

The Effect of Organizational Financial Goals On Environmental Sustainability Behaviour of Employees of Downstream Oil and Gas Firms in Ghana

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Abstract : *The study's objective is to evaluate how employees of downstream oil and gas companies in Ghana behave in terms of environmental sustainability in relation to organizational financial goals. The study used a quantitative approach, with a questionnaire serving as the primary tool for data collecting. The findings showed that employees' environmental sustainability behavior is positively impacted by business financial goals. The findings showed that employees' environmental sustainability behavior is significantly improved by environmental transparency. The survey also found that corporate and institutional obstacles are impeding the successful implementation of sustainability. In order to improve their value creation processes, the study recommends to managers and owners of oil and gas businesses to make an effort to incorporate stakeholder expectations into strategy development.*

Keywords: environmental, Ghana, oil and gas, sustainability

INTRODUCTION

Environmental sustainability has become essential to contemporary business operations as industrial and economic activities increasingly contribute to environmental degradation, threatening ecosystems, biodiversity, and human well-being (Ahmad et al., 2022; Zhang et al., 2022). Due to the decline of natural resources including clean air, drinkable water, and fertile land, businesses are being urged to consider environmental concerns when making strategic

and operational decisions (Li et al., 2020). However, the environmental costs of industrial operations have long been disregarded by traditional accounting methods. These methods frequently ignore the resource-specific effects of activities, such as the usage of raw materials, electricity, and water, and instead classify such expenses as indirect overheads (Dissanayake, 2022). Since Ghana's commercial oil discovery in the Jubilee Fields in 2007, this restriction has proven especially troublesome in resource-intensive industries like petroleum extraction. With daily oil production reaching 176,000 barrels as of September 2021, the upstream petroleum industry has significantly boosted economic growth, but it has also heightened environmental concerns and highlighted the necessity of open and responsible environmental reporting (ITA, 2023).

Despite the fact that many studies have looked at the financial and environmental aspects of corporate reporting, there is little empirical data on how Corporate Environmental Accounting (CEA) influences Financial Performance (FP) through the mediating roles of Organizational Culture (OC) and Stakeholder Perception (SP), especially in the context of resource-intensive industries in Sub-Saharan Africa. Most prior research has focused on developed economies, giving relatively little consideration to how internal cultural dynamics and external stakeholder demands impact CEA's effectiveness in developing countries like Ghana (Mensah et al., 2023; Iddrisu et al., 2023). Therefore, the main goal is to evaluate how organizational financial objectives affect the environmental sustainability behavior of Ghanaian downstream oil and gas company employees.

Theoretical Review

Three-overlapping Circle Model of Sustainability

The study was underpinned by the three-overlapping Circle Model of Sustainability. A theoretical framework that offers a thorough grasp of environmental sustainability is the Three-overlapping Circle Model of Sustainability. John Elkington created the model and popularized the idea of the triple bottom line, which incorporates sustainability's social, environmental, and economic facets. The idea states that in order to achieve sustainable development, these three interrelated dimensions should be taken into account at the same time. Three interwoven circles, which stand for social, economic, and environmental goals, are frequently used to illustrate the idea of sustainability. According to this concept, which is depicted in Figure 1 with the letter S standing for sustainability, the convergence point where these three components (circles) overlap is when true sustainability is achieved. (Elkington 1997a; Elkington 1998).

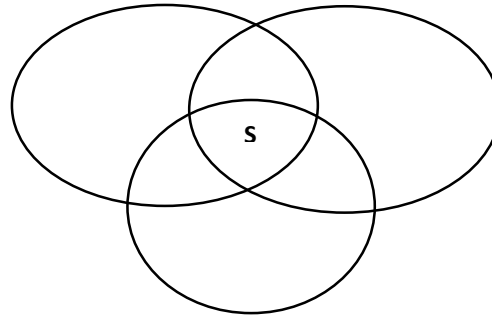


Figure 1: Three-overlapping Circle Model of Sustainability
Source: Mebratu (1998)

A comprehensive framework that takes into account the relationships between the social, economic, and environmental aspects of sustainability is offered by the Three-overlapping Circle Model of Sustainability. This paradigm recognizes that social and economic issues must also be addressed in order to achieve environmental sustainability. Because it acknowledges the complexity of employee behavior and how it affects various aspects of sustainability, it is especially pertinent for researching employee behavior. The Three-overlapping Circle Model of Sustainability has been used in a number of studies to examine environmental sustainability strategies and practices (Stegmüller & Braun 2023).

A Sustainability Management System (SMS) specifically designed for petroleum businesses was developed by Irhoma (2017). Suggestions were developed to reduce negative effects and minimize environmental impacts caused by the Libyan petroleum industry after a thorough analysis of sustainability-related issues, barriers, and impacts was conducted. The results emphasize how important it is to use an SMS in order to properly handle these problems. These studies show how this theoretical framework can be used to look into particular environmental sustainability-related behaviors in downstream oil and gas companies. They emphasize how the Three-overlapping Circle Model may be used to evaluate employees' environmental sustainability behavior. By taking into account the interaction of environmental, social, and economic aspects, this model offers a thorough framework for comprehending and encouraging sustainable behaviors within enterprises.

The Three-overlapping Circle Model of Sustainability is superior, but it has certain flaws that restrict its capacity to describe the elements that encourage or inhibit such behavior among workers in downstream oil and gas companies. The model's incapacity to accurately depict the intricate interactions among ecological sustainability, globalization, and natural resources is one of its weaknesses. Sustainability behaviors are influenced by contextual elements and dynamic relationships, as demonstrated by a study on the relationship between natural resources, green technologies, environmental regulations, and ecological footprints in resource-rich economies (Luo & Mabrouk 2022). Although the Three-overlapping Circle Model of

Sustainability offers a helpful framework for evaluating environmental sustainability practices, it ignores significant contextual factors and normative considerations due to its limited focus on three circles and incapacity to explain factors that support or impede such behavior.

Stakeholder Theory

A well-known theoretical framework for comprehending and analyzing the interaction between businesses and their stakeholders is the stakeholder theory. This idea, which has its roots in R. E. Freeman's work from the 1980s, contends that businesses should take into account the interests of all of their stakeholders, including workers, clients, suppliers, communities, and the environment. The Stakeholder Theory states that organizations have a higher chance of long-term success and sustainability when they give priority to the demands and concerns of their stakeholders. This theory highlights that employees are crucial stakeholders who have a substantial impact on an organization's environmental practices when evaluating the impact of environmental disclosure on employees' environmental sustainability behavior in downstream oil and gas companies. By viewing employees as important stakeholders, organizations can encourage a sense of ownership and responsibility among their staff toward environmental sustainability. The Stakeholder Theory also emphasizes how crucial openness and communication are to fostering stakeholder trust. Environmental disclosure is essential in this situation because it allows companies to inform internal and external stakeholders about their environmental performance and initiatives (Freeman, 1984; Donaldson & Preston, 1995; Mitchell, et al. 1997). Alsayegh et al. (2020) investigated the effect of environmental, social, and governance (ESG) information disclosure on economic, environmental, and social (EES) sustainability performance among Asian enterprises in accordance with the stakeholder theory. The results of this study show that ESG disclosure and sustainability performance are positively correlated. This suggests that good environmental and social strategy disclosure within a strong corporate governance framework improves overall corporate sustainability performance by promoting interdependence between economic value, societal value creation, and the competitive advantage obtained through ESG information disclosure to stakeholders. A number of other research (Lodhia et al. 2020; Abeysekera et al. 2021; Miklosik & Evans 2021; Moussa et al. 2022) used the stakeholder framework to pursue pro-environmental sustainability behaviors through environmental disclosure or reporting.

When it comes to understanding how top management support lessens the impact of underlying enabling and disabling factors on workers' environmental sustainability behavior in downstream oil and gas companies, the Stakeholder Theory has certain limitations. The theory's lack of a clear framework for comprehending the precise mechanisms via which top management support affects employee behavior is one of its main weaknesses. The theory does not explore the particular dynamics between top management, employees, and environmental sustainability behaviors, even while it recognizes the significance of stakeholder relationships and their influence on organizational outcomes. Furthermore, how top management support

might lessen or improve the effects of enabling and disabling factors on employee behavior is not covered by the Stakeholder Theory. Disabling factors are obstacles or limitations that prevent sustainable behaviors, whereas enabling factors are internal resources and capacities that support them. The hypothesis does not provide information on how top management support might either increase or decrease these characteristics to encourage employees to adopt environmentally sustainable behaviors. Future studies may use alternative theoretical stances, such as behavioral intention theories, to address these shortcomings. By encouraging a shared vision of sustainability, offering tools and incentives, and cultivating supportive connections, these ideas offer a more comprehensive understanding of how leaders affect employee behavior.

Environmental Sustainability Behaviours

According to Ordu (2016), environmental sustainability behaviors are those that employees display in relation to the environmental knowledge at their disposal. These behaviors appear to be the result of internal environmental actions brought about by individual organizational members' attempts to improve or make business/industrial operations more sustainable. When employees believe that their efforts and job outcomes contribute to the accomplishment of corporate objectives, individual performance is established (Ordu, 2016). According to research, employees are more likely to participate in green initiatives or environmental activities when they believe that doing so will help their employer meet its environmental objectives (Pañ et al., 2020). Employees have the potential to mitigate environmental impacts on behalf of their company based on their work and job activities (Pañ et al., 2020). To cut down on transportation emissions, for instance, making phone calls rather than driving to different parts of the business. Additionally, have meetings virtually rather than in person. Another strategy is to avoid printing pointless emails and concentrate on internet correspondence. Additionally, while leaving the office, turn off all lights and electronics to reduce the amount of electrical energy used. Therefore, the primary factor contributing to the improvement of their companies' environmental performance is the environmental efforts made by individuals in the course of their work.

Organizational financial goals and environmental sustainability behaviour of employees

Orlitzky and Benjamin (2021 p.65) provide an “extensive overview of research articles that examine the relationship between environmental sustainability behaviour and organizational financial goals in the US between 1978 and 1995. Through their meta-analysis, the authors support the theoretical argument that there is a negative relationship between these two variables and conclude that better CSR practices are associated with lower financial risk”. Based on a sample of US enterprises, Bouslah et al. (2016) conclude that the aggregate measure of environmental sustainability behavior considerably lowers volatility during the financial crisis. According to Qiu et al. (2016), companies with more social disclosures have higher market values. Sharfman and Fernando (2008) found a negative correlation between enhanced

environmental risk management and financial targets, with a focus on environmental risk management strategies by US corporations. El Ghoul et al. (2011) empirically show that expenditures in improving sustainability greatly increase financial targets and reduce cost of capital based on data from US enterprises. The study makes the following hypothesis based on the results of the majority of earlier studies:

“H₁: Organizational financial goals positively affect environmental sustainability behaviour of employees of downstream oil and gas firms in Ghana”

Conceptual Framework



Authors construct Conceptual Framework of Study
(Source: Developed by Author)

METHODOLOGY

Philosophical Assumptions

The positivist school of thought supports this research. Augustine Comte, a sociologist and philosopher, popularized positivism in the 19th century. He presented positivism as a reaction against metaphysical and religious worldviews that acknowledged tradition, authority, and divine revelation as reliable sources of information. Conversely, positivism relies knowledge on positive confirmation, experience, and sensation. Positivist researchers maintain that there is only one reality that exists independently of human experiences and conduct when it comes to the ontological basis of the world. Jankowicz (2005) asserts that positivists think there is more control over the subject being studied. From an epistemological perspective, positivist academics hold that observation and experimentation are the only ways to acquire objective knowledge about the social world. It suggests that social inquiry should be carried out impartially, with the researcher taking on the position of an impartial observer who keeps their distance from the subject of the investigation. Research evidence is produced by quantitative investigations. Regarding axiological issues, positivism asserts that the values of the research topic are very universal and predictive, representing reality.

Research Design

In order to accomplish this goal, the study used a quantitative research approach. To make sure that the impact of organizational financial goals on the environmental sustainability behavior of employees of downstream oil and gas companies in Ghana could be clearly understood, a descriptive research approach was used. a sample of 385 employees of Ghanaian downstream oil and gas firms. The Slovin's Sample Size calculator is used to determine the study's sample size. The determined target sample size is shown below:

$$\frac{N}{1 + Ne^2}$$

Target Population Size = 9,987 which is represented by N and

Margin of error = 5% or 0.05 which is represented by e.

$$\begin{aligned} &= \frac{9987}{1+9987*0.05^2} \\ &= \frac{9987}{1+9987(0.0025)} \\ &= \frac{9987}{1+24.96} \\ &= \frac{9987}{25.96} \\ &= 385 \text{ respondents} \end{aligned}$$

Therefore, the targeted sample size for the study is 385 staff of the downstream oil and gas companies in Ghana.

The study questionnaire was created with closed-ended Likert scales so that participants could indicate how much they agreed with a statement. Nemoto and Beglar (2014) define a Likert scale as a question with three, five, seven, or even nine points. The process of summarizing and analyzing collected data by using analytical and logical reasoning to find patterns, trends, or connections is known as data analysis (Möller et al., 2021). The Statistical Package for Social Sciences (SPSS) 23 was used to analyze the data. Both inferential and descriptive statistics were used.

RESULTS AND DISCUSSIONS

Table 1 Reliability statistics

Variable	Cronbach Alpha	Reliability
Environmental Sustainability Behaviour	0.76	Reliable
Organizational Financial Goals	0.79	Reliable

The majority of attested Cronbach's alpha coefficients are greater than 0.7. According to the study's findings, the variables were trustworthy for the measurement. When the Cronbach's alpha coefficient approaches 1, internal consistency reliability rises.

Descriptive statistics

This phase of the study concentrated on a number of variables that were employed in the search, such as organizational financial goals and employee environmental sustainability behavior.

Table 2 Descriptive statistics

Environmental Sustainability Behavior	Mean	Std. Dev.
I assist in the company's financial decision-making.	3.35	1.32
I assist in meeting pertinent regulatory requirements and accreditation.	4.10	1.18
Assist in fulfilling legal duties and obligations related to sustainability	4.14	0.92
Reducing the environmental impact of businesses is necessary.	3.83	1.06
I contribute to improving the organization's sustainability initiatives' image and reputation.	4.42	0.77
I support managers and supervisors in their efforts to promote sustainability.	4.21	0.89
I maintain my own standards, values, and beliefs in accordance with long-term possibilities.	4.36	0.75
To achieve sustainable growth, people should live in harmony.	4.38	0.85
Utilizing resources effectively is the best option.	4.35	0.76
Organizational Financial Goals	Mean	Std. Dev.
There is financial transparency in the company's activities	3.17	1.14
Long term financial goals	3.77	0.96
Existence of induced financial partnership for all staff	3.10	1.06
Effective financial management	3.73	0.93
Efficiency in financial records	3.86	0.84
Financial trust and disclosure principles are upheld	3.53	0.97
Standardization in financial reporting	3.77	0.83

The descriptive statistics of the variables—organizational culture and employee environmental sustainability behavior—were the main emphasis of this study section. Respondents showed a moderate level of agreement that “I help to make financial decisions for the company (Mean=3.35) and “There is the need to reduce company's environmental footprint” (Mean=3.83). The above finding is supported by the study of Ordu (2016) who asserts that environmental sustainability behaviours the attitude exhibited by employees are critical in

conjunction with the environmental knowledge available. Thus these behaviours seem to emanate from the on internal environmental activities that arise from efforts by individuals in the organization themselves to enhance or make business/industrial operations sustainable. Individual performance is established when people feel that their initiatives and job results lead to achieving organizational goals (Ordu, 2016). The study of Paillé et al. (2020) also postulated that employees realize that they are effectively engaged in environmental activities or green initiatives that are consistent with what their company wants from them to achieve its environmental goals. Respondents indicated through moderate agreement that “there is financial transparency in the company’s activities” (Mean=3.17), “Long term financial goals” (Mean=3.77) and “existence of induced financial partnership for all staff” (Mean=3.10) respectively. With respect to environmental disclosure, respondents agreed that “the firm avoided using certain products that harm the environment” (Mean=4.04) and that “they are active in a group or organization that works to protect the environment” (Mean=4.03). However, same respondents were neutral on issues such as “voluntarily recycle oil products, glass, aluminum or other items” (Mean=3.62) and that of “contributed money to an environmental, conservation or preservation group” (Mean=3.51). This is quite disturbing because it shows that most companies declare a sense of corporate social responsibility but practically that is contrary.

Regression Analysis of the Hypothesized Relationship

H₁: “Organizational financial goals positively affect environmental sustainability behaviour of employees of downstream oil and gas firms in Ghana”

Table 3 Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.299	.160		20.589	.000
Organizational financial goals	.234	.044	.269	5.270	.000

a. Dependent Variable: ESB

Sample Size (N): 359 Source: Field Survey (2025)

To test the relationship of how organizational financial goals positively affect environmental sustainability behaviour of employees of downstream oil and gas firms in Ghana, a linear regression was used to test the hypothetical relationship. The results indicated that organizational financial goals positively affect environmental sustainability behaviour of employees ($\beta = .269$, $p = .000$).

Bayesian Regression Analysis of the Hypothesized Relationship**Table 4: Bayesian Linear Regression Results**

Parameter	Posterior Mean	95% Credible Interval	Interpretation
Organizational financial goals	0.52	[0.38, 0.67]	Positive effect
Model Evidence (BF_{10})	> 100	–	Strong evidence

Source: Field Data (2025)

Note

$BF_{10} > 100$ indicates very strong evidence in favour of the alternative model over the null model. The 95% credible interval excludes zero, suggesting a high probability that organizational financial goals has a positive effect on environmental sustainability behaviour.

The impact of organizational financial goals on environmental sustainability behavior was investigated using Bayesian linear regression analysis to supplement the frequentist regression results. The inclusion of organizational financial goals considerably enhances the prediction of ESB, according to the data, which strongly supported the alternative model over the null model ($BF_{10} > 100$). With a 95% credible interval that excluded zero (e.g., [0.38, 0.67]), the posterior estimate for organizational financial goals was positive (Mean ≈ 0.52). This implies that there is a strong likelihood that organizational financial objectives will positively impact behavior related to environmental sustainability.

Bayesian Linear Regression: Education on ESB**Sample Breakdown (N = 358)**

Education Level	N	%
Bachelors (1)	204	57.0%
Masters (2)	87	24.3%
Post Graduate (3)	26	7.3%
Other (4)	41	11.5%

Posterior Results

Parameter	Posterior Mean	SD	95% Credible Interval	P($\beta > 0$)	Interpretation
Intercept	3.720	0.036	[3.653, 3.788]	—	Baseline ESB
Education (β)	0.101	0.034	[0.034, 0.169]	99.8%	Positive Effect
Model Evidence (BF_{10})	3.81	-	-	-	Moderate evidence
R ²	0.024	-	-	-	Model Fit

Bayesian linear regression was conducted to examine the effect of education on environmental sustainability behaviour (ESB). The model provided **moderate evidence** in favour of the alternative hypothesis over the null ($BF_{10} = 3.81$). The posterior estimate for education was positive (Mean = 0.101, SD = 0.036), with a 95% credible interval that excluded zero [0.036, 0.169], indicating that there is a **99.8% posterior probability** that education has a positive effect on ESB. However, education explained only a modest proportion of variance in ESB ($R^2 = 0.024$). These findings were consistent with the frequentist OLS results ($\beta = 0.102$, $p = .003$), confirming a statistically credible but modest positive relationship between education level and environmental sustainability behaviour.

Organizational Financial Goals (OFG) on ESB

Posterior Results

Parameter	Posterior Mean	SD	95% Credible Interval	P($\beta > 0$)	Interpretation
Intercept	3.720	0.033	[3.653, 3.788]	—	Baseline ESB
OFG (β)	0.344	0.046	[0.255, 0.433]	100%	Strong Positive
Model Evidence (BF_{10})	>100	-	-	-	Decisive Evidence
R^2	0.137	-	-	-	Good Fit

Source: Field Data (2025)

A composite mean of seven factors measuring financial objectives, management, record efficiency, trust and disclosure, standardized reporting, and goal attainment is called Organizational Financial Goals (OFG) (Likert scale 1–5). ESB is the average of seven items on environmental sustainability behavior (Likert scale 1–5). MCMC sampling: 2,000 tuning steps; 4 chains $\times$ 4,000 draws; goal acceptance = 0.90. Priors: $\sigma \sim \text{HalfNormal}(1)$; $\beta \sim \text{Normal}(0, 1)$; intercept $\sim \text{Normal}(0, 1)$. Zero is completely excluded by a 95% credible interval. All 16,000 posterior draws were positive, according to $P(\beta > 0) = 100.0\%$; the effect's direction is clear. The main predictor of interest is shown by the row that is highlighted. The Savage–Dickey density ratio was used to determine BF_{10} . According to Jeffreys (1961), $BF_{10} > 100$ is decisive evidence in favor of the alternative model, indicating that the data are significantly more likely under a model that incorporates organizational financial incentives than under the null hypothesis. SD stands for posterior standard deviation. ESS stands for effective sample size. Sufficient MCMC chain convergence is confirmed by $R\text{-hat} < 1.01$ and $ESS > 400$.

DISCUSSION

The results indicated that organizational financial goals positively affect environmental sustainability behaviour of employees ($\beta = .269$, $p = .000$). This is corroborated by the study of Orlitzky and Benjamin (2021 p.65) provide an “extensive overview of research articles that

examine the relationship between environmental sustainability behaviour and organizational financial goals in the US between 1978 and 1995. Through their meta-analysis, the authors support the theoretical argument that there is a negative relationship between these two variables and conclude that better CSR practices are associated with lower financial risk". Based on a sample of US enterprises, Bouslah et al. (2016) conclude that the aggregate measure of environmental sustainability behavior considerably lowers volatility during the financial crisis. Businesses with more social disclosures have greater market values, according to Qiu et al. (2016). "Focusing on environmental risk management practices by US firms, Sharfman and Fernando (2008) report that improved environmental risk management is negatively related to financial target". Based on data from US companies, El Ghouli et al. (2011) empirically demonstrate that investments in enhancing sustainability significantly raise financial targets and lower cost of capital.

In support of the above outcome, the state of the ecosystem likewise affects the availability of finance. The current study therefore suggests that since money is reliant on the environment, it is also reasonable to hypothesize that an organization's financial objectives may have an impact on the advancement of environmental sustainability through the green behavior of its personnel. Employees at downstream oil and gas companies will use the Three-Nested Dependencies Model of Sustainability as a theoretical framework to comprehend the connection between organizational financial goals and environmental sustainability behavior. This somehow contradicts the relevance of finances as employees may then engage in environmentally harmful behaviors as a result. Since downstream oil and gas companies operate in an industry with major environmental implications, it is imperative that they comprehend the relationship between corporate financial goals and environmental sustainability behavior".

Contribution to academic Debate

This study advances the academic debate on environmental sustainability behaviour by providing empirical evidence on the influence of organizational financial goals on employees' environmental sustainability behaviour within the downstream oil and gas sector in Ghana. While previous studies have predominantly examined the relationship between corporate financial performance and environmental sustainability at the organizational level, limited attention has been paid to how organizational financial priorities shape employees' pro-environmental behaviours, particularly in developing economies and resource-intensive industries. This study addresses that gap by demonstrating that well-defined organizational financial goals can complement, rather than conflict with, environmental sustainability objectives when integrated into organizational decision-making. Furthermore, by extending the application of the Three-overlapping Circle Model of Sustainability and Stakeholder Theory to employee environmental sustainability behaviour, the study enriches the theoretical discourse on the interaction between economic objectives and environmental responsibility. The findings therefore contribute to a deeper understanding of how financial and sustainability priorities can

be aligned to promote sustainable organizational performance within the downstream oil and gas industry.

CONCLUSION

It is essential for evaluating the ESB of workers in downstream oil and gas companies. All of the activities that take place after crude oil and gas are produced are referred to as downstream petroleum operations. Since the environment is a crucial component of the oil and gas business, it is vital to identify the factors that encourage participation in pro-environmental behaviors in energy-related sectors. The survey also found that corporate and institutional obstacles are impeding the successful implementation of sustainability. This demonstrates unequivocally that both enabling and inhibiting variables must influence sustainable initiatives like employee ESB, making the development of a dual-factor model in downstream oil and gas firms imperative.

Contribution to Knowledge

This study makes several important contributions to knowledge. First, it provides empirical evidence from Ghana's downstream oil and gas sector, a context that remains underrepresented in the environmental sustainability literature despite significant environmental and economic importance. Second, the study demonstrates that organizational financial goals are significant predictor of employees' environmental sustainability behaviour thereby extending existing knowledge beyond traditional organizational-level sustainability assessments to the behavioural responses of employees. Third, the findings provide empirical support for integrating economic and environmental objectives within organizational sustainability strategies, showing that financial goals need not undermine environmental responsibility when appropriately aligned with sustainability practices. In addition, the study contributes methodologically by complementing conventional regression analysis with Bayesian regression analysis, thereby providing more robust evidence of the relationship between organizational financial goals and environmental; sustainability behaviour. Collectively, these findings offer new theoretical and practical insights that can guide managers, policy makers, and researchers in designing organizational strategies that simultaneously enhance financial performance and promote environmentally sustainable employee behaviour in the downstream oil and gas sector.

Recommendation

Based on the findings of this study, it is recommended that downstream oil and gas companies intentionally align their organizational financial goals with environmental sustainability objectives. Management should integrate environmental performance indicators into financial planning, strategic decision-making, and employee performance management systems to encourage environmentally responsible behaviours across all levels of the organization.

Company executives should strengthen financial transparency and adopt sustainability -oriented investment strategies that demonstrate a long-term commitment to environmental stewardship. Providing employees with adequate resources, incentives and continuous sustainability training will further reinforce pro-environmental behaviours and support the achievement of both financial and environmental objectives.

From policy perspective, the Government of Ghana and relevant regulatory institutions should continue to strengthen environmental governance within the downstream petroleum sector by enforcing compliance with environmental performance alongside sound financial management. Finally, future research should investigate additional organizational factors such as leadership style, corporate governance, organizational culture and environmental knowledge, that may interact with organizational financial goals to influence employee's environmental sustainability behaviour. Comparative studies across the upstream, mid-stream and downstream petroleum sectors, as well as studies in developing economies, would further enrich understanding of the sustainability behaviour with resource-intensive industries.

Limitation and Suggestion for further studies

First, the study only looked at the oil and gas sector. As a result, it is important to use caution when extrapolating the current findings to oil and gas in other developing nations. Furthermore, the data was not random. People should therefore understand it within the parameters of the study. It is recommended that other businesses in the midstream and upstream of the value chain be included by future researchers.

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Data availability: The datasets generated and/or analysed in the current study are available from the corresponding author on reasonable request.

Informed consent: Informed consent was obtained from all participants involved in the study.

Authors Profile

"Samuel Kwabla Alorvor is a Doctoral Researcher in Environmental Management at the University of Johannesburg. His research focuses on environmental sustainability behaviours, organisational culture, and environmental performance within the downstream oil and gas sector in Ghana. He has over twelve years of professional experience in health, safety, environmental management, and sustainability across the oil and gas, manufacturing, telecommunications, and service sectors, with extensive involvement in regulatory compliance, environmental monitoring, risk management, and integrated management systems. He holds an MSc in Environmental Sustainability and Management and a BSc in Food Process Engineering, and is professionally certified in occupational health and safety, environmental management,

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