

## COMPARATIVE ANALYSIS OF ENVIRONMENTAL DISCLOSURES IN OIL AND GAS AND CONSTRUCTION INDUSTRIES IN SOUTH AFRICA

BY

---

DR JOSEPH T. AMBROSE  
BUSINESS SCHOOL  
FACULTY OF COMMERCE, LAW, AND MANAGEMENT  
UNIVERSITY OF THE WITWATERSRAND  
CENTRAL JOHANNESBURG  
SOUTH AFRICA

---

### ABSTRACT

*Environmental reporting is an ingredient of sustainable development. However this ingredient seems to be inadequately recognized in South African business terrains. The aim of this study is to examine the extent of environmental disclosures in quoted oil and gas and construction industries in South Africa. A comparative analysis of the content of environmental information provided in the 2005-2009 annual reports of the sample firms was conducted to ascertain the degree of comprehensiveness of such disclosures and if there exists significant differences between both industries. Findings indicate that the oil and gas industry provided a better disclosure level but this difference was not significant. More so, both industries presented very scanty environmental information in their annual reports which was in agreement with the arguments of the study. This paper however recommends amongst others that companies perceive environmental reporting as a moral and corporate duty, and that standard setters draft a comprehensive framework for reporting environmental concerns.*

**Keywords:** *Annual Reports, Content Analysis, Environmental Reporting, Legitimacy, Sustainable Development*

---

### INTRODUCTION

Sustainable development explains that processes of production must not trigger undue depletion of natural and human resources or threaten the environment. As such, sustainability marries economic and social systems with environmental factors. Development is assessed as sustainable when it meets the needs of the present without compromising the ability of the future generations to meet their own needs (UNWCED, 1987). In South Africa, an increased level of consciousness can be observed with regards to the relationship that exists between sustainable development and the quality of the environment. Severe environmental degradation appears to be threatening the long term sustainable development prospects of the Country. The implication is that adequate efforts have not been channeled to strike equipoise between development objectives and the need to maintain desirable environmental quality. Presently, there is a growing concern of the society as well as business organizations on environmental issues and the importance of disseminating environmental information. In this regard, environmental reporting has been utilized as the vehicle for expressing the extent of commitment of organizations to the environment and their stakeholders at large. Environmental reporting and awareness can be part of critical long term strategies focused on providing behavioral change to support sustainable environmental management. Environmental awareness is a precondition for pro-environmental behavior and sustainable environmental management which translates to sustainable development. The concept of Corporate Environmental Reporting was introduced in the early 1990s and since then it has rapidly gained acceptance as the means of communicating and demonstrating a company's

commitment to improving corporate environmental performance to its stakeholders (ACCA, 2004). According to the KPMG and UNEP Report (2006), environmental accounting provides a common framework for organizations to identify and account for past, present and future environmental costs in order to support management decision-making, control and public disclosure. Studies investigating why companies disclose environmental information in their annual or environmental reports have found that the reasons for disclosures relate to demands by corporate stakeholders, environmental groups, regulations, and improving corporate productivity and competitiveness (Suttipan and Stanton, 2012). Kolk, Walhain and Wateringen(2001) argue that many studies of environmental disclosure in annual or environmental reports have focused on companies in developed countries such as the USA, UK, Canada, New Zealand, Australia, Japan and the European Union. However, South Africa, a nation with a weighty pressure on its environment for economic survival only has scanty works of environmental disclosures documented. Environmental concerns such as environmental protection, energy savings, fair business practice, e.t.c are not given priority in annual reports. Asechemie(1996) stresses that the practical absence of data relating to actions for social and environmental concerns in South Africa is not in line with the trend in the USA, Europe and Canada where companies are required to report on the effect of compliance with laws governing corporate social environmental conduct. The establishment of the Federal Environmental Protection Agency(FEPA) and the National Environmental Standard and Regulatory Enforcement Agency (NESREA) for the purpose of supervising industrial activities as they affect the environment is welcome; nevertheless, there is utmost need for the government to go beyond this cosmetic move to ensuring that firms give a blow-to-blow account of their efforts towards environmental management, fair business practices, issues on products and energy and impact on biodiversity. In South Africa, the articulation of environmental concerns (costs and benefits) into financial reporting is still at a foetal stage. Companies do not provide clear cut environmental sections in their annual reports. Environmental Information provided therein is usually scanty and trivial. This study is however poised at assessing the extent to which certain core environmental initiatives are incorporated into the environmental disclosures of firms in South Africa. The oil and gas and construction industries have been judgmentally selected for a comparative anatomy of their corporate environmental reports. These industries have been by convenience selected for this investigation because of their high propensity to environmental degradation and pollution and also high impact of their industrial activities on the environment. The remainder of this paper is structured as follows: section 2 is a theoretical perspective to this study, section 3 elaborates on prior research works and hypotheses development, section 4 describes the methodology, section 5 shows the results and discussions of findings while section 6 concludes the paper and gives policy recommendations and implications.

## **THEORETICAL PERSPECTIVES**

This study draws heavily from the concept of organizational legitimacy. According to Lindblom (1993), legitimacy is a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part. Several researches have discussed corporate environmental and social disclosure practices within the theoretical framework of legitimacy (Dowling and Pfeffer, 1975; Guthrie and Parker, 1989; Wilmshurst and Frost, 2000). Legitimacy theory is derived from the concept of organizational legitimacy (O'Donovan, 2002). It is the most widely discussed theory in explaining corporate social and environmental disclosure (Deegan, 2002, and Owen, 2008). It proposes a relationship between corporate social disclosure and community

concerns so that management must react to community expectations and changes (Deegan, 2001; 2002). Legitimacy theory has been utilized to assess the various strategies management may choose from so as to remain legitimate (Deegan, 2001). O'Donovan(1999) demonstrates that the theory explains why companies report environmental disclosures, and as such, to bring legitimacy to an organization, social and environmental reports have been a part of the portfolio of strategies employed by accountants and managers to achieve this target (Wilmshurst and Frost, 2000; O'Donovan,2002). Organizations desire to operate within the boundaries set by their respective communities, and so they ensure that their host societies perceive them as legitimate since organizations cannot ignore the societies in which they operate. As such, Campbell, Craven, and Shrives (2003) demonstrate that legitimacy theory explains how environmental disclosures can be used to narrow the gap between company actions and social concerns or expectations. The legitimacy theory shall be used to streamline the research propositions of this study.

### **PRIOR RESEARCH AND HYPOTHESIS DEVELOPMENT**

Mullerat and Brennan (2005) argue that sustainable and socially responsible businesses recognize the need to operate a green business agenda while accepting environmental stewardship as an indivisible whole of business operations. In its commitment to make business more sustainable, the 1992 Earth summit in Rio endorsed environmental management systems (eco-efficiency) as the way forward for companies individually and collectively to contribute towards sustainable development. This is a management philosophy that encourages business to be more environmentally responsible while embracing concepts such as pollution prevention, waste reduction, waste minimization and cleaner production processes. According to Adegbite (2012), organizations around the world that have incorporated sustainable practices to strengthen their organizational goals have no doubt built better global market share and competitiveness. Such sustainability is unrealizable without environmental stewardship which involves disclosing corporate environmental information. Corporate Environmental Reporting strategy is a complex phenomenon; literature review raises concerns about social research approaches (Alrazi, De Villiers and Van Staden (2010). There has been a significant increase in the number of companies in both developed and developing countries making environmental disclosures in their annual reports and other media in the last two decades (Kolk, 2003). According to Malarvizhi and Yadav (2012), a reference to environmental report means different things to different user groups. Some tend to think of stand-alone environmental reports while others focus on the environmental content in the annual report itself. A majority of works consider the type of information provided in the annual reports (Cho and Patten, 2007). Certainly, organizations have the exclusive right as to the type of information to be disclosed, most especially where there are no regulatory standard practices of environmental reporting. This has been highlighted in several studies (Patten, 2002; Aerts and Cormier, 2009).It may appear useful for companies to disclose much environmental information; however a close examination of the content of such disclosures has revealed a propensity for positive information (Deegan and Rankin, 1996). Cuttingham (2001) demonstrates that organizations provide little negative environmental information in the annual report even when the organization has experienced several negative environmental events. Such reports could mislead the users as regards the environmental performance of organizations (Rockness, 1985). The question then arises: What is the extent of environmental responsibility information disclosure in South Africa firms? Are environmental reports comprehensive, or are they just targeted at improving corporate reputation? Are there reporting differences across industries? To answer these questions, two

highly environmentally sensitive industries are examined and then the following null hypotheses are proposed:

**Conclusion**

In conclusion, the findings indicate that the oil and gas industry provided a better disclosure level but this difference was not significant. More so, both industries presented very scanty environmental information in their annual reports which was in agreement with the arguments of the study.

**Recommendation**

1. The paper therefore calls for concerted efforts on the part of the South African Accounting Standards Board and the government to take another look at making CED mandatory.
2. Companies should perceive environmental reporting as a moral and corporate duty
3. Standard setters should draft a comprehensive framework for reporting environmental concerns.

**REFERENCES**

- ACCA, (2004). *An Empirical Investigation of Environmental Disclosures Analysing Reaction to Public Policy and Regulatory Effects*, Paper presented at the Asian Pacific interdisciplinary Research conference.
- Adegbite, D. (2012) *Accounting for Municipal Solid Waste Landfill Closure and Post closure Care Cost* Stamford, London.
- Aerts, X. & Cormier, W. (2009) Irreversibility, Uncertainty, and Investment, *Journal of Economic Literature*, 29, pp. 1110-1148.
- Alrazi, D. V. & Van, S. (2010). Some Determinants of Social and Environmental Disclosures in New Zealand companies, *Accounting, Auditing and Accountability Journal*, vol. 9, no 1, pp. 77–108.
- Asechemie, L. K. (1996) *An Introduction to Environmental Accounting as a Business Management Tool: Key Concepts and Terms*, Office of Pollution Prevention and Toxics, 742-R-95-001.
- Campbell, B. R., Craven, D. V. & Shrives, F. (2003). *Corporate Social Responsibility in Nigeria: Western Mimicry or Indigenous Practices?* Research Paper Series-ISSN 1479-5124 No. 39-200.
- Cho, Y. & Patten, G. M. (2007) A Study of Corporate Social Disclosures in Bangladesh, *Managerial Auditing Journal*, vol. 16, no. 5, pp.274-289.
- Cuttingham, R. D. (2001) *Environmental Cost Accounting for Capital Budgeting: A Benchmark Survey of Management Accountants*, Office of Pollution Prevention and Toxics, 742-R-95-005, September.
- Deegan, H. & Rankin, O. L. (1996) Corporate Social Disclosure Practice: A Comparative International Analysis. *Advances in Public Interest Accounting*, vol. 3, pp. 159-175.
- Deegan, H. (2001) Some Thoughts on Legitimacy Theory in Social and Environmental Accounting. *Social and Environmental Accounting Journal*, vol. 24, no. 2, pp. 3-7
- Deegan, H. (2002). *Environmental disclosures by Australian Companies: what is happening outside the annual report*, Proceedings of the Asia Pacific Interdisciplinary Research in Accounting (APIRA) Conference p.15-17.
- Dowling, H. & Pfeffer, I. (1975) *Intermediate Microeconomics* (Science Research Associates).
- Guthrie, K. & Parker, F. (1989) Organizational legitimacy: Social values and organizational behaviour', *Pacific Sociological Review*, vol. 18, issue 1, pp. 122-136.
- Kolk, K. (2003). *Environment and the finance function: a survey of finance directors*. London: Coopers & Lybrand Deloitte.

- Kolk, K., Walhain, V. & Wateringen, W. S. (2001) *Effect of Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting*. Accounting for Environmental Protection Measures: New York: United Nations, March 1976. (E/C.IO/AC.3/1976/5).
- KPMG & UNEP Report (2006). Managing Legitimacy: Strategic and institutional approaches, *Academy of Management Journal*, vol. 20, no. 3, Pp. 571-610.
- Lindblom, B. A. (1993) Corporate Social and Environmental Reporting: A Review of the Literature and a longitudinal study of United Kingdom Disclosure, *Accounting, Auditing, and Accountability Journal*, vol. 8, no. 2, pp. 47-79.
- Malarvizhi, A. Q. & Yadav, T. Y. (2012). Evidence of Environmental Accounting in Australian Companies, *Asian Review of Accounting*, vol. 6, no. 2, pp. 163-80
- Mullerat, Q. & Brennan. A. R. (2005) . *Social responsibility disclosure: Surveys of Fortune 500 annual reports*. Ernst and Ernst: Cleveland, Ohio.
- O'Donovan, M. (1999) . *Research Planning for Food Safety: A Value of Information Approach* (Santa Monica, Calif.: The RAND Corporation).
- O'Donovan, G. (2002) The cost of evolution and genetic loads; in: Dronamraju, K.R. (Ed.), *Haldane and Modern Biology*, Johns Hopkins Press, Baltimore, pp. 165–178.
- Owen, C. W.(2008) Note on the cost of natural selection, *Amer. Nat.* **96**:123–126.
- Patten, X. (2002) *Green about the environment?* Director, (New York) p. 40-47, February 2008.
- Rockness, R. R (1985) Empirical Evidence on Corporate Social Disclosure Practices in Jordan, *International Journal of Commerce and Management*, vol. 10, no. 3 & 4, pp.18-34.
- Suttipan, S. A. & Stanton, G. T. (2012) A Study of Social Accounting Disclosures in the Annual Reports of Nigerian Companies, *Asian Journal of Business Management*, vol. 3 no. 3, pp. 145-151
- UNWCED, (1987). *Terminology for Accountants*, Fourth Edition. Toronto: CICA, 1992. *Environmental Costs and Liabilities: Accounting and Financial Reporting Issues*. Toronto: EPA, 1986.-. EPA Handbook. Toronto: EPA, 1987.
- Wilmshurst, K. & Frost, D. (2000) A Stakeholder Theory Perspective to Corporate Environmental Disclosures, *Journal of Contemporary Business*, vol. 3, no. 3, pp.27-33.