

Yang Z.*

PhD student
Al-Farabi Kazakh National University
Almaty, Republic of Kazakhstan
e-mail: 13421037889@163.com
ORCID: 0009-0000-9640-148X

Hao Z.

PhD student
Al-Farabi Kazakh National University
Almaty, Republic of Kazakhstan
e-mail: haozhen@mail.ru
ORCID: 0009-0003-6541-7907

Nizamdinova A.

C.E.Sc, Senior Lecturer
Al-Farabi Kazakh National University
Almaty, Republic of Kazakhstan
e-mail: anizamdinova@mail.ru
ORCID: 0000-0003-3507-5216

COMPARATIVE ASSESSMENT OF GLOBAL REPORTING INITIATIVE AND SUSTAINABILITY ACCOUNTING STANDARDS BOARD ENVIRONMENTAL DISCLOSURE STANDARDS

Abstract

In the context of the accelerating global sustainable development, environmental information disclosure has become an important tool that allows firms to respond to external forces. Over the last few years, different disclosure frameworks have emerged, with the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) becoming two widely used standards worldwide. Such frameworks encourage firms to pursue more transparent and responsible reporting. This study takes GRI and SASB as its research objects. It identifies the differences between these two frameworks and illustrates them through case studies of Solidcore Resources, a mining firm, and Kaspi.kz, a fintech platform firm, both based in Kazakhstan. The findings suggest that GRI, rooted in a stakeholder-oriented logic, emphasizes the completeness of disclosed information and its broader relevance to stakeholder groups. By comparison, SASB reflects an investor-oriented perspective and places greater emphasis on internally focused information that is financially material to firms. The two standards can therefore be complementary. In addition, variations in firms' environmental information disclosure are shaped not only by regulatory requirements but also by industry environmental sensitivity, investor structure, and industry leadership.

Keywords: Environmental information disclosure, GRI, SASB, Complementarity, Disclosure practice

INTRODUCTION

The world has been challenged by issues of global environmental pollution that have caused serious problems to the realization of sustainable development. It is assumed that environmental pollution leads to more than 9 million deaths annually, which accounts for 16.7% of the global death rate (Fuller et al., 2022). Since the environment is a community asset, its excessive use may result in a chain of environmental and social issues that affect both natural ecosystems and human communities (Zhao et al., 2023). The ecological situation is getting worse, and thus puts firms under increased pressure to report their environmental information to external parties. Not only does adequate, transparent, and full disclosure of environmental information address the needs of investors to make ESG investment decisions, but it is also an essential tool for firms' reputation management. Also, it offers critical information services to governmental regulators.

However, the level of environmental disclosure differs greatly across firms. Other firms engage in selective disclosure of favorable environmental information, make environmental promises and fail to make corresponding practical steps to fulfill them, or issue imprecise and deceptive environmental claims. These are what are popularly known as greenwashing. Various environmental information disclosure standards have been devised to solve this challenge, such as the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the Task Force on Climate-related Financial Disclosures (TCFD), and the Carbon Disclosure Project (CDP).

Among these frameworks, the GRI has become the most widely adopted international standard. A large number of firms choose to use it to prepare their sustainability or ESG reports in accordance with the guidelines

specified therein. At the same time, on the basis of adopting the GRI, some firms further incorporate SASB into their disclosure practices, thus providing information through a dual-standards approach. An increasing number of firms are also beginning to use this combined disclosure approach in their sustainability reporting processes. This raises our first question: When firms use a dual-standards approach for environmental information disclosure, does such a practice result in information redundancy?

At present, non-financial information disclosure (including environmental information) is still mainly voluntary. The “comply or explain” principle is still being promoted and implemented. The number of countries and regions that have set mandatory disclosure requirements for such information remains relatively small. In a disclosure environment dominated by voluntary practices, what factors influence variations in firms’ disclosure practices in Kazakhstan? This is the second research question of this study.

The purpose of this study is to answer the above two questions. To achieve this, we employ a combined approach of document analysis and case studies. First, we introduce the fundamental features on GRI and SASB. Subsequently, using the mining industry as an example, we compare the differences in their disclosure metrics and explore the relationship between the two frameworks. In addition, through case studies of Solidcore Resources and Kaspi.kz, this study examines the potential factors that influencing differences in corporate disclosure practices.

The novelty of this study mainly lies in the following aspects. It provides complementary evidence for the comparative analysis of GRI and SASB at the global level. Situated in Kazakhstan, it also adds regional evidence and highlights the gap between early corporate practices and limited theoretical attention.

This study also has important scientific and practical significance. It enriches the relevant theoretical literature and helps firm managers better understand the relationship between the two sets of standards. Meanwhile, it provides reference and insights for regulators in formulating information disclosure standards.

LITERATURE REVIEW

Information disclosure is an imperative tool through which firm management informs external investors about operational performance and governance status in a transparent and systematic way (Ho et al., 2023). Through disclosed information, stakeholders rely on the information presented to make predictions and informed decisions about the firm’s operations and future (Al Natour et al., 2022), thereby monitoring corporate behavior and performance. Studies have shown that investors and financial analysts respond more positively to announcements that enhance investment transparency, and they demonstrate a strong level of interest in such disclosure initiatives (Chen & Smith, 2024). Nevertheless, information asymmetry is still widespread in different corporate settings, which has given rise to concerns and distrust regarding the quality of information presented by firms. Therefore, reducing information asymmetry and improving transparency remain critical issues.

The information disclosure can be divided into financial statement information and non-financial statement information, with the latter mainly involving social and environmental disclosure. Currently, within the specific field of financial information disclosure, academic research focusing on whether various countries or regions converge with the International Financial Reporting Standards (IFRS) and the specific level of such convergence has reached a relatively mature stage (Bengtsson & Argento, 2023).

With the sustainability concept becoming increasingly prominent in global contexts, non-financial information disclosure has become a major topic among regulatory bodies and investors. The forms used for non-financial information disclosure have become more diversified, including environmental reports, ESG reports, sustainability reports, integrated reports, and other formal disclosure documents.

Transparent non-financial disclosure not only contributes to achieving the United Nations 2030 Sustainable Development Goals (SDGs) (Mustafa Khan & Mohd Ali, 2023), but also helps enhance firms’ brand value and market reputation while reducing information asymmetry between firms and external stakeholders (Hichri, 2022).

Meanwhile, to standardize the content and format of non-financial disclosure, various global standards and frameworks have emerged over time, including but not limited to the Global Reporting Initiative (GRI), the European Sustainability Reporting Standards (ESRS), the International Sustainability Standards Board (ISSB), and the Task Force on Climate-related Financial Disclosures (TCFD).

GRI and SASB are some of the many non-financial information disclosure standards that have attracted rave attention. In particular, the GRI has been extensively discussed in high-quality academic journals, with studies exploring its methodological importance, existing challenges, and future prospects (Luque-Vílchez et al., 2023), as well as its role in promoting carbon emission reduction (Luo & Tang, 2023) and contributing to the achievement of the Sustainable Development Goals (Perello-Marín et al., 2022). In contrast, SASB has received relatively limited academic attention due to its later introduction. Although a small number of studies have empirically compared the two frameworks (Pizzi et al., 2023), overall research remains scarce, particularly in specific regional contexts.

There is a clear decoupling between corporate practice and academic research in Kazakhstan. On the one hand, several industry leaders, such as Solidcore Resources, Kazatomprom, and KazMunayGas, are listed on the Astana International Exchange (AIX) and adopt dual GRI and SASB reporting to meet diverse stakeholder information needs. On the other hand, local academic literature still lacks systematic analyses of the application

and differences of these international standards across specific industries, resulting in a pattern where corporate practice precedes and theoretical research lags behind.

Based on these research gaps, this study examines the comparative application of GRI and SASB from a regional perspective. Situated in the institutional and practical context of Kazakhstan, it conducts a textual analysis to provide additional evidence on the comparison of international disclosure standards in this context.

METHODOLOGY AND METHODS

This study adopts a qualitative approach combining document analysis and case studies. To ensure reliability and reproducibility, a three-stage research process is employed (Figure 1).

The first stage is standards overview and industry selection. This study reviews the latest GRI industry standard (GRI 14: Mining, 2024) and SASB industry standard (Metals & Mining, 2023). To ensure comparability, the mining sector is selected as the analytical context, as it is covered by both frameworks and is characterized by high environmental sensitivity and stringent disclosure requirements. In addition, AIX-listed mining firms with relatively mature disclosure practices provide an appropriate basis for subsequent comparison.

The second stage is comparative mapping and complementarity assessment. To address the first research question, a structural comparison of environmental disclosure requirements under GRI and SASB is conducted within the mining context. The analysis focuses on environmental indicators in both standards, examining differences in disclosure scope and thematic emphasis. Through content analysis and systematic coding of relevant indicators, the study evaluates whether the coexistence of the two frameworks leads to duplicative disclosure requirements or forms a complementary relationship oriented toward different information users.

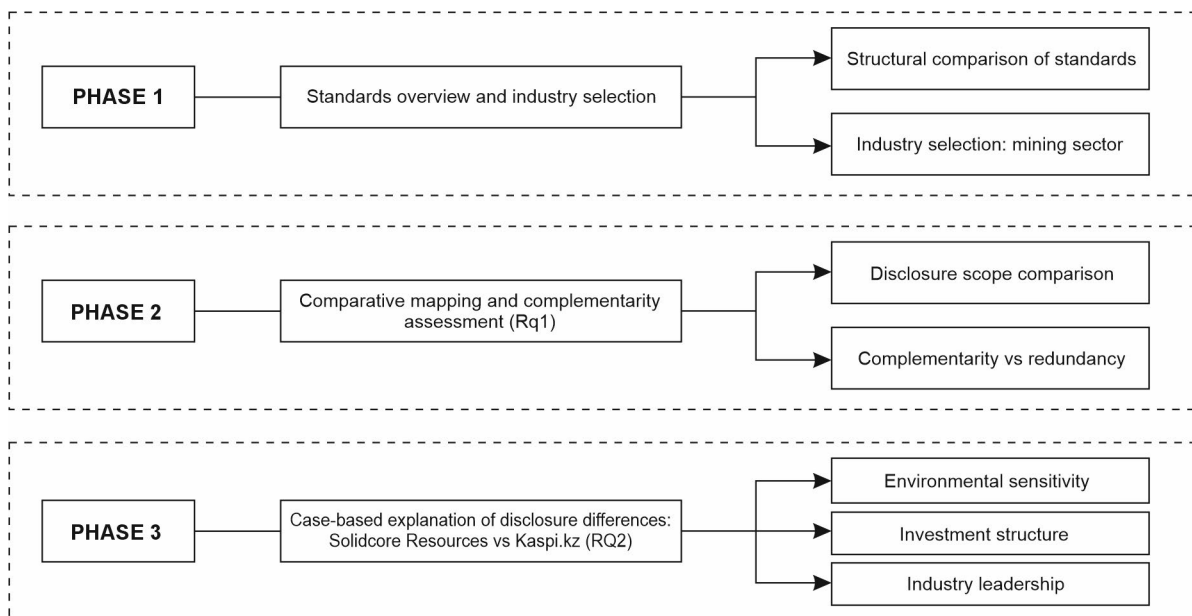
The third stage is a case-based explanation of disclosure differences. This stage examines variations in corporate environmental disclosure practices through comparative case analysis. Using purposive sampling, two AIX-listed firms, Solidcore Resources representing a high environmental sensitivity industry and Kaspi.kz representing a low environmental sensitivity industry, are selected as comparison cases. To interpret the observed differences, the analysis focuses on three dimensions: industry environmental sensitivity, investment structure, and industry leadership, which represent key sources of variation in corporate disclosure incentives.

To provide the necessary institutional background, this section briefly outlines the research context and case firms. Established in 2017 as part of the Astana International Financial Center, the Astana International Exchange (AIX) serves as an important international platform linking Kazakhstan with global capital markets.

Solidcore Resources (formerly Polymetal International) is a metals and mining firm. In 2023, it relocated its headquarters to Kazakhstan and completed its primary listing on the AIX. The firm has been listed on multiple exchanges, including London and Moscow. Its extensive international capital market experience and high environmental impact make its disclosure practices particularly informative.

Kaspi.kz is a leading fintech and e-commerce platform firm in Kazakhstan with a significant position in the domestic market and is also listed on the AIX. Compared with resource-based firms, it has lower environmental sensitivity, providing an industry contrast for analyzing differences in environmental disclosure practices.

Figure 1 – Analytical framework



Note: compiled by the authors

RESULTS

This study introduces the basic information of GRI and SASB. SASB has developed 77 industry-specific standards to enable firms and investors to share a common language regarding the financial implications of sustainable development. According to the official version on its website, SASB has a disclosure mission of providing disclosures responsive to investors’ needs. The term investor-oriented is used repeatedly in SASB, and the framework states that its disclosure is based on issues that have material effects on investors, enabling them to value firms and understand associated risks.

Certain disclosure points of SASB are anchored on the consideration of factors that can affect the cash flows of a firm in the short, medium, and long term. SASB concentrates on finding the sustainability challenges that are important to the firm’s financial performance, and these are referred to as financially material topics. SASB prioritizes identifying sustainability issues that would greatly influence the firm’s financial performance and are termed financially material topics.

The GRI, as the most prevalent global reporting initiative, is composed of three main components: Universal Standards, which provide general reporting requirements; Sector Standards, which currently offer reference disclosure standards for four sectors; and Topic Standards, which set out disclosure requirements in the environmental, social, and economic dimensions.

The GRI has repeatedly stated on its official website that its standards are based on the common good and aim to allow organizations to clearly and systematically disclose the effects of their operations on stakeholders. It indicates that the GRI is guided by the stakeholder theory, emphasizing that firms should comprehensively report the impacts of their operations on people and the planet, thereby assuming responsibility to all stakeholders.

Given GRI’s stakeholder-oriented approach, investors represent only a segment of the broader stakeholder community. The GRI standards not only focus on financial materiality but also emphasize impact materiality, which refers to the effects of a firm’s activities on the broader economy, environment, and society. When a topic is material from both impact and financial perspectives, it is considered to have double materiality. The key points of comparison between the two standards are presented in Table 1.

Table 1. Key comparison points between GRI and SASB

Dimensions	GRI	SASB
Standard Composition	Composed of universal standards, sector standards, and topic standards	77 industry-specific standards
Theoretical Orientation	Stakeholder-oriented	Investor-oriented
Target Audience	Designed to meet the information needs of multiple stakeholders, including government regulators, communities, employees, and investors; focuses on reporting the organization’s overall impact on the environment	Aims to meet the information needs of investors and other shareholders by disclosing information directly relevant to investors
Scope of Disclosure	Covers both internal corporate operations and the environmental impacts across the upstream and downstream of the value chain	Focuses on internal operations and directly related value chain activities, without requiring full value chain disclosure
Materiality Impact	Double materiality	Financial materiality

Note: compiled by the authors (SASB, 2023; GRI, 2023)

To more clearly illustrate the differences between the two standards, this study selects the mining industry as its specific subject of analysis. The choice of the mining industry is based on two main reasons:

First, SASB classifies its standards by industry, whereas GRI mainly develops its standards based on thematic dimensions (economic, environmental, and social) and currently provides only four industry-specific standards. To ensure comparability, this study focuses on the mining industry, which is covered by both standards. Moreover, as a highly polluting sector, mining serves as a representative case for examining environmental information disclosure practices.

Second, in the AIX, the mining firm Solidcore Resources is a leading firm in sustainability information disclosure and possesses a solid foundation of practical experience. It simultaneously adopts both the GRI and SASB standards, providing a valuable reference sample for comparative analysis (Solidcore Resources, 2024).

To intuitively illustrate the differences and overlapping relationships between the GRI and SASB concerning environmental materiality issues specific to the mining industry, this study has created Table 2.

Table 2. Environmental disclosure indicators (Mining industry)

Framework coverage	Indicator	GRI reference	SASB reference
GRI-only	Scope 2 & 3 GHG emissions	GRI 305-2; GRI 305-3	Not Covered
	GHG emission intensity and reduction	GRI 305-4	
	Energy consumption and intensity	GRI 302-1; GRI 302-3	
	Water-related impacts	GRI 303-1	
	Water resources management	GRI 303-2	
	Water discharge	GRI 303-4	
	Waste-related impacts	GRI 306-1	
	Waste management	GRI 306-2	
	Waste diverted from disposal	GRI 306-4	
SASB-only	GHG management coverage, e.g., plans, targets, and performance	Not Covered	SASB 110a.2
	Water-related non-compliance incidents		SASB140a.2
	waste-related major incidents		SASB 150a.9
	Policies and procedures for waste management		SASB 150a.10
GRI & SASB	Scope 1 GHG emissions	GRI 305-1	SASB 110a.1
	Non-GHG air emissions	GRI 305-7	SASB 120a.1
	Energy consumption within the organization	GRI 302-1	SASB 130a.1
	Water withdrawal and consumption	GRI 303-3	SASB 140a.1
	Generated waste	GRI 306-3	SASB 150a.4
	Total hazardous waste recycled	GRI 306-5	SASB 150a.8
		GRI 305-1	SASB 110a.1

Note: Compiled by the authors (SASB, 2023; GRI, 2023). GHG stands for Greenhouse Gas.

First, the GRI and SASB share a number of similarities in their disclosure scopes. Both sets of standards encompass core environmental issues that are critical to corporate sustainability reporting, including greenhouse gas emissions, energy consumption, water resource utilization, waste management, and biodiversity conservation. In terms of certain basic indicators, the two sets of standards overlap to a high degree. For instance, both require the disclosure of Scope 1 greenhouse gas emissions, water withdrawal, water consumption, and waste generation, as shown in Table 2. This overlap indicates a substantial intersection in the design and setting of their respective indicators. In addition, in Solidcore Resources' integrated report, the firm consolidates quantitative indicators in a single table, with GRI and SASB separately indexed, making the disclosed information clearly visible.

Furthermore, both the GRI and SASB place emphasis on the specific actions taken by corporate management to mitigate and reduce environmental impacts arising from business operations. SASB requires firms to disclose both short-term and long-term emission reduction strategies, targets, and their performance evaluations. It also requires firms to explain the policies and procedures for waste management (as shown in Table 2, SASB 110a.2 and SASB 150a.10). GRI requires firms to disclose measures taken in response to significant environmental impacts, such as recycling initiatives implemented by management to prevent waste from causing significant impacts (GRI 306-2) and management's water resource objectives (GRI 303-2). These disclosures help stakeholders understand the environmental governance capabilities of the firm and its management.

Third, the two standards show significant differences in their orientation. SASB is investor-oriented and primarily focuses on the firm's direct disclosure practices, whereas GRI is stakeholder-oriented, reflecting a comprehensive focus on environmental and social aspects. In terms of greenhouse gas emissions, energy, water, and waste management, GRI not only requires firms to disclose their direct actions but also recommends assessing the external impacts across the upstream and downstream value chain. For example, SASB only requires disclosure of Scope 1 greenhouse gas emissions (SASB 110a.1), whereas GRI requires disclosure not only of Scope

1 emissions (GRI 305-1) but also of Scope 2 and Scope 3 emissions (GRI 305-2; GRI 305-3). In terms of energy, GRI requires disclosure not only of energy consumption within the organization (GRI 302-1; SASB 130a.1) but also of external energy consumption, including upstream activities (such as employee commuting, upstream transportation and distribution) and downstream activities (such as product processing, use, and investment) (GRI 302-1; 302-3).

In addition, from the perspective of specific issues, the GRI expands disclosure to include a firm's impact on the external environment, whereas the SASB focuses more on the firm itself, particularly its financial risks and compliance. Taking water resources as an example, GRI requires firms to disclose data on water withdrawal, water consumption, and water discharge volume (GRI 303-3; 303-4; 303-5). Among these, water discharge volume reflects a firm's potential impact on external ecosystems. SASB only requires disclosure of water withdrawal and consumption volume (SASB 140a.1), as these two metrics directly relate to cost control and resource dependency. The financial materiality of water discharge volume only arises when it involves compliance issues or accident risks, meaning it has an impact on investors' decisions. Therefore, SASB usually reflects this issue indirectly by disclosing non-compliance events or accidents in the water resources sector (SASB 140a.2).

Similarly, in terms of waste management, in addition to requiring the disclosure of the amount of waste generated (GRI 306-3) and recycled (GRI 306-5), GRI also requires the disclosure of waste transferred for disposal (GRI 306-4) to reflect its external environmental impacts. By contrast, while requiring disclosure of the amount of waste generated (SASB 150a.4) and recycled (SASB 150a.8), SASB reflects firm's compliance and reputational risks through information such as non-compliance events and major accidents (SASB 150a.9). This type of information is directly related to fines, lawsuits, and reputational damage, providing investors with important decision-making signals.

In summary, however, based on the comparative analysis above, the first research question has been answered, namely that the application of dual standards does not lead to information duplication. GRI and SASB are complementary to each other in terms of environmental information disclosure. GRI offers a broad framework for environmental performance, while emphasizing disclosure of external impacts across upstream and downstream operations to address the expectations of a wide range of stakeholders. SASB is investor-oriented and thus places emphasis on the disclosure of decision-useful information, with the intention of helping investors assess the financial risks and management capacity of firms.

DISCUSSION

The second research question concerns the factors that influence the level of environmental disclosure among firms. Prior empirical studies have found that such disclosure is shaped by multiple determinants, among which regulatory requirements represent a crucial factor.

The sample of this study consists of firms listed on the AIX in Kazakhstan. Based on an analysis of the disclosure obligations stipulated by the AIX, it can be observed that ESG reporting is currently voluntary in nature. Although regulatory authorities have proposed a gradual transition toward a comply-or-explain mechanism, this mechanism has not yet been fully implemented across the board (AIX, 2022). In this context, variations in disclosure levels may, to some extent, reflect corporate autonomy. We analyze the factors influencing environmental disclosure differences among firms in Kazakhstan from a case study perspective.

- Industry environmental sensitivity

Environmental sensitivity constitutes an important determinant of corporate environmental disclosure, as firms operating in highly sensitive industries face stronger regulatory scrutiny and stakeholder pressure. Based on the analysis of Solidcore Resources, this firm has been undertaking systematic and detailed disclosure practices in line with the GRI and SASB. The convergence of these two groups of standards would achieve the complementarity of the information, which, in addition to providing all-inclusive information on environmental responsibilities, also emphasizes those indicators that have financial materiality to investors.

In contrast, within low-pollution industries, the content of corporate environmental disclosure tends to be relatively limited in scope. Taking Kaspi.kz as an example (Kaspi.kz, 2023), the firm's business operations do not involve resource extraction, energy-intensive production, or the emission of significant pollutants, resulting in a relatively small environmental footprint. Under the SASB, Kaspi.kz's business operations can be categorized into the commercial banks, consumer finance, or e-commerce sectors. Among these three sectors, the first two categories have almost no environmental disclosure requirements whatsoever, while the e-commerce sector primarily involves aspects related to energy management. Overall, the number of material issues related to the environment is relatively small, as illustrated in Table 3.

Table 3. SASB Environmental Disclosure by Business Segment at Kaspi.kz

Industry	commercial banks	consumer finance	e-commerce
Greenhouse Gas Emissions	×	×	×
Air Quality	×	×	×
Energy Management	×	×	√
Water Wastewater Management	×	×	×
Waste Hazardous Materials Management	×	×	×
Ecological Impacts	×	×	×

Note: √ indicates that the environmental issue is covered; × indicates that the issue is not covered.

Nevertheless, Kaspi.kz has adopted the GRI, which are the most widely applied globally, for the purpose of disclosing its environmental information. As of the present time, the firm has released two ESG reports (for the years 2021 and 2023) on its official website. Among these reports, the space dedicated to environmental disclosure is relatively limited, approximately two pages, and the content primarily consists of basic indicators. This level of disclosure is highly consistent with the inherent characteristics of low-pollution industries.

At the same time, this also addresses the first research question: if Kaspi.kz were to rely solely on SASB, the firm would hardly be required to disclose any environmental information. However, by leveraging GRI, the firm is still able to present a certain degree of environmental information in its ESG reports, thereby avoiding the absence of such disclosure. This outcome is favorably perceived by stakeholders. The reason why GRI is able to play such a role may be related to the fact that it was launched relatively early and has been widely adopted across various sectors. In contrast, SASB provides targeted supplementation from an investor-centric perspective. Currently, many firms typically take GRI standards as their foundation for environmental information disclosure and then select SASB standards based on their specific circumstances, thereby achieving dual-standard disclosure.

- Investor structure

Investor structure constitutes an important factor influencing corporate environmental disclosure. In firms with more dispersed ownership and a higher proportion of external shareholders, managerial discretion over disclosure is more constrained, and external investors exert stronger governance pressure, thereby increasing incentives for transparent and detailed disclosure.

Taking Solidcore Resources as an example, its relatively high level of information disclosure is closely associated with the dispersion of its ownership structure and the relatively large proportion of external investors. According to the firm's comprehensive report for 2024, the proportion of its freely tradable shares accounts for 69.6% of the total shares, while the management team holds only 0.74%. This implies that insiders within the firm have limited influence over information disclosure, whereas external shareholders and the capital market exercise stronger influence in the firm's governance. Consequently, the firm needs to rely on greater transparency and a solid reputation to maintain investor trust.

Among these freely tradable shares, Maaden International Investment, which holds a 29.7% stake, serves as a major shareholder and has publicly stated in news reports its goal of "becoming an ESG leader" (PIF News, 2022). It is reasonable to infer that this shareholder will also, to some extent, exert pressure on the invested firm to meet ESG disclosure requirements.

In addition, in the investor relations section of its integrated report, Solidcore Resources clearly states that the firm will enhance its communication with investors by improving its level of disclosure and providing stakeholders with regularly updated information.

In contrast, more than 50% of Kaspi.kz's ownership is held by its management team, resulting in relatively lower external investment pressure on the firm. This could be one of the reasons why Kaspi.kz's disclosure is not sufficiently detailed, a phenomenon reflected not only in environmental reporting but also in social and governance dimensions.

- Industry leadership

Industry leadership represents another key factor shaping environmental disclosure. Leading firms typically receive greater attention from regulators, investors, and the public, making their reputation and market value more sensitive to external evaluation. As a result, such firms face stronger external pressure and tend to adopt more comprehensive and higher-quality disclosure practices.

At the same time, such firms possess sufficient internal resources, enabling them to systematically organize and disclose information. As a result, the quality of their reports is often higher, which in turn further enhances the overall quality of their disclosure materials. Taking Kazakhstan as an example, both Solidcore Resources and Kaspi.

ks are leading firms within their respective industries. Both firms have demonstrated a reliable image of assuming environmental responsibility through their environmental disclosure practices. Although Kaspi.kz, due to its low-pollution characteristics, only discloses basic indicators, its disclosure level is still superior to that of most firms in the same industry, thereby sending a signal of transparency and credibility to external stakeholders.

In addition, the high-quality disclosure practices of industry-leading firms may also generate a demonstrative effect in the market. Against the backdrop of Kazakhstan’s environmental disclosure still being in a voluntary phase, with its relevant systems yet to be fully refined, the practices of leading firms are conducive to setting industry benchmarks and exerting a demonstrative and catalytic influence, thereby promoting improvement in overall disclosure standards across the sector.

Table 4. Factors Influencing Disclosure Variation: Solidcore vs. Kaspi.kz

Dimension	Solidcore Resources	Kaspi.kz	Disclosure Implication
Industry Environmental Sensitivity	High (Mining)	Low (Financial services & e-commerce)	Environmental sensitivity strengthens disclosure through regulatory and stakeholder pressure.
Investor Structure	Dispersed ownership; high external investor share	Concentrated insider ownership	Dispersed ownership strengthens shareholder monitoring and promotes more transparent disclosure.
Industry Leadership	Leading mining firm; international exposure	Leading domestic fintech platform	Industry leadership drives more comprehensive disclosure through reputation and signaling incentives.
Disclosure Framework Application	Dual GRI–SASB adoption	GRI-based reporting	Dual standards operate as complementary mechanisms.

Note: Compiled by the authors

To summarize the comparative analysis above, Table 4 provides an overview of the main factors and their relationship with disclosure variation.

CONCLUSION

This study addresses two research questions by comparing the official documents of GRI and SASB as well as their practical applications in real-world scenarios. First, if a firm adopts dual-standard disclosure (GRI + SASB), the two standards maintain a complementary relationship and do not lead to information redundancy in disclosure. As a widely adopted global sustainability framework, GRI is capable of meeting the diverse needs of multiple stakeholder groups. In contrast, SASB focuses specifically on financially material information, thereby meeting investor-oriented disclosure requirements in financial reporting. In some corporate practices in Kazakhstan, firms take GRI as their foundational framework and supplement it with SASB, which further confirms the complementary role of the two standards.

Second, under the voluntary disclosure regime applicable to firms listed on the AIX Exchange, factors such as industry environmental sensitivity, investor structure, and industry leadership are likely to emerge as important determinants of variations in environmental disclosure across firms.

Building on single-framework analysis, this study conducts a comparative examination of GRI and SASB to provide complementary evidence to the global literature. It further contributes empirical evidence from the regional context of Kazakhstan and helps bridge the gap between corporate practice and academic research in a setting where dual-standard reporting practices are relatively active but related scholarly discussion remains limited.

Admittedly, such research has certain constraints. The inferences regarding the role of these factors in corporate disclosure practices are largely based on case studies. Given the restricted sample size, the findings may not fully explain broader patterns of corporate disclosure behavior. Future research could adopt quantitative empirical methods based on large cross-sectional samples covering more industries and firms in Kazakhstan over multiple years to further examine the effects of variables such as industry environmental sensitivity, investment structure, and industry leadership on corporate disclosure levels. Through econometric modeling, the causal relationships and underlying mechanisms could be analyzed, thereby enhancing the robustness and external validity of the findings.

REFERENCE

1. Al Natour, A. R., Meqbel, R., Kayed, S., & Zaidan, H. (2022). The role of sustainability reporting in reducing information asymmetry: The case of family- and non-family-controlled firms. *Sustainability*, 14(11), 6644. <https://doi.org/10.3390/su14116644>
2. Astana International Exchange (AIX). (2022, June). AIX ESG Guide 2022. Retrieved September 2, 2025, from https://www-aix-kz.s3.eu-central-1.amazonaws.com/uploads/2022/06/AIX_ESG_Guide_2022.pdf
3. Bengtsson, M., & Argento, D. (2023). International accounting convergence and divergence: Towards a framework for understanding de jure adoption of IFRS. *Accounting in Europe*, 20(3), 370–392. <https://doi.org/10.1080/17449480.2023.2237056>
4. Chen, J., & Smith, D. (2024). Disclosure policy choice, stock returns and information asymmetry: Evidence from capital expenditure announcements. *Australian Journal of Management*, 49(2), 192–213. <https://doi.org/10.1177/03128962221127128>
5. Fuller, R., Landrigan, P. J., Balakrishnan, K., Bathan, G., Bose-O'Reilly, S., Brauer, M., Caravanos, J., Chiles, T., Cohen, A., Corra, L., Cropper, M., Ferraro, G., Hanna, J., Hanrahan, D., Hu, H., Hunter, D., Janata, G., Kupka, R., Lanphear, B., ... Yan, C. (2022). Pollution and health: A progress update. *The Lancet Planetary Health*, 6(6), e535–e547. [https://doi.org/10.1016/S2542-5196\(22\)00090-0](https://doi.org/10.1016/S2542-5196(22)00090-0)
6. Global Reporting Initiative (GRI). (2023, January 23). Compilation of GRI Standards. Retrieved September 18, 2025, from <https://www.globalreporting.org/how-to-use-the-gri-standards/resource-center/?g=7e373de0-cdf2-4e06-bf38-ffd990f8b9&id=22115>
7. Hichri, A. (2022). Corporate governance and integrated reporting: Evidence of french companies. *Journal of Financial Reporting and Accounting*, 20(3/4), 472–492. <https://doi.org/10.1108/JFRA-09-2020-0261>
8. Ho, K.-C., Sun, R., Yang, L., & Li, H.-M. (2023). Information disclosure as a means of minimizing asymmetric financial reporting: The role of market reaction. *Economic Analysis and Policy*, 78, 1221–1240. <https://doi.org/10.1016/j.eap.2023.04.022>
9. Kaspi.kz. (2023). 2023 ESG Report. Retrieved October 1, 2025, from <https://ir.kaspi.kz/financial-information/>
10. Khan, I., Fujimoto, Y., Uddin, M. J., & Afridi, M. A. (2023). Evaluating sustainability reporting on GRI standards in developing countries: A case of pakistan. *International Journal of Law and Management*, 65(3), 189–208. <https://doi.org/10.1108/IJLMA-01-2022-0016>
11. Luo, L., & Tang, Q. (2023). The real effects of ESG reporting and GRI standards on carbon mitigation: International evidence. *Business Strategy and the Environment*, 32(6), 2985–3000. <https://doi.org/10.1002/bse.3281>
12. Luque-Vílchez, M., Cordazzo, M., Rimmel, G., & Tilt, C. A. (2023). Key aspects of sustainability reporting quality and the future of GRI. *Sustainability Accounting, Management and Policy Journal*, 14(4), 637–659. <https://doi.org/10.1108/SAMPJ-03-2023-0127>
13. Mihai, F., & Aleca, O. E. (2023). Sustainability reporting based on GRI standards within organizations in romania. *Electronics*, 12(3), 690. <https://doi.org/10.3390/electronics12030690>
14. Mustafa Khan, N. J., & Mohd Ali, H. (2023). Regulations on non-financial disclosure in corporate reporting: A thematic review. *Sustainability*, 15(3), 2793. <https://doi.org/10.3390/su15032793>
15. Perello-Marin, M. R., Rodríguez-Rodríguez, R., & Alfaro-Saiz, J.-J. (2022). Analysing GRI reports for the disclosure of SDG contribution in European car manufacturers. *Technological Forecasting and Social Change*, 181, 121744. <https://doi.org/10.1016/j.techfore.2022.121744>
16. PIF News. (2022, January 9). How Saudi Arabia's Ma'aden is Mining for Sustainability Excellence. Retrieved September 12, 2025, from <https://www.pif.gov.sa/en/news-and-insights/news-network/2022/how-saudi-arabias-maaden-is-mining-for-sustainability-excellence/>
17. Pizzi, S., Principale, S., & De Nuccio, E. (2023). Material sustainability information and reporting standards. Exploring the differences between GRI and SASB. *Meditari Accountancy Research*, 31(6), 1654–1674. <https://doi.org/10.1108/MEDAR-11-2021-1486>
18. Solidcore Resources. (2024). Integrated Report. Retrieved September 15, 2025, from <https://www.solidcore-resources.com/en/investors-and-media/reports-and-results/annual-reports/>
19. Sustainability Accounting Standards Board (SASB). (2023). Metals & Mining Disclosure Topics. Retrieved September 10, 2025, from <https://sasb.ifrs.org/standards/materiality-finder/find/?industry%5B0%5D=EM-MM>
20. Zhao, S., Teng, L., Arkorful, V. E., & Hu, H. (2023). Impacts of digital government on regional eco-innovation: Moderating role of dual environmental regulations. *Technological Forecasting and Social Change*, 196, 122842. <https://doi.org/10.1016/j.techfore.2023.122842>

СРАВНИТЕЛЬНЫЙ АНАЛИЗ СТАНДАРТОВ ЭКОЛОГИЧЕСКОЙ ОТЧЕТНОСТИ ГЛОБАЛЬНОЙ ИНИЦИАТИВЫ ПО ОТЧЕТНОСТИ И СОВЕТА ПО СТАНДАРТАМ УЧЕТА В ОБЛАСТИ УСТОЙЧИВОГО РАЗВИТИЯ

Ян Ч.*

докторант
Казахский национальный университет
имени аль-Фараби
г. Алматы, Республика Казахстан
e-mail: 13421037889@163.com
ORCID: 0009-0000-9640-148X

Хао Ч.

докторант
Казахский национальный университет
имени аль-Фараби
г. Алматы, Республика Казахстан
e-mail: haozhen@mail.ru
ORCID: 0009-0003-6541-7907

Низамдинова А.

к.э.н., старший преподаватель
Казахский национальный университет
имени аль-Фараби
г. Алматы, Республика Казахстан
e-mail: anizamdinova@mail.ru
ORCID: 0000-0003-3507-5216

Аннотация

В условиях ускоренного процесса глобального устойчивого развития раскрытие экологической информации стало важным инструментом, позволяющим компаниям реагировать на внешние факторы. За последние годы последовательно сформировались различные рамочные системы раскрытия информации, среди которых Глобальная инициатива по отчетности (Global Reporting Initiative, GRI) и Совет по стандартам учета устойчивого развития (Sustainability Accounting Standards Board, SASB) стали двумя наиболее распространенными стандартами в мировой практике. Эти рамочные системы направляют компании на путь более прозрачной и ответственной отчетности. В настоящем исследовании в качестве объектов анализа рассматриваются стандарты GRI и SASB. В работе выявляются различия между данными двумя рамочными системами и демонстрируются эти различия на основе кейс-стади компаний Solidcore Resources-предприятия горнодобывающей отрасли, и Kaspi.kz-финтех-компания, обе из которых осуществляют деятельность в Казахстане. Результаты исследования показывают, что GRI, имея ориентированность на заинтересованные стороны, в большей степени направлен на полноту раскрываемой информации и учет её широкого воздействия на различные группы стейкхолдеров. В то же время SASB, основанный на инвестор-ориентированном подходе, уделяет большее внимание внутренним воздействиям, имеющим значение для финансовых результатов компании. Оба стандарта являются взаимодополняющими. При этом различия в практике раскрытия экологической информации предприятиями определяются не только регуляторными требованиями, но и в значительной степени связаны с отраслевой экологической чувствительностью, структурой инвесторов и отраслевым лидерством.

Ключевые слова: экологическое раскрытие информации, GRI, SASB, взаимодополняемость, практика раскрытия информации

**ЖАҒАНДЫҚ ЕСЕПТІЛІК БАСТАМАСЫ МЕН ТҰРАҚТЫ ДАМУ САЛАСЫНДАҒЫ
ЕСЕП СТАНДАРТТАРЫ КЕҢЕСІНІҢ ЭКОЛОГИЯЛЫҚ ЕСЕПТІЛІК СТАНДАРТТАРЫНА
САЛЫСТЫРМАЛЫ ТАЛДАУ****Ян Ч.***

PhD докторанты
эл-Фараби атындағы Қазақ ұлттық университеті
Алматы, Қазақстан Республикасы
e-mail: 13421037889@163.com
ORCID: 0009-0000-9640-148X

Хао Ч.

PhD докторанты
эл-Фараби атындағы Қазақ ұлттық университеті
Алматы, Қазақстан Республикасы
e-mail: haozhen@mail.ru
ORCID: 0009-0003-6541-7907

Низамдинова А.

э.ф.к., аға оқытушы
эл-Фараби атындағы Қазақ ұлттық университеті
Алматы, Қазақстан Республикасы
e-mail: anizamdinova@mail.ru
ORCID: 0000-0003-3507-5216

Аңдатпа

Әлемдік тұрақты дамудың жеделдеу жағдайында экологиялық ақпаратты ашу кәсіпорындардың сыртқы қысымдарға жауап беруіне мүмкіндік беретін маңызды құралға айналды. Соңғы жылдары әртүрлі ақпаратты ашу негіздері бірінен соң бірі пайда болды, олардың ішінде Жағандық есеп беру бастамасы (GRI) және Тұрақтылық есеп беру стандарттары кеңесі (SASB) халықаралық деңгейде кеңінен қолданылатын екі негізгі стандартқа айналды. Бұл негіз компанияларды ашық және есеп беретін есеп беру тәжірибелеріне бағыттайды. Бұл зерттеу GRI және SASB-ны зерттеу нысаны ретінде алады. Онда олардың тиісті теориялық негіздері сұрыпталады, екі стандарттың ақпаратты ашу философиясы мен қолдану аясы тұрғысынан айырмашылықтары салыстырылады және бұл салыстыруларды Қазақстанда жұмыс істейтін тау-кен өндіру кәсіпорны Solidcore Resources және финтех кәсіпорны Kaspi.kz-тің кейс-стадилерімен көрсетеді. Зерттеу мүдделі тараптар теориясына негізделген GRI ашылған ақпараттың жан-жақтылығына және оның әртүрлі мүдделі тараптар топтарына кең ауқымды әсеріне көбірек мән беретінін анықтады. Инвесторға бағытталған тәсілге негізделген SASB компанияның қаржылық көрсеткіштеріне қатысты ішкі әсерлерге көбірек көңіл бөледі. Бұл екі стандарт бір-бірін толықтыратын қарым-қатынасты сақтайды. Сонымен қатар, кәсіпорындардың экологиялық ақпаратты ашу тәжірибелеріндегі айырмашылықтар тек реттеуші талаптарға ғана емес, сонымен қатар салалық экологиялық сезімталдық, инвесторлардың құрылымы және салалық жетекші позиция сияқты факторларға да тығыз байланысты.

Түйін сөздер: экологиялық ақпаратты ашу, GRI, SASB, өзара толықтыру, ақпаратты ашу тәжірибелері