, renewable energy and impact investment (Huang & Watson, 2015).

In developing countries, sustainability reporting is gradually emerging (Husted & Sousa-Filho, 2017). The contextual settings of Nigeria, like many other developing countries, are distinguished by a distinctive socio-economic and political system. One major reason for this is that the oil and gas sector in Nigeria accounts for about 75% of its annual revenue and due to this fact account for a major proportion of the country's environmental challenges. Hence the

strategic position of the oil and gas sector in the economy makes it important to examine its sustainability.

All firms exist for the sole purpose of making profit, their profitability rests in the perception of their Operation in the minds of their various stakeholders (Isaksson, 2012; Porter & Kramer, 2011). If they are to effectively manage their risk, organizations must address regulatory compliance requirements with sustainability in mind. After independence, the Nigerian government has seemed to have taken some practical initiatives to boost oil and gas revenue. To achieve this, through various petroleum laws, the government has laid a strong foundation for the growth of oil and gas businesses in the country, encouraging the granting of licenses to both indigenous and foreign oil and gas companies. Oil and natural gas development and consumption have likely brought out both the best and worst of Nigeria's modern culture for almost four decades. It has significantly contributed to the economic growth of the country and, on the other hand, has had a profound adverse effect on the natural environment and has generated a host of other socio-economic problems, including human rights issues. The growing awareness of climate change as a problem of rising global concerns has received significant attention to the effects of the gas flaring of Nigeria in greenhouse gas build-up, while the socio-economic aspects of petroleum E & P have been highlighted by incessant community conflicts. In Nigeria, gas flaring measured by the World Bank was reported at over 35 million tons of carbon dioxide annually (Motilewa et. al 2018). The task of reconciling the demands of environmental protection, social justice, and economic development in the light of the deep dilemma facing the country, has become a challenge facing the entire spectrum of Nigerian society, from the government and its agencies, the oil industry, local communities and the entire country. Nevertheless, the oil and gas industry is witnessing a new age of legal regulation of the operations of oil and gas, and goods are increasingly being subject to local and foreign laws and regulations, as well as pressure from civil society.

The authority to set appropriate standards, to monitor regulated firms for compliance, to take measures to ensure implementation, and to repair damages when the enforcement mechanism fails, is fundamental to effective regulation in any industry. Government agencies share responsibility for the establishment of requirements that must be met by oil and gas firms. These bodies also audit or demand self-reporting of facilities, and set fines for violations. Based on the gravity of the breach, financial penalties vary and are often adjustable. Oil and gas companies could face cost overruns, production delays, physical security threats to company assets as a result of malicious activity and unintended loss of information due to the risk of non-compliance. Companies need to reconsider their approach to regulatory compliance with the cost of noncompliance and its impact on the business. It should be noted that in order to enhance a clean environment in the country, the Nigerian government has made various environmental legislations to manage and control the operations of oil and gas firms in the country.

### **Statement of the Problem**

The main objective of every Organization is to turn-out a profit by all means at all cost, but to what extent can the Organization keep it up, especially those that breach legal and ethical standards? The oil and gas industry has been described as a controversial sector in Nigeria for the past decades (Umukoro, 2009). This is in part due to the fact that there has been continued widespread participation in unprincipled business activities that have negative ethical, environmental and social implications (Du & Vieira, 2012). Naturally, all corporate firm's are

expected to comply with government laws and regulations and codes in order to enable the smooth running of a company, corporate governance codes included. Research shows that compliance levels in firm's has increased since the governance codes were introduced In the country across all industries, yet it appears that the passion in complying with corporate governance codes is still lacking (Raji & Abejide, 2014). The need for Nigerian energy firms to maintain Oil and gas industry regulatory compliance cannot be over emphasized, considering they account for highest amount of gas emissions to the environment (Motilewa et al., 2018). However, the existing studies have not sufficiently explained the relationship between regulatory compliance and environmental sustainability roles of oil and gas firms in Nigeria. The importance of shedding empirical explanations to the regulatory compliance of Nigerian oil and gas firms is critical considering that Nigeria is the seventh largest producer of crude product in the world and occupies a strategic position as a fast growing emerging economy. Firms desire to have a favorable corporate image in an industry as controversial as that of the oil and gas is very important. In the modern times of social media marketing, this is more important, where one bad move like greenhouse emissions, oil spillage, community unrest etc. can mar the reputation of a company, and even a slight decrease in brand value can be very costly. Customers, and investors are naturally attracted to companies that demonstrate full corporate governance compliance, and perceive them as doing the right thing. In a world whereby investors are moving towards (impact investing), the need for regulatory compliance amongst companies cannot be over emphasized. In line with this, this study aims to examine how a firm's Regulatory compliance can affect its Environmental performance.

## LITERATURE REVIEW

### Regulatory Compliance

Supervisory bodies, together with securities and exchange commissions, stock exchange authorities, and corporate affairs commissions, all have significant tasks to carry out in upholding effective compliance through legislative regulation. Udayasankar & Das (2007) contend that these can be used as rules for corporate governance in general. According to the statute, an enterprise is generally subject to the provision by which the jurisdiction's case law has already been implemented (Peretti & Igalens, 2015). ). A lot of studies on corporate governance has majorly centered around regulation fundamentally since the 1992 Cadbury Code published in the UK. In the aftermath of the 1990s financial crisis, the International Monetary Fund (IMF) and the World Bank placed emphasis on the recognition of international codes and standards of best practices which can play a huge role in fortifying national and global oil and gas and financial structures. Consequently, they called for the preparation of Reports on the Observation of Standards and Codes (ROSC) papers, which comprise an evaluation of how much a country espied internationally accepted codes and standards. The ROSC (2004) report for Nigeria emphasized some difficulties: differential financial related reporting prerequisites for enormous and little organizations; institutional shortcomings in compliance, regulation, and implementation; inadequate adherence and compliance with International Standards on Auditing (ISA) and International Accounting Standards (IAS); and lack of sturdy local based codes and standards, and a host of others. The ROSC report went on to make multiple policy suggestions. For instance, it emphasized the creation for an independent agency or body, (for example, the Financial Reporting Council FRC, in the UK) to manage, observe and put into effect international codes and standards of the (ISA and IAS).

Corporate governance regulatory practices copied by Nigeria from different countries or those recommended to her by several agencies like, the IMF and the World Bank may be unable to handle some vague regulatory problems in the nation. In setting up effective regulatory components in order to achieve a better corporate governance. The focal point in Nigeria must be to ensure that the defining features are, (for example, rule of law, transparency, responsibility, constitutional property rights and fairness) of a market economy in a fair and democratic society are encouraged (Mensah et al., 2003).

### **Environmental Sustainability**

Sustainability is a holistic approach which takes social, economic and environmental dimensions into account, recognizing that in order to find sustainable prosperity, all must be considered together. The versatility of this concept enables players from various sectors of the economy to center their priorities, expectations and ambitions on sustainable development issues. The Sustainable Development Goals form the basis for achieving sustainability for many organizations. The second component of a sustainable organization is its contribution to the protection of environmental sustainability, generally known as the effect on the environment. There are numerous examples of businesses decreasing environmental costs while enhancing company efficiency and profitability at the same time. Instead of concentrating on the triple bottom line emphasis of a sustainable business, a business that focuses solely on its environmental effects is referred to as a green business. Internally, a company's environmental effect also relates to activities related to natural resource use, waste, toxicity and emissions.

### **Regulatory Compliance and Environmental Sustainability**

The bigger environments under which companies operate are emphatically subject to corporate governance; these comprise of the administrative environment, for example, investor security laws (La Porta et al., 1998); the enforcement and efficient abilities of the judiciary; likewise, the overall support for business (Klapper & Love, 2002). Many federal agencies require companies in the oil and gas industry to maintain detailed reports of their operations accessible to the relevant regulatory bodies. These bodies also perform on-site inspections, which can include checks of documents as well as identification of leakages and verification of compliance with other standards. Although strong federal and state enforcement mechanisms are vital to ensure compliance with regulatory programs, there exist the believe that oil and gas operators and the general public could play crucial roles in ensuring community and environmental security. In the twenty-first century, the environmental, social, and ethical aspects of the business sector have become important (Rahdari & Rostamy, 2015). Consumption and urbanization are experiencing an unprecedented rate of growth and corporations have a crucial role to play in the transition to sustainability. A sustainable planet has been proposed in its complete conceptualization to provide adequate access to resources for several billion people to fulfill their different socio-economic and environmental needs, likewise as for several million other species to co-exist and survive with humans, as both humans and nature continue to evolve (Cortese, 2010). Green building is another commonly used term for environmental effects. Green building among companies that want to be more sustainable is an increasingly growing trend. Green building relates to reducing the environmental effect of the building's design, development, and continued life of the building. There's No uncertainty that, managing corporate governance may

vary starting with one nation onto the other, Seeing as countries encounter issues that may require different or specific ways or approaches in dealing with them. In addition to this, many sustainable companies develop a green procurement policy or environmentally favored buying policy to offer preferential purchases to goods and services that are most environmentally friendly.

## METHODOLOGY

This study made use of primary and secondary data to enhance greater validity of the research by ensuring that there were no gaps in the information or data collected. The population of this research study consists of employees in the top 5 largest energy listed firms in Nigeria based on NSE market capitalization, which are (11 PLC, Ardova PLC, Conoil PLC, Oando PLC, & Total PLC). The selected firm's have operations that cuts across both upstream and downstream of the Nigerian oil and gas sector. A total of 342 questionnaires were distributed, and only 326 were retrieved and analyzed for this study. Across the selected firms, male respondents were 154 (47.2%), while female were 172 (52.8%). Hence indicating that more female respondents participated in the study than male. The distribution of Age was as follows, respondents aged 20 and below was 18 (5.5%), respondents 21-30 were 101 (31%), respondents 31-40 were 87 (26.7%), and respondents 51 and above we're 44 (13.5%). Respondents from the age range 21-30 had the highest number of responses (101) representing (31%) of the total age distribution while respondents from the age range 20 and below had the lowest number of responses (18) representing (5.5%) of the total age distribution.

## Analysis and Discussion

The exact hypotheses which this study tested are:

*H01: A firm's Regulatory compliance does not significantly influence it's environmental performance in the oil and gas sector.*

*HA1: A firm's Regulatory compliance significantly influence it's environmental performance in the oil and gas sector.*

In order to test the hypothesis a linear regression analysis was carried out and the results are as presented in Table 1 below.

<b>Model Summary: Hypothesis One</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R square Change	F Change	df 1	df2	Sig.F Change
1	0.799 <sup>a</sup>	0.639	0.638	0.30221	0.639	573.813	1	324	0.000

a. Predictors: (Constant), Regulatory Compliance

Source: Field Survey Result (2020)

The test was to evaluate the effects of Regulatory compliance on Environmental performance was tested. To find out the degree of variance of the dependent variable (Environmental performance) which can be predicted by the independent variable (Regulatory compliance), the R-Square value was determined. The analysis revealed that regulatory compliance accounted for 63.9% variance in organizational environmental performance ( $R^2 = .639$ ,  $F(1, 324) = 573.813$ ,  $p < .05$ ). The significance of the F-change was evaluated and, as shown in table 2 below, it was significant (0.000):

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.408	1	52.408	573.813	0.000 <sup>b</sup>
	Residual	29.592	324	0.091		
	Total	82.000	325			
a. Dependent Variable: Environmental Performance						
b. Predictors: (Constant), Regulatory Compliance						
Source: Field Survey Result (2020)						

The Table 2 shows the results of the model. The model showed the effect of Regulatory compliance on Environmental performance. The F-value is calculated as the Mean Square Regression (52.408) divided by the Mean Square Residual (0.091), yielding  $F=114.352$ . From this results in the above model table shows that the model is statistically significant (Sig =.000). Since the results of the Anova in table 1 show a significant level of 0.000, the alternate hypothesis which states that Regulatory compliance has an effect on Environmental performance is therefore accepted, while the null hypothesis stating that Regulatory compliance does not affect Environmental performance is rejected.

The Table 3 below displays the independent 's contribution to the dependent variable 's variance and its significance levels.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	0.505	0.100	0.799	5.063	0.000	0.799	0.799	0.799	1.000	1.000
	Regulatory Compliance	0.530	0.050		10.694	0.000					
a. Dependent Variable: Environmental Performance											

Based on the results in model 2 in table 1, the table above revealed the contributions of Regulatory compliance on Environmental performance of the organizations and their levels of significance. (Regulatory compliance;  $\beta = .530$ ;  $t=7.99$ ;  $p<0.05$ ).

## Decision

The significance levels which are the P-value of 0.00 is less than 0.05 and the F change (573.813) is high and significant at 0.000. Based above results, it was justified that the alternative hypothesis of Regulatory compliance has an effect on Environmental performance

should be accepted while the null hypothesis which states that Regulatory compliance does not have an effect on Environmental performance should be rejected. It can therefore be concluded that Regulatory compliance has an effect on Environmental performance

### **Discussion of Findings**

The hypothesis which was assumed that there is no significant relationship between regulatory compliance and Environmental performance was rejected, while the alternate hypothesis which stated that there is a significant relationship between regulatory compliance and Environmental performance was accepted based on the statistical evidence provided in this study. Findings from this study has shown that there's No doubt that, regulating corporate governance and sustainability practices may differ from one country to another given that countries face issues which may require specific approaches to address them (Danciu, 2013). Findings from this study is in line with (Early, 2017) who stated that the solutions to prevent environmental disasters do not favor more regulations, but rather that the existing regulations be better enforced and implemented. The success of institutions rest not only with enforcement procedures of regulators, but also on the decisions and conduct of all stakeholders.

It can then be concluded that a higher level of regulatory compliance on the part of the oil and gas firms would lead to better management of the environment. Which in turn means that regulatory compliance has an effect on Environmental performance

### **IMPLICATION AND CONCLUSION**

This study focused on assessing the impact of regulatory compliance on the environmental sustainability of listed oil and gas firms in Nigeria. This study also pointed out that oil and gas firms in Nigeria have shown various commitment to promoting sustainable practices in their operations in recent years. They have created policies that help protect the environment and reduce pollution and oil spillage. Also they have shown more transparency in their operations in their actives, and commitment to renewable energy. This has led to an increase in investors relations and confidence, and better partnership with the host communities and government. At the same times external agencies who fight for more climate change argue that more can still be done especially when it comes to gas flaring. Based on the findings, the study concludes that regulatory compliance influences environmental sustainability of listed oil and gas firms. As seen from various studies, managing corporate governance tend to vary from one nation onto the other, given the issues faced by nations which may inversely necessitate different ways in dealing with them. It is thus recommended that the solutions to promoting better environmental sustainability, preventing ecological and environmental disaster do not favor more regulations, but rather that the existing regulations be better enforced.

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## REFERENCES

- Albertini, E., (2016) Does environmental management improve financial performance? A meta analytical review. *Journal of Organization and Environment*. (26), 431–45.
- Al-Tuwaiji, A., Christensen, T., & Hughes, E., (2004). The relations among environmental disclosure, environmental performance, and economic performance: A simultaneous equations approach. *Accounting, Organizations and Society*, 29(56), 447–471.
- Ambituuni, A., Amezaga, J., & Emeseh, E., (2014). Analysis of safety and environmental regulations for downstream petroleum industry operations in Nigeria: problems and prospects. *Environmental Development*. (9), 43–60.
- Amid, A. (2008). The effect of multiple regulatory regimes on the Nigerian petroleum industry. *International in-house counsel journal*, 1(2), 1-11
- Aniefiok E., Usenobong F., Margaret U., Idongesit O., & Udo J. (2016). Petroleum Industry in Nigeria: Environmental Issues, National Environmental Legislation and Implementation of International Environmental Law. *American Journal of Environmental Protection*, 4(1), 21-37
- Cortese, A. (2010). *Vision of sustainability in 2050*. Washington, DC: Second Nature press.
- Du, S., & Vieira, E., (2012). Striving for legitimacy through corporate social responsibility: Insights from oil companies. *Journal of Business Ethics*, 110(4): 413-427.
- Eghosa, O. E., (2016). Public Regulation of the oil and gas industry in Nigeria: An Evaluation. *Annual survey of international and comparative law*. 21 (1): 1-49
- Elenwo, E., Akankali, J. (2014) Environmental Policies and Strategies in Nigeria Oil and Gas Industry: Gains, Challenges and Prospects. *Natural Resources*, 5, 884-896
- Husted, B., & Sousa-Filho, J. (2017). The impact of sustainability governance, country stakeholder orientation, and country risk on environmental, social, and governance performance. *Journal of Clean Production* (155), 93-102.
- Ibidunni, A.S., Kehinde, O.J., Ibidunni, O.M., Olokundun, A.M., Falola, H.O., Salau, O.P., & Peter, F. (2018). Data on the relationships between financing strategies, entrepreneurial competencies and business growth of technology-based SMEs in Nigeria. Data in brief, 18, 988-991.
- Ibidunni A.S., Kehinde O.J., Ibidunni, O.M., Olokundun, A.M., Falola, H.O., Salau, O.P., Borishade, T.T., & Peter F. (2018). Data on the relationships between financing strategies, entrepreneurial competencies and business growth of technology-based SMEs in Nigeria, 18, 988-91.
- Ibidunni, A.S., Ufua, D.E., Okorie, U.E., & Kehinde, B.E. (2019). Labour productivity in agricultural sector of Sub-Saharan Africa (2010–2017): A data envelopment and panel regression approach. *African Journal of Economic and Management Studies*, 11(2), 207-232.
- Idemudia, U., (2014). Corporate social responsibility and development in Africa: issues and possibilities. *Geography Compass* 8(7), 421-435
- Hussain, N. Rigoni, U., & Oriji, R. (2018). Corporate governance and sustainability performance: analysis of triple bottom line performance. *Journal of Business Ethics* (2), 411-432.
- Kehinde, B., Ogunnaike, O., Adegbuyi, O., Ibidunni, S., (2020). Analysis of inventory management practices for optimal economic performance using Abc and Eoq Models. *International Journal of Management (IJM) - Scopus Indexed*, 11(7), 835-848.
- Klettner, A., (2017). Corporate Governance regulation. The changing roles and responsibilities of boards of directors, Rutledge press, New York.
- Mallin, C. Michelon, G., & Raggi, D. (2013). Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure? *Journal of Business Ethics* (114), 29-43.
- Melville, N., (2013), Information Systems Innovation for Environmental Sustainability. *MIS Q.* (34), 1–21.
- Motilewa, D., Ibidunni, S., Worlu, R., Moses, C., & Agboola, M., (2018). Effects of supply chain improvement on operational competency: Evidence from engineering employees of oil and gas firms in Nigeria. *International Journal of Mechanical Engineering and Technology*, 9(12), 974–980.
- Motilewa, D., & Worlu, R., (2015). Corporate social responsibility as a tool for gaining competitive advantage. *International Journal of Multidisciplinary Research and Review*, 1(1) 16-24.
- Motilewa, D., Ibidunni, A., Worlu, R., Moses, C., & Dirusu, A., (2018) Influence of ecological protection on the corporate image of oil and gas firms in Nigeria. *Business: Theory and Practice*. (20), 19–24



- Ogunnaike, O., Bishop, S., Akinsulire, H., Kehinde, B., & Oreagba, T., (2018) Education for sale: Markov chain analysis of physical qualities and engineering students switching behavior. *International Journal of Mechanical Engineering and Technology*, (9), 230-239
- Ortas, E., Alvarez, I., Jaussaud, J., & Garayar, A., (2015). The impact of institutional and social context on corporate environmental, social and governance performance of companies committed to voluntary corporate social responsibility initiatives. *Journal of Clean Production*, (108), 673-684.
- Peretti, J.M., & Igalens, J. (2015). *Dictionnaire des ressources humaines (7<sup>th</sup> edition)*, 110. Vuibert.
- Perrini, F., & Tencati, A. (2006). Sustainability and stakeholder management: the need for new corporate performance evaluation and reporting systems. *Journal of Business Strategy and the Environment*, (15), 296-308.
- Porter, M., & Kramer, M., (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 12.
- Porter, M., & Kramer, M. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 13, 5-14.
- Rahdari, H., & Rostamy, A. (2015). Designing a general set of sustainability indicators at the corporate level. *Journal of Clean Production*. (108), 757-771.
- Raji, A., & Abejide, T. (2014) Compliance with oil and gas regulations in the Niger Delta Region, Nigeria C. 1960s-2000: An Assessment. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 3(8), 35-47
- Umukoro, B. (2009). Gas flaring, environmental corporate responsibility and the right to a healthy environment: the case of the Niger Delta. *Journal of Accounting and Public Policy*, (18), 400-405.