

# A CRITICAL ANALYSIS OF SUSTAINABILITY REPORTING BY MINING COMPANIES

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## KEYWORDS

Sustainability indicators, Mining, Global Reporting Initiative (GRI)

## ABSTRACT

Mining and minerals play an important role in the economy of many countries, but the same time the significant environmental, social and economic impacts attributed to the mining extraction process is a major concern for the sector. The evaluation and reporting of its impacts emerge as a fundamental research topic. This research aims then at critically evaluating the reporting process of companies operating in the mining sector, the main source of data was Global Reporting Initiative (GRI), which is most well-known guidelines used both at national and international levels. When considering a scenario of voluntarily reporting at GRI, results put in evidence that sustainability reporting in the mining sector is mainly addressed by large and multinational companies due to difficulties experienced by smaller companies. The findings show that Countries from Africa, Asia, Northern America and Oceania region prevail in the quantity of companies disclosed in all GRI categories.

## INTRODUCTION

In response to the urgent need for sustainability in the mining sector move behind the rhetoric of sustainability, strategies for assessment must be considered. With regard to sustainability assessment methodologies, these are traditionally based on the identification and evaluation of criteria which expose potential impacts on the three dimensions of sustainable development: social, economic and environmental (OECD, 2010).

The purpose of sustainability assessment is to provide decision-makers with an evaluation of global to local integrated nature- society systems in the short and long term, in order to assist them in determining which measures should or should not be taken in their attempt to make society sustainable (Singh et.al. 2009).

Having in mind the importance of the mining sector and the significant environmental, social and economic impacts attributed to the mining extraction process, the evaluation and reporting of its impacts emerge as a fundamental research topic. This paper aims then at critically evaluating the reporting process of companies operating in the mining sector. For this, the Global Reporting Initiative (GRI) will be considered as one of the best recognized tools for this reporting.

The work is based on a revision of sustainability reports disclosed by mining companies at GRI in different countries worldwide. The research attempts then to contribute to analyze the actual scenario of sustainability reporting by mining companies, considering some aspects such as enterprise category (small, medium or large) and geographic location. The analyses included three hundred and thirty-two companies listed at Global Report Initiative. The paper is organized in five main sections, as outlined below.

## LITERATURE OVERVIEW

Mining and minerals industries are fast-growing, but at the same time, they have gained more attention due to their impacts over the environment and society (Alves, Ferreira, & Araújo, 2018).

As sustainability awareness has increased among interested stakeholders in the mining sector, effective sustainable strategies have become an important aspect to be considered by companies, governments and society, due to the impacts generated by mining activities and affecting different stakeholders.

Sustainability issues are mostly integrated in different functions of those companies which already perceived these concerns as important aspects for their performance. In the last few years sustainability reporting has been introduced as a forefront subject for companies worldwide; it has been supporting companies towards addressing economic, social and environmental goals for society, additionally adopting common practices for elaboration of sustainable reports (Ching, Gerab, & Toste, 2014).

According to Ramos et al. (2014), periodical monitoring, evaluating and reporting the state of the environment at global and local levels is then fundamental to better implement sustainable development principles and practices.

The debate about the methods used to evaluate and report sustainability in the industrial process is growing in academia and industry. The reports and indicators proposed by institutions such as GRI (Global Report Initiative), DJS (Dow Jones Sustainability Index), OECD (Organization for Economic Co-operation and Development), Environmental Indicators for European Union, and EPA (Environmental Protection Agency), have played an important role in starting the discussion with regard to the need to develop methods that can help companies to evaluate their processes towards environmental sustainability and even social sustainability.

Notwithstanding the development of sustainable reporting has not been accomplished in a similar manner by all sector and countries worldwide. Among countries such as European ones, the growth in the number of reports indicated that companies seem to be much more focused on communicating their responsibilities through reporting processes (Tarquinio, Raucci, & Benedetti, 2018).

The development of sustainable reporting has been seen as guidelines and standards to improve the transparency and credibility by companies. In the current literature of sustainable reporting, GRI guidelines have been used extensively as an influential guideline of triple bottom line. This initiative has been interconnected with several international reporting frameworks in the topic of sustainability due to their wide range of visibility, acceptance, and sustainable policy implication (Masud, Hossain, & Kim, 2018).

Despite of the concept of sustainability underlined at the GRI guidelines, and of presenting weaknesses, namely in an approach limited to a disclosure of a compilation of non-integrated indicators, the GRI guidelines persist as the most used by organizations to report their actions towards sustainability (KPMG, 2017).

## METHODS

In order to achieve the objective of this research, a review of the existing literature related to sustainability assessment and reporting was drew upon. Then, with the purpose of understanding the actual scenario of the sustainability reporting by mining companies, the literature related with GRI was also consulted, resorting to reports from mining companies.

The choice for the mining sector was motivated by the fact that these activities involve several impacts on the society but sustainability assessment and reporting in this field is still scarce (Alves et al., 2018).

As summarized in Table 1, this research analyses the sustainability reports disclosed in the period of five years (2012 – 2017) by all mining companies listed on GRI in 2018. The methodology was based on both companies reports available at sustainability report database from GRI platform.

Table 1: Criteria for search in the sustainability report database. Source: GRI (2018)

<i>Sector</i>	<i>Country</i>	<i>Size</i>	<i>Region</i>	<i>Report Type</i>	<i>Report year</i>
Mining	243	Large	Europe	GRI - G1	2012 - 2017
		MNE	Latin America	GRI - G2	
		SME	Caribbean	GRI - G3	
			North of America	NON - GRI	
			Oceania	GRI - G3.1	
				GRI - G4	
				GRI - STANDARD	
				CITING . GRI	
<i>Enterprise category</i>	<i>Headcount</i>	<i>Turnover OR</i>	<i>Balance sheet total</i>		
SME*	< 250	≤ € 50 million OR	≤ € 43 million		
Large Enterprise	≥ 250	> € 50 million OR	> € 43 million		
MNE**	≥ 250 and multinational	> € 50 million OR	> € 43 million		

The methodology used to collect the data is then presented in Table 1. The collection of the initial data was based on GRI pre-defined aspects such as companies' size, region and report type to classify the information of the companies and reports.

## FINDINGS

The results highlight that the Global Reporting Initiative sustainability reporting is one of the main sources used for companies to report sustainability. It also has been widely adopted by the mining companies as a global accepted standard guideline in this field.

From this same descriptive point of view, Figure 1 presents a scenario of the main countries where mining companies have been using the GRI as source to report their performance.

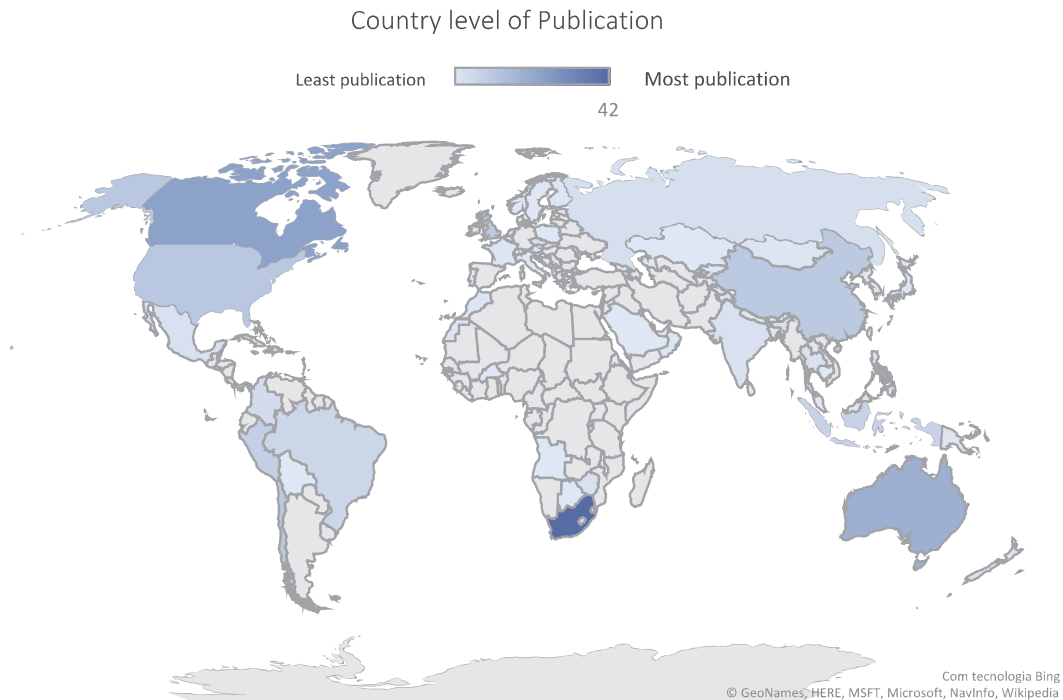


Figure 1: Number of publications by country in the five years period (2012 – 2017). Source: GRI (2018).

Initial results showed that Asia, South of Africa and Oceania are those regions with a higher number of mining companies reporting sustainability through GRI, being the majority of them large companies. Findings also showed that traditional mining countries such as those ones located at Latin American are active in sustainability reporting but still with a major focus on large companies. These regions still have a long path to go on reporting sustainability of small companies, which are still highly relevant at national and local scales.

The relatively similar results achieved all over the world, concerning large and medium companies resorting to GRI guidelines to report sustainability in mining, may derive also from the fact that there is a high level of multinational specialized companies operating all over the world, and thus their general companies' policy spreads locally, tending to smooth countries differences.

Empirical research such as Söderholm & Svahn (2015), has investigated the context of developed mining countries and its regional developments when reporting sustainability; their results showed that competitiveness and benefits sharing are aspects which justify the constant growth on reporting initiatives in these countries (See IGF, 2017; Söderholm & Svahn, 2015). The report of sustainability has been seen by some mining countries such as Australia and South of Africa as an alternative to assess and comprehend the regional and local impacts of mining activities; as well as benefit-sharing mechanisms to sustainable development.

Despite of importance and growth of reporting initiatives by mining companies in certain regions, looking to the whole sample, results revealed that in general the large companies are those ones with most disclosed reports. Figure 2 shows the number of sustainability reports listed at GRI by companies and region for the 5 years of the analysis, highlighting the importance of large companies.

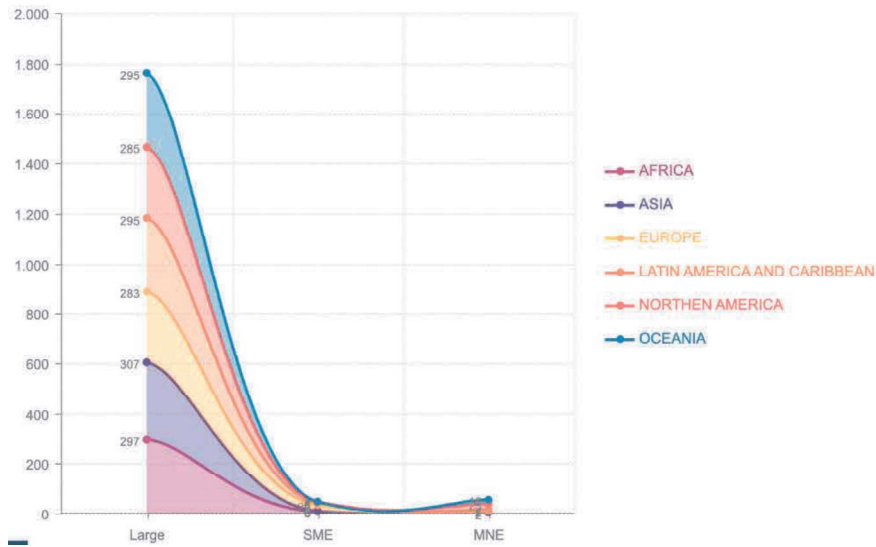
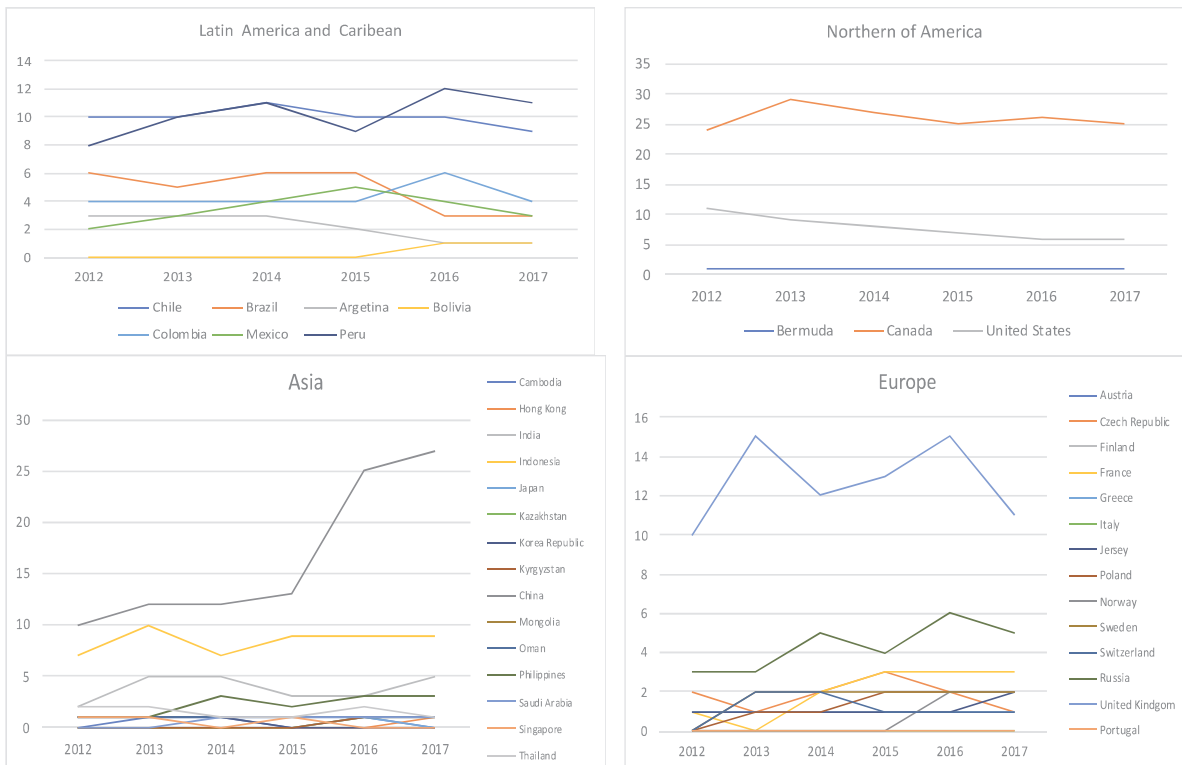


Figure 2: Sustainability Reports of mining disclosed at GRI: Source GRI (2018).

As illustrated in Figure 2, the reduced interest of small-medium (SME) mining for suitability reporting can be justified by challenges faced by them, which are not able to implement methodologies and tools to report sustainability due to different factors such as reduced access to information, specialized staff or support schemes. These difficulties are discussed for example for the case of Brazil by Alves, Ferreira, & Araújo (2017).

Figure 3 shows that for the case of Latin America and North America the GRI guidelines are already being adopted by mining companies, revealing a widespread use of GRI in countries such as Peru, Chile and Brazil, and also Canada and United States, with the predominance of large companies.



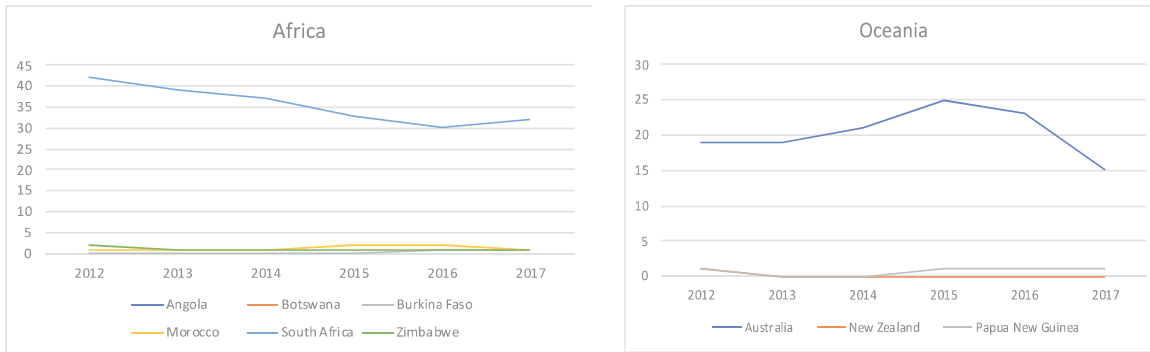


Figure 3: Suitability reporting of mining companies by region: Source: GRI (2018)

Results illustrated in Figure 3, show that countries such as United States, Canada, South Africa have experienced a moderate growth in the number of enterprises resorting to GRI to report their sustainability. Some of these countries have led to substantial investment in the mining sector.

In the Northern region, Canada has been widely recognized regarding development of tools and frameworks towards sustainability in the mining sector (see Centre for sustainability and excellence, 2017). The company's commitment to environment and community is well demonstrated in Figure 3 with increasing number of companies listed at GRI since 2012, despite its small decrease since 2015.

In Asia, mining activities are largely known as an important sector for raw materials to many countries, it is noteworthy that despite of it, impacts of these activities still remain as one of the most important concerns for governments and communities from the region. As illustrated in Figure 3, for countries such as China, India and Indonesia, the reporting of sustainability has been showing a growing trend. For the case of China, the level of reporting has been growing significantly since 2012 which is closely linked to the country's relevance for the mining sector.

For the case of Africa region, South of Africa has adopted the Integrating Reporting (IR) as a tool to promote an efficient approach to companies report and communicate their sustainable performance as discussed by Velte & Stawinoga (2017). This approach has been supporting not only mining companies, but companies from different sectors to report benefits of their activities for all stakeholders as well to create value over time.

South America is worldwide known as an important mining region, nonetheless, results showed that most of the companies listed and reporting at GRI are the largest ones, despite the importance of small and medium mining companies operating in the region. A few important exceptions include Peru and Chile, for which the number of companies reporting using GRI have been also increasing. In these countries, several international mining companies are operating which created better conditions for investment in sustainable projects and to report and publish their sustainability performance. Notwithstanding, the results shown that for most countries the number of reports published has grown between 2012 and 2014, while decreasing after that. Two relevant factors may have influenced the decrease in the number of reports, namely the slowdown in the worldwide mineral production since 2013, and also the lack of updating of the reporting by companies (See (Boiral & Henri, 2017; Brown et al., 2019; Tarquinio, Raucci, & Benedetti, 2018)).

Regarding to Oceania region, findings showed that Australia is also considered as a forefront mining country concerning reporting sustainability performance by mining companies. Due to the importance of this sector for the economy of the country, over the years specific mechanisms and investment, such as improving understanding of mining projects and voluntarily sustainable reporting programs have been introduced in the country.

In summary, the analysis revealed that most companies resorting to GRI to report their performance across all regions are large and Multinational Enterprises. Countries from Africa, Asia, Northern America and Oceania region prevail in the quantity of companies disclosed in all GRI categories, in particular for the cases of South Africa, Canada and Australia and to less extent to China.

## CONCLUSIONS

This research aimed to contribute to investigate the actual scenario of mining companies reporting sustainability drawing up useful information about sustainability concerns and reporting perspectives for mining companies.

Despite being in an initial stage, this research emerges as a first attempt to investigate the largest publicly available sample of Sustainability Reporting Database of GRI for mining companies across different regions. The results present the first assessment of sustainability reporting of the mining sector.

As previously observed in Velte & Stawinoga (2017) and Centre for sustainability and excellence (2017), policy makers have been supporting mining companies with voluntary initiatives concerning to sustainable reporting, as for the case of Australia and Canada, which was a signal of a need for both reporting improvement and assurance of sustainable information of mining companies.

The results confirmed that sustainability reporting in the mining sector is mainly addressed by large and multinational companies due to difficulties experienced by smaller companies. The study contributes to both theoretical and empirical literature on sustainability performance and reporting of mining companies. It also sheds further light on the disclosure of sustainability reporting in the GRI by mining companies worldwide.

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