IOSR Journal of Economics and Finance (IOSR-JEF)
e-ISSN: 2321-5933, p-ISSN: 2321-5925.Volume 11, Issue 2 Ser. III (Mar – Apr 2020), PP 41-46
www.iosrjournals.org

The Effects of Environmental Disclosure on Environmental Performance in Oil and Gas Sector in Libya

Muftah Alramah Alasgaa

[1], Dr. S. M. Ferdous Azam[2], Prof Sohail Ahmed Bin Saghir Ahmed[3]
[1]Az-zawiyaOil Refinery Company (A R C), Management and Science Univiverity (MSU), Malaysia
[2]Post Graduate Centre, Management and Science University (MSU), Malaysia
[3] Faculty of Business Management, University Technology Mara (UiTM), Malaysia

Abstract:
Background*: The need to manage environmental costs in the oil and gas industries has become an area of concern and focus for environmentally responsible countries and companies worldwide. Traditional methods of calculating costs remain insufficient because traditional accounting practices ignore important environmental costs and activities that negatively affect the environment. The disclosure of environmental accounting data as one of the main elements in the annual report allows the parties that use this information to know the company's position on preserving the environment and how it deals in particular with environmental issues.This paper aims to study the role of accounting disclosure of environmental costs in improving environmental performance and determining the nature and size of this relationship with application to the oil and gas industry in Libya.*
Materials and Methods*: The main source used to collect the necessary data is a questionnaire designed to ensure a comprehensive retrieval of relevant data. Data was collected from oil and gas companies in Libya during 2019. A questionnaire adapted from literature review to measure study variables and achieve its goals. The survey designed in Likert 5 style and have two main sections; demographic part and perceptional part. In addition the survey had been examined for validity by three expert and focus group of 10 participants.*
Results*: The relation between Environmental Costing Disclosure (ECD) and Organisation Environmental Performance (OEP)has an acceptable significance level and has a positive impact at the threshold of 5% significance level and one-tailed relation (T-statistics = 2.13). The significance level of the associated relation is labeled with path coefficient score of (Beta = 0.12).*
Conclusion:*The aim of this paper is to give a picture to all who are interested in the environment, and fellow accountants in academics and professional practices about the role of disclosing environmental costs in improving environmental performance. And a statement of the extent of the need to prepare and submit a financial statement for all environmental costs, to demonstrate and facilitate the decision-making process that leads to efficiency and effectiveness in performance while achieving reasonable profitability for companies. We can conclude that disclosure of environmental costs positively affects and enhances environmental performance.*
Key Word*:Environmental Costing Disclosure, Environmental Costing, Environmental Performance, Oil and Gas, Libya.*

Date of Submission: 16-03-2020 Date of Acceptance: 01-04-2020

I. Introduction

The oil and gas industry is among the leading five contaminating industries. The industry has actually put more effort into the physical influences related to its operating tasks, with the oil and gas industry concentrating mostly on environmental problems (Miller et al., 2019).

Much focus has been paid to the environmental performance of firms. On top of that, pressure from the ecological and public groups has resulted in boosted interest in the environmental performance of firms in terms of (top quality and quantity) of ecological info in yearly records (Berrone, Fosfuri, &Gelabert, 2017; Chuang & Huang, 2018).

Companies in Libya do not take into account the accounting disclosure of environmental costs, which makes environmental performance less than expected. Although information about environmental costs is low, it helps companies provide a clear picture of their environmental performance. It also determines the company's ability to assume environmental and environmental responsibility at the same time (Gerged, Cowton, &Beddewela, 2017; Rashwan& Ali, 2019).

Most studies on the oil and gas industry in Libya focused on studying the extent of companies' commitment to disclose environmental costs and difficulties in implementation, and did not pay much attention to the importance of improving environmental accounting information in financial reports (Zakari, 2014). Additionally, despite the increase in research, studies in this area in developing countries are still very scarce. To this end, this paper extends the existing literature by examining the level of environmental disclosure practices among companies operating in the oil industry in Libya.

This paper aims to study the role of accounting disclosure of environmental costs in improving environmental performance and determining the nature and size of this relationship with application to the oil and gas industry in Libya. Especially since the accounting disclosure reports about the costs of environmental performance are still not common among companies across Libya, despite the growing concern about environmental issues. The required information was collected by distributing the questionnaire. The analysis shows mixed results between the presence of environmental disclosure practices in oil companies and environmental performance.

II. Theoretical framework

This study examined the theoretical background of environmental costs of accounting based on social and environmental theories of accounting.

Related theories of environmental accounting discussed in this study include stakeholders and legitimacy. This approach extends to stakeholder theory by explaining the disclosure of environmental information as a commitment to the organization and the rights of stakeholders. According to the theory of legitimacy, the organization seeks to achieve a consensus between the social values associated with its activities or the basic norms and standards of acceptable behavior in the broader system of which its activities are part [1].

A. Stakeholder theory

The basic premise of stakeholder theory is that the success of any kind of firm depends upon the successful administration of all connections in between the firm and the stakeholders. The term initially supplied by the Stanford Study Institute (SRI) to describe these teams without the organization's assistance will disappear [2], [3].

Stakeholder theory presumes, according to Watts and Zimmerman (1978), that the disclosure of social and ecological details by an establishment is the outcome of pressure from stakeholders such as areas, customers, employees, the atmosphere, shareholders, and vendors [4]. This theory concludes that business environmental responsibility is a method to reveal an excellent image of various parties to boost earnings over time since it will certainly assist in retaining existing clients and engaging in new consumers, as well as enhancing the firm's environmental performance with effective costs on ecological activities [5].

The environmental efforts of a company may considerably affect the company's financial results (not just in terms of expenses, but also in regards to income) and its financial placement. In addition, rate of interest in the outcomes of environmental task is not only limited to the business's administration, but likewise to other stakeholders. Financiers and financial institutions are mainly worried with ecological threats and the extent of responsibilities arising from these threats. Naturally, the proprietors are also curious about the business's environmental habits. They are drawn to the economic risks of the business's environmental behavior and its impact on return on investment [6].

B. Theory of Legitimacy

Legitimacy is the basic perception or presumption that an entity's actions are desirable, proper, or appropriate within a system of socially created values, definitions, and values (Suchman, 1995). The theory of legitimacy concentrates on whether the value system is in the company. The organization has to be conscious of socially created top quality requirements, desire and social efficiency in conformity with accepted specialist expertise standards [7].

Organizations ought to strive to make certain that they run within the limits and norms of society. Where firms have to pay of repairing or preventing environmental damages resulting from companies performing industrial tasks that adversely affect the setting, to ensure the health and wellness of workers in the industry, and residents staying near polluted industrial sites and waste disposal websites [8].

From Islamic perspective, Sharia theory supplies an effective device for direct exposure to lasting volunteer social and environmental disclosure by firms, and that this understanding will provide a car for involving in an important public dispute. The issue of Sharia theory adds to an understanding of audit disclosures particularly [9]. Sharia theory connects to the extent and kinds of company social disclosure in the yearly record and is directly pertaining to administration assumptions regarding area worries Sharia theory works for analyzing company actions. This is due to the fact that authenticity is essential to organizations, and the constraints enforced by social norms and worths and reactions to these restraints offer a concentrate on assessing organizational habits absorbed relation to the atmosphere [10].

C. Environmental Responsibility

The environmental facet of business social responsibility has been reviewed over the previous few decades, as stakeholders have actually significantly called on companies to end up being extra socially liable and eco mindful [11].

In the last few years, the concept of "environmental responsibility" has expanded beyond compliance with policies and efforts such as effectiveness of recycling and power. "What began as a grassroots effort swiftly ended up being a significant problem for consumers, investors, political leaders and business market alike" [12]. It makes sense for business to be ecologically responsible due to their numerous concrete and intangible benefits. With awareness raising and understanding, many polluted business have actually additionally begun environmentally liable programs [13].

Scholars classified two consolidated advantages of environmental techniques: interior benefits (arising from cost savings in prices stemmed from much more efficient use natural deposits, reduced penalties or pollution activities and environmental assents) for: activity against environmental laws) and exterior advantages (advertising and marketing benefits) Stemmed from better company picture and therefore social legitimacy) [14].

D. Environmental Responsibility of Oil Companies

With the basic rise in environmental recognition in numerous nations, particularly industrialized nations, because the 1970s, the range and extent of volunteer environmental efforts have actually enhanced considerably and the environmental agenda has actually increased to include broader issues such as climate adjustment and biodiversity [15].

Oil firms currently give comprehensive environmental reports. A number of comparative worldwide studies have shown that environmental records among oil and gas companies are a lot more thorough contrasted to other industries consisting of energies and different producing branches, although this is partially due to the sector's considerable environmental influence [16].

During the 1980s and 1990s, the oil and gas industry primarily concentrated on enhancing health and wellness, and to some degree environmental performance. There was very little focus on environmental performance and influence on areas besides community charitable growth jobs and regular donations [17].

E. Environmental Responsibility of Oil and Gas Companies in Libya

The nature of the market establishes the worries of environmental responsibility, and environmental concerns vary substantially in between various markets. Nevertheless, some of the main concerns associated with the oil and gas market are very comparable in numerous nations. In Libya, the environmental effect of the oil sector, such as oil leaks and greenhouse gas emissions, has actually had an impacton the environment, especially in light of the political chaos and interior war that have actually impacted the environmental methods and places of oil business [18].

The Libyan oil and gas industry is one of the most important sectors in defending environmental corporate responsibility. This is due to the obvious negative effects of the nature of the daily operations of the industry, as well as the pressures and protests by civil society and environmental protection organizations for the industry's significant impacts on the environment and human health [19].

With the intensification of campaigns against the oil industry at the beginning of the 2011 revolution in Libya and the emergence of freedom of expression, some companies began to respond to criticism, and began to address social and environmental issues in their operations [20].

F. Environmental costs

Environmental costs are those costs sustained according to the company's policies and regulations or to stop infractions. Scholars categorize environmental costs in two major dimensions; special costs and community costs. Special costs are these expenses describe those prices that directly influence the company. They are identified as standard prices, possible hidden prices; emergency situation prices, photo and connection expenses [21].

Community prices: the costs birthed by people, culture, and the environment for which the organization is not liable. The previously mentioned community expenses also consist of external prices or outside factors, the environmental destruction for which companies are not legally responsible, and additionally have damaging effects on humans, building and wellness that can not be made up by the lawful system. These include damages to the river as a result of discharging contaminated wastewater or environments resulting from the disposal of strong waste or bronchial asthma from air pollutant exhausts [22].

The value of the environmental performance costs of capitalisms, according to arises in a set of advantages represented in: (1) Several environmental costs can be decreased or stayed clear of considerably utilizing far better service choices to purchase higher compatibility With environmental innovations and the re-design of procedures and items. (2) Better environmental cost monitoring can also boost the environmental performance of companies (by lowering pollution and securing public health) and attaining substantial advantages for society. (3) Recognizing understanding of the prices of environmental performance of products. The best items can be acquired at costs Great to improve and business to assist the core of ecologically friendly processes and products. (4) It has actually been verified that in relation to operations and items, it matches to the most effective environmental competitive benefits for the business's items for clients [23].

G. Environmental Performance

There are many concepts used to describe environmental performance, including: environmental status, environmental improvement, environmental efficiency, environmental effectiveness, compliance with environmental laws [24]. It is understood that environmental performance reflects a comprehensive activity that reflects the institution's ability to exploit its capabilities according to specific rules and standards that it sets based on long-term goals [25].

ISO 14001 defines environmental performance as "measurable results for managing the environmental aspects of the enterprise", which can be measured under environmental management systems based on the organization's environmental policies, goals, and objectives, or any other requirements for environmental performance (ISO 14001: 2004).

Environmental performance is the company's performance in creating a good environment. Companies pay attention to the environment as a form of responsibility and the company's interest in the environment. Environmental performance can be implemented by applying environmental accounting. Environmental accounting is the awareness and integration of the impact of environmental issues on the institution's traditional accounting system [26]. Environmental accounting is not only for calculating the company's economic costs and benefits but also for calculating environmental costs that are negative external economic factors or costs arising from the market [27].

H. Disclosure of Environmental Costs

Disclosure of environmental costs can be defined as "general reports issued by companies to provide information to internal and external stakeholders with a picture of the company's position and activities related to the economic, environmental and social dimensions" [28].

The importance of disclosing environmental costs raised for the following reasons: (1) Establishing a standard for public disclosure by expanding the scope of data and information that will be disclosed in its form and content, to include the economic, social and environmental performance of the institution. Users of financial statements for environmental information. (3) Rationalizing the economic and environmental decisions of the users of financial statements regarding assessing the companies' compliance with their responsibilities towards protecting the environment from pollution [29].

In Libya, several studies have discussed the disclosure of the environmental performance of industrial companies. For example, one study showed that oil and gas companies in Libya do not disclose their environmental performance, which was assigned with similar results from other studies. This study confirmed that no environmental obligations or assets were disclosed in the financial statements of the Libyan oil sector, nor did it reveal any environmental costs or revenues. The environmental cost is assumed to be included in the cost of production, indicating that the financial statements prepared in accordance with conventional accounting do not accurately reflect reality [30].

III. Methodology

The study uses exploratory research designed to explain and highlight the importance of the concept of environmental costs and the different approaches adopted by companies to be recognized as a modern party in the profession of accounting and education. The researchers used previous studies in environmental accounting to build a conceptual framework and design the survey that used for data collection. Data was collected from seven different companies and the final valid dataset was 285.

The main source used to collect the necessary data is a questionnaire designed to ensure a comprehensive retrieval of relevant data. Data was collected from oil and gas companies in Libya during 2019. A questionnaire adapted from literature review to measure study variables and achieve its goals. The survey designed in Likert 5 style and have two main sections; demographic part and perceptional part. In addition the survey had been examined for validity by three expert and focus group of 10 participants.

IV. Findings

The study hypothesized that Environmental Costing Disclosure (ECD) has a positive influence on Organisation Environmental Performance (OEP). And the related path coefficient results are summarized in in Table 1. The relation has an acceptable significance level and has a positive impact at the threshold of 5% significance level and one-tailed relation (T-statistics = 2.13). The significance level of the associated relation is labeled with path coefficient score of (Beta = 0.12). Results have cross matching with Reverte et al., (2016) as authors proved the relation between CSR disclosure and practices and corporate performance [31]. Some previous studies have shown that there is no significant association between environmental disclosure and environmental performance [32]. Whereas, some studies have found a positive relationship between environmental performance and environmental disclosure, and tend to report well-reported environmental performance to reveal more environmental information (Ahmadi & Bouri, 2017; Lu & Taylor, 2018).

Table 1: Findings of Relation between Organisation Awareness (OA) and Organisation Environmental Performance (OEP)

Relation	Status	Direction	Path Coefficient	T Statistics	P Value (one tailed)
ECD→OEP	Significant	+	0.12	2.13	0.0170

V. Conclusions

Over the past decade, reports of environmental responsibility have increased in importance, making them important topics locally and internationally, especially in companies that have a negative impact on the environment.

By practicing environmental cost accounting, you can reduce the environmental problems that arise from operations. By accurately estimating costs and providing timely reports to stakeholders who meet minimum requirements.

The aim of this paper is to give a picture to all who are interested in the environment, and fellow accountants in academics and professional practices about the role of disclosing environmental costs in improving environmental performance. And a statement of the extent of the need to prepare and submit a financial statement for all environmental costs, to demonstrate and facilitate the decision-making process that leads to efficiency and effectiveness in performance while achieving reasonable profitability for companies. We can conclude that disclosure of environmental costs positively affects and enhances environmental performance.

VI. Suggestions for Further Studies

In light of the results of this research, the following suggestions are recommended for further study:

The survey is used by 285 accountants. Future research could consider increasing the scope to include internal auditors, financial analysts and other related parties. This will provide additional evidence of the impact of disclosure of environmental costs on the environmental performance of oil sector companies in Libya.

Second. The study period for this research is one period. Future studies could consider a longitudinal study of annual reports. This can be used to assess trends in detecting environmental costs in order to confirm whether there is any improvement over time that may contribute to improving environmental performance.

Further studies can be conducted to examine the factors that influence the quality of disclosure of environmental costs in improving environmental performance in Libya.

The study recommends the necessity of making practical efforts by companies, companies, institutions, bodies, policy makers and professional accounting bodies to ensure that environmental financial accounting is presented correctly and recognized and included in the accounting reports. If this happens, it will contribute to addressing the costs of pollution and environmental degradation, and in defining, defining, measuring, recording and defining the role of environmental costs and determining their role in improving environmental performance.

References

[1] F. Mosca and C. Civera, "The evolution of CSR: An integrated approach," *Symphonya. Emerg. Issues Manag.*, no. 1, pp. 16–35, 2017.

[2] T. M. Jones, A. C. Wicks, and R. E. Freeman, "Stakeholder theory: The state of the art," *Blackwell Guid. to Bus. ethics*, pp. 17–37, 2017.

[3] R. E. Freeman, *Strategic management: A stakeholder approach*. Cambridge university press, 2010.

[4] E. Menicucci and G. Paolucci, "Forward-looking information in integrated reporting: A theoretical framework," 2018.

[5] J. Andriof, S. Waddock, B. Husted, and S. S. Rahman, *Unfolding stakeholder thinking: theory, responsibility and engagement*. Routledge, 2017.

[6] M. M. Jennings, "The Social Responsibility of Business Is Not Social Responsibility: Assume That There Are No Angels and Allow the Free Market's Touch of Heaven," *Berkeley Bus. LJ*, vol. 16, p. 325, 2019.

[7] R. B. Ewers, "Enterprise Risk Management in Responsible Financial Reporting," 2017.

[8] B. M. Moriarty, *Industrial location and community development*. UNC Press Books, 2018.

[9] H. Elasrag, *Corporate governance in Islamic financial institutions*. Hussein Elasrag, 2018.

[10] Z. Iqbal and A. Mirakhor, *Ethical dimensions of Islamic finance: Theory and practice*. Springer, 2017.

[11] J. Andriof and M. McIntosh, *Perspectives on corporate citizenship*. Routledge, 2017.

[12] D. Walters and D. Helman, "Preservation: Corporate Sustainability," in *Strategic Capability Response Analysis*, Springer, 2020, pp. 221–245.

[13] N. Gunningham, *Corporate environmental responsibility*. Routledge, 2017.

[14] E. Laurent, *The New Environmental Economics: Sustainability and Justice*. John Wiley & Sons, 2020.

[15] A. Blowers, *Planning for a sustainable environment*. Routledge, 2013.

[16] A. G. Frank, N. Dalle Molle, W. Gerstlberger, J. A. B. Bernardi, and D. C. Pedrini, "An integrative environmental performance index for benchmarking in oil and gas industry," *J. Clean. Prod.*, vol. 133, pp. 1190–1203, 2016.

[17] S. Schaltegger and M. Wagner, *Managing the business case for sustainability: The integration of social, environmental and economic performance*. Routledge, 2017.

[18] A. Toscano, F. Bilotti, F. Asdrubali, C. Guattari, L. Evangelisti, and C. Basilicata, "Recent trends in the world gas market: Economical, geopolitical and environmental aspects," *Sustainability*, vol. 8, no. 2, p. 154, 2016.

[19] D. Vandewalle, *Libya since independence: oil and state-building*. Cornell University Press, 2018.

[20] J. DeFronzo, *Revolutions and revolutionary movements*. Routledge, 2018.

[21] E. M. Hafner-Burton, S. Puig, and D. G. Victor, "Against Secrecy: The Social Cost of International Dispute Settlement," *Yale J. Int'l L.*, vol. 42, p. 279, 2017.

[22] T. Chitewere, *Sustainable communities and green lifestyles: consumption and environmentalism*. Routledge, 2017.

[23] C. L. França, G. Broman, K.-H. Robert, G. Basile, and L. Trygg, "An approach to business model innovation and design for strategic sustainable development," *J. Clean. Prod.*, vol. 140, pp. 155–166, 2017.

[24] Y. Fernando and W. X. Wah, "The impact of eco-innovation drivers on environmental performance: Empirical results from the green technology sector in Malaysia," *Sustain. Prod. Consum.*, vol. 12, pp. 27–43, 2017.

[25] W. Wu, S. Yan, R. Feng, D. Song, and X. Chen, "Development of an environmental performance indicator framework to evaluate management effectiveness for Jiaozhou Bay Coastal Wetland Special Marine Protected Area, Qingdao, China," *Ocean Coast. Manag.*, vol. 142, pp. 71–89, 2017.

[26] D. T. H. Manurung, R. W. R. Kusumah, D. W. Hapsari, and F. Husnatarina, "Effect of corporate governance, financial performance and environmental performance on corporate social responsibility disclosure," *Int. J. Arts Commer.*, vol. 6, no. 5, pp. 15–28, 2017.

[27] S. Schaltegger and R. Burritt, *Contemporary environmental accounting: issues, concepts and practice*. Routledge, 2017.

[28] D. Crowther, *A social critique of corporate reporting: Semiotics and web-based integrated reporting*. Routledge, 2016.

[29] A. M. Magablih, "The Impact of Green Accounting for Reducing the Environmental Cost in Production Companies," *J. Mod. Account. Audit.*, vol. 13, no. 6, pp. 249–265, 2017.

[30] I. Alshbili, A. A. Elamer, and E. Beddewela, "Ownership types, corporate governance and corporate social responsibility disclosures," *Account. Res. J.*, 2019.

[31] C. Reverte, E. Gómez-Melero, and J. G. Cegarra-Navarro, "The influence of corporate social responsibility practices on organizational performance: evidence from Eco-Responsible Spanish firms," *J. Clean. Prod.*, vol. 112, pp. 2870–2884, 2016.

[32] A. W. Sutantoputra, "Social disclosure rating system for assessing firms' CSR reports," *Corp. Commun. An Int. J.*, 2009.

[33] A. Ahmadi and A. Bouri, "The relationship between financial attributes, environmental performance and environmental disclosure," *Manag. Environ. Qual. An Int. J.*, 2017.

[34] L. W. Lu and M. E. Taylor, "A study of the relationships among environmental performance, environmental disclosure, and financial performance," *Asian Rev. Account.*, 2018.

MuftahAlramahAlasgaa,etal. "The Effects of Environmental Disclosure on Environmental Performance in Oil and Gas Sector in Libya." *IOSR Journal of Economics and Finance (IOSR-JEF)*, 11(2), 2020, pp. 41-46.