

# Environmental management reporting in Polish mining companies in the context of World CSR trends

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**Abstract.** CSR is very fast evolving management concept in the whole world. Therefore environmental management development is one of the most important strategic directions for modern enterprises. It is particularly relevant for mining enterprises, because of their impact on the natural environment. The authors aimed to verify if this trend is reflected in Polish mining companies actions. Mining companies are obligated to non-financial reporting. In the paper the level of Global Reporting Initiative (GRI) usage in mining companies was considered. GRI is now the most frequently used method of non-financial reporting in the world..

## 1 Introduction

All mining activities, both underground and surface mining have a significant, most often a negative impact on the surrounding environment. The changes may affect lithosphere, atmosphere, hydrosphere, pedosphere and biosphere [1].

Environmental is one of the most important sphere of CSR reporting. It is particularly relevant for mining companies, because their impact on the natural environment is in principle significant.

In December 2014 Directive on disclosure of non-financial and diversity information by some big companies came into force. Member states should transpose it into national laws within two years. Therefore the first company reports should be published in 2018, regarding the financial year 2017-2018.

The measures established by the Directive will enhance the transparency and accountability of roughly 6000 businesses in the EU. These so-called 'public interest entities' with more than 500 employees will be:

- Obligated to report on environmental, social and employee-related, human rights, anti-corruption and bribery matters;
- Obligated to present their business model, results and hazards of the policies on the above topics, and the diversity policy in management and supervisory bodies;
- Persuaded to use recognized frameworks such as GRI's Sustainability Reporting Guidelines, the United Nations Global Compact (UNGC), the UN Guiding Principles on Business and Human Rights, OECD Guidelines, International Organization for Standardization (ISO) 26000 and the International Labour Organization (ILO) Tripartite Declaration.

Regarding to this law, mining companies in EU are obligated to non-financial, CSR reporting.

The aim of this article is to verify level of environmental management reporting in Polish mining companies. It focuses particularly on the GRI reporting standards. The observations and conclusions were made from quantitative and qualitative perspective.

## 2 Importance of environmental sphere in CSR reporting for mining companies

CSR is the way in which companies integrate social, environmental and economic matters into their values. It is reflected in companies' culture, strategy, operations and allows to establish better practices within the firm as well as to improve society [2].

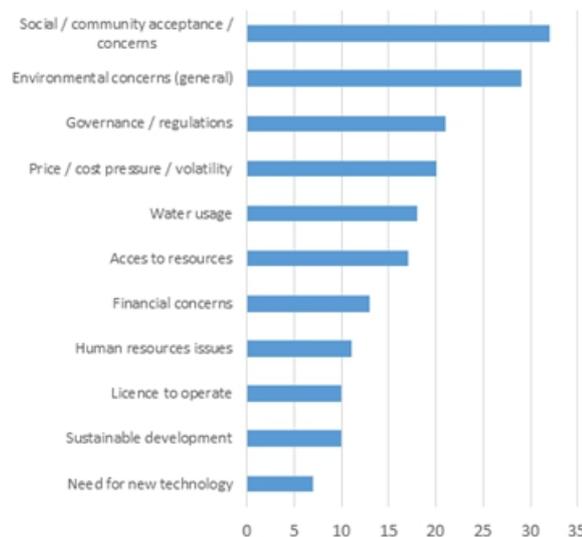
According to European Commission CSR is the responsibility of companies for their influence on society. CSR should be company led. Public authorities can play a supporting role.

Companies can follow social responsibility by:

- compliance with the law;
  - including social, environmental, ethical, consumer, and human rights matters into the way they run business [3]. A sustainability report presents the economic, environmental and social impacts caused by actions of a company. It also shows the organization's values and governance model, and demonstrates how its strategy contributes to a sustainable economy.
- Sustainability reporting can be also called as triple bottom line reporting or corporate social responsibility (CSR) reporting. It is also an intrinsic element of integrated reporting; a more recent development that combines the analysis of financial and non-financial performance [4].

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According to International Council on Mining and Metals survey, environmental concern is one of the most important challenges. Figure 1 presents the most serious issues for the international mining industry, in table 1. Importance of different kind of areas for the European mining industry was presented.



**Figure 1.** The most serious issues that the international mining industry will face in the next five years [5].

**Table 1.** Importance of different kind of areas for the European mining industry [5].

	Europe
Reducing impacts and making improvements to the environment where possible	91
Improving community relations	82
Improving its approach to health and safety	53
Improving the transparency of paid taxes and royalties to governments	63
Providing economic benefits and jobs	55

The environmental aspect of sustainability regards an organization’s influence on living and non-living natural systems, including ecosystems, land, air, and water. Environmental Indicators cover performance related to inputs (e.g., material, energy, water) and outputs (e.g., emissions, effluents, waste). Additionally, they cover performance related to biodiversity, environmental compliance, and other important information e.g. environmental expenditure and the impacts of products and services [6].

### 3 GRI Environmental Performance Indicators for Mining and Metals Sector

The GRI (Global Reporting Initiative) guidelines are the most common way of CSR and sustainability reporting. Sustainability reports are released by companies and organizations of all types, sizes and sectors, from every corner of the world.

Thousands of companies across all sectors have published reports that reference GRI’s Sustainability Reporting

Guidelines. Public authorities and non-profits are also big reporters. GRI’s Sustainability Disclosure Database features all known GRI-based reports [4].

The Global Reporting Initiative (GRI) encourages companies to use the sustainability reporting to become more sustainable. It aims to make sustainability reporting standard practice by sharing free Sustainability Reporting Guidelines. GRI, a not-for-profit, networkbased organization, engages many professionals and organizations of various backgrounds [7].

GRI in cooperation with International Council on Mining and Metals (ICMM) have prepared sustainability reporting guidance for the mining and metals sector. This Supplement has the sector-specific sustainability reporting guidance integrated in the GRI G3 Guidelines, the most widely-used guidelines for reporting on economic, environmental, and social performance. The Supplement covers biodiversity, indigenous rights, labor, community, artisanal and small-scale mining, resettlement, closure planning and materials stewardship [8].

GRI Environmental Performance Indicators for Mining and Metals Sector are presented in table 2.

**Table 2.** GRI Environmental Performance Indicators for Mining and Metals Sector [6]

Aspect	Imp.	No.	Description
Materials	Core	EN1	Materials used by weight or volume.
	Core	EN2	Percentage of materials used that are recycled input materials.
Energy	Core	EN3	Direct energy consumption by primary energy source.
	Core	EN4	Indirect energy consumption by primary source.
	Add	EN5	Energy saved due to conservation and efficiency improvements.
	Add	EN6	Initiatives to provide energy-efficient renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.
	Add	EN7	Initiatives to reduce indirect energy consumption and reductions achieved.
	Water	Core	EN8
Add		EN9	Water sources significantly affected by withdrawal of water.
Add		EN10	Percentage and total volume of water recycled and reused.
Biodiversity	Core	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.
	Core	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

	Core	MM 1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.
	Add	EN1 3	Habitats protected or restored.
	Add	EN1 4	Strategies, current actions, and future plans for managing impacts on biodiversity.
	Core	MM 2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.
	Add	EN1 5	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.
Emissions, Effluents, and Waste	Core	EN1 6	Total direct and indirect greenhouse gas emissions by weight.
	Core	EN1 7	Other relevant indirect greenhouse gas emissions by weight.
	Add	EN1 8	Initiatives to reduce greenhouse gas emissions and reductions achieved.
	Core	EN1 9	Emissions of ozone-depleting substances by weight.
	Core	EN2 0	NO, SO, and other significant air emissions by type and weight.
	Core	EN2 1	Total water discharge by quality and destination.
	Core	EN2 2	Total weight of waste by type and disposal method.
	Core	MM 3	Total amounts of overburden, rock, tailings, and sludges and their associated risks.
	Core	EN2 3	Total number and volume of significant spills.
	Add	EN2 4	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.
	Add	EN2 5	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.
Products and Services	Core	EN2 6	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.
	Core	EN2 7	Percentage of products sold and their packaging materials that are reclaimed by category.
Compliance	Core	EN2 8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.

Transport	Add	EN2 9	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.
Overall	Add	EN3 0	Total environmental protection expenditures and investments by type.

#### 4 Environmental management reporting in polish mining companies

The most important Polish mining companies were subject to non-financial reporting. Not all of them were able to implement this. Table 3 presents the most important Polish mining companies and their level of CSR reporting.

**Table 3.** Sustainability reporting in polish mining companies in 31.12.2015

Company	Sustainability reporting	GRI Guidelines
LW Bogdanka S.A.	+	+
Famur S.A.	-	-
JSW S.A.	+	-
KGHM Polska Miedź S.A.	+	+
KHW S.A.	+	+
Kopex S.A.	+	+
KW S.A.	-	-
PG Silesia	+	-
PGE S.A.	+	+
Tauron Polska Energia S.A.	+	+
Węglokoks S.A.	-	-

The analysis of Table 3 shows that among the 11 most important Polish mining companies, only 3 have not introduced any sustainability reporting. Companies that have not yet implemented the non-financial reporting are Famur SA, KW SA and Węglokoks SA.

No CSR reporting may be especially surprising in the case of KW SA, which is the largest mining company in Europe, employing over 50 000 employees. Mining company with such a powerful impact on the environment and the local community should be particularly committed to a sustainable development.

Among the companies that have implemented CSR reporting, the vast majority (6 of 8) has adopted GRI guidelines. This trend is reflected in the whole world where GRI is the most widely used standard.

Table 4 shows in detail the level of reporting the specific areas within environmental reporting of CSR in Polish mining enterprises, using GRI standard. Five areas of CSR reporting, which are described below, are completely missed by all Polish mining companies: EN2, MM2, EN24, EN27, EN29.

There is only one sphere, which appears in the sustainable reports of all the companies presented in Table 4. This is an EN8 area - Total water withdrawal by source. Among the Polish mining companies declaring reporting environmental sphere according to GRI guidelines KGHM Polska Miedź S.A. copes definitely the best. From 33 detailed areas 25 are reported by this company, two more: EN14 (Strategies, current actions, and future plans for managing impacts on biodiversity) and EN21 (Total water discharge by quality and destination) are reported in an incomplete or inadequate manner.

The areas completely ignored in reports of KGHM are also missed in all other mining companies. These are: EN2, MM2, EN24, EN27, EN29. The exception is EN19 (Emissions of ozone-depleting substances by weight), not reported by KGHM, but which can be found in the report of KHW S.A.

**Table 4.** Reporting of GRI Environmental Performance Indicators for Mining and Metals Sector in Polish mining companies.

Aspect	Imp.	No.	KGHM Polska Miedź S.A.	KHW S.A.	Tauron Polska Energetyka LW Bogdanka	PGE S.A.	Kopex S.A.
Materials	Core	EN1	+	-	+	+	-
	Core	EN2	-	-	-	-	-
Energy	Core	EN3	+	-	+	+	+
	Core	EN4	+	+	-	+	-
	Add	EN5	+	+	+	+	-
	Add	EN6	+	-	-	+	-
Water	Core	EN8	+	+	+	+	+
	Add	EN9	+	-	-	+	-
	Add	EN10	+	+	+	+	-
Biodiversity	Core	EN11	+	+	-	+	-
	Core	EN12	+	-	+	+	-
	Core	MM1	+	-	-	-	-
	Add	EN13	+	+	-	+	-
	Add	EN14	+/-	-	+	+	-
	Core	MM2	-	-	-	-	-
Emissions, Effluents and Waste	Core	EN15	+	-	-	+	+
	Core	EN16	+	+	+	+	-
	Core	EN17	+	-	-	-	-
	Add	EN18	+	+	+	-	+
	Core	EN19	-	+	-	-	-
	Core	EN20	+	+	+	+	-
	Core	EN21	+/-	+	+	+	-
	Core	EN22	+	+	+	+	-
	Core	MM3	+	-	-	+	-
	Core	EN23	+	-	+	+	+
	Add	EN24	-	-	-	-	-
Add	EN25	+	+	+	-	+	
Products and Services	Core	EN26	+	+	-	+	-
	Core	EN27	-	-	-	-	-
Compliance	Core	EN28	+	+	+	+	-
Transport	Add	EN29	-	-	-	-	-
Overall	Add	EN30	+	+	+	-	+

KHW S.A. reports less than a half (16 of 33) of areas identified in the GRI guidelines. A similar level of reporting is observed in Tauron Polska Energia (16 areas) and PGE S.A. (17 areas).

These three companies are reporting mostly the same, or similar areas, which suggests that they used common patterns in the process of creating the reports

Reporting at the level of approximately 50% of the guidelines is far too poor result. But reports of these companies already provide an image of the business activity impact on the environmental sphere.

Slightly wider range is contained in LW Bogdanka SA's report, in which references to 21 of 33 environmental areas indicated in the GRI guidelines can be found.

Definitely the worst was the outcome of Kopex S.A., which report covered only 4 areas: EN3, EN8, EN15 and EN23. At this level it is difficult to speak about CSR reporting or especially about the use of the GRI guidelines, which has been declared by the company. The report is too narrow to draw conclusions based on it regarding the impact of business on the environment.

## 5 Summary

In conjunction with introduction of the duty of non-financial reporting in EU, the most important Polish mining companies have been forced to sustainable reporting. EU authorities left some flexibility in choosing the method of reporting, but the most commonly used standard is the GRI. Similar situation is in the metal and mining industry, for which GRI together with ICMM prepared special guidelines. Also in Poland, among mining companies that have already implemented the CSR reporting, majority declares the use of this standard. Due to intense impact of mining companies on the environment, the environmental area is the most important one of non-financial reporting for these companies. The authors analyzed in detail the reports of Polish mining companies declaring environmental reporting according to the GRI guidelines. The only company that in a satisfactory manner fulfills the recommendations of this standard is KGHM Polska Miedź S.A. Other audited companies meet approximately 50% of the requirements in their reports. Definitely the worst is the result of Kopex S.A., which report contains only 4 elements of the GRI guidelines.

Generally, Polish mining companies follow the same path as world companies, but still a considerable part of them have not implemented the non-financial reporting. Those that already fulfill this requirement, still do not do this with reasonable accuracy and commitment. The optimistic phenomenon is the rapid increase in the importance of CSR in Polish mining industry. With the appropriate amount of effort Polish mining companies have a chance to catch up with the world leaders, as exemplified by KGHM Polska Miedź S. A.

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