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Analysis of Sustainability Reporting Practices in Mining and Oil & Gas Companies in Indonesia (GRI Guideline Approach)

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Abstract

During the last two decades, the issue of sustainability has drawn the attention of the business press, and various articles in academic literature that account of the sustainability issues have been published. This trend has highlighted the significance of sustainability reports and established corporate sustainability as an important topic in the business literature (Malik, 2015). A few mining companies pioneered this trend, and in the recent years, some of them incorporated the three dimensions of sustainable development, publishing so-called sustainability reports (Perez and Sanchez, 2009). In May 2013, GRI released its fourth guideline edition – G4. This latest guideline was expected to be more user friendly and to improve the technical quality of information helping the companies to explain material factors transparently and accountably (Dellios, 2012). This study examined the practice of sustainability reporting of Indonesia listed and non-listed companies in mining and oil & gas industry that published stand alone sustainability reports in one decade (year 2006 - 2015). Literature study, desk research, and sustainability report analysis were conducted in this study. Result of this study finds that there is an increasing trend of sustainability reporting practices. Since 2006 the number of companies in mining and oil & gas industry making sustainability reports has been increasing, from only 3 companies to 22 companies in 2016. From 2006 to 2016, only economic indicators are consistently presented in the sustainability report, whereas for various Environmental and social indicators are varied each year. The highest number of indicators presented in the sustainability report relates to the economic aspects of 2009–2013 (8-9 indicators), Environmental aspects in 2010-2013 G3 (25-28 indicators), social aspects in 2011-2012 (37-41 indicators). While in other year, the indicator presented is not as much as the period of theyear.

Keywords: Sustainability reporting practice; GRI guideline, Indonesia.

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1. Introduction

Dramatic rise in corporate sustainability has an increasingly uptake of sustainability reporting become mainstream practice for organizations all over the world during the last two decades (Kolk, 2010). Current sustainability-related reporting practice is primarily of voluntary nature; therefore, companies are flexible in experimenting with disclosed information (Chen and Bouvain, 2009; Simmons and Michael, 2013). In light of this discretionary latitude, the corporate sustainability disclosure in sustainability reporting practice has led to abundant labels for recent reports (e.g., corporate citizenship report, corporate social responsibility report, sustainable development report, sustainable value report, and sustainability report). However, only those reports that simultaneously include all three dimensions of sustainability can truly be regarded as "sustainability reporting" while one-dimensional reports are merely sustainability-related because they cover only isolated aspects of sustainability. In this sense, "sustainability reports" also often exclude important aspects especially from the economic pillar that are usually disclosed in separate annual reports (Hahn and Kuhnen, 2013).

There are many ways of corporate sustainability reporting. One of them is sustainability report (SR), mostly used by the companies not only to disclose their corporate sustainability performance on economic, environmental and social aspects but also to communicate their socially responsible behavior. The way companies communicate through their reports indicates the level of their commitment to the corporate sustainability (Fernandez *et al.*, 2014). Sustainability report is important for companies, since they will be considered as their responsibility to make their business sustain (Gray, 2010). By disclosing sustainability information, companies, for example, aim to increase transparency, enhance brand value, reputation and legitimacy, enable benchmarking against competitors, signal competitiveness, motivate employees, and support corporate information and control processes (Herzig and Schaltegger, 2006).

Sustainability report should be balance, comparable, accurate, timely, clear and valid to provide qualified reporting (KPMG, 2012). Dando and Swift (2003) note the importance of standards and guidelines development to fulfill the need of transparent and trustworthy information. Standards and guidelines developments are vital to continuous improvement of the quality of sustainability disclosure. The GRI has developed the leading standard or guidelines for sustainability reporting (KPMG, 2008). Currently, the new era of sustainability reporting is marked by the adoption of GRI G4 as the reporting framework. Today, more than one hundred companiesglobally report their social, environmental, and economic impact according to GRI (Arvidsson, 2010). GRI becomes an important international guideline and method used by companies which intend to adopt better sustainability reporting principles.

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The number of organizations that disclose information on their sustainability performance has increased considerably in recent years. According to the Governance & Accountability Institute (2012), 53 percent of the 500 largest companies listed on the US stock exchange follow the S&P 500 (SPX) stock index-published sustainability reports, whereas 63 percent follow the Global Reporting Initiative (GRI) indicators. A report published by (KPMGM, 2013) indicated that nearly 93 percent of the 250 largest companies around the world publish this type of report. This data demonstrates that sustainability reporting is now a common practice whose standardization improves with the increasing use of the GRI (KPMGM, 2013).

The KPMG survey shows that sustainability reporting in developed countries is higher than developing countries. In several developing countries such as Indonesia, there is little or no regulation and no expectation to follow international standards; therefore, corporations in developing countries tend not to provide sustainability reporting (Oeyono *et al.*, 2011). Indonesia is recorded as a country that has mandatory regulation; accordingly, the corporation in Indonesia must disclose their corporate sustainability activities, although there is no enforcement of legal penalties enforcement (Utama, 2008). Further, Indonesia can be defined as having rule by law that means Indonesia has a lot of law but lack of enforcement or participation (Kemp, 2001). As there is a lack of regulatory controls in reporting countries is lower than in developed countries.

In Indonesia (Setyorini and Ishak, 2012) show that the extent of sustainability reporting in Indonesia has increased from years to years. Starting with one company publishing sustainability report in 2005, then a number of companies publishing sustainability report gradually increase around six to ten companies each year (www.ncsr.org). The results reveal that the extent of corporate social and environmental reporting in Indonesia has also increased every year(Permatasari, 2017).

For many years, the mining sector has been under scrutiny for the significant ecological footprint of its activities (Young, 1992) and its impacts on communities (IIED, 2002) (IISD, 2004) (World Bank, 2003). Mining companies are among those that pioneered the production of environmental reports. Noranda, a Canadian mining and metals company, released its first report in 1991 (Noranda, 1990) and then reported annually. By 2002, eight out of the ten biggest mining companies were pub- lishing annual environmental reports as a stand-alone document, i.e., separated from general annual reports (Jenkins and Yakovleva, 2006). Environmental, social, or sustainability reporting is potentially a meaningful tool for mining companies to communicate their policies and achievements. Evolving from purely environmental performance to comprehensive sustainability reports is one adaptation by those companies to a "new operating paradigm that has shifted from a 'do no harm' approach to a 'demonstrate positive development benefit' imperative'' (Warhurst, 2001). Based on these reasons, this study focus on companies in mining industry.

This study investigates the extent to which sustainability reporting by companies in the mining industry has been evolving over recent years and which dimensions of the reports are evolving the most.

The rest of the paper is structured as follows. First, it present the description of GRI sustainability reporting guideline and the literature on sustainability reporting. Second, it describes the research methodology. Finally, it presents and analyzes the keyresults.

2. Literature Review

2.1. GRI Sustainability Reporting Guideline

The guidelines of GRI were first introduced in 1999 and had been revised four times with the current version: the GRI's G4 guidelines. GRI becomes a comprehensive sustainability reporting framework worldwide and assists companies in measuring and reporting sustainability factors applicable to their business activities.

The GRI G4 guideline is the GRI's fourth generation of sustainability reporting guidelines. It is designed to be universally applicable to small to big organizations, across the world. To make the experienced reporters and new reporters of the sustainability reporting from any industrial sector, the features of G4 is complete with material and services. Alike with prior GRI guidelines, the G4 not only includes widely accepted references and used issuespecific reporting documents but also is designed as a consolidated framework for reporting performance against different sustainability codes and norms.

The first version of GRI sustainability reporting guidelines was launched in 2000. The GRI sustainability reporting guidelines are periodically reviewed to provide the best and most up-to-date guidance for effective sustainability reporting. The main objective of GRI G4 is helping the reporters to not only prepare sustainability reports substance such as valuable information on the organization's most critical issues on sustainability but also make accountable and purposeful guideline practice of sustainability. Aiming to be more user friendly than the prior version of guidelines, G4 emphasizes on the requirements for the organizations to focus on the reporting process and final reports as two material aspects are significant to the organization's business and stakeholders. The GRI reporting principles are the prerequisite guidelines criteria to the GRI disclosure standard of sustainability reporting. This GRI G4 disclosure standard consists of three main parts.

The first part consists of strategy and profile disclosures setting the overall context for understanding organizational performance, such as: strategy and analysis (G4-1to G4-2), organizational profile (G4-3 to G4-16) and identified material aspects and boundaries (G4-17 to G4-23). These three contents of the first part provide the context to understand the company's strategy and its approach to corporate sustainability.

The second part of GRI G4 disclosure standard is management approach (G4-DMA). It regulates the disclosures covering how the organizations not only address a given set of topics providing context to understand their performance but also manages their material impacts on the economy, the environment and the society.

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The third part of GRI G4 is performance indicators eliciting comparable information on the economic, environmental, and social performance of the organization. The organization must comply with the format of performance indicators in compiling its sustainability report even though other formats are available. The G4 performance indicators consist of economic performance indicator (G4-EC1 to G4-EC9), Environmental performance Indicator (G4-EN1 to G4-EN34), and social performance indicator relating to labor practice and decent work (G4-LA1 to G4-LA16), human rights (G4-HR1 to G4-HR12), society (G4-SO1 to G4-SO11), and product responsibility (G4-PR1 to G4-PR9). The GRI G4 performance indicators describe the organization's economic, Environmental and social performance. In fact, the labor, human rights, society and product responsibility also offer greater insight into the organization's social performance. (GRI G4, 2013).

3. Methodology

This study examined the practice of sustainability reporting of Indonesia listed and non-listed companies in mining and oil & gas industry that published stand alone sustainability reports. Literature study, desk research, and sustainability report analysis were conducted in this study. This study focuses on a time-series of stand-alone sustainability reports published by the companies. In this research, the sampling unit is a sustainability report, the data collection units are phrases, graphics, or tables containing certain information, and the units of analysis are the evaluative criteria, organized in assessment categories.

4. Data Collection and Analysis

In order to review the reports, the following assessment categories were selected to frame the evaluation, based on headings adopted by those sustainability report based on GRI Gs4 guideline (GRI G4, 2013): (1) Environmental performance quantitative or qualitative information regarding environmental impacts of the company; (2) Social performance quantitative or qualitative information regarding social impacts of the company; (3) Economic performance quantitative or qualitative information regarding economic impacts of the company.

5. Results and Findings

5.1. Trend Evolution of Sustainability Reporting Practices In Indonesia

In 2006, the number of companies in mining and oil&gas industry published stand-alone sustainability report were only three companies. This number continued increasing from year to year. In 2010 to 2012 there were eleven companies that published sustainability report. In 2015, the number of companies that published stand-alone sustainability report, were 15 companies. In 2016 there were twenty two stand-alone sustainability reports. Figure 1 depicts the trend of the numbers of the companies that published the stand alone sustainability reports.

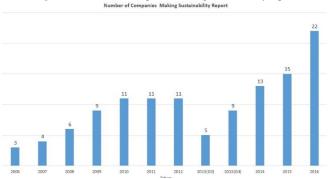
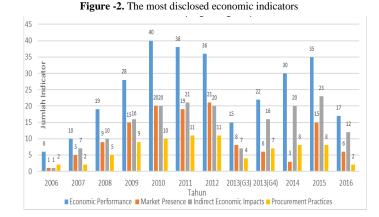


Figure-1. Number of companies making sustainability report

5.2. Economic Indicator

In 2006, the most discouraged economic indicators by companies were economic indicators related to Economic Performance (EC1, EC4) and Procurement Practices (EC9). In 2007, there were 5 Economic Indicators (EC1, EC3), Market Presence (EC6), and Indirect Economic Impacts (EC7, EC8). The highest increase of economic indicators disclose by the company has increased again in 2008. There are 7 Economic indicators (EC1, EC2, EC3), Market Presence (EC5), Indirect Economic Impacts (EC7, EC8) and Procurement Practices (EC9). Significant decline occurred in 2009, where the most disclosed economic indicators only amounted to 3 indicators, namely Economic Performance (EC1), Indirect Economic Impacts (EC8), and Procurement Practices (EC9).

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However, in 2010 and 2011, the economic indicators that most disclose by the company the number again increased significantly. Just as in 2009, in 2012 there was a significant decline from 2012, where in 2012 the most exposed economic indicators by companies are 3 indicators, namely Market Presence (EC5), Indirect Economic Impacts (EC7), and Procurement Practices (EC9).

Starting in 2013 to 2014, when the company started using GRI G4 as a guide in compiling its SR, the most discontinued Economic indicators are indicators related to Economic Performance (G4-EC1), and Indirect Economic Impacts (G4-EC7, G4 -EC8). Year 2015 is the year where the number of economic indicators didisclose by the company at most when already using GRI G4 of Economic Performance (G4-EC1), Market Presence (G4-EC5), and Indirect Economic Impacts (G4-EC7, G4-EC8). In 2016, there are 3 economic indicators that are mostly undisclosed by companies namely Economic Performance (G4-EC1), and Indirect Economic Impacts (G4-EC7, G4-EC8). From 2006 to 2016, there was one of Economic indicator that always disclosed most often by the company, the Economic Performance indicator (EC1).

5.3. Environmental Indicator

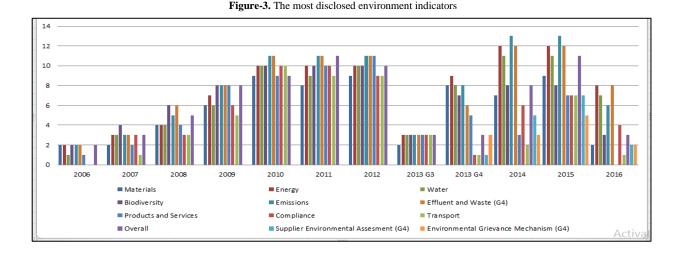
In 2006, the most disclosed environmental indicators were eight indicators. Those were (i) the materials (EN2); (2) Energy (EN6), Biodiversity (EN11, EN13, EN14), Emissions, effluents, and Waste (EN18, EN21) and Overall (EN30). In 2007, there were ten indicators that relate with Energy (EN3), Water (EN8), Biodiversity (EN11, EN12, EN13, EN14), Emissions, effluents and waste (EN22, EN24), Compliance (EN28), Overall (EN30).

Figure 4 . The most disclosed environmental indicators

In 2008, there were three indicators that relat with Biodiversity (EN13, EN14), and Emissions, effluents and waste (EN22). In 2009, the number of those most of them are in disclose about 9, namely Biodiversity (EN11, EN12, EN13, EN14), emissions, effluents and waste (EN20, EN21, EN22), Products and services (EN26), Overall (EN30). In 2010, the number of indicators that were disclosed increase to 14, the water (EN10), Biodiversity (EN12, EN13), Emissions, effluents and waste (EN16, EN17, EN18, EN19, EN20, EN21, EN22, EN23, EN24), Compliance (EN28), Transport (EN29).

In 2011, the most didisclosed indicators were only five, namely Emissions, effluents and waste (EN16, EN18, EN19, EN23), Overall (EN30). In 2013, the number of most didisclosed indicators were 25 indicators.

In 2013, the number of most disclosed indicators that were 5 indicators, namely : Materials (G4-EN1), Energy (G4-EN3, G4-EN6), Biodiversity (G4-EN13), Emissions (G4-EN19), and Water (G4-EN8). In 2015 the number of most disclosed indicators were about 5 indicators, namely : the Energy (G4-EN3, G4-EN5, G4-EN6), Water (G4-EN8), and Overall (G4-EN31). In 2016, the number of those most didisclose about 3, namely energy (G4-EN3), Water (G4-EN8), and products and services (G4-EN28). From year 2013 to 2016, one environmental indicator which always become the most disclosed indicator is energy (G4-EN3) indicator.



5.4. Social Indicators

Social indicators in GRI guideline were 44 indicators for G3 version and 48 indicators for G4 version. They were divided into four sub-category, namely the Labor Practice and Decent Work (LA), .Human Rights (HR), Local Communities (SO), and Product Responsibility (PR).

In 2006, there were only two companies that released sustainability reports however one of them did not disclose social category indicators. The other report disclosed 8 social indicators, namely : the employment (LA3), Occupational health and safety (LA7, LA8), Training and education (LA10, LA11, LA12), Community (SO1) Public policy (SO5). While the company express sub-category Human Rights, the indicators are investment and procurement (HR1), Practices (HR2, HR3), Non-discrimination (HR4), Freedom of Association and Collective Bargaining (HR5), Child Labor (HR6), Security Practices (HR7), and Indigenous Rights (HR8).

As the development of the sustainability reporting practice, there were an increase in at least every two years in expressing social indicators this. Taken from 2007 and 2008 data, most companies expressed 23 up to 27 social indicators. And from the data 2009 and 2010, expressed 32 up to 37 social indicators. Social indicators that most highlighted in the four year were Employment (LA1, LA3), Labor/Management relations (LA5), Occupational health and safety (LA7, LA8), Training and education (LA11), Diversity and equal opportunity (LA13), Investment and procurement practices (HR3), Non-disrimination (HR4), Freedom of association and collective bargaining (HR5), Child labor (HR6), and Compulsory forced labor (HR7), Security practices (HR8), Indigenous rights (HR9), Community (SO1), Public policy (SO5), Corruption (SO2), SO9 and SO10, Customer health and safety (PR2), Product and service labeling (PR3, PR4, PR5), Customer privacy (PR8) and Compliance (PR9).

In 2011 until 2012, which the company still use reference standard GRI-G3, social indicators expressed by mining industry company oil and gas were more complete. Social indicators expressed in two years ranges from 37 to 41 indicators.

In 2013, some of the companies that had adopted GRI G4 version guideline disclosed social indicators limited to only indicators that were considered material for the company itself thus the numbers of the indicators disclosed were not as many as previous years. There were about 19 social indicators expressed in 2013 sustainability report and there were about 17 social indicators in the following year. In 2015, average companies disclosed 23 social indicators, and in 2016 average companies merely expressed 16 social indicators. The most disclosed social indicators expressed in the last four years were Employment (G4-LA1), Occupational Health and Safety (G4-LA6), Training and Education (G4-LA9), Diversity and Equal Opportunity (G4-LA12), Investment (G4-HR2), Indigenous Rights (G4-HR8), Anti-Corruption (G4-SO4, G4-SO5), Grievence Mechanisms for Impacts on Society (G4-SO11), Customer Health and Safety (G4-PR2), and Product and Serice (G4-PR5).

During 2006 – 2016 period, when the companies still use GRI-G3, namely in 2006 to 2013, most companies present information on each indicator economic. Since GRI G4 based sustainability reports were prepared with materiality consideration, not all items in GRI G4 guideline should be disclosed. Table 3 shows the range number of disclosed indicators.

Table-1. Range of Diclosed Number of Indicators		
	Years	Score
EC	2006	3
	2007-2008	6-7
	2009-2013(G3)	8-9
	2013(G4)-2016	5-6
EN	2006	9
	2007	13
	2008-2009	20-24
	2010-2013(G3)	25-28
	2013(G4)-2016	12-17
SO	2006	10
	2007-2008	23-27
	2009-2010	32-37
	2011-2012	37-41
	2013(G3)	33.00
	2013(G4)-2015	17-23
	2016	16.00
All	2006	22
	2007	43
	2008-2009	54-64
	2010-2012	72-78
	2013(G3)	67
	2013(G4)-2015	39-44
	2016	33

6. Conclusion

Since 2006 the number of companies in mining and oil & gas industry published sustainability reports has been increasing, from only 3 companies to 22 companies in 2016. From 2006 to 2016 only economic indicators were consistently presented in the sustainability reports, whereas for various environmental and social indicators are varied each year. The highest number of indicators presented in the sustainability report relates to the economic aspects of 2009 – 2013 (8-9 indicators), Environmental aspects in 2010 - 2013 G3 (25-28 indicators), social aspects in 2011-2012 (37- 41 indicators). While in other year, the indicator presented is not as much as the period of the year.

The method developed to perform this assessment to analyze the coverage evolution of reports could be improved for future research by developing the rating scale to provide a quantitative assessment of each information requirement. The companies analyzed evolved to a greater maturity level in reporting, however, evolution is different in each assessment category. Another characteristic found in the research is that each company uses different approaches to disclose information. This finding suggests that the evolution of sustainability reports is a unique process in each company, probably depending on their stakeholders, resources and expert support in disclosing nonfinancial performance (Diouf and Boiral, 2017).

Since the impact of mining activity in communities is quite visible, it is not a surprise that social performance was one of the most widely disclosed categories. Never- theless other topics should also be presented and discussed in depth, as controversial environmental impacts, such as the depletion of natural resources, economic impact on stakeholders and comparability in a widercontext.

References

- Arvidsson, S. (2010). Communication of corporate social responsibility A study of the views of management teams in large companies. *Journal of Business Ethiccs*, 96(3): 339-54.
- Chen, S. and Bouvain, P. (2009). Is corporate responsibility converging ? A comparison of corporate responsibility reporting in the USA, UK, Australia, and Germany. *Journal of Business Ethics*, 87: 299-317.
- Dando, N. and Swift, T. (2003). Transparency and assurance: Minding the credibility gap. *Journal of Business Ethics*, 44: 195-200.

Dellios, E. (2012). Sustainabilti Reporting in Australia. Keeping Good Companies.

- Diouf, D. and Boiral, O. (2017). The quality of sustainability reports and impression management: A stakeholder perspective. *Accounting, Auditing & Accountability Journal*, 30(3): 643-67.
- Fernandez, F. B., Romero, S. and Ruiz, S. (2014). Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework.
- Gray, R. (2010). Envisioning sustainability and re-envisioning the large corporation: A short review essay in business and sustainable development. *Social and Environmental Accountability Journal*: 45-48.
- Hahn, R. and Kuhnen, M. (2013). Determinants of Sustainability Reporting: A Review of Results, Trends, Theory, and Opportunities in an Expanding Field of Research. *Journal of Cleaner Production*:
- Herzig, C. and Schaltegger, S. (2006). Corporate sustainability reporting: An overview. Sustainability Accounting and Reporting: 301-24.
- IIED (2002). Breaking New Ground. Earthscan: London.
- IISD (2004). Seven questions to sustainability, how to access the contribution of mining and minerals activities. IISD, Winnipeg.
- Jenkins, H. and Yakovleva, N. (2006). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, 14: 271-84.
- Kemp, M. (2001). Corporate social responsibility in indonesia: Quixotic dream or confident expectation?
- Kolk, A. (2010). Trajectories of sustainability reporting by mnes. Journal of World Business.
- KPMG (2008). Kmpg international survey of corporate responsibility reporting. *KPMG AmsterdamThe Netherlands: KPMG*.
- KPMG (2012). Sustainability reporting systems. A Market Review.
- KPMGM (2013). Kpmg international survey of corporate responsibility reporting. KPMG Amsterdam The Netherlands: KPMS.
- Malik, M. (2015). Value-enhancing capabilities of csr. A Brief Review of Contemporary Literature.
- Noranda, M. I. (1990). Environmental Report., 20.
- Oeyono, J., Samy, M. and Bampton, R. (2011). An examintarion of corporate social responsibility and financial performance: A study of the top 50 indonesian listed corporations. *Journal of Global Responsibility*, 2(1): 100-12.
- Perez, F. and Sanchez, L. E. (2009). Assessing the evolution of sustainability reporting in the mining sector. *Environmental Management*, 43: 949-61.
- Permatasari, P. (2017). Corporate Sustainability Determinants. GRI G4 Guideline Adoption Readiness and Sustainability Reporting Quality, 27.
- Setyorini, C. T. and Ishak, Z. (2012). Corporate social and environmental reporting: A case of mimetic isomorphism. *American International Journal of Contemporary Research*, 2(5).
- Simmons, J. and Michael, J. (2013). Understanding the determinants of corporate social disclosure strategies: An examination of firms use of gri guidelines. *Unpublished Dissertations, Theses and Capstone Projects,* 600.

- Utama, S. (2008). Regulation to enhance accountable corporate social responsibility reporting. Social and environmental issues Corporate Social Responsibility.
- Warhurst, A. (2001). Corporate citizenship and corporate social investment: Drivers of tri-sector partnerships. Journal of Corporate Citizenship, 1: 57-73.
- World Bank (2003). Striking a better balance. The World Bank Group And Extrative Industries The Final Report Of The Extractive Indstries Review, 1.
- Young, L. (1992). Mining the earth. Brown LR et al (eds) State of the world: 110-18.