

**An assessment of corporate environmental reporting performance and its alignment to environmental management systems in a South African gold mining company.**

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## **Abstract**

Corporate Social Environmental Reporting is a process through which companies and organisations can inform the societies within which they operate about their performance on non-economic issues including environmental performance. The Global Reporting Initiative (GRI) is an internationally recognised organisation which has frameworks and guidelines organisations can use to standardise the reports which they issue to the society. Data gathering for reporting on environmental performance can be done in several ways, including by means of the data required for an Environmental Management System (EMS) based on the ISO 14001 “plan – do – check - act” commonly known as the Demming cycle, aimed at continual improvement of environmental performance by an organisation. The clauses in an EMS allow for an organisation to measure its performance and hence the generation of data which can be used for interpretation on environmental performance. The utility of data generated from an EMS is optimised for input towards the generation of a Corporate Social Environmental Report by the level of alignment between the reporting process and the system used for data generation.

The aim of this study was to evaluate the level of such an alignment between the two processes for AngloGold Ashanti (AGA), a multinational gold mining company which issues its reports according to GRI guidelines and also has an ISO 14001 EMS in place. The method used entailed a desktop documentary analysis, a questionnaire answered by individuals responsible for implementation of the EMS and an interview posed at corporate level.

It was found that despite corporate commitment to continually improve CSER, there is a relative weak alignment between the two systems, with consequent duplication of effort and sub optimal use of human resources. Recommendations for improved alignment include focused education and training of staff on the relationship between CSER and EMS, and improvements in EMS monitoring and measuring procedures.

## **Key words**

*Corporate Social Environmental Reporting, Global Reporting Initiative, Environmental Management Systems.*

## **Opsomming**

Korporatiewe Sosiale en Omgewingsverslagdoening (KSOV) is 'n proses waarvolgens maatskappye en organisasies die omliggende gemeenskap kan inlig oor hulle nie-ekonomiese prestasie, waaronder die omgewingsprestasie. The Globale Verslagdoeningsinisiatief (*Global Reporting Initiative* – GRI) is 'n internasionaal erkende organisasie met raamwerke en riglyne waarvolgens organisasies hulle omgewingsverslae kan standardiseer. Die data wat vir verslagdoening benodig word kan op verskeie wyses bekom word, onder andere deur middel van die data wat vir die vereistes van 'n Omgewingsbestuurstelsel (OBS) wat op die ISO 14001 “beplan – doen – kontroleer – tree op” siklus gebaseer is, ingesamel moet word.

Verskeie klousules in die OBS maak dit vir die organisasie moontlik om prestasie te meet, gevolglik kan die data wat daarvoor ingesamel word, ook vir Omgewingsverslagdoening aangewend word. Die toevollegewaarde van sodanige data word geoptimeer vir die samestelling van 'n Omgewingsverslag volgens die mate waartoe die data-insamelingsproses met die verslagdoeningsproses belyn is.

Die doel van hierdie studie was om die mate van sodanige belyning te ondersoek binne AngloGold Ashanti (AGA), 'n inter-nasionale goudmynmaatskappy wat Omgewingsverslagdoening volgens GRI riglyne doen, en ook 'n ISO 14000 OBS in plek het.

Die navorsingsmetode behels 'n lessenaarstudie van relevante dokumente, 'n vraelys wat deur EMS personeel ingevul is, en 'n onderhoud met 'n lid van die korporatiewe bestuur.

Die bevinding is dat belyning van die prosesse relatief swak is, ten spyte van 'n korporatiewe verbintenis tot voortdurende verbetering van Omgewingsverslagdoening, met gevolglike duplisering van moeite en sub-optimale benutting van mensehulpbronne. Aanbevelings vir verbeterde belyning sluit in gefokusde opleiding van personeel oor die verwantskap tussen KSOV en OBS, asook verbeteringe in OBS moniteer- en meetprosedures.

## **Sleutelwoorde**

*Korporatiewe Sosiale en Omgewingsverslagdoening, Globale Verslagdoeningsinisiatief, Omgewingsbestuurstelsel.*

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## LIST OF ABBREVIATIONS

AGA	AngloGold Ashanti
BEE	Black Economic Empowerment
CERES	Coalition for Environmental Responsible Economies
CSER	Corporate Social Environmental Reporting
CSR	Corporate Social Responsibility
ECI	Environmental Condition Indicator
EMA	Environmental Management Accounting
EMAS	Environmental Management Auditing Systems
EMS	Environmental Management Systems
EPI	Environmental Performance Indicator
GRI	Global Reporting Initiative
ICMM	International Council on Mining & Metals
ISO	International Organisation of Standardisation
JSE	Johannesburg Stock Exchange
MPI	Management Performance Indicator
NGOs	Non-Governmental Organisations
OPI	Operational Performance Indicator
SD	Sustainable Development
SRI	Socially Responsible Investment
SoER	State of the Environment Report
TBL	Triple bottom line
UNEP	United Nations Environmental Programme.

## CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT

### 1.1 CORPORATE SOCIAL AND ENVIRONMENTAL REPORTING

Corporate Social and Environmental Reporting (CSER) is defined as the process of reporting on an organisation's activities, to the extent that they impact on, and are influenced by, the environment, employees, local communities, and the society at large (Hill *et al.* 2005:67).

According to McCormick (as quoted by Hill *et al.* 2005:67), CSER emerged into academic prominence in the 1970s following a decade of increasing liberalism, together with worldwide emergence of environmental movement and a rise in environmental concern. The fundamental basis of CSER was that business should be accountable to those whom it affected, that is its stakeholders, composed primarily of its employees, environmental groups as well as communities and the public at large.

Corporate Social and Environmental Reporting can also be termed sustainability reporting and is based on measuring corporate success in terms of economic, environmental, and social factors. In the 1990's, one key obstacle identified in terms of sustainability reporting was the absence of generally accepted reporting frameworks and guidelines to assist in the credibility, comparability and comprehensiveness of sustainability reports (GRI Portal, 2006:1), thus highlighting the need for, and applicability of the CSER frameworks and guidelines.

The National Environmental Management Act (NEMA), Act 107 of 1998 (SA, 1998:10) on the other hand, defines sustainable development (SD) as "*the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations*".

In terms of the above definition, sustainability reporting, also known as triple-bottom-line (TBL) reporting (Ballou *et al.* 2006:66), is based on measuring corporate success in terms of economic, environmental, and social factors. According to Lucas (2009), a sustainability report can be regarded as a communication tool for reporting on sustainability performance in a company, which can include both good and bad news.

Since corporations are increasingly faced with pressure from their stakeholders to publicly report in terms of the TBL, more companies today are reporting on their performance in terms of CSER guidelines and principles (Ballou *et al.* 2006:65). This pressure is due to heightened support and awareness of international sustainability standards such as ISO 14001, as well as international environmental agreements such as the Kyoto Protocol (Merlin & Visser, 2002:80). Fortes (2002:78) also states that *“increased social awareness of the damage caused by pollution”* and sustainability debates further adds pressure for CSER.

In South Africa there is evidence of growing utilisation of CSER as highlighted by KPMG (2006:4) when they stated that there is continuing and growing support for corporate governance in South African business, specifically regarding ethics and integrity. Amongst the many forms and formats that a Corporate Social Report can assume, there is a Global Reporting Initiative (GRI) format which has become the accepted norm worldwide and South Africa has also followed suit.

The King Report on Corporate Governance for South Africa 2002 (King II) and the King Code and Report on Governance for South Africa 2009 (King III) can also be regarded as codes which are important and guiding to organisations listed on the Johannesburg Stock Exchange (JSE) on reporting requirements. The King III report specifically stipulates in Chapter 9 that the board should focus on the substance of the report rather than on the form, emphasis is thus on the content of the report. It further stipulates that the report should be an integrated one whereas the King II report mandated an annual disclosure on financial and non-financial matters. It did not however mention the integrating of the reports on financial and non-financial matters (PricewaterhouseCoopers, 2009: 62).

## **1.2 THE GLOBAL REPORTING INITIATIVE**

The Global Reporting Initiative (GRI) drives sustainability reporting in most organisations which have voluntarily adopted the framework as means of reporting. GRI produces a comprehensive Sustainability Reporting Framework that is widely used around the world to enable greater organisational transparency and accountability as well as the divulging of information based on organisational performance across the economic, social and

environmental spheres of an organisation. The framework includes the reporting guidelines that set out the principles and indicators organisations can use to measure and report their economic, environmental and social performance (GRI, 2006:1).

The third revision (G3) of the GRI guidelines was launched in October 2006 (GRI, 2006:1), together with the Sustainability Reporting Guidelines of 2006, which provide an improved, practical and more user friendly sustainability reporting tool for companies. It includes 10 reporting principles, disclosure items, as well as 79 reporting indicators (GRI, 2006:1) which include economic, social, and environmental indicators. The reporting framework includes principles of transparency, clarity, timeliness, comparability, neutrality, accuracy, sustainability context, exclusiveness, completeness and relevance, all of which must be auditable.

At the time of this study, November 2012 the G3 2006 reporting guidelines were undergoing review with the launch of the G4 Guidelines planned for 2013. The development of the G4 guidelines will entail a consultative process involving international multi- stakeholders which will eventually lead to the publication of revised guidelines.

In addition to the Environmental Performance Indicators required in terms of the GRI G3 reporting requirements, there are also sector supplements for each industry. Since the case study is a mining company the sectoral supplements that govern the reporting requirements are those of the International Council on Metals and Mining (ICMM). The Sector specific indicators of the ICMM are regarded as core indicators as disclosure on such is compulsory.

### **1.3 ENVIRONMENTAL MANAGEMENT SYSTEMS**

An Environmental Management System (EMS) is defined as “the part of the overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining an environmental policy. These key elements interact with each other to form the framework of an integrated, systematised

approach to environmental management, with the result of continual improvement of the overall system and ultimately, environmental performance.” (Woodside *et al*, quoted by Nel, 2008:14)

According to the ISO 14001:2004 standard “an organisation shall establish, implement and maintain a procedure(s) to monitor and measure, on a regular basis, the key characteristics of its operations that can have a significant environmental impact. The procedure(s) shall include the documenting of information to monitor performance, applicable operational controls and conformity with the organisation’s environmental objectives and targets.” (ISO, 2004:7) This requirement could be extrapolated to mean that once monitoring systems are in place there should be a form of reporting either to top management of the organisation and even to the community at large depending on the agreement, expectations and the regulatory reporting requirements. This can be attributed to the fact that monitoring is conducted for data gathering purpose and if interpretation of data is not done in order to make informed decisions or to inform management and other stakeholders about the environmental performance of an organisation then the monitoring exercise is a futile one.

The potential therefore exists for organisations which report according to the GRI G3 guidelines and also have an EMS in place, to have separate but overlapping reporting and monitoring systems namely the Global Reporting Initiative, and reporting as required by the monitoring and measurement section in ISO (2004). The above mentioned systems could create a potential for confusion, repetition, duplication and also for missing important environmental issues.

#### **1.4 THE CASE OF ANGLOGOLD ASHANTI**

AngloGold Ashanti (AGA) is a multinational gold mining company with its corporate office situated in Johannesburg South Africa. The South Africa Operations contributed a total of 42% of the gold produced by the company in 2008 (AGA, 2008:6). The company’s primary listing is in the Johannesburg Stock Exchange (JSE).

The environmental management reporting requirements as well as environmental performance for AGA are driven by four major international initiatives namely:

1. Global Reporting Initiative (GRI)
2. International Organisation for Standardisation (ISO 14001: 2004)
3. International Council on Mining and Metals (ICMM)
4. King Report on Corporate Governance for South Africa 2002 (King II) and the King Code and Report on Governance for South Africa 2009 (King III).

The system that is used to drive the environmental management in all the operations within the Southern Africa Division of the company is the ISO 14001: 2004 Environmental Management Systems. In 2008 all the Southern Africa operations were ISO 14001 certified. In addition to this the company is also a signatory to the United Nations Global Compact and a founding member of the International Council on Mining and Metals (ICMM) (AGA, 2008:216). AngloGold Ashanti is also an organisational stakeholder of the Global Reporting Initiative (GRI) and thus issues its annual reports based on the GRI 2006 G3 Sustainability Guidelines.

### **1.5 AIMS OF THE STUDY**

The literature survey conducted has indicated that thus far no research has been published to determine if there is any form of alignment between Environmental Management Systems and the Global Reporting Initiative (GRI) for a South African gold mining company. A study conducted by Odd (1994) aimed at determining the extent at which sustainability reporting (GRI) guidelines enable organisations to move towards sustainability indicated that there is a gap in how companies can use their GRI reporting towards achieving sustainability reporting. Odd determined that sustainability reporting presented a challenge more specifically in multinational companies (Odd, 1994: 37). One of the problems alluded to by Odd was that such multinational companies lacked precise and common metrics and methodology for application (Odd, 1994: 37). Methodology and application of GRI reporting is thus imperative if reporting is to be conducted in a manner which can be auditable and able to relay information and data which can be traceable and reliable. Other studies conducted on the subject of GRI reporting have shown that information must have usable format and content. It has also been determined from such studies that the process of gathering and making the information public may be an important managerial experience for reporting organisations. This precipitates to the fact that the process of deciding what and how to

report needs to be given an important consideration if ever companies wish to divulge information which is of value and interest to its stakeholders and societies within which they operate (Brown *et al.* 2009: 579).

A study has been conducted by Nel (2008) aimed at determining the extent at which South African companies listed on the JSE integrate ISO 14001:2004 EMS generated information with their sustainable development reporting. Nel stated that there was a lack of alignment between the data gathering processes for GRI reporting and the environmental monitoring and measurement for most of the companies which had an EMS in place (Nel, 2008:45).

Nel (2008:5) indicated that to a large extent companies listed in the Johannesburg Stock Exchange do publish annual sustainability reports and also that most of these companies do have an Environmental Management System (EMS) in place. According to Nel (2008) in most cases ISO 14001:2004 is the preferred Environmental Management System in most companies listed in the JSE and which issue annual reports. It also appears that the sustainability reporting systems of these companies are not aligned to the EMS clauses related to reporting and data gathering, i.e. the monitoring and measurement as required by the ISO 14001:2004 standard (clause 5.4.1 and other related clauses). As a result, information and data generated in the EMS are not used as a basis for data gathering that are required or used as an input for the information in the sustainability reports in terms of the GRI. As highlighted by Nel, if companies do not use the information produced by their environmental management systems when compiling the sustainability reports this could result in an increased workload for staff as well as inaccurate reporting (Nel, 2008:5).

Nel (2008:45) argues that due to the relation between GRI indicators and the ISO 14001 clauses, the reporting process could be much easier, more accurate and less time consuming if companies do utilise their ISO 14001 EMS to generate data for the GRI reporting process. In addition such data can be regarded as more credible since an ISO 14001 EMS is audited on an annual basis internally and externally by independent auditors, and any discrepancies could be identified during audits and addressed prior to compilation of the sustainability report.

A gap therefore exists in the methods, content as well as the format in which companies issue their sustainability reports and also in relaying the data and information which matters to the public and stakeholders.

This research aims to use AngloGold Ashanti as a South African gold mining company and determine the extent of alignment of its EMS to its sustainability reporting process and also assess its reporting performance.

In order to achieve the main aim, the following objectives were set:

1. To seek evidence of a link between EMS clauses and GRI Indicators used in the generation of environmental data collated for the sustainability reports.
2. To investigate the data gathering processes as followed by personnel.
3. To investigate the corporate perspective on selection and materiality of GRI indicators for GRI reporting.
4. To determine the level of compliance of the content of the reports to the GRI and ICMM reporting requirements.

The means of achieving the above objectives are detailed in the next section.

## **1.6 RESEARCH METHODOLOGY**

In order to achieve the set objectives the methodology entailed the following:

1. A desktop analysis of the EMS monitoring and measurement processes within AngloGold Ashanti South African operations was conducted to determine the degree of alignment between EMS and GRI indicators.
2. Interviews with personnel responsible for the implementation and maintenance of the EMS were conducted. These interviews were guided by a questionnaire and were completed in the presence of the researcher and verbal prompts were used in cases of ambiguity.
3. An open ended questionnaire was administered to the person responsible for GRI reporting at corporate level.
4. Reports issued to society over a three year period were investigated and an analysis conducted to determine to what extent the reports do comply with the GRI and ICMM reporting requirements.

The methodology is discussed in detail in Chapter 4.

## 1.7 DISSERTATION STRUCTURE

The dissertation is structured as follows:

**Chapter 1:** Introduces the background to environmental corporate reporting, and guidelines for reporting on a global scale. Environmental management systems are introduced as systems which drive and guide environmental management in AGA, followed by the aim of the research as well as the methodology.

**Chapter 2:** Reviews the theory guiding corporate reporting internationally as well as in South Africa. Environmental reporting trends and a description of the reporting guidelines including the GRI requirements, the ICMM principles as well as the requirements for integrated reporting contained in the King II and III reports are presented. Principles contained in the UN global compact are also described here.

**Chapter 3:** A description of the functioning and the operations within the South African sector of AngloGold Ashanti is presented in this chapter, as well as relevant background information to environmental management systems.

**Chapter 4:** Data collection and analysis is done in this chapter. EMS and GRI reporting and monitoring systems are analysed as systems used in AngloGold Ashanti. Data gathering and monitoring as required by the two systems is investigated. Data are also derived from the questionnaires and interviews conducted.

The reports issued by AGA were analysed for compliance to GRI and the ICMM reporting guidelines and requirements.

**Chapter 5:** Findings, conclusions and recommendations are discussed in this chapter.

## CHAPTER 2: LITERATURE REVIEW

### 2.1 CORPORATE SOCIAL ENVIRONMENTAL REPORTING IN SOUTH AFRICA

Corporate, social environmental reporting (CSER) internationally began in the late 1990s as a response to community and Non-Governmental Organisations (NGOs) pressure on companies to show a move towards better environmental practice (DEAT, 2005:4).

The practice of corporate environmental reporting was initially a voluntary process, but from the mid-1990s, a number of countries began to introduce mandatory reporting requirements. According to Scott (as quoted by DEAT, 2005:4) Denmark was the first country in 1996 to introduce the requirement for public environmental reporting by companies.

South Africa on the other hand, partly due to its political history and the change to democracy in the 1990s, is acclaimed to have played a substantive role in the sustainability reporting movement. This leading role could be attributed to the fact that South Africa was pressurised by the potential of disinvestment by global economies due to the old apartheid rule. The Sullivan Principles (**Appendix 1**) were also one of the initiatives that were adopted by the South African government and hence increased the need for transparency. The transparency and disclosure deliberation in South Africa was therefore an active one from an early stage, even before the concept of sustainability reporting gained popularity (KPMG & UNEP, 2010:84).

The publication of the South African King Report on Corporate Governance in 1994 heralded the importance of reporting on non-financial matters (KPMG & UNEP, 2010: 84).

The fact that South Africa's largest companies are involved in mining and other heavy industries has also influenced environmental as well as health and safety reporting practices in a positive manner over the years. As a result South Africa is one of a few developing economies and the only country in Africa that has vibrant reporting activities. This performance has been acknowledged in international surveys (KPMG & UNEP, 2010:84).

In 1994 the King Report on Corporate Governance, commonly known as King I was published by the King Committee on Corporate Governance (IODSA, 1994). The King I report was the first of its kind in the country and was aimed at promoting the highest standards of corporate governance in South Africa. It was applicable to companies and organisations which were listed in the JSE, banks, financial and insurance entities and public sector enterprises governed by the Public Finance Management Act (Act 1 of 1999) and the Municipal Finance Management Act ( Act 56 of 2003).

Over and above the financial and regulatory aspect of corporative governance, King I promoted the need for an integrated approach to responsible and accountable corporate leadership aimed at enhancing good governance by involving a wide range of stakeholders. Even though the King I report could be regarded as ground-breaking at that time, changes in economic practices as well as legislative changes necessitated that the King I report be updated.

An updated report on Corporate Governance known as the King II report was published in 2002 (IODSA,2002). The King II report acknowledged a move away from a single bottom line which focussed mainly on finances to a triple bottom line which then encompassed the economic, environmental and social aspects of a company's activities. Compared to the King I report which focused on accountability and transparency, the King II report can be said to herald the need for sustainability reporting due to its triple bottom line approach to disclosure. The publication of the King II report in 2002, though not legislated, could be regarded as having laid the need and the requirement for sustainability reporting in South Africa. The Johannesburg Stock Exchange has requested listed companies to comply with the King II report recommendations or to explain their level of non-compliance (Merlin & Visser, 2002:80) and therefore supporting King II's need and mandate of sustainability reporting.

The third King Code on Corporate Governance in South Africa (King III), which became effective on 1 March 2010, emphasises the importance of integrated reporting (IODSA, 2010). Sustainability reporting and disclosure should be integrated with the company's financial reporting. The board should ensure that the report discloses the positive and

negative impacts of the company's operations and informs the public of management practices and plans to improve the positives and terminate or minimise the negatives in the financial year ahead (IODSA, 2010: 49).

The King III report has opted for an 'apply or explain' governance framework. Where the board believes it to be in the best interests of the company, it can adopt a practice different from that recommended in King III, but must explain it. Explaining the different practice adopted and an acceptable reason for it will then be consistent with King III principles. In contrast to King I and King II, King III applies to all entities irrespective of the manner and form of incorporation (IODSA, 2010:3).

The use of CSER is also increasing as it holds various benefits to an organisation, some of which include improved competitiveness due to demonstration of transparency through reporting. Fortes (2002:77), also stipulates that CSER can improve societal support because corporate reporting mandates that stakeholders should be involved to an extent in selecting what information they would like the company to report. Alternatively if stakeholders are not awarded an opportunity to choose the information that they would like the company to divulge in their CSER after a report has been issued they can be awarded an opportunity to evaluate the usefulness and the relevancy of the information contained in the report. It also provides an organisation with an opportunity to improve its environmental performance due to the fact that an organisation is under an obligation to report both its good and bad performance and hence would aim at reporting more on good performance and consequently reduce poor performance. Fortes (2002:91) further argues that CSER can increase organisational and societal environmental awareness. It is therefore possible that CSER can lead to enhanced sustainable development by assisting organisations to measure, track and improve its performance.

Sustainability reports are usually compiled in terms of an organisation's internal guidelines as well as external mandatory and voluntary CSER criteria (Ballou *et al.* 2006:66). This therefore leaves a potential for interpretation of what form a CSER can assume as well as how and what to disclose and to what extent. Hence the issue of credibility, comparability and comprehensiveness as there is no clear and mandatory format of reporting but rather a more guided as opposed to a more regulated format of reporting.

In essence, South Africa remains in a leading position with regards to sustainability reporting standards. With a focus on integrated reporting in King III, which has been presented within an “apply or explain” environment, the country is likely to remain in the leading position in terms of sustainability reporting evidenced by a further increase in both the quantity and quality of sustainability reports (KPMG & UNEP, 2010:85).

The King II report required compliance to the Global Reporting Initiative, (GRI) and it further provided guidelines to South African companies who intend to improve on their reporting methods and practices (Cliffe Dekker, 2003:1).

To help companies achieve the triple bottom line and enable corporate social reporting, King II further recognises that companies should integrate safety, health and environmental (SHE) objectives into their sustainability policies (Cliffe Dekker, 2003:2).

## **2.2 GLOBAL REPORTING INITIATIVE**

GRI evolved following the disastrous Exxon Valdez oil spill in 1989. Several concerned environmental groups, labour unions, and institutional investors joined efforts to draft the Valdez Principles. This became a code which guided the *modus operandi* of corporates with specific reference to environmental management. This led to the formation of an institution named the Coalition for Environmental Responsible Economies (CERES) and eventually these principles were renamed the CERES Principles (CERES, 20). The CERES organisation was a Boston based non-profit organisation and recognised the need for credible and accountable environmental reporting and consequently, one of the principles was dedicated to the public disclosure of environmental impacts. After some years of negotiation with regards to the application and the implementation of the principles, it was clear that investors, employees, NGOs, and companies all had different expectations about what should be included in sustainability reporting (Buchanan, 2008: 2).

The co-founder and former acting chief executive of GRI, Dr Allen White introduced a framework for Environmental reporting as an advisor to CERES in the early 1990s aimed at creating an accountability process to ensure companies followed the CERES principles for responsible environmental conduct (GRI, 2006:1).

In 1997, GRI was therefore initiated as a project within the CERES organisation. The primary goal of this organisation was the identification of a common set of metrics for reporting that all stakeholders could agree upon. To distinguish the work of the GRI and improve its international profile and credibility, the United Nations Environment Program (UNEP) joined with CERES to expand the scope of the GRI to ensure the reporting framework was further developed to cover economic, environmental and social issues, and had the balanced participation of companies, labour, Non-Governmental Organisation (NGOs), investors, academics, accountants and others from around the globe.

GRI launched the first version of the Guidelines in 2000, and the second edition followed in 2002 at the World Summit on Sustainable Development in Johannesburg. These were termed the G2 Guidelines and received high profile recognition among governments, business, civil society and labour participants, and were one of the only two initiatives mentioned in the official government declaration issued at the conclusion of the Summit. The same year GRI was formally instituted at the United Nations as a new organisation and a collaborating body for UNEP. The GRI became independent of CERES in 2002 and moved from Boston to Amsterdam where it incorporated as a non-profit organisation. The King II report followed in 2002 and were influenced by the G2 guidelines.

The GRI G3 guidelines are the most used, credible and trusted framework in the world (KPMG, 2006:3). It is however still a voluntary standard and it has not yet been listed as a legal obligation for sustainability reporting. The fact that the GRI G3 guidelines are not mandatory and are rather voluntary guidelines does lead to a lack of consistency on the information and reports issued by companies to the society on their environmental performance. The public therefore may be faced with a situation in which the information which they receive from companies is not relevant, nor transparent. This sentiment is also echoed by Ballou *et al.* (2006:71) when they found that the GRI guidelines have not yet been recognised by a regulatory body, and hence the content in the reports which companies issue to the public cannot be standardised. The Global Reporting Initiative hence serves as a standardising mechanism for those companies which are members of or issue their reports according to its guidelines on what content is relevant and should be contained in the reports. Other companies which do not subscribe to reporting

according to the GRI guidelines cannot be penalised or have any action taken against them with regards to the quality of information on their environmental performance.

According to KPMG (2006:24) South Africa ranks 10<sup>th</sup> among the 58 countries with respect to applying the GRI Guidelines as a framework for reporting. It is therefore evident that to a large extent South Africa is leading African countries with regards to corporate environmental reporting and can be regarded as being on par with international trends in corporate social environmental reporting.

### **2.3 KEY ASPECTS OF GRI REPORTING**

The Global Reporting Initiative (GRI, 2006: 28) lists the following as some of the key non-financial aspects that should be included in the environmental section of company reports:

- Materials used including percentage recycled (EN1)
- Energy consumed and saved (EN3)
- Water used and reused (EN8)
- Land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value (EN11)
- Impacts on biodiversity (EN12)
- Greenhouse gas emissions by weight (EN16)
- Initiatives to reduce greenhouse gas, ozone-depleting and other harmful emissions (EN18)
- Waste by type and disposal method (EN24).

The G3 guidelines suggest three levels of reporting applications and companies are required to declare ahead the level at which they issue the report. This is represented in Table 1. The levels are termed A, B and C according to levels of completeness, with the option of conducting independent external assurance, which is recognised by the ascription of a '+' sign at any level.

Report Application Level		C	C+	B	B+	A	A+
Standard Disclosures	G3 Profile Disclosures	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4, 4.14 - 4.15	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
	G3 Management Approach Disclosures	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach disclosed for each Indicator Category	
	G3 Performance Indicators & Sector Supplement Performance Indicators	Report on a minimum of 10 Performance Indicators, including at least one from each of: social, economic, and environment.		Report on a minimum of 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.		Respond on each core G3 and Sector Supplement* indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission.	

**Table 1 : GRI reporting applications (GRI,2006:2).**

- Level C report:* Indicates that the report details Section 1 Part 1.1 of the profile disclosure which basically informs the reader of the report about the company's strategy and analysis. Sections of Part 2 which is the organisational profile that inform the public about the primary brands and or services of the organisation as well as information such as the location of the organisation's headquarters and operational structures of the organisation need to be included in the C level reporting. Sections of Part 3 which inform the reader about the scope and boundary and the reporting cycle, frequency as well as the contact person at the company are included in reports issued at level C. Certain parts of Section 4 which discloses governance, commitments and the modus operandi for the company's stakeholder engagement are also included in level C reporting. Management approach disclosures are not mandatory if the organisation chooses to report at C level. Typical management approach disclosures would entail company policies, goals and organisational responsibility, training and

awareness programmes within the reporting organisation amongst others and any additional contextual information.

- Performance indicators are the last section on which an organisation reporting at level C will have to disclose information. It is expected of an organisation reporting at a C level to report on at least 10 performance indicators with at least one of the indicators from each of the economic, environmental and social performance indicators.
- *Level B report:* Discloses on Section 1 Part 1.1 as well as Part 1.2 of the profile disclosures which is a description of key impacts and risks and opportunities that an organisation faces as compared to Part 1.1 only as in level C reporting which as indicated informs the reader only about the company's strategy and analysis, more on Sections 2, 3 and 4. Management approach is mandatory for organisations reporting at level B.
  - It is expected of organisations reporting at level B to include a minimum of 20 indicators, of which at least one from each of the economic, environmental and social performance indicators ,
- *Level A report:* Details all parts of Sections 1, 2, 3 and 4 which are the profile disclosures, report parameters, governance commitments and engagement and the management approach disclosure. In addition level A reports need to detail all the core indicators of the performance indicators. If a core indicator is not reported by an organisation which issues it reports at A level then an explanation is required. This can be the case in instances where the indicator is not applicable for the organisation. For example environmental performance indicator EN27 is a core indicator which discloses the percentage of products sold and their packaging materials that are reclaimed by category. AGA does not report on this indicator because it is not applicable to the organisation, and rather AGA gives an explanation of why the indicator is not applicable in the report.

An A+ application level, such as that at which AngloGold Ashanti issues its reports, indicates that all criteria have been reported on for profile disclosures, and that the

management approach disclosures are provided for each indicator category, and finally that the report contains a description of each core G3 and sector supplement indicators.

In terms of the GRI reporting structure there is a total of 33 environmental indicators of which 30 are GRI framework indicators and three are ICMM sectoral supplement indicators (see section 2.3.1). 17 of the 30 GRI framework indicators and the three from the ICMM sectoral supplement are core indicators and have to be reported on. This amounts to 20 core indicators and 13 additional indicators.

The Environmental Performance Indicators are included as Appendix 2, and a more detailed description appears in Chapter 3.

Apart from stipulating the content of the indicators to be contained in the report, the guideline also defines the following concepts for organisations which aspire to follow the guideline.

**Transparency:** Full disclosure of the processes, procedures and assumptions in report preparation are essential to its credibility.

**Inclusiveness:** The reporting organisation should ensure that its stakeholders are fully engaged in the reporting process in order to continually improve the quality of its reports.

**Auditability:** Reported data and information should be recorded, gathered and collated in a manner that would enable an audit trail, analysis and disclosure should also be in such a way that auditing can be used to verify the credibility and reliability of the data and information.

**Completeness:** Information contained in the report should be material to users, and allow users of the report to assess the reporting organisation's economic, environmental and social performance. The contents of the report should be in a manner that is consistent with the declared boundaries, scope and time period as stated in the report.

**Materiality:** This is defined as ensuring that the report includes topics as well as indicators that are able to give information pertaining to the organisation's significant economic, environmental as well as social impacts. Such information should be sufficient and informative to the level that stakeholders are able to make judgements and assess an organisation fairly based on the information contained in the report.

**Relevance:** Relevance is the degree of importance assigned to a particular aspect, indicator or piece of information, and represents the threshold at which information becomes significant enough to be reported.

**Sustainability context:** The reporting organisation should envisage placing its performance in the larger context of ecological, social or other limits or constraints, in such a way that the reported information contributes significance to the broader context of sustainability and is not just isolated quanta of data and information.

**Accuracy:** The margin of error in the reported data and information should be as low as possible and data should be reliable. It should allow the users of the report to make decisions with a high degree of confidence.

**Neutrality:** Reports should not be biased in selection and presentation of information and should provide a balanced account of the reporting organisation's performance divulging good and bad information about the organisation where applicable.

**Comparability:** The reporting organisation should maintain consistency in the boundary and scope of its reports, disclose any changes, and restate previously reported information.

**Clarity:** The reporting organisation should remain cognisant of the diverse needs and backgrounds of its stakeholder groups and should make information available in a manner that is responsive to the maximum number of users while still maintaining a suitable level of detail.

**Timeliness:** Reports should provide information on a regular schedule that meets user needs and comports with the nature of the information itself (GRI, 2006:8).

The concepts listed above can be regarded as requirements of the sustainability reports according to GRI but a similarity also exists in what is required by other corporate reporting guidelines such as the King III codes which mandates that corporate reports have to be verified by external auditing companies. Furthermore Wallage (2000:58) stipulates criteria to which a CSER report has to conform. According to Wallage (2000:58) a CSER has to contain content which is relevant and meets the objectives of the report. The data in the report are to be reliable and the sources from which such data is sourced should also be reliable. The information and data contained in the CSER has to be understandable and hence the readers and the stakeholders for whom the report is intended for have to be considered during all the stages of reporting. These criteria correspond to what GRI stipulates and hence a company that reports according to GRI requirements such a report would meet Wallage's above mentioned CSER reporting criteria.

The verification of data is an important issue to any CSER report as highlighted through its inclusion into GRI requirements, the King III code and also as stipulated by Wallage (2000). According to KPMG (2006:29), not only does external auditing and assurance ensure that there is conformance to the frameworks but it also provides a sense of comfort to the stakeholders in knowing that the data are not generated internally only, but that the process of generating and the data itself have been verified. Furthermore external auditing protects the reputation as well as the image of the organisation. The branding of the organisation is maintained intact once the stakeholders and readers of the report are provided with a sense of trust of the report through the external verification process.

### **2.3.1 SECTOR SPECIFIC SUPPLEMENT**

To provide sector specific guidance and supplement the general information contained in the standard guidelines, sector supplements have also been included in the GRI guidelines, which include the following industries: Automotive, tour operators, public agencies, mining and metals, financial services, telecommunications, logistics, as well as the apparel and footwear sector (GRI, 2006:1).

Since this study is focused on mining, the relevant sector specific guideline is the International Council on Mining and Metals (ICMM) supplement.

The supplement deals with the aspects of sustainable development that characterise the mining and metals sector, often because they are encountered more frequently or in greater measures in mining than in other sectors. Reporting companies and the users of their reports are actively interested in these aspects, which therefore may merit a level of treatment not captured in the main GRI G3 guidelines. The sector supplement for AGA as a mining company was developed by the International Council on Mining and Metals as it pertains to mining and metals companies, and is presented in Table 2.

ICMM Performance Indicator	Disclosure
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.
MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.
MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks.

**Table 2: ICMM sector specific indicators (GRI, 2006).**

### **2.3.2 UN GLOBAL COMPACT**

In addition to the GRI G3 guidelines and the sector specific supplements, there is also the UN Global Compact, which is a voluntary international initiative (UNGP, 2009:1) that facilitates UN agencies, business, NGO's, labour and government to comply to ten principles in the areas of labour, human rights, anti-corruption and the environment (KPMG, 2006:3) as well as to disclose how these principles are applied within organisations which are members of the compact.

The UN Global compact has 10 guiding principles; three of which (principles 7, 8 and 9) are related to environmental practises in organisations.

*Principle 7* states that business should adopt a precautionary approach to its environmental challenges. This means that in cases where there is insufficient data and information to validate an impact then a worst case scenario should be assumed.

*Principle 8* stipulates that business should promote greater environmental responsibility. This approach supports sustainability in that in being environmentally responsible organisations do not only consider their current needs but also the needs of future generations.

*Principle 9* mandates companies to encourage the development and implementation of environmentally friendly technologies. This principle thereby encourages companies to be innovative and seek for best practicable options when dealing with environmental

challenges or even in simple developmental projects in organisation within which they operate (UNGP, 2009:3).

## **2.4 CONCLUSION**

The aim of this chapter was to give an overview of the reporting guidelines and criteria which organisation intending to issue integrated reports can use.

The fact that both the CSER are not regulated by any legislation can leave a lot to interpretation as to the means of reporting. This could create a situation where companies can still issue reports which are neither relevant nor transparent enough but still not be challenged. The benefit of reporting in accordance with the GRI requirements is that companies declare beforehand their reporting level and can only be accredited by the GRI organisation if they have met the requirements. In South Africa the King II code of governance has therefore recommended that companies listed on the JSE should use the GRI guidelines when issuing their sustainability reports; this can be seen as a move towards standardisation of the sustainability reports.

The GRI framework combined with the ICMM sectoral guidelines therefore provide guidance and direction which companies can use to issue their sustainability reports and evaluate their performance. In the next chapter indicators used to evaluate environmental are discussed in detail.

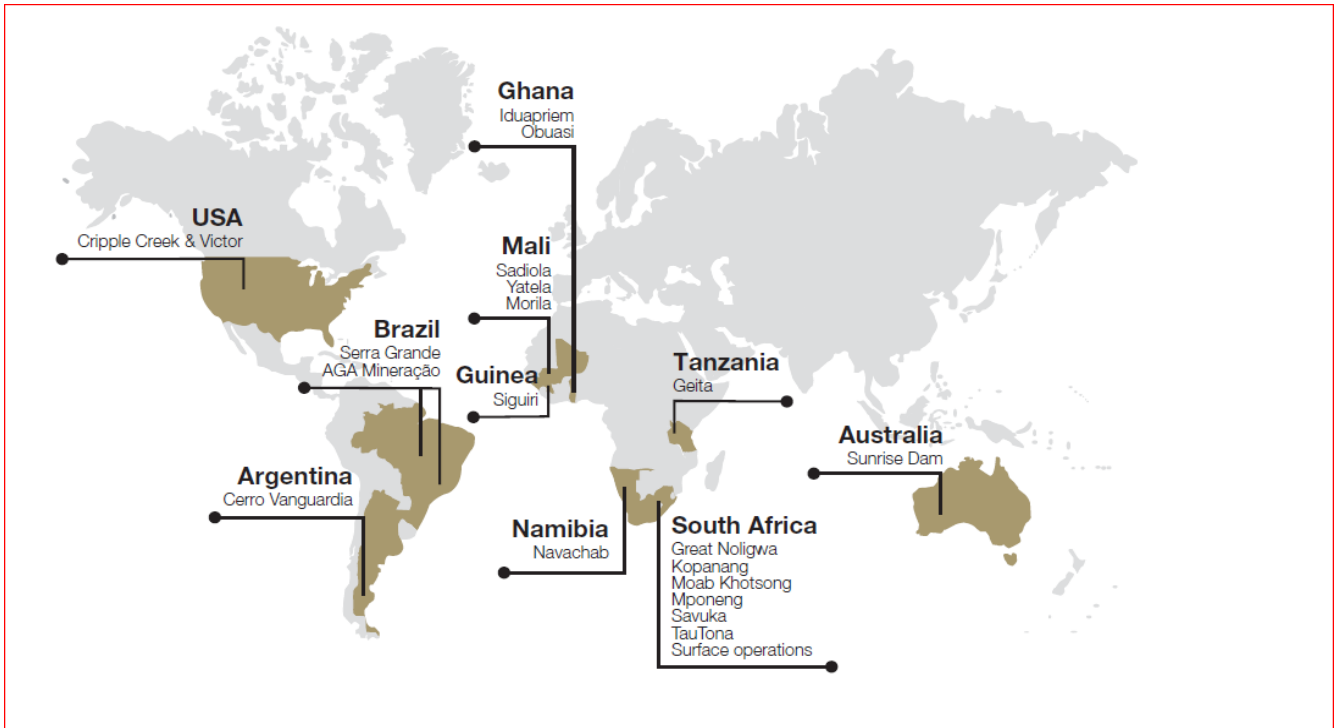
## **CHAPTER 3: ENVIRONMENTAL MANAGEMENT SYSTEMS AND REPORTING**

The previous chapter explained the reporting requirements according to GRI as well as the King II and King III codes of practices for corporate social and environmental reporting. In this chapter a description of the company chosen in the case study is given, how the company operates as well as how an EMS is used as a driving force for environmental management within the organisation. The processes used for data gathering and information generation towards GRI reporting are discussed.

### **3.1. ANGLOGOLD ASHANTI: CASE STUDY**

AngloGold Ashanti is a multinational company with its corporate office situated in Johannesburg, South Africa. The South Africa Operations contributed a total of 42% of the gold produced by the company in 2008. (AGA, 2008:6) The company's primary listing is in the Johannesburg Stock Exchange (JSE) but it is also listed on the London and the New York Stock Exchanges.

In 2008 all the operations were ISO 14001 certified. In addition to this the company is also a signatory to the United Nations Global Compact and a founding member of the International Council on Mining and Metals (ICMM) (AGA, 2008:216). The company is also a stakeholder of the Global Reporting Initiative (GRI) and has been issuing its annual reports since 2007 based on the GRI 2006 G3 Sustainability Guidelines.



**Figure 1: AngloGold Ashanti operations across the globe (AGA, 2008: 5).**

In South Africa there are six mining operations, and one surface operation. Three of the mining operations are located in the Witwatersrand and the other three are located in the Vaal River region. The surface operation is comprised of “salvaging” activities where gold is reclaimed from surface areas such as waste rock dumps. Surface operations are regarded as a single unit even though it spans across two regions.

There are four metallurgical plants spread across two regions namely the Witwatersrand and the Vaal River. The mining operations are managed as five business units because two mining operations in the West Witwatersrand have merged due to their reduced output. The metallurgical plants are managed as a single unit as well as the surface operations. This gives a total of seven business units. In 2008, 2009 and 2010, the review period for the study all the business units were ISO 14001 certified, and in addition the metallurgical plants were compliant to the Cyanide Code.

### **3.2 EVOLUTION OF AN EMS**

According to Steger (2000:23), the roots of Environmental Management Systems (EMS) can be traced back to the mid-eighties in the US, when a need to ensure compliance with increasing environmental legislation came to the fore. At the same time, leading companies in Europe were developing a more proactive attitude towards environmental issues, regarding them as a business opportunity rather than a problematic challenge. In their pursuit for management tools that would help them implement an environmental management approach, they developed environmental audits as a means to manage their environmental risks (Steger, 2000:23).

The 'Earth-Summit' in Rio 1992 brought a new global importance to the corporate role in environmental protection. The International Standardisation Organisation (ISO) set up a committee to develop an EMS, which was finalised in 1995 and released in September 1996. It was regarded as being much quicker when compared to other standards such as the standards for ensuring quality. The first module was ISO 14001, which covered EMS in general, and was soon followed by a series of other standard which covered the requirements for audits (ISO 14010–14012) or environmental performance evaluation (ISO 14031)(Steger, 2000:23). In the same manner, the European Union developed a regulation for voluntary participation in an Environmental Management and Auditing System (EMAS) in 1993. Initially, this regulation applied only to industry and used sites as the regulated body; sites had to submit an environmental declaration in order to be found compliant by an independent, government-accredited auditing organisation (Steger, 2000:24).

The widest uptake of EMS has been ISO 14001: 2004, the same applies also within AGA, and therefore only ISO will be discussed in the rest of this chapter. ISO 14000 is a series of standards issued by the ISO focusing on corporate environmental management systems, promoting continual improvement without specifying actual standards of performance. Critics of the system state that because it requires organisation to only put into place the systems or structures for monitoring environmental aspects and reducing environmental impacts, there is no requirement that environmental performance actually be improved or that specific goals be met. In fact, an organisation's environmental performance could even deteriorate while the organisation is certified. It has also been

stated by those who do not favour the system that it dictates requirements for management processes and not environmental performance (Bansal & Bogner, 2002:282).

However, those in favour of the ISO 14001: 2004 EMS argue that through the introduction of the system into an organisation there has been evidence of internal performance benefits such as cost reductions, environmental quality improvements, increased productivity even to an extent of improved employee morale. It is worth noting though, that cost reductions do not necessarily mean an improved environmental performance as in certain instances cost are externalised and hence the environment may end up bearing financial costs, and sometimes this may be to the detriment of the environment. On the social context there are those who argue that other benefits include improved relations with communities and authorities (Bansal & Bogner, 2002: 284).

According to Balzarova and Casta (2008:76), external marketing benefits have also been reported by certain organisations, these include improved corporate image, increased market share, increased customer satisfaction, as well as increased on-time delivery. It is therefore evident that given the fore mentioned benefits it is of value for organisations which can afford it to actually implement an EMS. This will not only add value as indicated in the discussion but in addition an EMS leads to generation of volumes of information and data which according to the system need to be recorded and traceable.

One of the ISO: 14001 clauses which is of interest is the monitoring and measurement clause, which stipulates that an organisation should monitor its environmental performance (ISO, 2004). It is possible therefore that an introduction of an EMS in any company can add value in generating data which can be of importance if an organisation needs to know as well as evaluate its environmental performance, whether good or bad.

### **3.3. MONITORING, MEASUREMENT, DATA GATHERING AND VERIFICATION**

In order for a company to compile and release information and data to society it is imperative that there be a system for data collection and management. According to DEAT (2005:8) an important component in the success of environmental reporting is ensuring that the collection and management of data forming the inputs to the reports are well organized and able to ensure accuracy and appropriateness.

Measuring and monitoring becomes one of the processes in which companies must engage if information and data pertaining to its environmental performance are to be generated which consequently informs management decisions. It follows that measuring is important and core to management activities. The phrase "if you don't measure it, you can't manage it", is realised and becomes important for the functioning of management. This is an example of Galileo's statement "count what is countable, measure what is measurable and what is not measurable, make measurable" (quoted by Beukes, 2003:28).

Spellerberg (quoted by Abbot & Guijt, 1998:11) define monitoring as the systematic measurement of variables and processes over time. Monitoring and evaluation are closely linked, but the major difference exists in the frequency with which observations are made and the data are collected, which has many methodological implications. Monitoring is a periodic, rather than a once-off, re-assessment of indicators that are chosen to determine the effects of certain interventions or policies, or change in general. Thus, monitoring is a relatively frequent occurrence, as often as daily, while evaluations generally are more sporadic, sometimes annually or bi-annually, but more often every two or three years (Abbot & Guijt, 1998:13). One area where confusion remains about the difference between monitoring and evaluation is how to deal with the analysis of data. McArthur (quoted by Abbot & Guijt, 1998:13) does not support the notion of separating monitoring from evaluation, but argues that the activity of monitoring is inseparable from evaluation and the two are rather activities that complement each other. For some, the act of interpreting monitoring data makes it an 'evaluation' activity, while others view analysis as part and parcel of any monitoring process. Abott & Guijt (1998:13) conclude that: "it is important to distinguish between monitoring as a process of regularised observation and data collection and evaluation as a way of systematically organising and interpreting data for management and planning." Hence, both monitoring and evaluation approaches require the identification of relevant information, how data

should be collected, analysed and interpreted, and who should be involved in each phase. These decisions depend on the objective of the exercise, the scale and structure of the activity to be monitored and or evaluated, and the resources available.

Data acquisition and tracking systems vary from one organisation to another. Sometimes a hand-written log sheet is the only source of data. Fully automated relational databases with direct data input from monitoring equipment can be found in only a few of the better-organised companies. That is why seeking to track and quantify the effectiveness of environmental activities and data have different levels of difficulty and, in some cases, complete data cannot be obtained (Scavonne, 2006:1279).

Environmental Management Accounting (EMA) is one of the processes that can be used for the generation as well as for the analysis of both financial and non-financial information in order to support an environmental management system, and can therefore be regarded as an environmental monitoring tool. Scavonne (2006:1279) states that it is an approach designed to help company personnel integrate environmental management and best management accounting approaches and practice.

There is no obvious best method of how data can be generated, collected and verified. However it is logical that time and effort needs to be invested in setting up systems to collect data and ensure continuity and relevancy. Collection of data can be moved between different collection and transfer points. This means that there can be various points from which data are collected and the transferred to a central point which can be regarded as the data collation point, where data from different sources are arranged to give sense and meaning. According to DEAT (2005:8) good data management should ensure that information passes through as few hands as possible and at all of its stages, is checked for accuracy and up to date status.

To assist organisations in the process of performance measurement, the International Standard Organisation (ISO) has developed the ISO 14031 specific standard to help organisations with environmental performance evaluation (EPE).

The standard can be used to offer practical guidance to organisations in selecting relevant, reliable, and comparable measures or indicators. In addition, the standard

provides a framework, in line with the plan, do, check and act model as used in ISO 14001, for the collection, analysis, assessment, reporting and review of data.

Indicators are the main tools of this standard, and are defined as the “specific expression that provide information about an organisation’s environmental performance” (ISO, 1999:1). Their main scope is to make measurement of the environmental performance easier for organisations, because measurements can be uncertain and hence yield data which are unreliable. The uncertainty that affects raw data is an important factor, since an indicator can provide a reliable picture of the environmental aspects or performance only if it is based on data which is of good quality.

Indicators are used in EMS to reflect and give information to the relevant individuals involved in the EMS with regard to environmental performance in EMS language. These indicators are not necessarily linked to the GRI indicators, but may be more closely related to significant aspects of an EMS and hence have to be monitored. Various types of EMS indicators are detailed in the ISO 14031 standard.

It therefore becomes imperative for organisations to have an EMS that can be aligned to the GRI data capturing or acquisition process. Since an EMS does not dictate which indicators are to be monitored, the choice of indicators which form part of an EMS becomes a crucial issue if alignment is to be achieved, though a common practice is that organisations tend to monitor those indicators relating to significant aspects of the EMS.

Ideally GRI indicators should be included as indicators which are to be monitored in an EMS, in order to avoid duplication or even creating a situation where data has to be sourced from scratch at the time of reporting, which can lead to potential inaccuracies and compromising on the quality, reliability and traceability of the data.

An aligned system could also benefit organisations during auditing and verification of data by ensuring that there is an audit trail (DEAT, 2005). The value of an audit trail cannot be overemphasised as it improves and facilitates the auditability of data especially in cases where external as well as internal verification is required. Auditing and verification of data is not a requirement in terms of GRI guidelines because a report can be issued without external assurance and hence does not have a + rating, but it can

be used by organisations in ensuring that the data which is released in their reports are credible.

Organisations can use different methods to ensure credibility of their GRI reports, which can include internal and external audits. The GRI recommends, but does not mandate, external audits in addition to internal audits to ensure credibility. These external audits are usually executed in terms of a “*systematic, documented, and evidence-based process*”, not governed by a specific standard assurance (Ballou *et al*, 2006:70).

In order to ensure credibility of reports that are not verified by external auditors the CSER frameworks serve as standards against which credibility can be verified though not assured. The need for the use of CSER frameworks is also evident in the fact that, according to Antonites and de Villiers (2003:8), there are no relevant legal requirements related to disclosure of sustainability information in South Africa and hence the CSR guidelines can be used as a measuring tool to ensure consistency in the reporting and disclosure practices in South Africa. However, Lucas (2009) does not concur with this statement because the Public Finance Management Act, 1999 (Act 1 of 1999) makes provision for corporate reporting in section 55(2) (a) related to annual reports and financial statements of public institutions and entities, and therefore this indirectly becomes a legislative requirement for corporate reporting. This legislative provision is however quite wide, and not directly related to sustainability reporting. According to Lucas (2009) compliance to the CSR guideline, though not mandatory can assist organisations in managing sustainability issues and reporting at an improved level on such issues. If used correctly, the frameworks to guide the reporting process in companies can also improve stakeholder perceptions and involvement in companies and furthermore can improve communication, and in certain instances attract investors.

External assurance provision in South Africa is however still low. This is evident in the fact that only 9 of 141 (6%) companies surveyed by KPMG in 2006 had used external auditing companies to validate and verify the data in their reports (KPMG, 2006:20).

The GRI level A reports issued by AGA over the three years (2007 – 2009) for which this investigation has been conducted were given an A+ rating which indicated that the report was audited by an external company.

### 3.4 TYPES OF ENVIRONMENTAL PERFORMANCE INDICATORS

Monitoring and measurement is conducted so as to assess the environmental performance of an organisation. In order to understand how an organisation performs environmentally, it is imperative to know the various types of performance indicators, which refer not only to physical and visible conditions of an environment, but can also refer to the way in which management makes decisions, and to their level of commitment to invest in environmentally-friendly or industrially leading initiatives.

Environmental Performance Indicators can be grouped into two general categories, namely environmental conditions indicators (ECIs) and environmental performance indicators (EPIs)(Jasch, 2000).

ECIs provide information about the condition of the environment which may be useful for the implementation of environmental performance evaluation within an organisation. At times ECIs can also be used to describe the baseline condition of an environment at the time of project implementation so that any impact after project implementation can be identified and assessed more readily. For example ECIs can highlight the effect of air emissions on the regional air quality, or the effect of water discharges on water resources in operational areas of an organisation.

EPIs can be further grouped into two general types namely management performance indicators (MPIs) and operational performance indicators (OPIs).

Management performance indicators (MPIs) provide information about management efforts to influence the environmental performance of the organisation's operations. MPIs relate to the policy, people, practices, procedures, decisions and actions at all levels of the organisation". Operational performance indicators (OPIs) on the other hand provide information about the actual environmental performance of the operations of the organisation, and OPIs relate to:

- "the design, operation, and maintenance of the organisation's physical facilities and equipment;
- the materials, energy, products, services, wastes, and emissions related to the organisation's physical facilities and equipment; and

- the supply of materials, energy and services to, and the delivery of products, services and wastes from the organisation's physical facilities and equipment.” (Jasch, 2000:83).

OPIs are used to evaluate the actual environmental aspects of organisations and or sites where processes and operational activities of organisations take place. They are subdivided into mass and energy indicators, for examples:

- electricity consumption per production unit,
- total waste
- average petrol consumption of the transport fleet.

OPIs are the basis of environmental performance data for internal and external communication (Jasch, 2000:83).

GRI further classifies its indicators as core and additional indicators. Core indicators are compulsory to report on except if such indicators are not applicable to the organisation or if the organisation wishes to issue its reports according to B or C application levels. The different application levels were discussed in Section 2.2 of Chapter 2. Additional indicators on the other hand are those indicators which are not compulsory to report on. The ISO 14001 standard does not stipulate what type of performance indicators should be monitored and measured in an EMS. It just mandates that an organisation should monitor and measure its environmental performance. This leaves organisation with a choice of aspects which it can measure, and therefore a wide choice of indicators which it can include or choose to exclude in its EMS.

### **3.5 CONCLUSION**

The discussions above have explained the importance of aligning a company's EMS monitoring and measurement process to its GRI data acquisition and gathering process. This will not only improve the EMA system, but will also reduce potential duplication and minimise the stages through which data go through before input into the GRI collation system. As alluded to by DEAT (2005: 8), good data should go through a minimal number of stages. One way in which an EMS can be fully aligned to the GRI reporting process is to include the aspects that a company reports about in the GRI report into the monitoring and measurement process of an EMS. This can be facilitated through identification of such aspects and then enumerating these in the monitoring and measurement procedure so that these are continuously monitored, and data captured more frequently as determined by the procedure rather than sourcing the data at the time of generating the sustainability report.

The following chapter investigates the extent of alignment of the indicators reported in AngloGold Ashanti GRI reports to the indicators which the business units measure in the monitoring and measurement process of the EMS.

## **CHAPTER 4: DATA GATHERING AND REPORTING IN AGA**

The main aim of this study is to determine the extent of alignment between Environmental Management Systems (EMS) monitoring processes and the collation of data towards the annual Global Reporting Initiative (GRI) within AngloGold Ashanti and to assess the performance of the reports over a three year period. As indicated in Chapter 1, four supporting objectives were also set in order to achieve the main aim, namely;

5. To seek evidence of a link between EMS clauses and GRI Indicators used in the generation of environmental data collated for the sustainability reports. The means of assessing this are discussed in section 4.1.
6. To investigate the data gathering processes as followed by personnel. The methodology is discussed in 4.2
7. To investigate the corporate perspective on selection and materiality of GRI indicators for GRI reporting. This is discussed in section 4.3
8. To determine the level of compliance of the content of the reports to the GRI reporting requirements. The method followed to determine this is detailed in section 4.4

The results are discussed immediately following each methodology.

### **4.1: THE EXTENT OF ALIGNMENT BETWEEN EMS AND GRI DATA GATHERING IN AGA. (Objective 1)**

The ISO 14001: 2004 EMS procedures relating to monitoring and measurement (clause 4.5.1) and the objectives, targets and programmes (clause 4.3.3) of the seven business units within the organisation were scrutinised. In each of the EMS procedures it was determined which aspects relating to the various GRI indicators were captured for each of the business units. Objectives and targets are closely related with the monitoring and measurement process and therefore were also investigated.

Since the ISO 14001: 2004 system is based on continual improvement, there is a possibility that if the procedures for different years were used, it could impact on the results as some improvement could have been effected on the procedures over the

three year period. Therefore the 2009 EMS procedures were used to achieve consistency. In certain instances the business units did not detail their objectives in the procedure and had a separate sheet for objectives and targets. In such cases, the actual or the different sheet for the objectives and targets was also consulted and analysed.

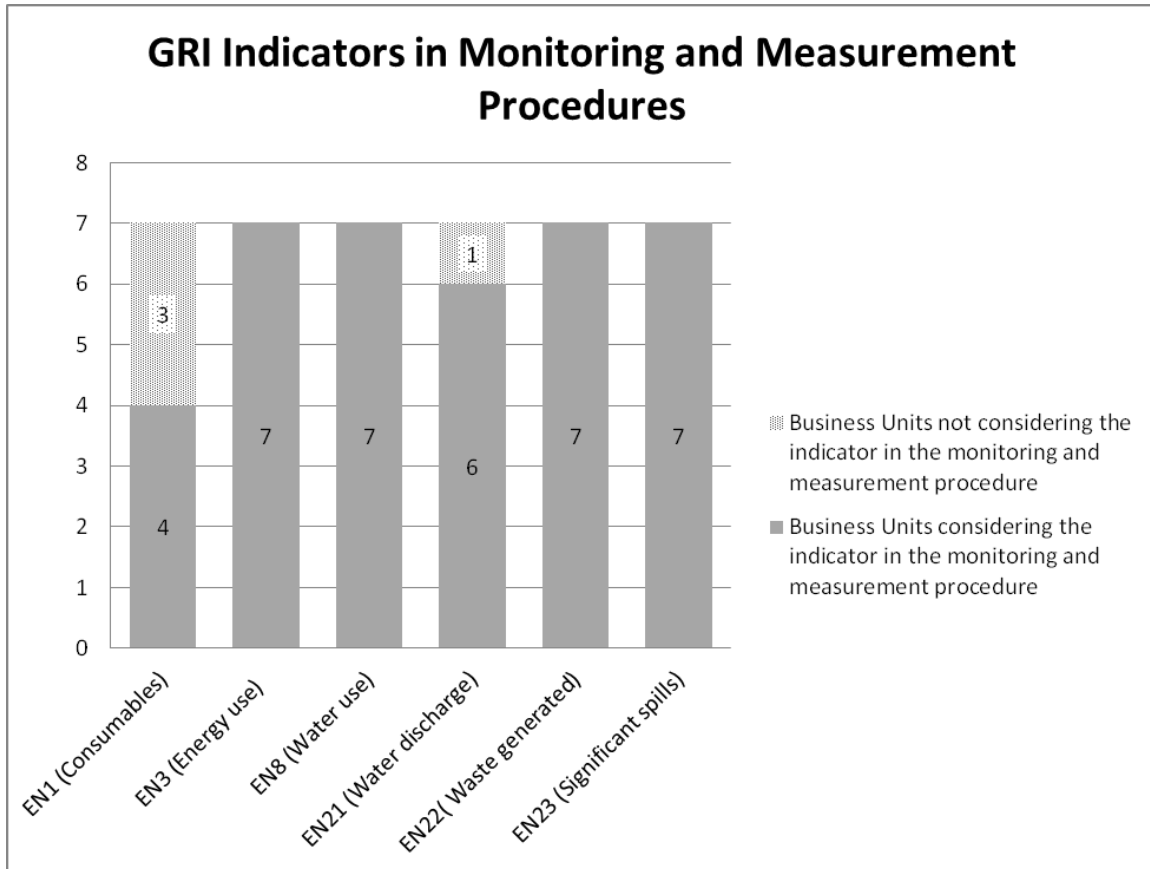
Indicators detailed in the GRI reports are routinely coded according to the category in which they belong and the environmental indicators which detail environmental performance are coded EN. Similarly those indicators which detail economic performance are coded EC. Due to the wide range of environmental indicators, only the indicators mentioned below were considered in determining the level of alignment for the objectives, targets and programmes as well as monitoring and measurement.

- Material use by type (EN1)
- Direct energy consumption by primary energy source (EN3)
- Water use (EN8)
- Water discharge (EN21)
- Weight of waste by type and disposal method (EN22)
- Total number and volume of significant spills (EN23)

These indicators were chosen because they can be measured by the business unit and hence should feature in the respective business unit's monitoring and measurement EMS procedures. Indicators relating to air emissions i.e. EN16, EN17, EN19 and EN20 were scoped out because within AGA this was done centrally from corporate office and does not feature as an aspect to be monitored by the individual business units.

#### 4.1.1 GRI INDICATORS IN THE MONITORING AND MEASUREMENT PROCEDURES

The graphs below represent the results of the desktop study detailed above.



**Figure 2: GRI Indicators included in ISO 14001: 2004 monitoring and measurement procedures.**

It can be seen in Figure 2 above that all the business units included electricity consumption (EN3), water use (EN8), waste generated (EN22) and significant spills (EN23), in their monitoring and measurement procedures.

Reductions in electricity use (EN3) was set as a company-wide strategic objective and hence it follows that it had to be monitored efficiently in all the business units.

Water use (EN8) was also monitored by all the business units, which could be attributed to the fact that water use was identified as a significant aspect in the aspect registers of all business units and hence efficient monitoring was required to ensure optimal water use and reduction in water wastage. Only one business unit did not measure its water

discharge (EN21). Upon investigation it was found that the process water from this business unit is in closed circuit with another business unit in the same region and hence water discharged was accounted for in the other business unit.

Waste (EN22) was also another issue that was identified as significant in the aspect registers of all the business units in the study and was monitored closely.

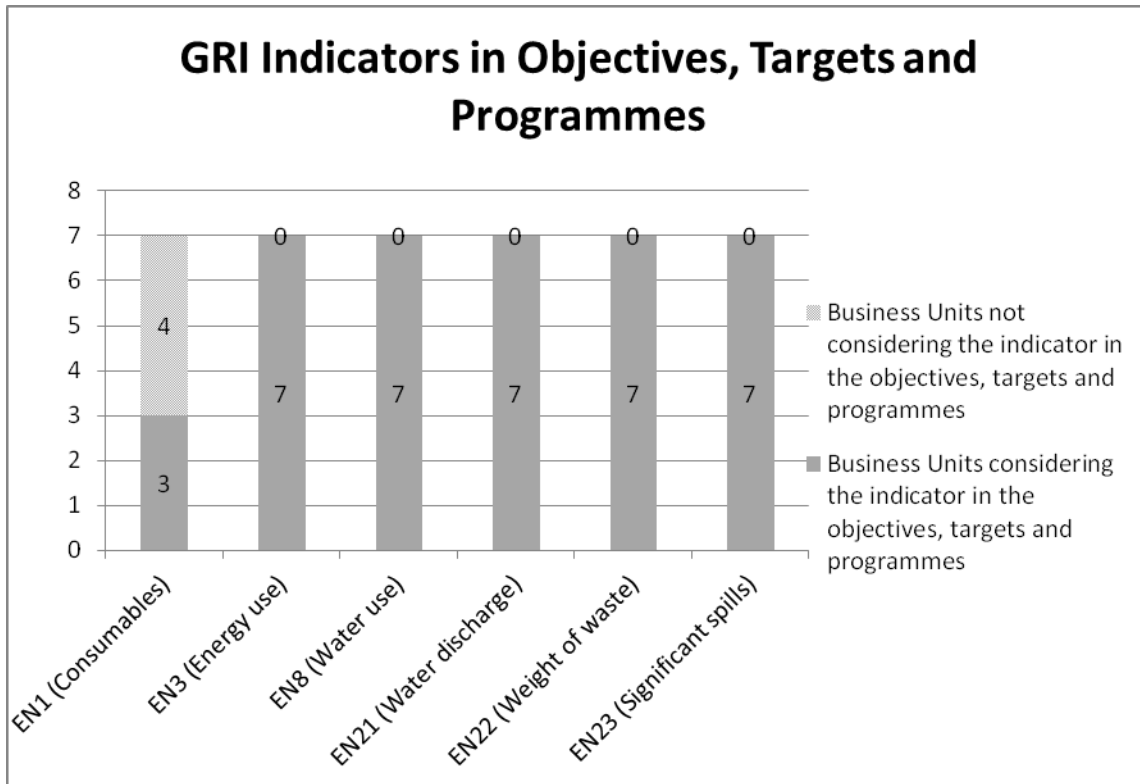
A reduction in reportable environmental incidents by 60% over a three year period from 2009 was also set as a company-wide strategic objective from 2009 and hence it could be attributed to the close monitoring of significant spills (EN23) by all the business units.

Only four of the seven business units did monitor and measure the resources that it used (EN1) as part of its EMS. Resources used (EN1) and reported in the GRI reports for AGA are the explosives, hydrocarbons and grease. Hydrocarbon was the only resource that was monitored and measured consistently across the four business units. One business unit however did not measure explosives as it did not use such in its operations.

It can therefore be seen that material use (EN1) was not monitored as part of the EMS by all the business units. This was attributed to the fact that resource use (except for water and electricity) was not identified as significant by the other three business units.

#### 4.1.2 GRI INDICATORS IN THE OBJECTIVES AND TARGET PROCEDURES.

Figure 5 below represents the results obtained in determining which of the business units included the sampled indicators in their objectives, targets programmes and procedures.



**Figure 3: GRI Indicators included in the ISO 14001: 2004 objectives, targets and programmes procedures.**

The trend which was observed in the inclusion of GRI indicators in the monitoring and measurement procedures also prevails in the setting of objectives, targets and programmes.

It is however worth noting that one business unit that did monitor and measure resource consumption (EN1) did not include resource consumption in the setting of objectives and targets. This ties in with the fact that resource consumption was regarded as insignificant according to the aspect rating for the business unit. Less emphasis was

therefore placed on resource consumption and hence even though it was monitored no objectives and targets were set.

#### 4. 2 DATA GATHERING PROCESS WITHIN AGA (Objective 2)

The questionnaire was developed so that an actual reflection as well as impressions from the individuals assigned the task of environmental management could also be determined. The questionnaire was aimed at determining to what extent the seven business units have a mechanism of aligning its data acquiring system for the GRI to the EMS ISO 14001: 2004 system, with specific reference to the identified EMS clauses and the selected indicators.

An abbreviated version of the questionnaire and possible answers appears in Table 3.

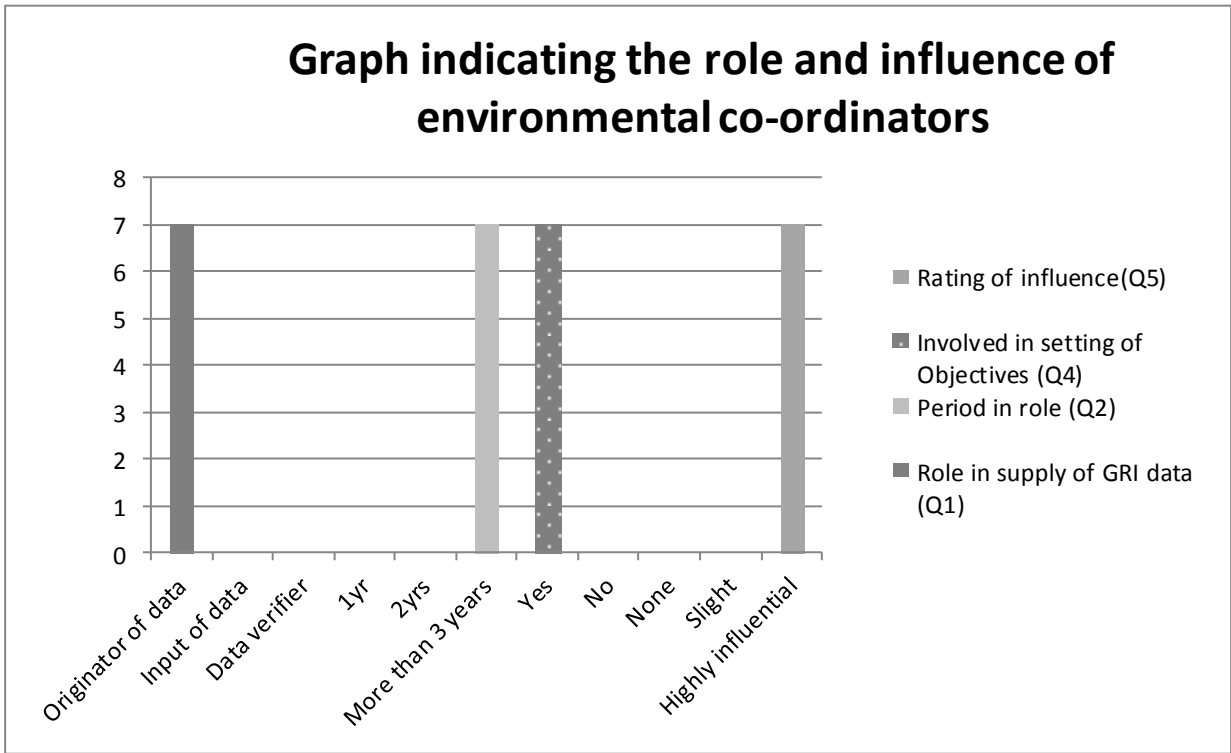
Questions	Answers
1. Role / input towards GRI annual reporting.	Originator, capture, supplier, verifier of data.
2. Period in the above role.	1yr, 1-3 yrs, more than 3 years
3. Which indicators do you report on annually?	Choice of indicators
4. Are you involved in the setting of objectives? (Yes/ No)	Yes/ No
5. Rate your influence in the setting of objective.	Not influential, slightly influential, highly influential.
6. In the setting of objectives do you consider the results of the previous year's EN indicators? (Yes/ No)	Yes / No.
7. Do you have a system for aligning the objectives and targets of the organisation? (Business Unit) to the GRI indicators (ENs)	Yes/ No.
8. If Yes for above, which aspects of the objectives and targets are aligned to which GRI Environmental Indicators. ( ENs)	Enumerate the aspects which are linked to objectives.
9. How are the data that go into the GRI report obtained?	Monitored continuously, obtained from stores quarterly/ obtained from personnel quarterly, obtained on an annual basis
10. Indicate which indicator would fall under which category towards the gathering and compilation of data that go into the GRI report.(monitored regularly, monitored quarterly, obtained quarterly from stores, obtained annually from stores, others)	Link indicator with the method of data collation.
11. Which key characteristics of the organisation's aspects are monitored as required by clause 4.5.1 of ISO 14001: 2004 standard?	Enumerate key characteristics included as part of monitoring process.
12. Have previous years' GRI reportable environmental indicators been used by the organisation (Business Unit) to set objectives and targets for the subsequent years	Yes / No.

**Table 3: Abbreviated questionnaire**

A rating of the influence as well as the experience of the co-ordinators in their current roles and on the setting of objectives was determined as this was seen as a factor which could have an impact on how the objectives were set and hence an indirect impact on methodologies used for the gathering and collation of data for input into the GRI reports. A questionnaire was the preferred methodology as it was assumed that it will be able to extract information relating to the actual practices as compared to conducting a desktop survey and only being able to deduce “biased” impressions.

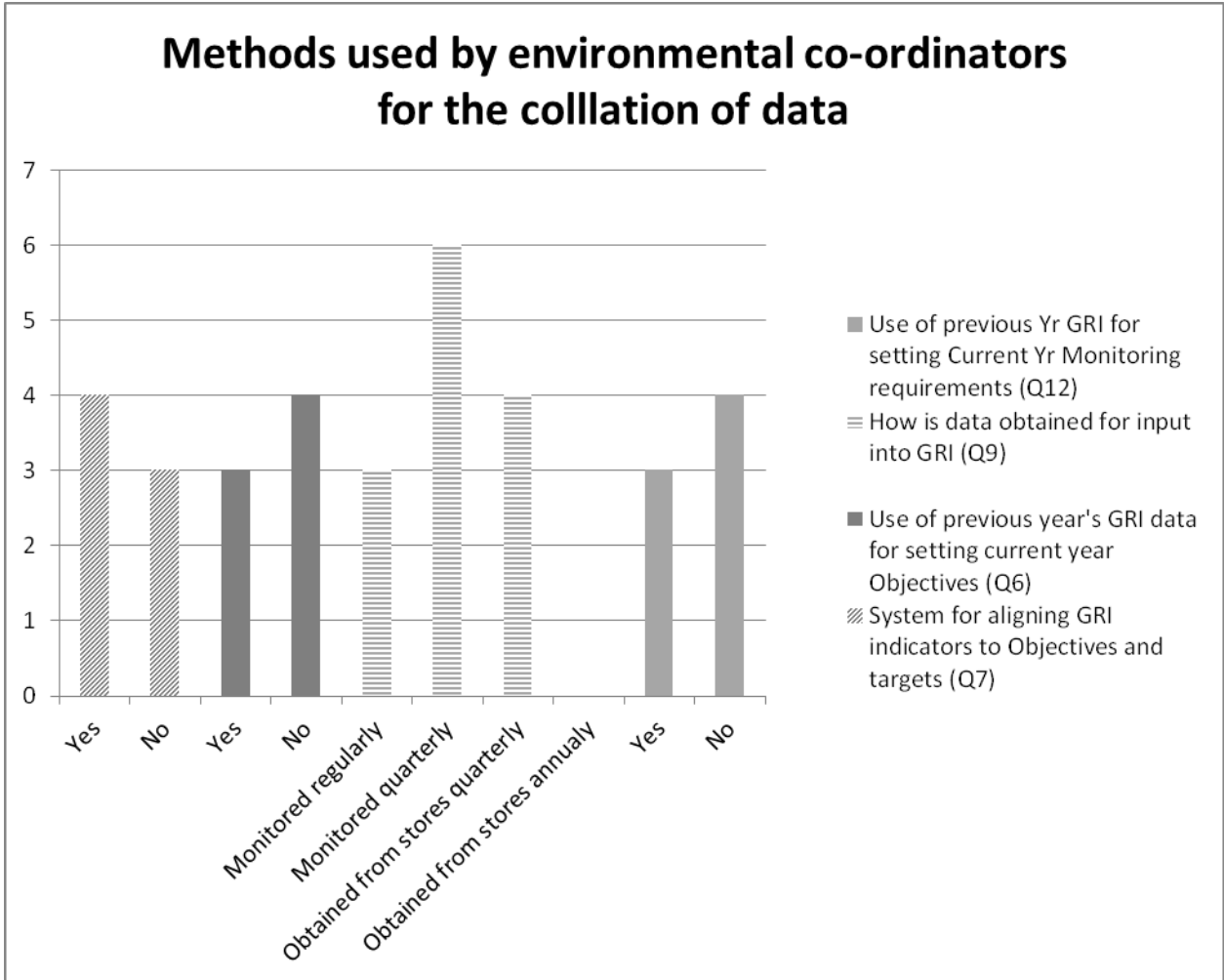
The questionnaire was initially tested on one individual to test suitability for the research and was then adapted in cases where it did not elicit enough information deemed as essential to conclude what the actual practices were. The full questionnaire is included as Appendix 5. The questionnaires were completed by seven respondents representing the seven business units, in the presence of the researcher, and verbal prompts were used in cases of ambiguity. Responses are discussed and summarised in Figures 4 and 5.

Results obtained from the questionnaire indicated that all the personnel tasked for the implementation and maintenance of ISO 14001: 2004 EMS were also involved in the supply of data for GRI reporting and are therefore the originators of the data (Q1). Personnel also indicated that they were fairly familiar with the process as they had been involved for periods longer than 3 years (Q2). The co-ordinators all reported on EN1 (consumables) EN8 (water use), EN22 (waste disposed and type) as well as EN 23 (total number and volume of significant spills (Q3). They were involved in the process of setting the objectives (Q4) and also rated themselves as highly influential (Q5) and hence input from them is likely to be considered by management and less likely to be dismissed or ignored.



**Fig 4: The role and influence of co-ordinators.**

It was found that different methods were followed in gathering data for the GRI report (Q9), as indicated in Figure 5 below. It was found that four (4) of the seven (7) indicated that they had a system for aligning the GRI indicators with the setting of objectives and targets.



**Figure 5: Methodologies used in the data collection for input into GRI reporting.**

The method of data collection for input into the GRI varied even within one business unit depending on the indicator. Across some business units it was found that data was collected through regular and more frequent monitoring whereas others collected it through quarterly monitoring and in other cases other business units only sourced data from the stores on a quarterly basis at the time of reporting and hence no close monitoring existed. Based on this observation no alignment could be clearly established between the methods of monitoring and data collection for GRI reporting.

Three of the seven business units indicated that they did consider the results of the previous year's GRI data when setting the current year's objectives and targets. The same business units also used previous years' GRI data on setting the current year's objectives and targets.

It is therefore suggestive from the desktop study and the questionnaire that there is an alignment of the EMS to GRI indicators. This was however not consistent and limited to an extent. The use of materials such as explosives, grease and other process materials used in the gold mining industry was not closely monitored by all business units. It was evident that materials with a potential to significantly impact negatively on the environment if released by accident were monitored closely and hence were part of the EMS monitoring programme and hence aligned to the reporting process as well. This included materials such as cyanide and hydrocarbons.

Other materials regarded as less potentially harmful to the environment were not monitored closely, this included material such as explosives. This notion of risk ranking material used and hence inclusion in the monitoring and measurement programmes of the business units therefore could be regarded as influential in the determining factor of what is aligned between the monitoring programmes of a business unit and the reporting process.

Waste was also (EN1) an issue which was found to be monitored though inconsistently and hence impacting on the reporting process. Waste generated with a monetary value such as steel and copper cables were monitored closely due to the monetary value attached to it. Waste with no monetary or with a limited value attached to it was not monitored closely and hence created potential alignment problem at the time of reporting. This included waste such as hydrocarbon waste and crushed fluorescent tube waste. This resulted in duplication of efforts at the time of collecting and collating data for input into the GRI annual report as it meant data has to be sourced from its original sources such as dispatch and safe disposal records as no summaries were in place and rather that reliance was more on the records of safe disposal certificates.

#### **4. 3 SELECTION OF INDICATORS IN THE GRI REPORT (Objective 3)**

An open ended questionnaire was completed by the person responsible for GRI reporting at corporate level. The process entailed an e mail with questions set pertaining to the corporate expectations, perceptions and experiences of data collation for GRI

reporting. Questions posed also related to the criteria used to select parameters and material usage reported on by the company.

The impression obtained from the electronic interview revealed that there was a disconnect between EMS data capturing, and methods used in the collection of data for input into AGA's annual GRI report. However according to the interviewee, this can be regarded as less than ideal since having an EMS in place should be to the benefit of the organisation regarding GRI reporting and not a duplicated effort.

The interview indicated that if resource consumption (EN1), energy use (EN3) and water use (EN8) are noted as significant aspects in the EMS, it would be expected to be listed as a related EMS objective or target, which can even be to remain at a constant level of usage or efficiency. Following from that, one would expect monitoring and measurement processes to identify actual performance and reports against the objectives to be regularly scrutinised by management. Such processes in the EMS would certainly strengthen not only the systems and quality of data used to report consumption at year-end, but hopefully improve actual performance.

With regards to the selection of material to be reported the explanation given was that for the AGA global report timber was excluded because it is a material unique to South Africa underground and Obuasi mines in Ghana. It was mentioned that the organisation had tried to select parameters that would be relevant across all operations. Alkalis and acids as well as cyanide were chosen as important chemicals consumed (EN1) to report on because of their potential impact on the environment. The interview also revealed that it was however more important that the report should inform readers how these potentially dangerous chemicals are managed rather than simply how much of them are used, and hence an opportunity to develop metrics that show how well the key control parameters are being applied. Response from the interviewee indicated that such metrics could inform the reader about the number of inspections conducted to test the application of reagent management controls such as bunds integrity; offloading and storage practices; and how many deficiencies were found and or closed out within the required time periods. The same philosophy can be applied to waste controls. The message revealed through such would inform the readers not only how much of the dangerous goods the company uses but also that reagents are managed to a good standard.

The corporate interview alerts to the fact that AGA can still report more on the additional indicators and not limit itself to the core indicators. At the time of this study AGA GRI reports focussed more on the core indicators which did not comprehensively inform the readers of the report and the company's stakeholders about management approaches and practises used by the company to ensure sustainability and ensure minimal harm to the environment.

#### **4.4 EVALUATION OF THE SUSTAINABILITY REPORTS ISSUED BY AGA. (Objective 4)**

The annual GRI reports issued to society for the period 2007 – 2009 were evaluated for completeness and compliance to the reporting requirements of GRI and ICMM.

Evaluation of completeness was based on the GRI indicators included in the reports over the stipulated period against what is required to be reported as per the GRI G3 reporting framework (Standard disclosure – see Table 5). Other factors which can impact on completeness of the reports according to the GRI G3 reporting framework such as the structure of the report, and information pertaining to organisational structure of the company, were scoped out for the purpose of the study to retain the focus and emphasis on the content of the environmental section of the report.

Performance of the reports was also evaluated according to the type of indicator included in the report, i.e. management performance indicators (MPIs), operational performance indicators (OPIs) and environmental condition indicators (ECI), as defined by ISO (1999) in Table 4

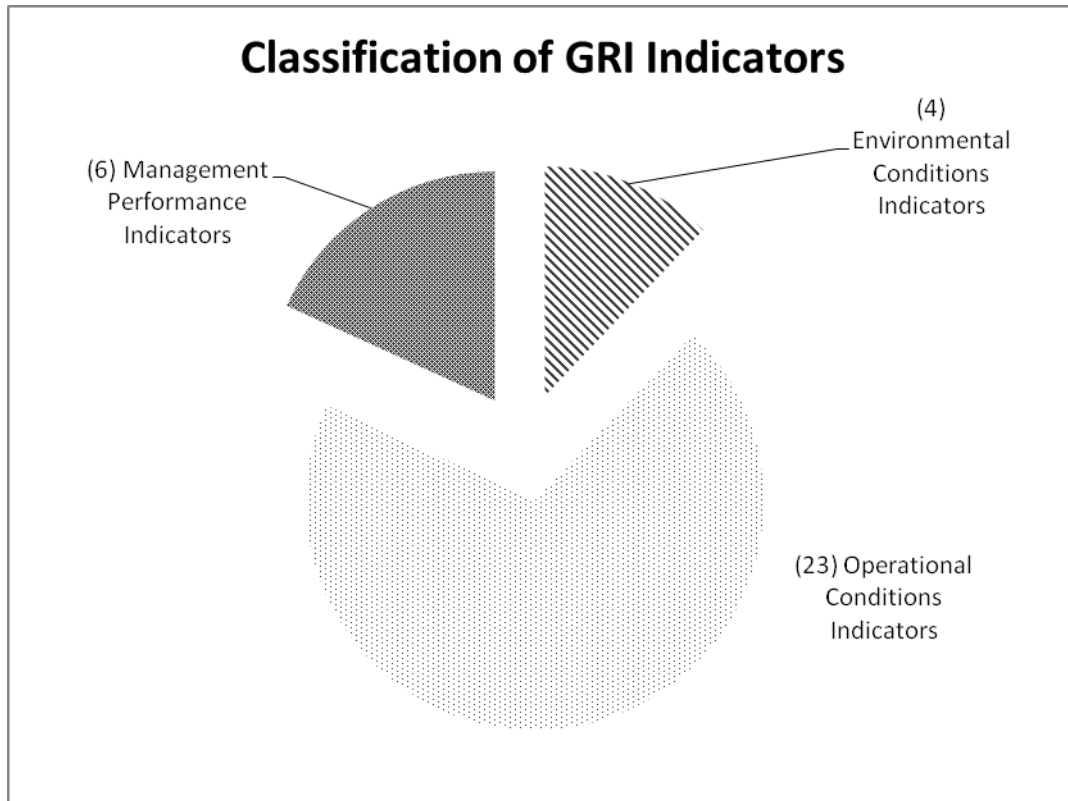
The advantage of grouping the indicators into the different categories is to allow the determination of the materiality of each indicator included in the AGA reports. GRI: 2006 defines materiality of the report as inclusion of indicators which reflect the organisation's significant economic, environmental and social impacts. According to GRI (2006:8) such indicators should be informative to the stakeholders of the organisation to an extent that the stakeholders would be able to make an informed assessment and decision about the organisation's performance. It follows that each type of indicator will give different information to the stakeholders and the public at large depending on its type, hence depending on the type of indicator included in the report the public is in a better position to make an assessment of the organisation. The contrary also holds true in that the exclusion of a particular indicator compromises the ability of the public and stakeholders to make an informed decision on the overall environmental performance of an organisation.

Indicator	Definition
Management performance indicator (MPI)	Environmental performance indicator that provides information about the management efforts to influence an organisation's environmental performance.
Operational performance indicator (OPI)	Environmental performance indicator that provides information about the environmental performance of an organisation's operations.
Environmental condition indicator (ECI)	Specific expression that provides information about the local, regional, national or global condition of the environment.

**Table 4: Environmental Performance Indicators (ISO 14031, 1991: 5).**

There are 30 indicators in the standard disclosure, of which seventeen are core indicators and thirteen are additional indicators (Table 5). In addition, all the three ICMM supplement indicators are also core indicators (Table 6). The company has to report on all core indicators. The classifications and discussions below will be done by grouping the standard as well as the supplement indicators together.

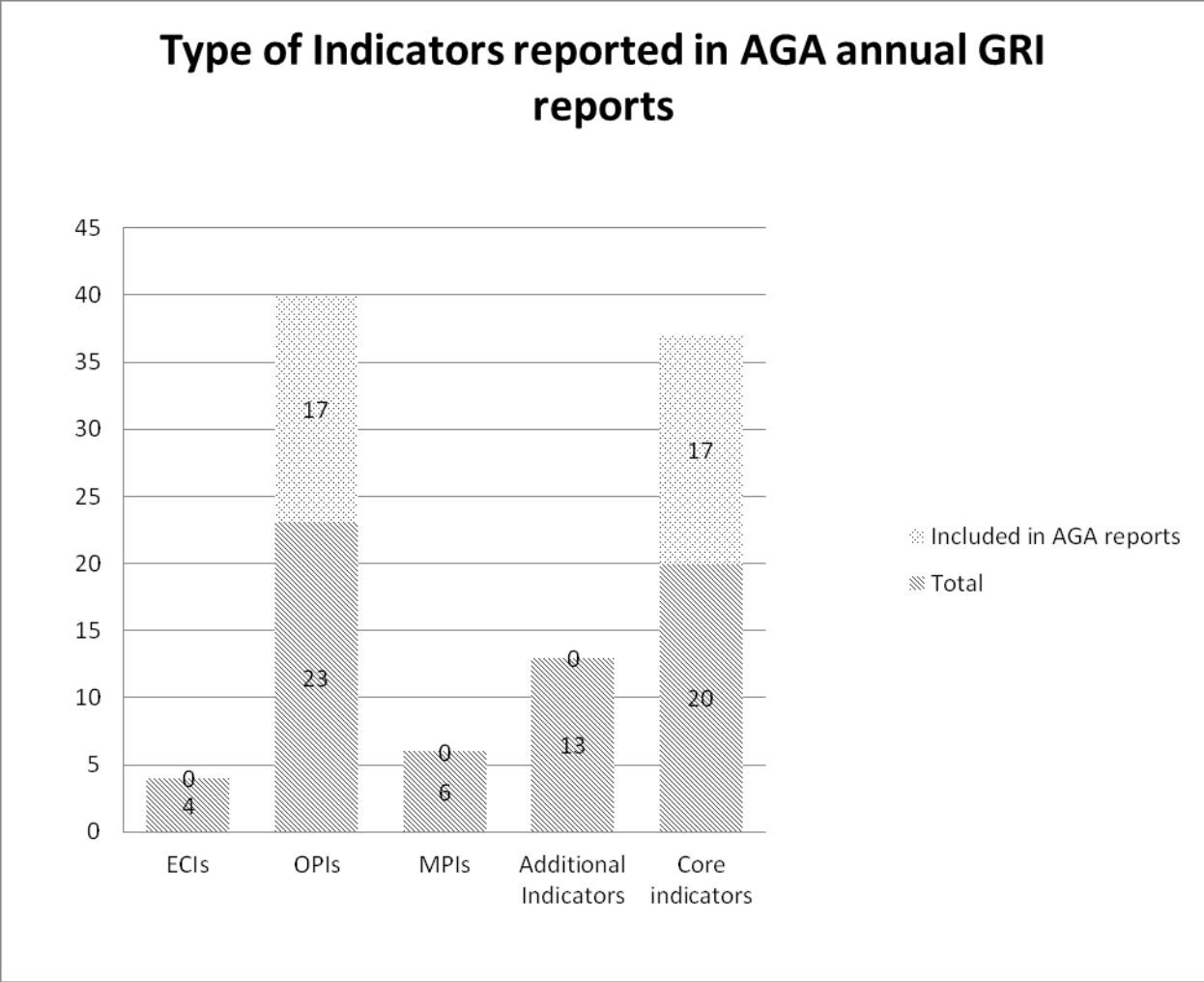
The environmental indicators contained in the GRI standard disclosure and the ICMM sectoral supplement were categorised into OPIs, ECI and MPIs as indicated in the figure below. This was done using the definitions in Table 4 as well as the description alluded to by Jasch (2000) in Section 3.4 of Chapter 4.



**Figure 6: Classification of Environmental Performance Indicators into Operational Performance, Environmental Conditions and Management Performance Indicators**

From a total of 33 indicators, 23 were classified as OPIs and four were classified as ECIs and six were classified as MPIs. The reasoning behind the above classification is to further determine if the information and data disclosed in the AGA annual reports do have materiality significance to the readers of the report. One of the principles for defining the content of the report is that it must have information which has materiality significance to its stakeholders. This was found to be a factor worth determining and in alignment to the objective of investigating the corporate perspective on selection and materiality of GRI indicators included in the company's annual reports.

Materiality was also investigated by evaluating the types of indicators that are included in the annual reports. Any indicator informs the reader about environmental performance and the information which the reader gets depends on the type of indicator. Whilst OPIs do give an indication of operational performance MPIs were seen as giving direction to management approach and hence tend to be more indicative of management's commitment to improved environmental performance which is key to an EMS.



**Figure 7: Type of indicators included in AGA annual GRI reports.**

From Figure 7 it was evident that the organisation did not report on the ECIs or on the MPIs. This could be attributed to the fact that all the MPIs and ECIs were additional indicators and hence by default reporting on these is not compulsory as per the GRI guidelines. The company reported on 17 of the 20 core indicators as the other three were not applicable to the organisation.

Only 17 OPIs were included in the report out of a maximum of 23 OPIs. None of the MPIs were included in the annual reports.

The results below summarise the findings discussed above. These are imperative in understanding materiality of the content of report which is discussed in detail in the conclusion of this section.

**Table 5: Classification of Environmental Performance Standard disclosure and ICMM indicators into categories and types as observed in the AGA GRI reports.**

Indicators in Sectoral Supplement (ICMM)	ECI / MPI / OPI	Included in AGA Reports	Core/ Additional Indicator
MM1: Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	O	◆	C
MM2: The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.	O	◆	C
MM3: Total amounts of overburden, rock, tailings and sludges and their associated risks.	O	◆	C
EN5 Energy saved due to conservation and efficiency improvements.	O		A
EN6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	M		A
EN7 Initiatives to reduce indirect energy consumption and reductions achieved.	M		A
EN8 Total water withdrawal by source.	O	◆	C
EN9 Water sources significantly affected by withdrawal of water.	E		A
EN10 Percentage and total volume of water recycled and reused.	O		A
EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	O	◆	C
EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	O	◆	C
EN13 Habitats protected or restored.	E		A
EN14 Strategies, current actions, and future plans for managing impacts on biodiversity.	M		A
EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	E		A
EN16 Total direct and indirect greenhouse gas emissions by weight.	O	◆	C
EN17 Other relevant indirect greenhouse gas emissions by weight.	O	◆	C
EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved	M		A
EN19 Emissions of ozone-depleting substances by weight.	O	◆	C
EN20 NOx, SOx, and other significant air emissions by type and weight.	O	◆	C
EN21 Total water discharge by quality and destination.	O	◆	C
EN22 Total weight of waste by type and disposal method.	O	◆	C
EN23 Total number and volume of significant spills.	O	◆	C
EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	O		A
EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	E		A
EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	M	N/A	C
EN27 Percentage of products sold and their packaging materials that are reclaimed by category.	O	N/A	C
EN28 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	O	◆	C
EN29 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	O		A
EN30 Total environmental protection expenditures and investments by type.	M		A

Indicators in Sectoral Supplement (ICMM)	ECI / MPI / OPI	Inclu ded in AGA Rep orts	Core/ Additi onal Indicat or
MM1: Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	0	◆	C
MM2: The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.	0	◆	C
MM3: Total amounts of overburden, rock, tailings and sludges and their associated risks.	0	◆	C

Table 5 reveals that AGA does report on 17 of the 20 core indicators. GRI requires that for an organisation which reports at an A level it should report on all the core indicators, 3 of the 20 core indicators are not applicable to AGA and therefore the company includes an explanation on why it does not report on these.

It is also evident that the company does not report on any of the additional indicators and it reports on all the three ICMM indicators.

None of the ECIs and MPis were included in the AGA reports. As indicated in the introductory paragraphs of this section a type of indicator included or excluded from the report can compromise the information that stakeholders and the public have about an organisation and hence impact on the assessment and overall impression the public may have about the organisation's environmental performance.

It is worth noting that over the 3 year period for which the analysis of the reports was done the company was issuing its reports at an A+ level indicating that it did meet the GRI reporting requirements and that the data contained in the report was validated by an external and an independent company. However the exclusion of MPis and ECIs from the report compromises the overall information that the readers of the report do have on the overall performance of the organisation. This was also highlighted by the corporate interview in that the company tends to reveal more about its material use and does not include other information such as management practises which can be vital in any decision making process from the public and stakeholder perspective.

The King Report on Corporate Governance for South Africa 2002 (King II) and the King Code and Report on Governance for South Africa (King III) also stipulated reporting requirements for companies in South Africa. The King III report mandates that reporting should be transparent and accountable (Pricewaterhouse Coopers, 2009: 62). It is also mandatory that the reports should be auditable and should be prepared on an annual basis. The King II report however did not specifically indicate that the sustainability reports should be audited. The King II report required annual reporting on sustainability however it did not stipulate that the report should be an integrated one with financial as well as non-financial disclosures, the King III report on the other hand mandates that the report should be an integrated one.

AngloGold Ashanti reports issued according to the GRI requirements were found to be in conformance to the requirements of the King II and King III reporting codes in that the company issued integrated reports on an annual basis which disclosed both the financial as well as the non-financial information of the company. In addition the company has been issuing reports which were verified and audited externally hence an A+ rating according to the GRI rating criteria which is an indication of disclosure on all core indicators and external verification. Credibility of the reports will be discussed in detail in Chapter 5.

#### **4.5 DISCUSSION**

It is evident from the results of the desktop that not all the business units do have a system for aligning GRI indicators to the EMS system. This could result in duplication as well as inefficiencies in both the systems. This notion is supported by Nel (2008:45) that if the ISO 14001: 2004 was to be used by companies for generating and acquiring the data for GRI indicators this could result in the process of compilation of the GRI reports being less time consuming and more efficient.

It was apparent that a risk based approach was prevalent in most of the business units' EMS as significance was more based on avoiding and minimising impact with a potential to damage the environment rather than to minimise resource consumption. Resource consumed which were monitored closely were those considered to have a risk of impacting on the environment to an extent that it would damage the reputation of the organisation in cases of accidental releases. Other consumables perceived and rated to be of low risk were not monitored closely in the EMS. This was evidenced also by the fact that the type of indicators included in the reports were more OPIs rather than MPIs hence information given to the public informs the public more on what amount of resource is used rather than the management practices in place which ensure minimal consumption of the resource and also minimal impact in cases of accidental releases.

The methods used for data gathering varied across the various business units and hence no single applicable method was in place. This compromised the efficiency of implementing an EMS as it led to duplication of efforts during the data collection and also reduced the effectiveness of an EMS monitoring and measurement programme.

Records generated from stores were sometimes used for data gathering as opposed to a monitoring programme which is more reliant and able to pick up abnormal conditions when they arise such as too much resource consumption which could actually be an indication of containment failures if picked up at the right time.

The electronic interview conducted at corporate level was found to be in agreement with the desktop study and the questionnaires in that there is some disconnection in the EMS of the company and the data gathering process towards GRI reporting. The results obtained from the corporate interview also formed a link in the results obtained from evaluating the reporting performance of the organisation. The corporate interview did highlight the fact that the company does report more on material use rather than on the management practices within the organisation. It was revealed from the interview that rather than focussing of how much is used, it is imperative that the company should also report on management practices hence informing the reader on the way things are done within AGA. This however does not imply that the amounts used should be excluded, but rather a comprehensive reporting which also includes MPIs should be the preferred method of communication.

The evaluation of the reporting performance of the company over the three year period revealed a lack of reporting on the MPIs as well as on the ECIs. The primary reason attributed to this could be the fact that the MPIs and ECIs do not form the core indicators and hence reporting on such is not compulsory. MPIs can be regarded as those indicators that detail the way in which things are done in an organisation. This is because MPIs relate to policies, procedures, decisions as well as management's efforts on influencing environmental performance. In addition ISO 14031: 1999 further stipulates that ECIs can help an organisation to understand the actual impact or potential impact of its environmental aspects (ISO, 1999: 5). It is therefore possible that the lack of reporting on the MPIs and ECIs could bring about a reduced understanding of the company's actual as well as potential impacts on the environment by the readers of the report as well as the organisation's stakeholders. This could thus affect the materiality of the report to an extent as the readers may not be sufficiently informed about environmental management practices within the organisation. ISO (1999), also stipulates that ECIs assist organisations to better understand its actual as well potential impacts,

and hence if these are excluded from the report information on such does not reach the communities.

In a study conducted by Hill and Mitchell (2010: 59) aimed at determining the perceptions and expectations of stakeholders on what should be included in corporate reports, it was found that stakeholder expectations were not met. Hill and Mitchell (2010: 65) mention that most of the stakeholders rated legal compliance very important to extremely important in its inclusion to corporate reports. Environmental groups on the other hand rated information divulging the impacts of pollution of an organisation on the environment to be extremely important. The actual reporting of the impacts was however found to be poorly addressed according to the stakeholders. Materiality is hence compromised according to stakeholders as reports do not contain information which they would prefer to have included in CSER.

Jasch, (2000: 40) stipulates that ECIs are usually only applied by public institutions. Together with environmental political target setting, these national indicators can be used by organisations to aid their selection of their performance indicators, as well as supporting their setting of priorities and goals. Only when an organisation is the main cause of a local impact on a region, such as an airport producing noise pollution, air emission for the electricity sector or the water quality downstream for the pulp and paper sector, are these indicators to be applied by individual organisations. The lack of reporting on the ECIs by AGA could be attributed to the argument above by Jasch (2000:40), as well as the fact that these are additional indicators.

#### **4.6 CONCLUSION**

It can therefore be concluded that there is a weak level of alignment of the EMS ISO: 14001: 2004 to the data gathering processes within AGA. This is evidenced by the lack of consistency in the data gathering processes that even existed within a single business unit. Some business units only gathered their data on a quarterly basis, others had a monitoring process in place and others no monitoring at all and reliance was on records generated from the stores department. There is therefore a need for improvement. This can be achieved through a better monitoring and measurement process. The process for the setting of objectives could also be improved and an alignment can be achieved if previous years' GRI data are considered in the setting of objectives and targets for the

current year. Such an alignment could have a potential improvement in environmental performance as well. Such an improvement can be possible if the previous years' data are used as a benchmark and hence over consumption can be detected and investigated for.

An alignment of the two systems will not only have a potential of improving environmental performance, but it will also save time and hence an overall improved efficiency in the data collection, collation and the data verification by the external auditing company

The corporate interview has indicated that there is an opportunity for improving on the materiality of the report. Inclusion of management practises employed within AGA could lead to a situation where the reader is more informed and knows the level at which chemicals with a potential to impact adversely on the environment if accidentally released are managed to an acceptable standard. The materiality of the content of the report can still be improved. This will lead to better informed decision making and assessment of the organisation by the public. This can to an extent also improve the image and the reputation of the organisation as there will be more information available to the public on the management practices of an organisation. The availing of more information on the management practices will help erase the misconceptions that the public tend to have about gold mining companies. As indicated in Chapter 1 sustainability reports should inform the public not only about the good information of the company but should also declare the weaknesses and threats that the company faces. If more MPis were to be included in the GRI reports of AGA this could make the public aware that the company is knowledgeable on its challenges and continues to investigate the means of tackling the challenges, however with the current minimum disclosure the company does comply to the GRI requirements but compromises its potential to inform the public of its management practices. A study conducted by Hill and Mitchel (2009:58) revealed the fact that most South African companies reported only on the minimum requirements and no measure to report on the extras which were not the minimum requirements. In this study Hill and Mitchel also indicated that organisations that were prepared to report more were those perceived to have a minimal environmental impact such as financial institutions. This study was however conducted on a South African Municipality but results were viewed to be applicable to corporate organisations as well.

The review of the reports indicated that the reports do comply with the minimum requirements of the GRI because AGA did include all the core indicators in its annual reports issued over a three year period. However it was also evident that even though AGA did meet the A+ reporting criteria, which indicated that it had reported on all the core indicators reporting only included OPIS and none of the MPIs and the ECIs.

Disclosure on MPIs and ECIs was found to be compromised to an extent. This however was not an oversight by the company but it was more of a default due to the GRI reporting requirements. This however does not stop the company from reporting on the additional indicators and hence an opportunity to report more on MPIs and ECIs. As indicated at the time of this study the GRI G3 guidelines of 2006 were undergoing revision and probably with the revision more of the indicators which offer companies to disclose their management practices will become core indicators and not additional indicators.

## CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

### 5.1 INTRODUCTION

Corporate Social Environmental Reporting (CSER) is required for South African companies in terms of the King I, II and III reports, as well as by other voluntary reporting organisations, of which the GRI is the most important. The various requirements, along with the requirements of ISO 14000 EMS, create the potential for duplication of effort in gathering data. Since AngloGold Ashanti (AGA) is a company that reports annually in terms of GRI, and also has an operational ISO 14000 EMS, the aim of this study was to investigate the extent of alignment between the EMS and the GRI reporting processes in AGA. Chapter 2 introduced the background to reporting principles as well as guidelines and other frameworks which guide and govern a CSER process. In Chapter 3 environmental performance monitoring was detailed as a means through which data are generated for an EMS as well as for GRI reporting. The various performance indicators in GRI and in the ISO 14031: 1999 were introduced and analysed according to the information which they detail in terms of environmental performance. Chapter 4 analysed the *status quo* of methods used to generate data towards GRI reporting in AGA. The content of the GRI reports issued over a three year period were investigated for type of indicators included in the report as well as the materiality of indicators.

The study has provided evidence that AGA does adhere to the GRI G3 requirements for reporting and issuing sustainability reports with reference to the environmental content of the fore mentioned reports. The reports received an A+ rating over the three year period of the study and can therefore be regarded as meeting the principles enshrined in the GRI G3 requirements, the ICMM principles as well as the principles of the UN global compact for which the organisation is a signatory.

The benefit of using the EMS data gathering process for informing the GRI reports has however not been explored to its full potential, resulting in duplication as well as inefficiencies in the data gathering for GRI reporting within AGA. This could be attributed to the fact that aspects identification which forms part of the planning phase in the ISO 14001: 2004 system can be a relatively subjective process, which in turn could possibly be attributed to the methodology used in the determination of significance.

There is a methodology used in the rating of significance across AGA, but it has been observed that significance ratings are influenced to a large extent by the perceptions, morals and ethics of those who responsible for the ratings. The result is that aspects that could potentially be regarded as significant and required to be monitored in one business unit and even reported upon in the GRI reports, could be identified as non-significant in the EMS aspect identification and rating process in another business unit. This leads to disconnection between the GRI and EMS data generation and gathering processes across the various business units.

Materiality of the indicators included in the reports was also found to be one area which has not been investigated fully by the organisation. Even though the organisation did report on the required core indicators according to the GRI requirements, it was found that they were all operational indicators (OPIs), while no management performance indicators (MPIs) were included in the reports. This limited the ability of external stakeholders to make an informed decision and judgement on the overall environmental performance of the organisation as well as management practices within AGA. In 2008 the GRI report had a section in which members of the public could give feedback on the information and indicators they would like to have included in the report. In the following year there was no indication of whether feedback from the public had been incorporated. Inclusion of feedback received is not a requirement according to any reporting guideline, but it could be of benefit in indicating that topics and indicators included in the report matter to the public and therefore meet the materiality principle of GRI. Through including such feedback such a notion of lesser understanding of impacts could be verified and addressed if indicated that in actual fact the stakeholders and public do have a lower understanding of the organisation's activities. This step can only improve conformance to the inclusivity principle of the GRI G3 reporting frameworks, as well as to the neutrality principle in cases where impacts which are regarded as negative are also brought to the knowledge of the general public.

## 5.2 RECOMMENDATIONS

In order for organisations to maximise the benefit of the implementation of an EMS it is recommended that a system be developed to identify deficiencies in the aligning of GRI indicators to EMS.

The design and implementation of goals and targets to improve data acquiring systems in EMS could add further value by ensuring that what needs to be reported in the GRI is included as objectives and / or aspects of the environment requiring monitoring.

The choice of performance indicators in an EMS monitoring and measurement process is of importance. The inclusion of indicators which can generate data towards the GRI report should be part of the EMS monitoring and measurement process. It is therefore ideal that irrespective of the significant aspects of an EMS, indicators which need to be reported in the GRI report should be included as part of an EMS to facilitate the alignment of data gathering processes.

Training and awareness is also an issue which can never be overemphasised, due to the constant changes as well as improvement in knowledge. Awareness must be raised amongst the individuals involved in EMS with reference to the notion of sustainability and environmental performance reporting. Sustainability issues should be revisited and emphasis placed on the finite nature of resources. This would help in the choice of indicators to be included in the EMS if personnel are made aware of sustainability issues and the importance of monitoring and measurement with relation to the finite nature of resources.

Answers generated from this research can be used to highlight the importance and the benefits added by an EMS in the corporate social environmental reporting process of companies with similar operations, as well as to determine the impact of inclusion or exclusion of certain indicators in the reports. Even though this research is aimed at closing that gap in the methods and alignment processes which can be used in generating data towards sustainability reporting, it should not be regarded as prescriptive in how companies can use the EMS systems. This is influenced by the fact that EMS standards are process and not performance standards, i.e., they do not mandate organisations but describe a system to help an organisation achieve its own environmental objectives (Melnyk *et al.* 2003:332).

Future research on issues relating to alignment of GRI and EMS could focus on the influence that alignment has on the overall environmental performance, and this investigation could be extended to other mining companies, as well as to other sectors of industry and commerce in South Africa. In addition to the benefits brought about through the alignment of the EMS to GRI data gathering future research can also focus on the potential of improved resource consumption and the impact of that on sustainability through the alignment of the two systems.

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## **APPENDIX 1: GLOBAL SULLIVAN PRINCIPLES**

### **Preamble**

The objectives of the Global Sullivan Principles are to support economic, social and political justice by companies where they do business; to support human rights and to encourage equal opportunity at all levels of employment, including racial and gender diversity on decision making committees and boards; to train and advance disadvantaged workers for technical, supervisory and management opportunities; and to assist with greater tolerance and understanding among peoples; thereby, helping to improve the quality of life for communities, workers and children with dignity and equality. I urge companies large and small in every part of the world to support and follow the Global Sullivan Principles of corporate social responsibility wherever they have operations.

Feb. 1, 1999  
The Rev. Leon H. Sullivan

### **Principles**

As a company which endorses the Global Sullivan Principles we will respect the law, and as a responsible member of society we will apply these Principles with integrity consistent with the legitimate role of business. We will develop and implement company policies, procedures, training and internal reporting structures to ensure commitment to these principles throughout our organization. We believe the application of these Principles will achieve greater tolerance and better understanding among peoples, and advance the culture of peace.

Accordingly, we will:

- Express our support for universal human rights and, particularly, those of our employees, the communities within which we operate, and parties with whom we do business.
- Promote equal opportunity for our employees at all levels of the company with respect to issues such as color, race, gender, age, ethnicity or religious beliefs, and operate without unacceptable worker treatment such as the exploitation of

children, physical punishment, female abuse, involuntary servitude, or other forms of abuse.

- Respect our employees' voluntary freedom of association.
- Compensate our employees to enable them to meet at least their basic needs and provide the opportunity to improve their skill and capability in order to raise their social and economic opportunities.
- Provide a safe and healthy workplace; protect human health and the environment; and promote sustainable development.
- Promote fair competition including respect for intellectual and other property rights, and not offer, pay or accept bribes.
- Work with governments and communities in which we do business to improve the quality of life in those communities – their educational, cultural, economic and social well-being – and seek to provide training and opportunities for workers from disadvantaged backgrounds.
- Promote the application of these principles by those with whom we do business.

We will be transparent in our implementation of these principles and provide information which demonstrates publicly our commitment to them.

## APPENDIX 2: ENVIRONMENTAL PERFORMANCE INDICATORS

- **Aspect: Materials**

EN1 Materials used by weight or volume.

EN2 Percentage of materials used that are recycled input materials.

- **Aspect: Energy**

EN3 Direct energy consumption by primary energy source.

EN4 Indirect energy consumption by primary source.

EN5 Energy saved due to conservation and efficiency improvements.

EN6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.

EN7 Initiatives to reduce indirect energy consumption and reductions achieved.

- **Aspect: Water**

EN8 Total water withdrawal by source.

EN9 Water sources significantly affected by withdrawal of water.

EN10 Percentage and total volume of water recycled and reused.

- **Aspect: Biodiversity**

EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.

EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

EN13 Habitats protected or restored.

EN14 Strategies, current actions, and future plans for managing impacts on biodiversity.

EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.

- **Aspect: Emissions, Effluents, and Waste**

EN16 Total direct and indirect greenhouse gas emissions by weight.

EN17 Other relevant indirect greenhouse gas emissions by weight.

EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved.

EN19 Emissions of ozone-depleting substances by weight.

EN20 NO<sub>x</sub>, SO<sub>x</sub>, and other significant air emissions by type and weight.

EN21 Total water discharge by quality and destination.

EN22 Total weight of waste by type and disposal method.

EN23 Total number and volume of significant spills.

EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.

EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.

- **Aspect: Products and Services**

EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.

EN27 Percentage of products sold and their packaging materials that are reclaimed by category.

- **Aspect : Compliance**

EN28 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.

- **Aspect : Transport**

EN29 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.

- **Aspect : Overall**

EN30 Total environmental protection expenditures and investments by type.

(Source: <http://www.globalreporting.org/ReportingFramework/G3Guideline>)

As mentioned above not all the above Environmental Indicators have to be reported on, those that are compulsory to be reported on are known as the core indicators and those of which it is not necessary to report on are known as the additional indicators.

<b>Core Indicators</b>	<b>Additional Indicators</b>
EN1 Materials used by weight or volume.	EN5 Energy saved due to conservation and efficiency improvements.
EN2 Percentage of materials used that are recycled input materials.	EN6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.
EN3 Direct energy consumption by primary energy source.	EN7 Initiatives to reduce indirect energy consumption and reductions achieved.
EN4 Indirect energy consumption by primary source.	EN9 Water sources significantly affected by withdrawal of water
EN8 Total water withdrawal by source.	EN10 Percentage and total volume of water recycled and reused.

<b>Core Indicators</b>	<b>Additional Indicators</b>
EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	EN13 Habitats protected or restored.
EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	EN14 Strategies, current actions, and future plans for managing impacts on biodiversity.
EN16 Total direct and indirect greenhouse gas emissions by weight.	EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.
EN17 Other relevant indirect greenhouse gas emissions by weight.	EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved
EN19 Emissions of ozone-depleting substances by weight.	EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally
EN20 NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions by type and weight.	EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.
EN21 Total water discharge by quality and destination.	EN29 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.
EN22 Total weight of waste by type and disposal method.	EN30 Total environmental protection expenditures and investments by type
EN23 Total number and volume of significant spills.	
EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	
EN27 Percentage of products sold and their packaging materials that are reclaimed by category.	
EN28 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	

**Table distinguishing between Core and Additional Indicators**

### **APPENDIX 3: ICMM SECTORAL SUPPLEMENT PERFORMANCE INDICATORS**

**MM1:** The number/percentage of sites identified as requiring biodiversity management plans, and the number/ percentage of sites with plans in place. Also include criteria for deciding that a biodiversity management plan is required and the key components of a plan.

**MM2:** The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.

**MM3:** Total amounts of overburden, rock, tailings, and sludges presenting potential hazards.

## APPENDIX 4: REPORTING CONCEPTS

In terms of the GRI; 2006 the following form the core concepts of reporting or issuing a report by any organisation.

**Transparency:** Full disclosure of the processes, procedures and assumptions in report preparation are essential to its credibility.

**Inclusiveness:** The reporting organisation should systematically engage its stakeholders to help focus and continually advance the quality of its reports.

**Auditability:** Reported data and information should be recorded, compiled, analysed and disclosed in a way that would enable internal auditors or external assurance providers to attest to its reliability.

**Completeness:** All information that is material to users for assessing the reporting organisation's economic, environmental and social performance should appear in the report in a manner that is consistent with the declared boundaries, scope and time period.

**Relevance:** Relevance is the degree of importance assigned to a particular aspect, indicator or piece of information, and represents the threshold at which information becomes significant enough to be reported.

**Sustainability context:** The reporting organisation should seek to place its performance in the larger context of ecological, social or other limits or constraints, where such context adds significant meaning to the reported information.

**Accuracy:** The accuracy principle refers to achieving the degree of exactness and low margin of error in reporting information necessary for users to make decisions with a high degree of confidence.

**Neutrality:** Reports should avoid bias in selection and presentation of information and should strive to provide a balanced account of the reporting organisation's performance.

**Comparability:** The reporting organisation should maintain consistency in the boundary and scope of its reports, disclose any changes, and restate previously reported information.

**Clarity:** The reporting organisation should remain cognisant of the diverse needs and backgrounds of its stakeholder groups and should make information available in a

manner that is responsive to the maximum number of users while still maintaining a suitable level of detail.

**Timeliness:** Reports should provide information on a regular schedule that meets user needs and comports with the nature of the information itself.

**APPENDIX 5: QUESTIONNAIRE**

**Name:** .....

**Business Unit:** .....

**Designation:** .....

1. Role / input towards GRI annual reporting

	Originator of data
	Data capturer
	Verifier of data
	Supplier of data to relevant data capturer

2. Period in the above role

	1 year
	2 years 1 - 3
	More than 3 years

3. Which of the following EN Indicators do you report on, on an annual basis

	EN1 Consumables
	EN3, EN4, EN6, EN6, EN7 (Energy related)
	EN11, EN12, EN13, EN14, EN15 (Biodiversity related)
	EN16, EN17, EN18 ( Greenhouse gas emissions related)
	EN19 Ozone depletants
	EN20 SOx and NOx emissions
	EN23 significant spills
	EN24 Hazardous Waste transported
	EN26 Initiatives to mitigate environmental impacts
	EN27 Reclaimed materials from packaging
	EN28 Monetary value of fines paid due to non compliance and or environmental transgressions
	EN29 Significant environmental impacts due to transportation
	EN30 Total environmental protections, expenditure & investment by type

4. Are you involved in the setting of objectives and targets

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

5. Rate your influence in the setting of Objectives and targets

<input type="checkbox"/>	Not influential
<input type="checkbox"/>	Slightly influential
<input type="checkbox"/>	Highly influential

6. In the setting of objectives do you consider the results of the previous year's EN reportables

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

7. Do you have a system for aligning the Objectives and targets of the Organisation (Business Unit) to the GRI reportables ( EN)

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

8. If Yes above, which aspects of the objectives and targets are aligned to which GRI Environmental Indicators ( ENs)

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9. How are the data that go into the GRI report obtained

<input type="checkbox"/>	Monitored continuously
<input type="checkbox"/>	Obtained from Business Unit stores on a quarterly basis
<input type="checkbox"/>	Obtained from relevant personnel on a quarterly basis
<input type="checkbox"/>	Obtained from relevant personnel on an annual basis
<input type="checkbox"/>	Other

10. Indicate which indicator would fall under which category towards the gathering and compilation of data that go into the GRI report.

Environmental Indicators	Method of data capturing/ compilation
	Monitored continuously
	Obtained from Business Unit stores on a quarterly basis
	Obtained from relevant personnel on a quarterly basis
	Obtained from relevant personnel on an annual basis

11. Which key characteristics of the organisation's aspects are monitored as required by clause 4.5.1 of ISO 14001: 2004 standard.

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12. Have previous years' GRI reportable environmental indicators been used by the organisation (Business Unit) to set Objectives and targets for the subsequent years.

	Yes
	No

Explain why for each choice above.

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.....

Any other comments you would like to make regarding the issues touched on above

END OF QUESTIONNAIRE  
THANK YOU