## Abstract

Environmental reporting is largely voluntary for companies, unlike financial reporting which has well set standards for measurement, reporting, auditing and governing laws based on IFRS and GAAP. A driver such as a stock exchange is able to act as a "regulating body" that requires a minimum reporting standard for companies listed on the stock exchange. Stock exchanges have an ethical responsibility to encourage companies listed with them to be environmental stewards to provide investors with responsible investment opportunities. This study provides an understanding of the quality of environmental guidelines presented by international stock exchanges compared to key global environmental concerns. The aim of this dissertation was to assess and compare sustainability guidelines provided by selected stock exchanges, with specific focus on key global environmental concerns. The objectives were (1) to assess the existing environmental reporting requirements of 19 stock exchanges across all continents, (2) to determine how the JSE environmental reporting guidelines compared to those of other stock exchanges, (3) to compare 20 JSE listed companies' environmental reports based on the presence and quality of data, (4) to compare what companies reported to what the JSE required and (5) to identify possible differences in reporting between the impact levels and industries of companies. A Sustainability Balanced Scorecard (SBSC) was developed by identifying seven key global environmental concerns (resources; biodiversity; water; energy; emissions, pollution and waste; products and services; and supply chain management) that were common themes from the MEA (2005) and UNEP Ecosystem Management policy (2010). A five tier scoring system specific to assessing reporting guidelines and another five tier scoring system specific to assessing company environmental reports were used. Nineteen stock exchange guidelines were assessed to represent both developing and developed countries and all regions (Africa, America, Australasia and Europe). Overall, the stock exchange guidelines addressed the key global environmental concerns rather poorly. There were no differences in the quality of guidelines for stock exchanges that recommended guidelines in developing or developed countries. There were no differences found in the guidelines of stock exchanges operating in different regions. There were differences in the focus on key global environmental concerns by the guidelines.

The environmental information reported by twenty companies spanning three impact levels and seven industries was also assessed. The companies in the high and medium impact levels reported similarly and better than the companies in the low impact levels. There were differences found in the way companies reported according to the different industries as well as differences in the way companies addressed the key global environmental concerns. Even though the JSE's developed guidelines did not account for resources and biodiversity, the Global Reporting Initiative (GRI) reporting guidelines that the JSE recommended to their listed companies covered these categories. Companies reported voluntarily on the categories because they may understand the importance of managing resources and biodiversity for the sustainability of their business.

Stock exchanges are faced with a variety of companies at different impact levels representing different industries, making it difficult to provide a minimum set of environmental reporting guidelines. Stock exchanges should require companies to report on all key global environmental concerns identified in this study, but should not dictate how the companies report on them. Global environmental reporting standards may be better suited with a global sustainability body like the Global Sustainability Standards Board (GSSB) that is able to provide global standards for all companies. Companies need to change the way that they do business, the benefits of reporting on environmental performance outweigh the risks of not reporting and managing these impacts. Sustainability reporting and best practise today may be the compliance of the future. Stakeholders are increasingly expecting companies to contribute more to environmental sustainability. Companies are essential in building a resilient planet that will be able to feed a growing population that will increase from seven to nine billion people by 2050.

**Key words:** Environmental Sustainability; Johannesburg Stock Exchange; Millennium Ecosystem Assessment; Sustainability Balanced Score Card Approach; United Nations Environment Programme Ecosystem Management Policy