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Sustainability Reporting in the Mining and Metals Sector: An Investigation of 25 Steel and 25 Mining Companies

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Abstract

Globalization driven further by innovations in Information and Communication Technologies (ICT), transportation and the World Wide Web has tremendously changed the traditional economic development policies and practices. With globalization of production (outsourcing, off-shoring and Foreign Direct Investment - FDI) and globalization of markets, more and more companies embarked upon trans-boundary operations, and thus the name multinational corporations. Unprecedented economic gains have been reaped by shareholders of companies, but often at the cost of sustainable development. This has led to the need for companies and organizations to provide their performance reports to stakeholders, and thus step up their corporate responsibilities on the social and environmental dimensions as well.
This paper looks into the reporting efforts of 25 global mining and 25 global steel companies. Five sample companies have been selected from the two categories, and their performance reports evaluated on the core dimensions of sustainable development: social, economic and environmental.

Keywords: Sustainability reporting, Social responsibility, Sustainable development, Mining and metals sector, Steel industry

Introduction

Although the language of sustainability emerged during the 1970s, it became popular with the release of the Brundtland report in 1997 (Robbins, 2007:1683). Nevertheless, the origins of this concept in the context of forestry and resource security can be traced back to the Duke of Saxony, Hannβ Carl von Karlowitz, a mining supervisor in Freiberg (Lecture Notes, Karen Murillo, TU Bergakademine Freiberg, May 2009). The concepts sustainability and sustainable development since the Brundtland Report in 1997 have evolved to include considerations of social, human and natural capital. According to Robbins (2007:1684), “many of the differences in various concepts of sustainability can be attributed to the relative weight given to economic social, cultural, and environmental components of sustainability.”

Since the GRI was launched in 1997 by the "US-based non-profit CERES (formerly the Coalition for Environmentally Responsible Economies), and Tellus Institute with the support of the UNEP, more and more companies and organizations are reporting their performances on primarily three dimensions: social, economic and environmental. Through time, based upon these triple bottom lines, companies and organizations came up with copious reports of their own performance. Nevertheless, these reports often vary considerably on their structure, content, and even sustainability measurement metrics.

Numerous indices, metrics, auditing and reporting guidelines have been developed by multi-lateral organizations such as the UN, NGOS, ISO, and several companies. Hence, this considerable adaptation and growing variation on Sustainability Reporting, which is often called Corporate Social Responsibility Reporting or simply Corporate Responsibility, gave way to ramifications and increasingly incompatible adaptations.

Although, reporting on sustainability performance by a growing number of companies has given rise to encouraging ways forward to sustainable development, the lack of comprehensive reporting modules and application of similar criteria for reporting led to yawning inconsistencies, lack of uniform application of standards and mushrooming reports that, more often than not, share the name but hardly verifiable content. It is not uncommon that several companies build upon this gap to use Sustainability Reporting as window-dressing a report which communicates hardly measurable and verifiable facts on the ground.

The purpose of this brief paper is to find out how top global mining and steel companies report on their performances on the three pillars social, economic and environmental, also called the triple bottom line. We have looked into the Sustainability, Corporate Responsibility, and Corporate Social Responsibility reports of 25 steel and 25 mining companies. Sure, those companies give reports different names such as Corporate Responsibility reports (CRR), Corporate Social Responsibility reports (CSRR), Sustainability reports (SR), Annual reports (AR), Annual monitoring reports, and similar others. Despite these variations in the names of reports, the key criteria we used to evaluate those reports is whether those companies considered the three pillar approach (triple bottom line) in their reports, and to what extent do they report on these three core criteria.

Methodology

Out of top fifty mining companies, we have selected 25 companies. We also took 25 companies out of 50 top global steel companies. Over all we have screened out 50 companies in the mining and steel sector. Our selection of those 50 companies was largely guided by the availability of reports on the World Wide Web, hence the need for convenience sampling.

As it is cumbersome to closely investigate the reports of 50 global companies, we selected five samples from each domain i.e. five mining companies, and five steel companies, thus a total of ten companies. We have selected these companies on random sampling method based on the Lottery Selection without Replacement Method.

The performance reports of companies were collected from internet sources. We have also gathered information from books, and occasionally from class lecture notes. The information gathered from the reports of those sample companies has been tabulated, and duly referenced.

Nevertheless, a complete investigation into the sustainability reports of such big companies requires more time, data collection and verification of the facts through observation. Hence, we kept presumption at bay by openly pointing out that our study requires further detailed investigation, time and resources.

Part one of the paper gives introductory information on the purpose, methodology, and organization of the paper. Part two gives definition of key terms, namely, Sustainability, Corporate Responsibility, and Corporate Social Responsibility reporting. Part three provides the presentation of performance reports of selected mining and steel companies. Part 4 analyzes and evaluates the sample performance reports released by those companies. Finally, part five presents the conclusions of this study.

Definitions and discussion

While the world, as a result of globalization, has witnessed unprecedented economic growth, the improvements derived from such growth have been counterbalanced by the deteriorating state of the environment, and exacerbating magnitude of poverty and rising population figures hit by hunger (Todaro, 2009:803). Consequently, new developments in technology, innovations, management policy are challenging organizations to ensure their operations, products, and services should no longer put irreversible negative impacts on people, economies and the environment (GRI, 2006:2).

Corporate responsibility reporting (CRR)

Corporate Responsibility reporting (CRR) is defined as a report which discloses information on "commitment of a business to contribute to sustainable economic development working with employees, their families, the local community and society at large to improve their quality of life (Corporate Social Responsibility: the WBCSD's Journey, "World Business Council for Sustainable Development (WBCSD), 2004 in *KMPG Global Sustainability Services: KMPG International survey of Corporate Responsibility Reporting* (2005:6).

Corporate social responsibility reporting (CSRR)

Corporate Social Responsibility (CSRR) can be defined as "an approach to the firm which takes in economic activities, legal obligations and social responsibilities (Morrison, J. 2009:516). This broader view has been welcomed by many, yet it has aroused objections from those who feel that businesses should properly focus on profit-making, leaving social concerns for individuals, families, government agencies and charitable institutions. The economist Milton Friedman (1970: 32-33) argues that "the business of business is business," and that companies best serve society by profit generation and shareholder primacy. According to Thomson (2005: 131-52), one of the challenges associated with CSR is defining the nature and extent of social responsibilities. 'Responsibility' suggests social obligations, yet CSR is a voluntary undertaking beyond a company's legal obligation, thus contradicting the view that CSR involves "social obligation'.

Sustainability reporting (SR)

The GRI Sustainability reporting guidelines (2002) defines Sustainability Reporting as "the practice of measuring, disclosing and being accountable for organizational performance while working towards the goal of sustainable development. A sustainability report provides a balanced and reasonable representation of the sustainability performance of the reporting organization, including both positive and negative contributions". The document has pointed out that while SR is a broad term encompassing others, there is no essential difference between SR, CSR, and CRR. "Sustainability Reporting is a broad term considered synonymous with others used to describe reporting on economic, environmental and social impacts (e.g. Triple Bottom Line, Corporate Responsibility Reporting, etc.)".

Different companies use different terminology of the same essence such as Sustainability, Sustainable Development, CSR or simply CR. At the kernel of all these lies reports on the social, economic and environmental performance.

As can be discerned from the definitions drawn from various sources above, there is no fundamental difference between CRR, CSRR, and SR although as has been pointed out by the GRI document, the term SR is broader and more inclusive. At the spotlight of CRR, CSRR, and SR is the Triple Bottom Line (TBL), alias called "people, planet, and profits" which became the principal approach to public sector full-cost accounting. It has been customary practice to use the terms CRR, and CSRR for private sector organizations and companies while SR is commonly employed in the public sector ones.

Although essentially founded upon the TBL, the GRI (also called the ecological footprint guidelines) is the most widely used guideline mainly because it has been created "through a multi-stake-holder, consensus-seeking approach. With continuous improvement, the GRI, initially released in 2000 gave birth to the G3, which consist of principles and disclosure items along with sector supplements and national annexes. The G3 Guidelines are the cornerstone of the GRI Sustainability Reporting Framework. In line with the GRI vision, it is recommended they be used as the basis for all of an organization's annual reporting.

The Guidelines outline core content for reporting and are relevant to all organizations regardless of size, sector, or location. They are the foundation upon which all other GRI reporting guidance is based. The G3 Guidelines outline a disclosure framework that organizations can voluntarily, flexibly, and incrementally adopt. The flexibility of the G3 format allows organizations to plot a path for continual improvement of their sustainability reporting practices. All SR, CRR, and CSRR are basically various names for the practical application of the G3 guidelines on reporting the social, economic and environmental performance of companies.

Mining and steel companies: presentation of reports

Mining and steel companies contribute immensely to the benefits of society. To fully comprehend how dependent we are on products of mining and steel companies, we may take a snap audit of all the materials and services that we use within each single day. Nevertheless, mining and steel companies have a range of serious social and environmental impacts such as habitat modification, displacement of local communities, fugitive dust emissions, surface and ground water pollution, and erosion and sedimentation among others.

The ICMM, which is made up of 17 mining and metal companies, and 30 association members (which are also mining, mineral, and metal companies) has basically committed all member and associate companies to the GRI, with supplements applicable to these sectors. The adoption of the GRI would undoubtedly enhance uniformity of reporting standards. However, even member companies of the ICMM do not strictly stick to the proposed public reporting standards. More often than not, they come up with their own reports. The unifying economic, social and environmental strands are still kept although at differing levels of materiality, depth and coverage.

Below is a list of 25 mining and 25 steel companies selected from the leading global companies in both sectors. The types of reports published by each company, and the year of publication are provided. It should be noted however that those companies which have more than one report are not necessarily those companies with better sustainability performances.

No.	Company Name	CR	SR	CSR	Other Report	Year	Country
1	Agnico-Eagle Mines limited	0	0	0	AR	2008	Canada
2	Harmony	1	1	0	AR	2008	South Africa
3	Aricom PLC	0	0	0	AR	2008	UK
4	Barrick	1	0	0	0	2008	Canada
5	Angolo Ashanti	0	0	0	AR	2008	South Africa
6	Bhp Billiton	0	1	1	0	2008	Australia
7	Codelco	0	1	0	AR	2008	Chile
8	Vale	0	1	0	0	2007	Brazil
9	Compass	0	0	0	AR	2008	USA
10	Debswana	0	0	0	AR	2008	Gaboroni
11	Vedanta	0	1	0	0	2009	India
12	Xstrata	1	1	0	AR	2008	Switzerland
13	Newmont	1	1	0	0	2009	USA
14	Lonmin	0	1	0	0	2008	UK
15	Iron ore	0	1	0	AR	2008	USA
16	Fnx Mining	1	0	0	AR	2008	Canada
17	First Quantum	1	0	1	0	2009	Canada
18	Freeport Memoran	0	1	0	AR	2008	USA
19	Eramet	0	1	1	0	2008	French
20	Anglo-American	0	1	1	AR	2008	UK
21	Marston	1	1	0	0	2008	USA, Australia
22	Martin Marietta	0	1	0	AR	2007	India
23	Mspl	0	1	0	0	2007	India
24	Teck	0	1	0	AR	2009	Canada
25	Kazakhmys	0	1	1	AR	2008	UK

Table 1: Performance reports by 25global mining companies, O = No report available; 1 = Report available; AR = Annual report available. Source: Compiled by the authors based on performance reports of companies gathered from the Internet

No.	Company Name	CR	SR	CSR	Other Report	Year	Country
1	Arcelomittal	1	0	0	0	2008	India
2	Hyundai Steel	0	0	1	0	2007	S. Africa
3	Auto Kumpu	1	0	1	0	2008	Japan
4	JFE Japan	1	0	1	0	2008	Japan
5	Nippon Steel	0	1	1	AR	2008	Japan
6	Pasco_Steel	0	1	1	AR	2007	S. Korea
7	Bao Steel	0	1	1	AR	2007	China
8	Tata Steel	0	1	1	AR	2007	India
9	US Steel	1	1	1	AR	2007	US
10	Wuhan Iron and Steel	0	0	0	AR	2007	China
11	Nucor	0	1	1	AR	2008	USA
12	Gerdan	0	1	1	AR	2008	Brazil
13	Group River	0	0	0	AR	2008	Italy
14	Sever Steel	0	1	1	AR	2008	Russia
15	Thyseen Krup	1	1	1	AR	2008	Germany
16	Evra Corporation	1	0	1	AR	2008	USA
17	Magang Group	0	0	0	AR	2008	China
18	Steel Authority of India	0	1	0	AR	2008	India
19	Sumitono metal	0	0	0	AR	2007	Japan
20	Magnitogorsk	1	1	1	AR	2008	Russia
21	China Steel	0	0	0	AR	2007	Taiwan
22	SSAB	1	1	1	AR	2008	Sweden
23	Rantaruukic	1	0	0	AR	2008	Finland
24	Novpliersk	0	0	1	AR	2008	Russia
25	Alcihic	0	0	1	AR	2007	Japan

Table 2: Performance reports by 25global steel companies, O = No report available; 1 = Report available; AR = Annual report available. Source: Compiled by the authors based on performance reports of companies gathered from the Internet

As can be seen from Table 1 and Table 2 above, companies issue out their performance reports using various names. Some of them (US Steel, Thyseen Krup, SSAB) provide several kinds of reports, most have one or two of these reports, and others (Aricom PLC, Angolo Ashanti, Compass, Debswana, Sumitono Metal, Group River and Maganag Group) release only Annual Reports. The use of ‘Annual Reports’ instead of SRR, CRR, or CSRR suggests the legacy of the old tradition in which the focus of companies was primarily on economic returns measured by financial figures. Nevertheless, many of these companies have included their performance on social, economic and environmental dimensions.

Tables 1 and 2 clearly show that although companies may adopt corporate sustainability reporting guidelines given in the GRI, they do not follow uniform standards of reporting. Beginning from the names of their reports, they show considerable variations in content, coverage, materiality, and verifiability (measurability) of their reports. Hence, as we would shortly see in part 4, a mere evaluation of performance based on the types, numbers and volume of reports would not lead to cogent and valid outcomes. The difference in nomenclature of reports however poses communication challenges (Dawkins, J.2004:108).

A summary of information on which mining companies have stand-alone reports and which others have integrated reports is given in Figure 1 below. It can be observed that 4 companies have SR as a stand-alone report while only one company has a CRR stand-alone report. None of the 25 companies have CSRR as a stand-alone report. Five of those mining companies have other, i.e, Annual Reports as stand-alone performance reports. Historically, it is customary that companies and organizations report their performance in Annual Reports. Comparatively speaking, SR, CRR, and CSRR reporting are new introductions into the performance audits of companies. No wonder why most of the companies have given their performance reports as annual reports as can be gleaned from Figure 1. Compared to stand-alone reports in Figure 1, more companies have issued out integrated reports of which SR and Other (AR) predominates. It has been pointed out in the previous section that the distinction between SR, CRR, and CSRR is only minimal. The GRI has also stated while SR is a more comprehensive concept, there is no real distinction among those three concepts. Given this, why have then companies produced two or three reports, and integrated them? Or does the integration simply exist in name? This may even point out to further insights such as lack of clear communication of reporting standards, misunderstanding on performance reporting, purposeful misguiding about real performance or using reports to serve promotion purposes.

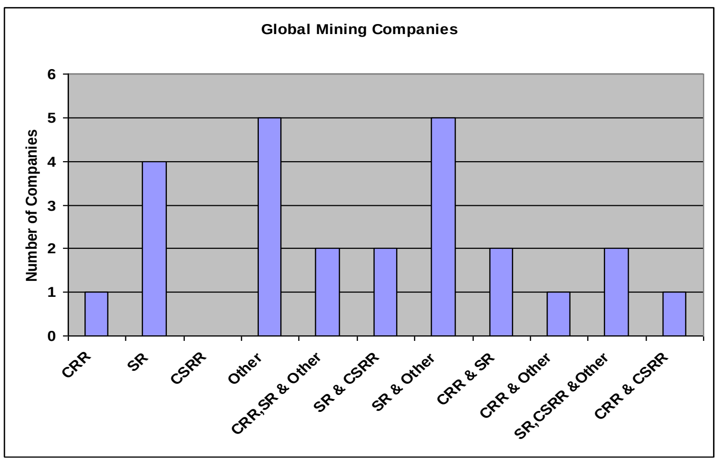

Figure 1: Stand-alone and integrated performance reports of global mining companies Source: compiled by the authors

We will not attempt to investigate into the real causes, but we can safely say that there are communication gaps on ways, standards, and purposes of performance reporting. Similarly, Figure 2 shows five steel companies have given other (i.e. AR), two companies each issued our CRR and CSRR reports, whereas none had SR stand-alone reports. Here again, in relative terms, more companies have given AR as stand-alone reports.

In comparative terms once more, most steel companies, precisely 7 of them, have issued out integrated SR, CSRR and Other (AR) reports. A similar question poses itself up here again: Why should companies give integrated reports while SR, CRR, and CSRR are essentially similar? Are the reports integrated only in name or in content too?

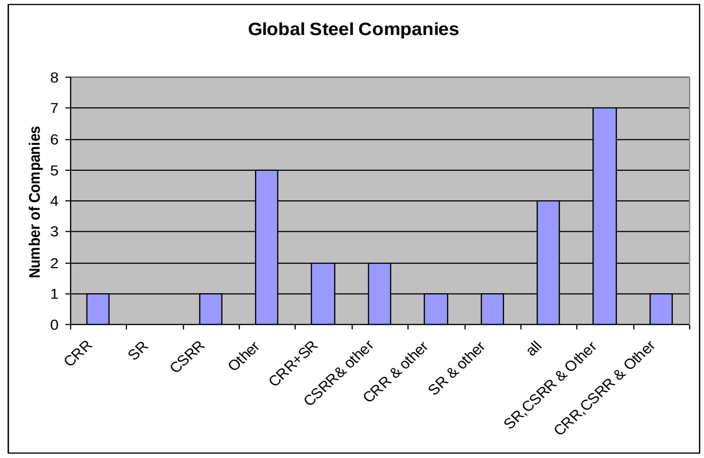

Figure 2: Stand-alone and integrated performance reports of global steel companies Source: compiled by the authors

Those observations and inquiries would lead us to find out better alternatives to assess performance reports. We need to implement selected criteria as a common indicator to the look into sustainability development reporting in the mining and metals sector. In Part 4 below, we have attempted to assess sample performance reports vis-à-vis core dimensions of the TBL.

Sample mining and steel companies: evaluation of reports

Performance evaluation of companies based on the number and types of reports they issued out would be elusive. Hence, we thought the evaluation of company reports based on the criteria of the Triple Bottom line (Three Pillars Approach) would lead to better results.
Companies which have only annual reports do not necessarily scored less on the social, economic and environmental performances, and conversely those which have more than two reports do not necessarily exhibited better performance. To avoid such superficial evaluation of reports by companies, we deemed it far better to adopt the Three Pillars Approach.

As pointed out in part 2 earlier, the GRI itself and many other sustainability report guidelines are wound up upon the three basic dimensions: social, economic and environmental. Even a gross assessment of companies' reports based on these criteria would produce better results than comparing the types of reports purportedly reflecting sustainability reporting on comprehensive grounds.

Consequently, companies whose report incorporates all the three dimensions have been rated A. Those which have included their performance on only two of the dimensions are given score of B. We gave C to those which include only one of these dimensions in their performance reports. Reports rated C do have economic reports that depict the costs and revenues of a company as measured by financial figures. Hence they often neglect to report on economic gains to society or communities. The selection of the sample companies given in Table 3 and Table 4 below, as has been indicated in the introduction section, is based on the lottery without replacement method. Only five companies from each sector were taken into account mainly because of the constrain of financial resources to print out more reports for closer studies, and also because of the copious nature of reports which at times may go as high as 6 Mega Bytes.

Despite problems of generalization for wider application, our evaluation of performance reports shows that the types and number of reports companies produce do not necessary match with sustainable performance. Table 3, for example, shows that both Barrick and Fnx Steel from the mining sector have got CRR (see Table 1), but while Barrick rated A, Fnx rated B on the evaluation criteria. Aricom PLC issues out only one report, i.e., its annual report. Yet, Aricom scored C on the assessment scale.

No.	Company	Social dimension	Environmental dimension	Economic dimension	Evaluation
1	Harmony	1	1	1	A
2	Kazakhmys	1	1	1	A
3	Aricom PLC	0	0	1	C
4	Barrick	1	1	1	A
5	Fnx Mining	0	1	1	B

Table 3: Evaluation of performance reports by 5 sample mining companies, 0 = Not included; 1 = Included.

No.	Company	Social Dimension	Environmenta l dimension	Economy dimension	Evaluation
1	Arcelomittal	1	1	1	A
2	Pasco Steel	1	1	1	A
3	Wuhan Steel	0	1	1	B
4	Magang Group	0	0	1	C
5	US Steel	1	1	1	A

Table 4: Evaluation of performance reports by 5 sample steel companies, 0 = Not included; 1 = Included.

Similarly, a good example from the steel sector is Arcelormittal. This company issues out only one performance report, i.e., CRR, but it scores A upon evaluation of report based on coverage of social, economic and environmental dimensions. Also, both Wuhan and Maganag have annual reports but on the scale of performance on the three pillars, Wuhan measures better than Maganag.

It is revealing to see that all the sample companies have got reports which cover economic dimensions despite at various scopes and depths of coverage. This clearly shows that the criteria of profitability predominates the performance of almost all companies. Those which rated C on the evaluation scale we devised have at least economic reports on the costs incurred into and benefits accrued by companies.

This fact points out that companies, particularly those working for profits, put economic returns (profit maximization) top on the hierarchy of their performances. It is not uncommon to find companies whose reports purportedly witness good performance on the social and environmental dimensions, but upon a closer investigation their reports are putting cost and benefit reckonings (profit maximization) in the spotlight.

While the problems of fair reporting on social and environmental performance may be attributed to several factors such as lack of expertise, forbidding costs, or poor commitment, a handful of companies use CRR, SR or CSRR reports only for promotion purposes, hence the problem of window-dressing functions of such reports

Conclusions

This miniature study set out to investigate into the performance reports of 25 global mining and 25 global steel companies, and find out whether those reports reflect the core dimensions of sustainable development. These core dimensions which have been major unifying strands in the GRI are the social, economic and environmental dimensions, also called the triple bottom line, or the three pillars of sustainability. All the fifty companies included in this study have issued out their performance reports in either one or more of the following names, namely, CR, SR, CSR reports, and/or Annual Reports (AR).
While the GRI Guidelines state that there is no essential difference among CR, SR, and CSR reporting, the terms CR and CSR reporting seem to be favored by private companies especially those which with trans-boundary operations(MNEs). It has been found out that the number and types of reports mining and steel companies release do not necessary match with their sustainability performance on the three basic dimensions of sustainable development. While some companies which may have only one report, such as a CR report or simply an AR, rated high (A) on the triple bottom line sustainability index, some others which have provided more than one report rated medium or low (B or C).

The increasing divergence among report formats and contents of companies implies the lack of clearly formulated, comprehensive reporting guideline. Moreover, reporting is only a voluntary commitment on the part of companies; it is not an obligatory one. This in itself has contributed to loose adherence to reporting guideline such as the GRI and its consecutive modifications (G2, and G3).

To sum up, the performance reports of mining and steel companies showed considerable variations among themselves. On top of that, performance reports are not dependable guides to properly appraise the sustainable performance of a company. That is, they cannot be taken at face value. A closer investigation of those reports on measurable social, economic and environmental criteria (TBL) would produce valid outcomes on the sustainable development of companies.

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