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Environmental Reporting in the Oil and Gas Industry in Nigeria

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ABSTRACT

There is a great deal of potential to cause several and avoidable environmental harm by unchecked Oil and Gas exploration activities, in addition to severe health hazards that is usually associated with Oil and gas exploration activities resulting from pollution and the likes. Similarly, the culture, and economic and social structure of local and indigenous communities are also usually affected. To compound the problems, it is believed that environmental laws in emerging economies such as Nigeria and others are often ineffective because they are substantively inadequate and/or because they are inadequately enforced. According to KPMG (2005 Report), this has led to calls by academics, practicing lawyers and human rights and environmental activists for transnational oil companies to voluntarily improve their performance in countries with inadequate environmental laws. This is now required to be done in their accounting reporting (KPMG, 2005). This will give rise to sustainability reporting. Accounting, as "a set of socially conditioned practices which have various significant impacts on the operation of our society" (Bebbington, 2004), is called upon to assist in demonstrating the accountability and integrity of business actions. Inline with this view is borne this paper. It looks at the need for adequate Environmental Reporting – both financial and non-financial reporting and its importance in the industry in reaching out to stake holders. It is anchored on the legitimacy theory of corporate social responsibility reporting whilst critically assessing the reporting requirements as well as what is usually reported in the financial statements of Oil and Gas companies vis a viz standard disclosure requirements. It was found that that reporting format needs to be consistent and followed in order to ensure transparency in reporting of company operation. Looking at environmental performance indicator as well as reporting formats and Normalization factors, it is found out that the greatest challenges faced by the industry regarding sustainability performance reporting are determining how to measure, define and select appropriate indicators.

Keywords: Environmental Reporting, Legitimacy Theory, Nigeria, Oil and Gas Industry, Performance Indicators.

INTRODUCTION

The behaviour of corporations has never been more under the spotlight (McIntosh *et al*, 2003). Although this was not considered to be a new issue even in the 1960s (Drucker, 1969), or 1950s (Heald, 1957), public awareness of the environmental, social and economic impacts of business has increased at a dramatic rate over the last decades. Companies now face increased pressure from investors, governments, customers and others to demonstrate their efforts to manage the impacts of their operations (Scott and Jackson, 2002). Accounting, as "a set of socially conditioned practices which have various significant impacts on the operation of our society" (Bebbington, 2004), is called upon to assist in demonstrating the accountability and integrity of business actions.

There is a great deal of potential to cause several and avoidable environmental harm by unchecked Oil and Gas exploration activities, in addition to severe health hazards that is usually associated with Oil and gas exploration activities resulting from pollution and the likes. Similarly, the culture, and economic and social structure of local and indigenous communities are also usually affected. To compound the problems, it is believed that environmental laws in emerging economies such as Nigeria and others are often ineffective because they are substantively inadequate and/or because they are inadequately enforced. According to KPMG (2007 Report), this has led to calls by academics, practicing lawyers and human rights and environmental activists for transnational oil companies to voluntarily improve their performance in countries with inadequate environmental laws. This is now

required to be done in their accounting reporting (KPMG, 2007). This will give rise to sustainability reporting. Accounting, as "a set of socially conditioned practices which have various significant impacts on the operation of our society" (Bebbington, 2004), is called upon to assist in demonstrating the accountability and integrity of business actions.

Oil companies and industry groups have also recognized that international oil companies operating in emerging economies such as Nigeria, with inadequate environmental laws should adopt best practice. For example, members of the American Petroleum Institute are responsible for "obeying all laws and best practice" as part of the pledge to a program of continuous health, safety and environmental improvements,4 while the 1997 *Environmental Policy* of the Australian Petroleum Production and Exploration Association (APPEA) states that APPEA encourages and supports member companies to "comply, at a minimum, with applicable laws, regulations, standards and guidelines for the protection of the environment and in their absence adopt the best practicable means to prevent or minimize adverse environmental impacts".

The oil and gas industry also recognizes that reporting on sustainability or non-financial indicators to those who are affected by or can benefit from oil and gas operations and products is a valuable tool in managing and measuring progress. Reporting is also one important approach, among others, for developing constructive stakeholder dialogue and thereby fostering a better understanding of stakeholders' concerns. This paper looks at the need for adequate Environmental Reporting – both financial and non financial and its importance in the industry in reaching out to stake holders.

Definition of Environmental Reporting

According to the lawdisctionary.com, Environmental Reporting (ER) is an Objective evidence of environmental conditions as a public disclosure. Focused on a firm's environmental performance information. Very much like public statements of financial performance information.

Furthermore, it involves both non financial and financial reporting.

Non-financial Reporting *on its own as defined by API (2005) is seen* as reporting on the range of Environmental, health and safety, social, and economic issues and impacts that relate to oil and gas company operations and products, and is synonymous with Sustainability Reporting. In addition, companies may choose to use a variety of other terms to refer to this concept, such as corporate responsibility, corporate citizenship, or contributions to sustainable development. The term 'non-financial' is used by some companies to distinguish these reports from more traditional company financial reports, even though both reports include economic indicators (API, 2005). In the same vein, there are terminologies that are used interchangeably for reporting in Oil and Gas Indusatry for global reporting and congruency in accounting. These are according to Campbell and Slack, (2006) as follows:

Sustainability or sustainable development reporting, non-financial indicator reporting, corporate responsibility, corporate social responsibility or social responsibility reporting, and citizenship reporting. All these can be used interchangeably as generic terms to describe voluntary disclosure on performance in these areas. Therefore, depending on the term a company adopts, environmental and sustainability reporting is necessary as this will at least give a snapshot of the companies' obligations to its host communities as well as environment. This will in turn enhance its acceptability rating.

THEORITICAL FRAME WORK AND LITERATURE REVIEW

Several scholars have given various attempts to explain why adequate disclosure is vital for an organisations survival. For example Zain, (1999) looked at why disclosures are necessary and identified a link with CSR. Others opined that disclosure may be partly attributed to the ongoing debate behind Corporate Social Responsibility and the identified lack of regulation (Gray *et al*, 1995a; Gray *et al*, 1996; Adams *et al*, 1998; O"Dwyer, 1999; Deegan, 2000; Clikeman, 2004; Deegan, 2004; Turner *et al*, 2006). An overarching question in the CSR literature is whether CSR is reactive or proactive, whether it is the organisation"s or the society"s interests that prevail (Lindblom, 1994; Zain, 1999; O"Dwyer, 1999; Woodward and Woodward, 2001; Woodward *et al*, 2001; O"Donovan, 2002). From a reactive point of view it has been suggested that increased Corporate Social Disclosures (CSD) may be expected to occur when an organisation"s legitimacy is threatened

(Deegan and Ranking, 1996; Deegan *et al*, 2002; Tilling, 2004), when organisations face increased media exposure (Media Agenda-Setting Theory – MAST, Deegan *et al*, 2000; 2002; Patten, 2002a) or increased general public pressure (Boulding, 1978; Patten, 2002b) and generally do not comply with the requirements of an implicit social contract (Shocker and Sethi, 1973, 1974; Gray *et al*, 1988; Garcia-Lacalle, 2006); when organisations imitate each other and adopt institutionalised practices (institutional theory, DiMaggio and Powell, 1983; Bansal and Roth, 2000; Woodward *et al*, 2004); or when they face threats to their image (Deegan and Rankin, 1996; Deegan *et al*, 2000; Adams, 2002). The above arguments would generally comply with a view of accountability "conceived of as a relational issue", where organisations are "being answerable to and held responsible by others" (Unerman and O"Dwyer, 2006, p353), regardless of how selectively the recipients of the account/stakeholders are identified by their accountable organisations. It should be noted, however, that even when organisations adopt such an externally motivated accountability view, they may still be possibly CSR proactive in case, for example, they are anticipating such future stakeholder needs. In contrast, there are some other perspectives considering organisations now to be too powerful and able to dictate the agenda, including three distinct approaches to Political Economy of Accounting (PE) theory, most of which emphasise that CSR may be employed by some powerful organisations to control their environments.

From this proactive standpoint, CSR may also occur when managers attempt to minimise reported earnings and reduce the likelihood of adverse political actions (Positive Accounting theory (PA), (Watts and Zimmerman, 1986; Belkaoui and Karpik, 1989; Milne, 2001); when companies attempt to improve their image to mystify consumers" perceptions of the firm by simply advertising their legitimacy (Gray and Roberts, 1989; Poiesz, 1989; Adams *et al*, 1998; Woodward *et al*, 2001); and when companies want to raise their share performance (Decision Making Theory, Abbot and Monsen, 1979; Anderson and Frankle, 1980; Freedman and Patten, 2004). Even organisations with ethical orientations, however, which would feel that people have an inalienable right to information that should be satisfied by providing an account (Tricker, 1983; Laughlin, 1990; Gray *et al*, 1988; 1991; 1995a; Zain, 1999; Jones, 2006), would be internally motivated and adopt a generally proactive CSR stance. Yet again, as Unerman and O"Dwyer (2006) note, even in the case of such an adopted identity form of accountability, where internally motivated organisations "feel a responsibility… to be accountable… to themselves… in the form of their values, mission and culture" (Unerman and O Dwyer, 2006), these may still feel the responsibility to be accountable to stakeholders affected by their actions, and thus appear to be responsive/ reactive in their CSR approach. Furthermore, When one attempts to adopt this action–centred reactive vs proactive theoretical CSR perspectives distinction, therefore, it becomes evident that the offered explanations under each category are quite diverse: proactive explanations may incorporate arguments for powerful organisations employing CSR to manipulate stakeholders but also arguments for organisations truly embracing the accountability notion; likewise, reactive CSD may be a sign of a responsive corporate stance to the expectations of its constituents but also of an organisation interested in image building and in ultimate survival (Adams *et al*, 1998; Woodward *et al*, 2001; Deegan *et al*, 2002). From the foregoing, these arguments may be perhaps more suitably classified when incorporated into a revisited legitimacy theory framework (Vourvachis, 2008). These theories are critically examined in the proceeding paragraphs

Legitimacy Theory

Legitimacy Theory (LT), is probably the most frequently adopted framework in the CSR literature (see Hogner, 1982; Guthrie and Parker, 1989, 1990; Patten, 1992; Pava and Krausz, 1997; Adams and Heart, 1998; Brown and Deegan, 1998; Neu *et al*, 1998; O"Donovan, 1999; O"Dwyer, 1999; 2002; 2003; Campbell, 2000; Wilmshurst and Frost, 2000; Woodward *et al*, 2001; Deegan, 2002; Deegan *et al*, 2002; Patten, 2002a,b; Campbell *et al*, 2003; Crowther, 2004; Tilling, 2004; Roberts and Chen, 2006).

According to Gurthrie and Parker, (1989) Legitimate theory states that a social contract or agreement exists between an enterprise and its constituents, due to which "business agrees to perform various socially desired actions in return for approval of its objectives, other rewards and ultimate survival" (Guthrie and Parker, 1989). Under this perspective, organisations would employ a number of legitimation strategies, to extend, maintain or defend their legitimacy (Ashforth and Gibbs, 1990; Suchman, 1995; Tilling, 2004) and control for potential existing or perceived legitimacy gaps

following legitimacy threats (Lindblom, 1994; Deegan, 2000; Savage *et al*, 2000). Despite its wide employment, however, limited research has been conducted on how LT may incorporate other theoretical arguments towards explaining CSR action (but see Suchman, 1995; Buhr, 1998; Deegan, 2000, 2002; Roberts and Chen, 2006). As Deegan (2002) admits, "legitimacy theory… can still be considered to be… under-developed… There are many „gaps" in the literature which embraces legitimacy theory.

Despite Zain"s (1999) arguments that "there is no single theory that is all embracing" (Zain, 1999), it is argued here that the revisited LT framework can incorporate most of the often cited in the literature theoretical explanations for CSR. First, however, there is a need to clarify that legitimacy is perceived here as an *operational resource* on which organisations are dependent for survival and which they extract, often competitively, from their cultural environments and employ in pursuit of their goals; this view is most notably associated with the work of Pfeffer and his colleagues (Dowling and Pfeffer, 1975, Pfeffer and Salancik, 1978; Pfeffer, 1981, see also Ashforth and Gibbs, 1990). Hence, the theoretical framework adopted in this study is the Legitimate Theory of CRS.

In line with this, one of the genuine acknowledgments by industry of a duty to the environment is one reason for the growth of voluntary environmental guidelines and policies. Second, these codes are a response to shareholder, customer, interest group and community pressure on companies to be transparent and accountable in environmental management, allowing industry to demonstrate environmental responsibility and enhancing public relations. Third, companies have adopted these co-operative and flexible approaches to environmental regulation in order to avoid prescriptive and costly command and control mechanisms.

Similarly, American Petroleum Institute (API), 2004 has it that in the international oil exploration and production industry, the guidelines and standards of the International Association of Oil and Gas Producers (OGP – formerly the Oil Industry International Exploration and Production Forum) and the American Petroleum Institute (API) are particularly influential. The OGP represents oil and gas companies from around the world, and the API, through the history of the dominance of US oil companies in the international oil industry, has a strong influence in the industry. The guidelines of various NGOs and IGOs are also influential, including the World Conservation Union (IUCN), the United Nations Environment Programme (UNEP), the International Standards Organisation (ISO), the World Bank, the International Chamber of Commerce (ICC) and the World Business Council for Sustainable Development (WBCSD) (API, 2004).

Globally Acceptable Principles Upon Which Environmental Reporting Should Be Based

According to API (2005), there are general reporting principles, reporting practices and reporting formats. Worthy of note though is that these principles are consistent and peculiar to Oil and Gas companies. These principles are looked at in details below**:**

General Reporting Principles

Reporting principles are broad concepts that form the basis upon which sustainability or non-financial reporting can develop and improve over time. The voluntary reporting principles outlined here are based on a general set of principles that were developed for the oil and gas industry in voluntarily reporting greenhouse gas emissions (2003 IPIECA/OGP/API publication): Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions). Reporting companies are encouraged to offer some discussion of how their reporting principles are applied and integrated into their reporting. There should be relevance, transparency and consistency, accuracy and completeness of information (API, 2004).

Relevance – It is important that reported information is considered by report users – both internal and external to the company – to be meaningful and valuable to the user for information purposes.

Transparency – Information should be reported in a clear, understandable, factual and coherent manner, and facilitate independent review. Transparency relates to the degree to which information on the processes, procedures, assumptions and limitations in report preparation are disclosed.

Consistency – The consistent application of information gathering processes and boundary definitions is essential to the development of credible reports. Consistency in what is reported and how it is reported enables meaningful comparisons of a company's performance over time and facilitates

shared understanding, especially internally within companies, as well as comparisons with peer companies.

Completeness – Information that is relevant to internal and external users should be included in a manner that is consistent with the stated purpose, scope and boundaries of the report. Reported information should be complete with respect to appropriate operational boundaries and scope of information.

Accuracy – Information should be sufficiently accurate and precise to enable intended users to understand the relevance of information with a reasonable level of confidence. Accuracy refers to the levels of certainty and uncertainty of reported information such that users can assess its usefulness, reliability and limitations.

Reporting Practices

General Reporting Practices

In line with the reporting principles highlighted above which should serve as a foundation for developing sustainability reporting in the Oil and Gas companies, there is need for an acceptable reporting practices that will be an all-encompassing. API (2004) indicated that more specifics about general reporting practices, which many oil and gas companies commonly use in their reports, should include scope as well as indicators amongst others.

Scope**:** It is important that reporting companies be clear and explicit in describing what issues and aspects of their operation are covered in their sustainability or non-financial reports (i.e., what operations are or are not included in the report, and why). For example, companies may choose to restrict scope to health, safety and environment issues initially, and gradually develop their reporting on social and economic issues.

Indicators**:** To the extent feasible, information should be reported in terms that can be quantitatively measured. Reporting companies are encouraged to present data using generally accepted international units and provide standard conversion factors to enable conversions to other commonly used measurement units. However, not all indicators can be quantified, in which case the use of qualitative indicators (e.g., case studies, process or management system descriptions) is also encouraged.

Information Quality**:** Reporting companies are encouraged to describe how quantitative data or qualitative information were produced and managed relative to measurement protocols and methodologies for collection and compilation of information. To the extent feasible, the quality of quantitative data should be discussed in terms of its source, how it was assessed and the degree of certainty.

Timeliness**:** Reporting companies are encouraged to publish reports on a regular schedule.

Dissemination Methods**:** Reporting companies are encouraged to disseminate information in a consistent manner through a variety of media, such as printed reports, as well as corporate websites.

Baselines: Many companies establish baselines to maintain data consistency and track performance over time. This facilitates internal performance monitoring and decision-making, and helps demonstrate progress toward stated goals from a designated starting point or base year. Selection of a reference year should take into account the quality of historical data and frequency and/or significance of non-recurring events.

Performance Trends**:** Wherever possible, reporting companies should present performance indicators in a manner that enables users to understand trends. Comparisons with industry averages and trends, where available, can also provide a useful context. Performance information often includes quantitative or qualitative objectives or targets (whether voluntary or prescribed), a description of plans for achieving progress, and explanations for variances in performance. Setting objectives or targets is one mechanism that can be useful in reporting progress and can demonstrate accountability (API, 2004).

Reporting Contents

1. General Reporting Content

GRI Sustainability Reporting Guideline (2002) has it that although reporting companies use a wide variety of formats and presentation structures, sustainability or nonfinancial reports typically consist of **an executive summary, company profile, reporting boundaries, company policies, major programme initiatives, and performance indicators**. Further, some companies include topics such as report verification, the integration of management systems into operations, operational security, fines and penalties, and major media events. When determining the data and information content to be disclosed, reporting companies need to consider the stakeholders who are the intended readers of the report (i.e., the report audiences). Key audience groups for these reports commonly include employees, investors, local communities and opinion leaders. Additional audience groups may include governmental and non-governmental organizations, regulators, academic and media research, schools and colleges, customers and suppliers, and the general public (GRI, 2002).

It further highlighted examples of sections and topics that many oil and gas companies commonly include in sustainability or non-financial reports to include: *Performance Indicator Framework which will include Core and Additional Performance Indicators; Qualitative vs. Quantitative Information, Data Aggregation as well as Normalization Factors.*

2. Core Indicators are Typically

- ❖ Considered relevant to almost all oil and gas industry companies
- ❖ Inherent to activities in the oil and gas industry (e.g., upstream and downstream)
- ❖ Of common interest to a wide range of local and global stakeholders
- ❖ Generally related to aspects or issues of national or global significance
- ❖ Sufficiently mature in terms of consistent usage and reproducibility by those in the oil and gas Industry On this basis; the core indicators have been defined to enable generally consistent reporting or aggregation on a global basis. There can be value and benefit in using core indicators to promote consistent performance reporting among companies, encourage best practice sharing and enable industry associations and organizations to generate reasonable overviews of sector performance.

Additional indicators may often represent a leading practice in sustainability or non-financial reporting.

Furthermore, some qualitative additional indicators may pertain to issues for which there are currently no generally accepted definitions or performance measurement practices. Additional indicators are typically locally defined and/or relate to local or regional issues. Since indicator definitions may not provide comparable or meaningful descriptors of overall company performance, reporters should exercise caution when interpreting additional indicators on a global basis by either consolidating information or aggregating data. Therefore, reporting at the local (operating unit or country) level is becoming more prevalent for oil and gas industry companies, especially to describe performance in locations where a particular issue has high significance or sensitivity.

Presentation of only consolidated qualitative information or aggregated quantitative data with these indicators may not be as meaningful or useful unless local context, disaggregated data or other explanations are provided by the reporting company. A company may not report all indicators addressed in this document if it has assessed that the indicator or issue is not relevant across all of its activities or because of insufficient information systems, quality, availability or resources.

3. Qualitative vs. Quantitative Information

Core and additional indicators can be defined either quantitatively or qualitatively. Quantitative indicators are reported as a number with a dimensional unit or some form of a numerical index. Certain indicators, however, do not readily lend themselves to quantification. Many social issues, in particular, are primarily reported in qualitative terms as there is not yet common understanding of appropriate quantitative measures.

When qualitative indicators are appropriate, reporting companies are encouraged to consolidate information and report their performance in terms of underlying policies, commitments, programme initiatives, stakeholder partnerships, industry alliances and case study examples that describe results, benefits and lessons learned from various initiatives. Over time, qualitative indicators may evolve into more quantitative measures. Companies may start out by describing performance related to operational practices and by using anecdotal examples and local case studies. In time, these anecdotal descriptions may converge into a more objective approach for reporting performance within an organizational segment or operating region of a company.

4. Data Aggregation

Companies report performance data at varying levels of aggregation ranging from individual facilities to national/regional locations and to global coverage for the entire corporation. Aggregate reporting at the corporate level is most commonly observed for reporting occupational injuries, environmental emissions and incident data as part of both regulated and voluntary public reporting.

5. Normalization Factors

There are two principal aspects of performance indicators that are of interest to internal and external users of sustainability or non-financial indicator performance data: the absolute quantity of the indicator and the normalized quantity relative to some other measured input or output. Reporting companies often present raw performance data in terms of absolute quantities that can be expressed in a physical unit of measurement related to weight, volume, energy or financial value. In general, absolute data can be expressed in units of measurement that are readily convertible. Absolute quantities may provide information about the magnitude or size of an output, input, value, or result.

Normalized quantities are relative figures representing ratios between two absolute quantities of the same or different kind. Ratios allow comparisons among operations of different size and facilitate comparisons of similar products or processes. They also help relate the performance and achievements of one company, business unit, or organization to those of another. Ratio indicators can provide information on the efficiency of an activity, on the relative intensity of an output (e.g., energy intensity) or on the relative quality of a value or achievement.

Often, companies measure and report performance based on both absolute and normalized quantities to provide a more complete and balanced representation of sustainability or non-financial performance (GRI, 2002).

Reports Topics of Consideration in ER

Organizational Boundaries

Organizational boundaries are used to define a company for the purpose of reporting and generally should contain all of the legally owned, or partly owned, assets of the company. This boundary may already be defined for financial accounting. Information or data from the assets within this organizational boundary are often consolidated to describe the overall performance of the company. There are two primary methods of consolidation: the ***Operated*** (or operational control) method and the ***Equity*** (or equity share) method (Campbell and Slack, 2006).

These two methods enable the company to either separately report performance for only those assets under its management responsibility or report performance in proportion to the company's share of ownership of all assets. Depending on the purpose of the data, reporting organizations may choose either boundary consolidation method. Under the ***Operated*** boundary, a company reports performance by consolidating 100 percent of the indicator data or information from operations over which it has management control and no data from operations it does not manage. Generally, for reporting purposes, oil and gas companies may define the operated boundary as all of those facilities where the company's management has accountability and authority for implementing its policies and systems covering health, safety, environmental, social and/or economic performance associated with the facility. This boundary may be of importance to a number of stakeholder groups, such as regulators, employees and communities. Typical examples of issues that may be reported under this boundary include labor standards, safety of operations or plant emissions. Under the ***Equity*** boundary, a company reports performance by consolidating indicator data or information in proportion to its

percentage share of equity in (or benefits from) its various subsidiaries, associates and joint ventures. This boundary may help identify the potential exposure of a company to risks associated with an issue. Although oil and gas companies may choose to report their performance using either the operated or equity boundary method, there may be value in reporting by both methods. Companies should clearly state the basis on which they are reporting (GRI, 2002).

Organization Activities

Once organizational boundaries have been defined, it is then good practice to also clarify the range of activities that are covered by company sustainability or non-financial performance reports. The oil and gas industry encompasses a wide variety of operations, ranging from the discovery and production of oil and gas to the delivery of petroleum products to consumers. Oil companies typically divide these operations into different businesses, most commonly:

- **Upstream Operations** — the exploration, development, and production of oil and gas
- **Downstream Operations** — the refining, processing, distribution, and marketing of products derived from oil and gas
- **Chemicals** — the manufacture, distribution, and marketing of chemical products derived from oil and gas (petrochemicals). Although large, integrated oil and gas companies participate in all of these businesses, smaller companies may have operations in only one, or part of one, of them. In addition, both large and small oil and gas companies may engage in one or more secondary activities that are not typically associated with the oil and gas industry, including:

Coal Mining; Power Generation, Natural Gas Transmission; Renewable Energy Systems; Specialty Chemical Production and Metals Production

The way in which oil and gas companies divide their activities into different businesses varies from firm to firm. As well as reporting consolidated company performance, companies often separately report data for different activities, particularly where there are important differences between the activities for the indicator.

Stakeholder Engagement

Effective reporting can provide an important foundation upon which a company can enhance or improve stakeholder dialogue. Effective stakeholder engagement can lead to cooperative relationships, with the potential to produce solutions to shared problems. As noted earlier, it is important to identify which stakeholder groups are the primary audiences for the company's report. The process of stakeholder engagement can be very helpful in determining the relevance of certain issues covered in the report. In reporting on stakeholder engagement, companies typically identify the major stakeholder groups or audiences for their report, generally describe how they consult with them, identify the relevant issues for reporting, and respond to feedback on the reported issues. Additionally, the reporting company may consider using quantitative indicators to illustrate the application of its policy and approach to stakeholder consultation (e.g., the frequency of consultations by type of consultation and by stakeholder group).

Management Systems

Many companies in the oil and gas industry employ management systems as a principal means to continually improve business performance. The efficacy of such systems is often discussed in sustainability or non-financial indicator reports. Usually, management systems apply a quality systems approach to comprehensively and methodically manage various operational and business activities.

A management system typically consists of a cyclic "plan, implement, assess and adjust" process that takes learning and experiences from one cycle and uses them to improve and adjust expectations during the next cycle (Campbell and Slack, 2006). Today, companies are increasingly integrating aspects of the sustainable development concept into their management systems. Furthermore, Reporting companies often describe and give evidence of how they are using a systematic approach in managing health, environment, safety and social issues. In doing so, companies may choose to report on various aspects of management systems. Some examples include:

- **Key elements of the system**
- **Accountability within the organization for delivery of the system**
- **A description of key issues covered by the policy**
- **If and how improvement objectives are set, monitored, and achieved**
- **Monitoring, measurement and review of performance**
- **Risk assessment and risk management**
- **Review of performance compliance**
- **Use of external guidelines, norms, principles, conventions, standards, etc**., which the company has supported, adopted or implemented as part of its management approach. In many companies these may be combined into an integrated EHS management system. Some companies are also beginning to use management systems on a broader scale by integrating social aspects into their overall EHS management system or integrating other approaches for systematically managing socio-economic issues. Thus, although there are no commonly accepted indicators for socio-economic management systems, companies reporting on social issues may describe how their management approach is evolving and developing.

Trends in Reporting

API, 2005 pointed out the trend of reporting is emerging in the way companies report various activities in order to win the trust of stakeholders. These are seen in the areas of assurance processes, materiality, value chain as well as performance benchmarking (API, 2005).

Assurance Processes

It is seen that increasingly, companies are using internal and/or external assurance processes to enhance the credibility and quality of their sustainability or non-financial indicator reports, hence, evidence is emerging regarding companies that employ internal systems and processes that provide management with confidence in the quality of the reported information. In addition, External verification is another approach used by some companies to provide independent assurance regarding the credibility of content and processes used in producing sustainability or non-financial reports.

Materiality

The concept of materiality in sustainability reporting refers to the outcome of a process that determines what information is to be disclosed by assessing its level of importance and relevance to the company and its stakeholders.

Value Chain

Some companies are beginning to consider reporting on wider impacts of their activities in the context of a value chain that extends beyond the normal activities within its organizational boundaries. For example, companies may choose to report on how they are influencing emission reductions or improved social responsibility within their supply chain, or on the customer side, companies may choose to report on programmes aimed at informing consumers about the efficient use of oil and gas products. An impact may be described as "direct" when an activity is under the company's control (as owner or operator). When an activity is under another's control, but the company has some degree of influence over this activity, the resulting impact may be described as "indirect". By separately addressing relevant indirect impacts, the company is extending the scope of its reporting within its value chain (GRI, 2002).

Performance Benchmarking

Many oil and gas companies actively engage in EHS benchmarking initiatives and are increasingly involved in sustainability and other non-financial indicator benchmarking. Benchmarking provides an effective tool to improve performance, because it can provide a systematic approach to identify and learn from others about good practices and innovative solutions. It offers an external view of a company's performance and can help identify what is needed for continual improvement. Oil and gas companies often rely on industry groups to facilitate benchmarking processes by developing key performance indicators, and by collecting and analyzing performance information. This document

provides a common point of reference that can help support broader engagement in benchmarking studies of sustainability or non-financial indicators among oil and gas companies, and thereby encourage good practice sharing to enhance individual company performance.

DISCUSSIONS

Environmental Performance Indicators

The GRI (2002) has suggested that oil and gas industry recognizes that its operations have potential impacts on the environment and hence some impact assessment is vital. Some of the environmental impacts may have social and/or economic implications. Although, companies in the industry have made many commitments to manage and minimize negative environmental impacts, in the developing nations such as Nigeria, more of commitment needs to be made. Whilst in the developed nations, these commitments go beyond regulatory obligations (Campbell and Slack, 2006), it is usually not the case with developing nation. Just as it is globally advocated, the environmental performance indicators described in this section as suggested by API (2005) may be useful in describing the performance of company operations of which must be upheld regardless of where operations are carried out.

Core Indicators

These include Spills and Discharges (looks at hydrocarbon spills, controlled discharges as well as effluent discharges), wastes and residuals and environmental management systems and biodiversity. Furthermore, a company should consider the applicability of the core environmental indicators to its business and determine whether audiences for its public report(s) would find disclosure of the information relevant and useful. Often, it is helpful to describe environmental performance in terms of quantitative measures as well as in a qualitative context that signifies the relative importance of the indicator. Reporting companies may also choose to report on the additional indicators if relevant to their business. Indicators such as spills, emissions, wastes and energy use, when expressed as absolute quantities provide a sense of magnitude or scale. Normalization of these quantities facilitates comparisons among organizations of different sizes, and can help express environmental performance in economic terms if this is done, it wins the trusts of stakeholders and minimizes the risk of friction (API, 2005; Campbell and Slack, 2006).

For the indicators listed above, it is important for acceptable reporting to have taken place, companies may choose to report performance for all activities that lie within their operational control boundary (i.e. typically those activities where the company has responsibility for environmental management), with the exception being greenhouse gas emissions, where both operational control and equity boundary reporting can be appropriate (GRI, 2002).

Typical Example of Format for Environmental Reporting Especially Spills and Discharges

According to GRI report, (2002), a sustainable reporting of a company in terms of Core Indicator which includes spills and discharges. The following items must be included in order to make an acceptable environmental reporting:

For example, a Hydrocarbon Spills to the Environment- ***Definition:*** Number and volume of hydrocarbon liquid spills greater than 1 barrel (159 liters) that reach the environment.

Scope: Hydrocarbon liquids include crude oil, condensate, and petroleum-related products containing hydrocarbons that are used or manufactured, such as: gasoline, residuals, distillates, asphalt, jet fuel, lubricants, naphthas, light ends, bilge oil, kerosene, aromatics, and refinery petroleum-derivatives. Reporting companies may choose to estimate the hydrocarbon content of spills of oil/water mixtures (e.g., oil-water emulsions, tank bottoms). When appropriate, the scope or basis of the estimate should be stated. Primary or secondary containment into the "environment", including land (permeable materials like soil, sand, silts, shells, gravel, etc.), ice or water. Earthen berms do not count as secondary containment unless they are engineered to be sufficiently impervious to prevent spilled oil from contaminating underlying soil and/or groundwater must also be stated.

• Sabotage, earthquakes or other accidental release as a result of events outside operational control.

• Company-owned and operated transport. • On-going aboveground or underground leakage over time, counted once at the time it is identified. For the purpose of this indicator, spills do not include:

• Spills to secondary containment or other impermeable surfaces that do not reach the environment • Workover fluids and synthetic, oil, or mineral based drilling fluids (report under ENV—A1), • Chemical spills (report under ENV—A1), • Historical or past leakage that reached the natural environment from tanks, pipes or other vessels, but is not associated with a current release

Purpose: This is a core indicator because hydrocarbon spills can have negative environmental, reputational and financial impacts.

Reporting Units

1. Number of hydrocarbon spills greater than one barrel
2. Barrels of hydrocarbon spilled (Conversion: 1 barrel = 159 liters)

Estimation/Calculation Suggestions

The volume reported should represent the total estimated amount spilled that reached the environment and should not be reduced by the amount of such hydrocarbon subsequently recovered, evaporated or otherwise lost.

Other Considerations

- ***Total Number and Volume of Hydrocarbon Spills*** — In addition to reporting spills that reach the environment, companies may also choose to report separately the "total" number and volume of all hydrocarbon spills, whether the spill reached the environment or was contained (i.e., did not reach the environment). Thus, total spills may include all hydrocarbon releases from primary containment, including spills that reach the environment, as well as spills that are contained within an impermeable surface or secondary containment. This indicator provides increased transparency regarding performance and is also a measure of operational reliability.
- ***Recovered Hydrocarbons*** — Reporting companies may also report the amount of spilled hydrocarbons recovered which includes the amount that is removed from the environment through short-term spill response activities. It does not include longer-term remediation of the spill site. Oil which evaporates or burns should not be included in recovered volume. This provides an indicator of the effectiveness of immediate oil spill response measures.
- ***Land and Water Spill Data*** — Companies may consider separately reporting land and water spill data for spills that reach the environment.
- ***Lower Spill Thresholds*** —In addition to reporting spills greater than 1 barrel, companies may consider reporting with lower spill thresholds for different sectors or locations if smaller spills are significant in their operations. For example, marketing and transportation may have more small spills than other sectors.
- ***Qualitative Impacts to the Environment*** — Companies may also report on significant impacts on the environment as a result of spills in qualitative terms, particularly from larger releases (e.g., over 100 barrels) or from a small release into a sensitive environment.
- ***Policies, Programmes and Initiatives*** — Organizations may also describe policies, programmes and initiatives undertaken to prevent accidental releases of oil, chemicals and other process-related liquids to the environment. In addition to spill prevention measures, reporting organizations are also encouraged to report on emergency preparedness and response programmes, plans, organizational structures and affiliations to effectively respond to spills and other emergencies.
- ***Third-Party Carriers*** — Companies may also choose to separately report significant hydrocarbon spills from third-party carriers.

Social Responsibility Performance Indicators

Companies are also are encouraged to report all core indicators in this case so as to enhance transparency. These includes issues on Human Rights, Business Ethics, Bribery and corruption cases, political contribution if any, lobbying and advocacy, Employment practices including non – discrimination policy and local employment opportunities especially for host communities. Other are community and society issues including community relationships and social investments and security.

It is believed that reporting in the area of social responsibility is still developing (Campbell and Slack, 2006b). As a result, the majority of indicators in this section propose that the reporting company describe its management approach to a social responsibility issue. Where this may not be feasible, the use of case study examples is encouraged as a first step. Where a company's management of an issue is more advanced, companies are invited to report quantitative indicators if they consider it appropriate and feasible. Examples of quantitative indicators are given within the scope of some indicators but a company is encouraged to determine its own measures of an indicator. It is hoped that from open experimentation, the development of quantitative industry indicators in this area will become more feasible for future. Furthermore, Oil and gas companies can find themselves operating in challenging environments by nature of the location of oil and gas reserves. This is true of developing nations of which make them peculiar and hence, adequate and thorough reporting is required, the challenges that will be faced will not be consistent across a company's operating areas. Companies may therefore acknowledge and respond as appropriate to the particular challenges they face in any given area (GRI, 2002).

If appropriate, companies may choose to further develop reporting practices by describing any mechanisms to monitor implementation of their policies and/or procedures, and the outcomes of this monitoring.

Economic Performance Indicators

The economic performance indicators that companies may find useful for sustainability reporting are examined here.in addition, they are essential as they help companies ascertain its viability and otherwise sustainability of operations. In other words, Companies are encouraged to use these economic indicators, and to choose other financial indicators that they already use in various public financial reports to give an overall picture of their sustainability performance in general terms of income and expenses (or economic inflow and outflow). The economic dimension of sustainability reporting may not only address the financial performance of the reporting company but also the company's effects on the economic circumstances of its stakeholders and on the local, national and global economic systems in which it operates (Campbell and Slack, 2006). Economic performance, therefore, covers aspects of the company's economic interactions. These include the following Economic Performance Indicators that describe key economic interactions.

Governments: Issues of Tax expenses, dividends paid plus purchases (shareholders), Employees (Payroll and Benefits); Suppliers and Contractors (Capital expenditures) as well as Lenders and Holders of Debt securities)(GRI, 2002).

The intent of these core and additional Economic Performance Indicators however, is to aid companies in characterizing the relative magnitude of economic outflows as they relate to major stakeholder groups with whom the company interacts. Key stakeholders and their interests that are relevant to the economic contribution of the oil and gas industry include:

- Governments and the economic interaction with oil and gas companies with respect to taxes, royalties and other payments.
- Shareholders and the economic interaction with respect to the payment of dividends, repurchase of outstanding shares of stock and share value.
- Employees and the economic interaction with respect to the payment of wages, benefits, pensions, etc.
- Suppliers and Contractors and the economic interaction with respect to business and development generated in the supply of goods and services to the oil and gas industry.
- Lenders and Holders of Debt Securities and the payment of interest on borrowed capital.

For reference purposes, many of the traditional financial performance indicators typically reported by oil and gas companies are below as examples. Companies may choose to use some of the financial indicators as listed below as well as the core and additional indicators defined in this section of this guidance. The use of such traditional financial indicators can provide helpful context regarding the operational and economic scale of a company's activities for the purpose of sustainability reporting.

This guidance document recognizes that companies and governments use different accounting practices and conventions, as well as different definitions for some financial terms. As a result, some indicators presented in this section may not be comparable to those in other company sustainability

reports. For example, certain financial measures defined under generally accepted accounting principles in the United States (U.S. GAAP) may not be the same as those same measures as defined under international accounting standards (IAS). Likewise, indicators that are not defined under any accounting standard (e.g., reserve life or reserve replacement rate) and defined by each company may also be different and not comparable. Therefore, companies may choose to footnote or otherwise highlight areas of data and information in their reports that may not be externally comparable. It is also good practice in a sustainability report to provide brief explanations for the basis or definitions of a company's reported financial and economic indicators.

Traditional Financial Indicators: Companies publishing sustainability reports should consult with their financial organizations that prepare annual reports and other public filings when selecting financial performance indicators that best describe the economic and operational scale of a company's activities for sustainability reporting. As noted above, precise definitions of financial indicators may vary, for example in different countries, and should be obtained from individual company financial departments.

Traditional Financial Indicators and Ingredients for its Reporting

According to Oil and Gas accounting requirement, Economic Inflow should be reported. This could be in the form of Net income (in millions of local currency /or US$). Others are:

Exploration & Production: Production (mboe/day), % of Production Attributable to Gas Production (mboe/d), Proven Reserves (mboe), % of Proved Reserves Attributable to Gas Production (mboe), Reserve Life (years); Reserve Replacement Rate (%),

Midstream Gas Sales (mcm/d); ***Downstream:*** Refinery Throughput, Crude Oil Input or Distillation Capacity (mb/d), Total Refined Products Sales (mb/d), ***Chemical*** Total Chemical Sales (in millions local currency and/or US$).

Other Considerations:

- As an additional option, companies may choose to report, in quantitative or qualitative terms on other types of corporate taxes (e.g., property taxes, petroleum revenue tax, excise taxes, etc.), royalties and contractual payments paid to governments as a key stakeholder group. Reporting total tax paid provides an overall indication of a company's economic contribution to nations, in response to fiscal requirements of their governments. If this approach is taken, deductions may be made for subsidies and other payments received.

These may be grants, tax relief and other types of financial benefits that do not represent a transaction of goods or services. The total tax reported should be a globally aggregated amount, and may be reported elsewhere in a company's annual accounts.

Additional Indicator: Transparency of Payments

Definition: Description of any policies, initiatives or advocacy programmes for the promotion of transparency of payments to host governments.

Scope: The reporting company is encouraged to indicate its policy and steps taken to promote transparency of tax, royalty and other payments made to host governments related to extraction of its natural resources (to produce oil and gas). The company may indicate active participation in transparency initiatives or its adoption of any standards on transparency of payments. This may be reported at the global, regional or national levels.

Purpose: To contribute to better public transparency in the economic interaction between host governments and oil and gas companies.

Normalization Factors

API (2005) warned that it is generally a good practice to measure and report performance based on both absolute and normalized quantities to provide a more complete and balanced representation of performance and sustainable progress. Companies report normalized performance indicators for a number of reasons, including:

- Tracking performance over time

- Comparing performance among similar business operations within the company
- Facilitating performance benchmarking with other companies

However, the variability in how companies report normalized data presents a challenge, because companies use different normalization factors for different activities and for different comparison purposes. Companies should normalize performance indicators in ways that make sense for their business and support their decision making. This is particularly important in the developing countries context as any report gives the stakeholders the impression that all is well with the companies operating their local community.

Therefore, they should select ratios for external reporting that allow better communication of performance to stakeholders and help stakeholders make better use of the information. Companies should carefully consider what ratio indicators best characterize the benefits and impacts of their business. Normalization factors will vary. For example, occupational injury and illness data are usually normalized on the basis of the number of employees or number of hours worked, and reported as injury/illness rates. Generally, environmental performance indicators can be normalized on the basis of physical quantities related to output or input. However, the relevance of environmental performance data (spills, discharges, wastes managed and emissions) in the oil and gas industry is very dependent on the type of operational activities within various subsectors of the industry. One thing is pertinent though, the reporting and its simplicity has the capacity of reducing conflicts amongst the Oil and Gas companies and their host communities as transparency is engendered.

CONCLUSION

A review of the current reporting on sustainability was done by KPMG and found out that "The greatest challenges faced by the industry regarding sustainability performance reporting are determining how to measure, define and select appropriate indicators. Member companies would like industry associations to provide support mostly in the area of establishing and maintaining consistent metric definitions and measurement methods, but not in verification of performance results." (KPMG, 2007). Having said thus, some of the conspicuous benefits of environmental reporting in the Oil and gas are enumerated below.

Some Benefits of Environmental Reporting the Oil Industry

Business Drivers for Improved Reporting

The reporting of sustainability or non-financial indicators is part of an evolving process that has its roots in corporate environmental reporting that began about two decades ago. Over time, environmental reporting has gradually expanded to include health and safety issues. More recently, many companies in the oil and gas industry have extended their reporting still further to include social and broader economic issues. Sustainability or non-financial indicator reporting has become an increasingly important means for **communicating company performance and progress.** According to a 2001 publication – Stepping Forward: Corporate Sustainability Reporting in Canada – by Stratos Inc., such reporting can:

- ***Enhance Business Value*** – by building investor confidence and demonstrating that the company is managing risks and positioning itself to address emerging opportunities.
- ***Improve Internal Operations*** – by deepening the level of understanding of how the company is performing among employees, and internally using that information to improve company operations and decision-making processes.
- ***Strengthen Relationships*** – by demonstrating to local communities and regulators that a company is operating in an environmentally and socially responsible manner that will benefit the community in the short and long term.
- ***Be an important Accountability Mechanism*** – by establishing commitments and reporting on the challenges and progress being made.

The interest in improved "sustainability" or "non-financial" indicator reporting is highlighted by the emergence of the Global Reporting Initiative (GRI, 2002) Sustainability Reporting Guidelines. The oil and gas industry acknowledges the value of the GRI Guidelines as an important generic voluntary

reporting framework. IPIECA and API also recognized an opportunity to respond to member company requests for guidance on sustainability or nonfinancial reporting practices that address the diversity of operations and unique activities of the oil and gas industry.

Finally, in addition to above, environmental reporting should ultimately benefit the users in the following ways for it to be effective and efficient, Improve data consistency and quality:

- Foster improved processes for efficient data collection
- Create new opportunities for internal and external benchmarking
- Demonstrate industry commitment for consistent and transparent performance reporting
- Encourage and facilitate stakeholder feedback, engagement and dialogue processes
- Use this information to improve business processes, strategies and actions

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