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INTEGRATION OF ESG AND INCENTIVE SYSTEMS DEDICATED TO MANAGEMENT IN THE MINING INDUSTRY

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Purpose: The aim of the article is to examine and evaluate how ESG practices can be effectively integrated with incentive systems for management in the mining industry and what possibilities they offer in achieving sustainable development goals while simultaneously increasing the engagement and efficiency of management through appropriate incentive systems.
Design/methodology/approach: The article is exploratory in nature, focusing on the analysis of the relevant literature. The methodology includes an in-depth review of national and international literature on incentive systems and sustainable development. This analysis allows for an understanding of how the integration of ESG and incentive systems impacts corporate governance.
Findings: The conducted research provides important conclusions for management in the mining sector, indicating that incentive systems integrating ESG goals can be more engaging and valuable than traditional incentive systems focused solely on financial or operational outcomes.
Research limitations/implications: The research presented in the article may contribute to further empirical studies, particularly in the context of the long-term impact of these systems on financial results, sustainable development of companies, and the risks and opportunities of sustainable development in business.
Practical implications: The practical implications of the conducted research enable their application in restructuring incentive systems in mining enterprises, with greater consideration of ESG aspects.
Originality/value: The research results indicate the need for a comprehensive reconstruction of incentive systems in mining enterprises to better integrate ESG goals and respond to the requirements of the European Green Deal.
Keywords: ESG, incentive systems, mining, corporate responsibility, sustainable development, motivation.
Category of the paper: Research Article, General Overview.

1. Introduction

In the current era of global challenges related to climate change, sustainable development, and social responsibility, the necessity for corporate transparency and responsible management in the industry is becoming increasingly desirable. The mining sector, due to its significant environmental impact, faces an imperative to integrate ESG principles and effective incentive systems. These are no longer just added values but have become key elements ensuring the long-term stability and operational efficiency of enterprises.

Well-designed incentive systems that incorporate ESG goals can significantly influence the engagement and performance of management while supporting the implementation of sustainable development strategies. Motivating leadership to incorporate sustainable practices not only improves stakeholder relations and the company's image but also contributes to better financial results through innovation and operational efficiency. Consequently, incentive systems that were initially focused on financial and operational outcomes should now expand their evaluation criteria to include environmental and social indicators in line with the European Green Deal.

The challenge is also to ensure that these integrated incentive systems are fair, transparent, and tailored to the specific goals of each organization. In developing these systems, it is important to consider not only direct financial results but also indicators such as environmental impact, employee satisfaction, innovation, and corporate reputation. Developing sustainable incentive strategies that truly reflect ESG priorities requires a deep understanding of both local and global trends in sustainable development, as well as continuous monitoring and adjustment of programs in response to changing market and regulatory conditions.

It should also be noted that effective integration of ESG and incentive systems requires commitment at the highest management levels, as well as openness to change and readiness for innovative solutions. Striving to understand these mechanisms and their impact on sustainable business practices is becoming crucial for the future of the mining sector, making this topic extremely important for both research and practical implementation.

2. The Role of ESG Standards and European Regulations in Shaping Sustainable Development

ESG (Environmental, Social, Governance) standards play a key role in shaping sustainable development, compelling companies to take responsibility for their impact on the environment, society, and management practices. In Europe, the role of these standards is even more significant due to the stringent regulations being introduced to promote sustainable development and corporate responsibility. Simultaneously, there are reports of challenges related to the quality of ESG reporting and its real impact on sustainable development. It is recommended that ESG reporting goes beyond focusing solely on the company, adapting traditional accounting systems to more effectively incorporate the growing demands for ESG disclosures, thereby enabling transparent demonstration of environmental and social impacts (Shauhrat S.C., Supunsala S.S. et al., 2024).

The role of ESG standards and European regulations in shaping sustainable development is significant, as they not only influence corporate strategies but also investments and risk management associated with green initiatives, which is crucial for the future of the mining sector and, more broadly, the economy and society. ESG is a term referring to key factors measuring sustainable development. It consists of three pillars: environmental, social, and governance, which are essential for assessing how a company manages risks and opportunities related to environmental, social, and corporate governance issues. ESG criteria help investors assess potential investments, influencing the direction of capital flows toward more sustainable business practices[1].

ESG standards cover a wide range of issues, from reducing carbon emissions and protecting natural resources, to ensuring decent working conditions, corporate transparency, inclusiveness, and eliminating corruption. Specific standards, such as the Global Reporting Initiative (GRI), though not mandatory, have so far provided a framework for organizations to report and manage their impact on the environment and society.

In addition to the previously mentioned standards, the European Social Responsibility Reporting Standards (ESRS) are also significant and mandatory for some organizations. These standards were introduced to standardize and facilitate the dissemination of information about the activities and impact of organizations on environmental, social, and governance aspects. The ESRS aims to increase corporate transparency and raise standards of responsibility, contributing to better risk management and promoting sustainable development[2]. These standards are particularly important in the European context, where ESG regulations are becoming increasingly significant. Through ESRS, companies can more effectively report their actions in the field of sustainable development, which in turn allows stakeholders to better assess their progress in implementing sustainability principles (Vaessen, 2023).

The European Union is actively introducing regulations aimed at integrating ESG issues into daily business practices. An example is the EU Regulation on Sustainability-Related Disclosures in the Financial Services Sector (SFDR), which requires companies to report how they integrate ESG factors into their investment and decision-making processes. The SFDR

[1] Deloitte. What Is ESG? Retrieved from https://www2.deloitte.com/ce/en/pages/global-business-services/articles/esg-explained-1-what-is-esg.html

[2] Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards

(EU Regulation 2019/2088) represents a significant regulatory context for ESG, requiring financial entities to disclose information about sustainable investments and ESG-related risks[3].

Another key legal act that has a significant impact on the integration of ESG issues into corporate practices in Europe is the Corporate Sustainability Reporting Directive (CSRD). The CSRD expands the scope of sustainability reporting obligations introduced earlier by the Non-Financial Reporting Directive (NFRD). The CSRD introduces more stringent requirements for reporting on sustainable development, increasing the number of companies covered by these obligations and improving the quality and scope of data that must be disclosed. Through the CSRD, companies are required to provide more detailed information about the impact of their activities on the environment, society, and governance, including energy efficiency, labor practices, respect for human rights, and anti-corruption efforts. These requirements aim not only to increase the transparency of business activities but also to enable investors, customers, and other stakeholders to make more informed decisions based on sustainability criteria. The CSRD was proposed by the European Commission in April 2021, introducing the obligation to verify the disclosed data as part of non-financial reporting. The introduction of the CSRD currently applies to large companies and all companies listed on regulated markets, excluding micro-enterprises listed on the stock exchange, starting in 2024, with full implementation by 2028[4,5,6].

The European Sustainability Reporting Standards (ESRS) have been developed to provide detailed data for the new reporting requirements under the CSRD. These standards consist of general standards covering general reporting principles and thematic standards that provide detailed guidelines for reporting specific aspects of sustainable development, such as climate change, emissions, and social issues. The ESRS aims to increase transparency, consistency, and comparability of information, helping companies comprehensively report on environmental, social, and governance factors. The adoption of these standards is intended to facilitate the integration of ESG factors into corporate strategies and financial analysis, promoting a transition to sustainable business operations (Giner, Luque-Vílchez, 2021)[7].

Another important regulation is the EU Taxonomy, a classification system that defines which activities can be considered environmentally sustainable. It is a classification tool designed to facilitate sustainable investments, thereby supporting the goals of the European Green Deal. The key aspects of the Taxonomy include six environmental objectives: climate

[3] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability- related disclosures in the financial services sector (Text with EEA relevance).

[4] Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance).

[5] Harvard Law School (2023). EU Finalizes ESG Reporting Rules with International Impacts. Retrieved from: https://corpgov.law.harvard.edu/2023/01/30/eu-finalizes-esg-reporting-rules-with-international-impacts/

[6] European Commission (2023). Sustainable Finance Package. Retrieved from: https://finance.ec.europa.eu/publications/sustainable-finance-package_en

[7] Harvard Law School (2023). EU Finalizes ESG Reporting Rules with International Impacts. Retrieved from: https://corpgov.law.harvard.edu/2023/01/30/eu-finalizes-esg-reporting-rules-with-international-impacts/

change mitigation (CCM), climate change adaptation (CCA), sustainable use and protection of water and marine resources (WTR), transition to a circular economy (CE), pollution prevention and control (PPC), and protection and restoration of biodiversity and ecosystems (BIO). For an economic activity to be classified as sustainable, it must make a substantial contribution to one or more of these goals without causing significant harm to the remaining goals (DNSH) and must comply with minimum social safeguards[8,9].

These regulations and standards are part of a broader EU plan aimed at supporting sustainable finance and steering the European economy towards greater climate neutrality, in line with the goals of the European Green Deal[10].

These regulations not only compel companies to be more transparent about environmental and social issues but also contribute to transforming financial markets by promoting sustainable investments. By introducing ESG reporting requirements, the EU seeks not only to increase corporate responsibility but also to lead to more sustainable business practices, which are crucial for achieving climate and development goals on the continent. The integration of ESG standards and compliance with European regulations in these areas is essential for creating a sustainable business environment that supports both environmental protection and long-term socio-economic development.

3. Incentive Systems Theory (Overview of Incentive Systems)

The word "motivation" originates from Latin, where "*movere*" means movement, stimulation, or encouragement to action. Therefore, motivation can be described as a psychological process that directs people, mobilizes them to act, and helps them achieve specific goals. J. Reykowski notes that motivation is one of the most dynamic aspects of the human psyche (Reykowski J. 1979). The main goal of motivating employees is to promote attitudes conducive to efficiency. However, for motivation to be effective, it must consider both the organization's goals and the needs and expectations of the employees. If the incentive system focuses solely on the organization's needs, it may lead to its failure (Moczydłowska, 2008).

[8] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

[9] S&P Global. A Short Guide to the EU's Taxonomy Regulation. Retrieved from: https://www.spglobal.com/esg/insights/a-short-guide-to-the-eu-s-taxonomy-regulation

[10] European Commission. Overview of Sustainable Finance. Retrieved from: https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en

Today's employees must be efficient, effective, and beneficial to the organization. Professional work is one of the key elements of a person's life, requiring an investment of time and energy. It can also be an important source of motivation if it brings satisfaction. A crucial question is how to create conditions that allow an employee to fully utilize their skills and creative energy. Therefore, increasingly better methods of motivation should be sought, considering the various professional contexts and their conditions. The secret of motivation lies in creating work conditions that allow employees to feel free from negative influences that might hinder their willingness to work.

An incentive system is a comprehensively planned and consistent set of motivational tools aimed at stimulating employees to actions aligned with the company's goals. It integrates both financial and non-material incentives. In practice, many incentive systems emphasize financial aspects while neglecting significant behaviors and aspirations of the workforce. The ideal incentive system should harmoniously combine incentives, means, and principles, considering benefits for both employees and the organization. The effectiveness of various motivation methods depends on several factors, both external and internal, and their proper recognition and implementation can increase employee engagement. Such a system cannot operate in isolation and must be integrally connected with other systems and procedures in place within the company. Moreover, it should reflect the latest best practices and theories in the field of motivation. Solutions within the incentive system should serve the organization's mission and goals and support its strategy. Recognizing the nature of work and the type of tasks carried out to achieve the organization's comprehensive, synthetic goals is the starting point for building a motivation system (Sekuła, 2008). An incentive system should correspond to the specific characteristics of the company, taking into account both universal aspects, such as working conditions or training, and more specific ones, such as organizational culture or work flexibility. The effectiveness of incentives depends on the individual characteristics of employees, such as age or family situation. The success of an incentive system hinges on management's understanding of employee expectations and adjusting incentives in a way that is attractive to them without giving the impression of exploitation or lack of appreciation (Sekuła, 2008).

The characteristics of an incentive system encompass three main categories: coercive measures, incentive measures, and persuasive measures. Each of these categories plays a crucial role in effectively motivating employees, but they differ in methods and approaches to achieving desired outcomes.

a) Coercive measures are motivational methods that rely on the application of force, obligation, or pressure to compel employees to act. This approach may include threats of punishment, such as warnings, pay cuts, or even dismissal if specific tasks are not completed according to requirements. Although effective in the short term, coercive measures can lead to negative psychological effects, such as decreased morale, increased stress, or reduced creativity, which in the long term may weaken employee motivation.

b) Incentive measures are motivational strategies that involve offering positive stimuli to encourage desired behaviors and outcomes. These incentives may include various forms of rewards, such as bonuses, pay raises, promotions, tangible rewards, or public recognition of achievements. Incentive measures are effective because they directly link employees' efforts with tangible benefits, which increases their engagement and loyalty o the company. When applied appropriately, these methods not only boost productivity but also enhance job satisfaction and foster a positive organizational environment.

c) Persuasive measures focus on using communication to convince employees to take action or adopt specific attitudes through rational arguments, inspiration, or emotional engagement. This approach may involve conveying the company’s vision, emphasizing the importance of each employee's contribution to the organization's success, or building trust through open and honest communication. Persuasive measures are particularly effective in building long-term commitment and loyalty, as they rely on employees' intrinsic motivation to act, which is more sustainable than extrinsic motivation.

By combining these three types of motivational measures, organizations can create comprehensive incentive systems that not only effectively motivate employees but also contribute to achieving organizational goals in a sustainable and ethical manner (Kozłowski, 2022).

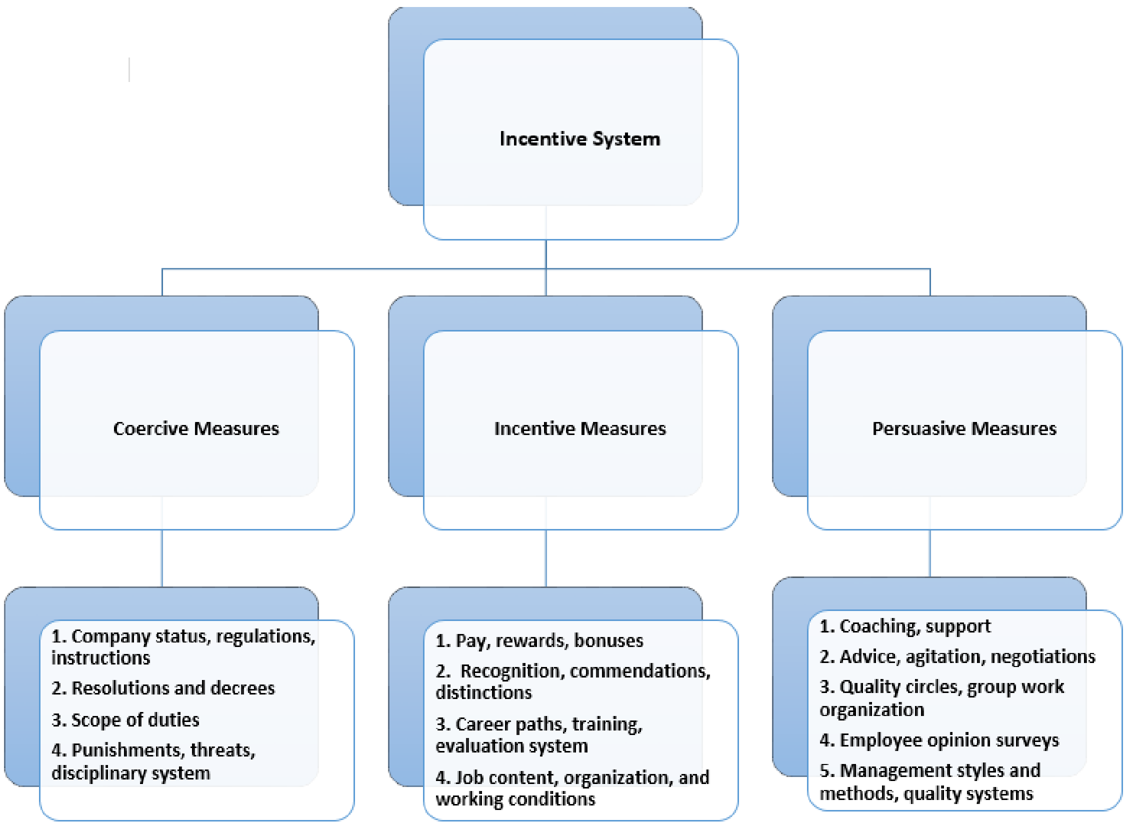

Figure 1. Types of Measures Forming the Incentive System.

Source: Own elaboration based on literature (Kozłowski, 2022).

The primary goals of an incentive system according to Michael Armstrong include:

- Increasing work efficiency by motivating employees to use their skills and competencies more effectively.
- Improving quality by enhancing the standards of work performance among employees.
- Supporting recruitment and retention through an attractive incentive system that helps attract new employees and retain existing ones.
- Strengthening engagement and loyalty by building a stronger connection between employees and the organization.
- Ensuring consistency in actions by aligning employees' actions towards organizational goals (Armstrong, 1997).

The appropriate selection of motivational instruments and tools is a key element of an effective incentive system, which should always be tailored to both the individual needs of employees and the strategic goals of the organization.

Financial motivation plays a fundamental role, as it directly affects employees' material satisfaction with their work. Bonuses, allowances, bonus systems, and the opportunity to participate in the company's profits are examples of tools that can significantly increase employee engagement. These are particularly effective in short-term motivation to exert effort and achieve specific, measurable operational goals. However, it is important to remember that these systems should be transparent and fair to avoid unhealthy competition within the team.

Non-material motivation is equally important, as it influences long-term engagement and job satisfaction. This includes aspects such as opportunities for personal and professional development, which can be supported by offering training, courses, or promotion opportunities. Recognition and awards (e.g., Employee of the Month), as well as a positive workplace atmosphere, are also crucial. These elements contribute to building a sense of belonging and importance among employees. It is important that the incentive system is flexible and can be adjusted depending on the changing internal and external conditions of the organization (Abbah, 2014).

Incentive systems in organizations play a crucial role in encouraging employees to achieve set goals and better performance. To be effective, they must be carefully tailored to both the internal needs of the organization and the external context in which the company operates. Factors influencing the shape of the incentive system:

a) External factors:
   - Legal-political: Legal regulations may limit or shape the possibilities of incentive systems (e.g., regulations concerning minimum wages, rewards, bonuses).
   - Market: Market conditions, such as the level of competition for employees, may influence the level and types of incentives offered.
   - Cultural: Social norms and values can influence what types of motivation are accepted and effective in a given culture.

b) Internal factors of the organization:
   - Organizational strategy: The incentive system must align with the organization's strategy, supporting its long-term goals and values.
   - Organizational culture: The internal culture of the organization determines which motivational methods are most appropriate and how they will be perceived by employees (Kopertyńska, 2009).

4. Incentive Systems Dedicated to Management

Incentive systems directed at management differ from those designed for lower-level employees due to their crucial role in shaping the organization's strategy and development directions. Effectively motivating management requires not only financial incentives but also a range of non-material aspects that support their leadership development and job satisfaction.

For management, competitive compensation packages are key, often including stock options, annual bonuses tied to company performance, and long-term bonus plans based on results. These tools are effective in securing long-term commitment from managers and motivating them to work towards increasing the company's value (Bebchuk, Fried, 2003). On the other hand, non-material aspects such as opportunities for professional development, participation in prestigious training and conferences, and the recognition of their achievements within the industry are equally important. Building the personal brand of management and involving them in the company's decision-making processes significantly impact their motivation (Mabey, 2013). Regular and transparent performance evaluations, based on clearly defined criteria, and consistent feedback are also essential in the incentive system for management. These systems allow for identifying areas for development and reinforce the sense of fairness and objectivity in evaluating their work (Daniels, Bailey, 2016). Another key element is involving management in strategic planning processes, which not only increases their responsibility for the company's results but also allows them to influence the shaping of the organization's future. This participation is a powerful motivator, as it enables leaders to realize their visions and initiatives within the framework of corporate goals (Mintzberg et al., 2005).

In practice, managing executive teams in publicly traded companies involves complex and multifaceted incentive systems, encompassing both universal and specific motivators. Research examples show that both financial and non-financial incentives play a crucial role in increasing the engagement and effectiveness of board members. Common motivational practices among board members of publicly traded companies include base salary, which is the primary component of total compensation, accounting for between 75% and 85% of annual earnings. Well-developed interpersonal relationships within the board and between the board and the supervisory board are also considered key to ensuring board effectiveness. In some cases, additional benefits such as access to parking or garages, sports and recreational activities, and severance packages related to mergers and acquisitions are additional motivational tools, though these are less commonly used and dependent on individual company agreements. The study indicates that the most significant motivators for managers are base salary and the quality of relationships within the board and with the supervisory board. Factors that demotivate managers include insufficient power in company management and an inadequate amount of stock ownership. Interestingly, despite the subjective belief in the dependence of compensation on economic goals, statistical analysis did not confirm a strong correlation between compensation and the company's economic performance (Kopycińska, Wiśniewski, 2016).

The incentive system for the management in mining enterprises is based on a combination of base salary and bonuses, with the bonuses being closely tied to operational efficiency. Bonuses are awarded based on the achievement of specific economic, accounting, and market indicators, which are defined in management agreements and the company's development strategies. The evaluation system uses both collective indicators, assessing the joint actions of the management board, and individual indicators assigned to specific areas of management.

Bonuses for board members can amount to approximately 50% of their annual salary and are paid based on annual results. The components of the bonuses are calculated in detail, taking into account the achievement of the goals of specified indicators such as EBITDA, return on equity (ROE), unit production cost, and specific strategic objectives. The indicators used in the bonus system primarily focus on short-term operational results, which may not always align with the long-term interests of the enterprise (Michalak, Turek, 2014).

5. Incentive Tools Supporting ESG Goals

Supporting ESG (Environmental, Social, Governance) goals within incentive systems for management is becoming increasingly important in the context of global sustainable development challenges. Integrating these goals into incentive systems requires the implementation of tools that promote responsible behavior and management in line with ESG principles. To achieve this, several key tools and methods can be employed in management incentive systems to support the achievement of ESG goals.

One of the most direct tools is financial bonuses for achieving specific ESG goals. These can include annual bonuses tied to meeting designated indicators such as reducing CO_2 emissions, improving energy efficiency, completing CSR (Corporate Social Responsibility) projects, or meeting set corporate governance standards. Another tool is stock options linked to ESG goals. These can be granted under conditions dependent on the long-term achievement of ESG objectives. This approach motivates management to continuously strive for improvement in key areas of sustainable development, linking their personal financial benefits with the long-term value of the company built on sustainable development principles.

The incentive system for management also includes the development of appropriate Key Performance Indicators (KPIs) related to sustainable development. Defining specific, measurable performance indicators related to ESG goals should be incorporated into management agreements and performance evaluation systems. Examples of such indicators might include employee satisfaction levels, recycling rates, inclusivity levels, or the number of customer complaints related to social and environmental aspects. Another solution is investing in training and development for management in areas related to ESG, which not only serves as a reward but also as a means of raising awareness and competence in sustainable development. This can include workshops, courses, and certifications in environmental, social, and corporate governance management. To make the incentive system more effective, an appropriate evaluation system can also be implemented, which includes feedback from colleagues, subordinates, and other stakeholders on how management's actions impact the environment, community, and governance. Such evaluations can help identify areas needing improvement and promote a corporate culture based on ESG values.

Implementing these tools can contribute to better integrating ESG goals into the daily operations of the enterprise, while ensuring that management is properly motivated and rewarded for making progress in these areas.

Introducing incentive tools that support ESG goals in company management, as described above, is a fundamental step towards integrating sustainable development into the daily functioning of enterprises. However, for these changes to be effective and yield the expected results, a proper understanding and application of motivation theories are essential in correctly shaping incentive systems. Therefore, in the context of the mining industry, where the impact on the environment and community is particularly significant, applying specific motivational models that support management in achieving ESG goals becomes crucial. In the mining industry, where operational activities have a direct impact on the natural environment and local communities, motivating management to achieve ESG goals through well-designed incentive systems is not only a responsibility but also a strategic choice. Utilizing both financial and non-financial motivation can effectively support management in striving to achieve these goals. Integrating Vroom's Expectancy Theory and Deci and Ryan's Self-Determination Theory into the structure of rewarding and compensation allows for a holistic approach to management motivation, which is key to achieving sustainable success in the challenging and often controversial mining sector.

Incentive systems in mining companies can play a key role in promoting and achieving ESG-related goals. To effectively link motivation theories with incentive systems supporting ESG goals, several important models from organizational psychology and management can be applied. Victor Vroom's Expectancy Theory is particularly useful in the context of financial motivation. This theory posits that employees are motivated to act if they expect that their efforts will bring about desired results and that they will be appropriately rewarded for these efforts. In the context of ESG, bonus and compensation systems can be designed to reward board members of mining companies for achieving goals related to CO_2 emissions reduction, implementing environmental innovations, or increasing taxonomic indicators. Bonuses can be directly tied to measurable outcomes in these areas, especially those reported in non-financial reports. Many companies, including mining companies, have sustainable development strategies. These strategies provide an excellent basis for measurable indicators, allowing for effective accountability and reward for achieving environmental, social, and governance commitments.

Deci and Ryan's Self-Determination Theory (SDT) fits well with the analysis of non-financial motivation. SDT provides a theoretical framework for enhancing employee motivation and stimulating positive outcomes such as engagement, well-being, and organizational commitment (Forner et al., 2021). Implementing development programs for employees in management positions, such as rewards for sustainable development innovations and public recognitions, can increase employees' sense of competence and autonomy, as well as their engagement in activities aligned with ESG values. This motivation is not directly based on material rewards but on internal satisfaction and social acceptance.

The participatory management model is based on the concept that employee involvement in decision-making processes leads to greater motivation and job satisfaction. This aligns with Douglas McGregor's Theory X and Y, where Type Y management assumes that employees are naturally motivated to work if they are adequately supported and appreciated (Trzcielińska et al., 2023). Integrating employees into decisions related to the company's environmental or social policies not only strengthens their sense of influence over the organization's business environment but also promotes a deeper understanding and commitment to ESG goals. This is especially important in industries like mining, where operational decisions have a direct impact on the environment and local communities (Sobczyk, 2007).

6. Benefits of integrating motivation systems and ESG goals

Engagement in ESG (Environmental, Social, Governance) goals is increasingly important from both ethical and business perspectives (Skowroński, 2006). Companies that effectively integrate ESG goals often gain market value, enjoy better reputations, and minimize operational, legal, and environmental risks, directly stemming from their high environmental awareness. In the mining context, where company operations have a direct and significant impact on the environment and local communities, effective incentive systems can contribute to full regulatory compliance, reduce negative environmental impacts, and improve relationships with local communities.

a) Ethical Perspective: From an ethical standpoint, responsibility for the environment and social well-being is seen as a moral obligation for companies (Torelli, 2023). In the face of global challenges such as climate change and social inequalities, companies that engage in ESG initiatives contribute to building a "better world". Supporting sustainable development and caring for the well-being of employees and local communities becomes a hallmark of responsible leadership (Tamvada, 2020).
b) Business Perspective: Companies that successfully integrate ESG goals are often perceived as more innovative and forward-thinking, attracting investors who seek sustainable and long-term investments. Additionally, investors and funds increasingly consider ESG criteria in their investment decisions, which can lead to increased demand for shares of companies with strong ESG ratings, thereby boosting their market value (Chopra, Dissanayake, 2024).

Companies actively engaged in ESG activities gain a reputation as leaders in responsible business. This, in turn, translates into better relationships with customers, suppliers, and business partners, which can lead to new market opportunities and increased customer loyalty (Baratta et al., 2023).

Minimization of Operational, Legal, and Environmental Risks: Adhering to ESG standards enables companies to identify and manage potential risks early (as directly supported by the CSRD directive – double materiality assessment), which can reduce costs associated with failures, penalties, or reputational damage. In the mining sector, which is particularly vulnerable to environmental regulations, compliance with applicable laws can help avoid significant financial penalties and operational restrictions.

Mining activities have a direct impact on the natural environment, for instance through water pollution, air emissions, noise, or landscape degradation. Additionally, they can affect local communities by altering access to natural resources, causing pollution, or even necessitating relocations.

7. Implementation Potential of ESG-Based Incentive Systems

The implementation of incentive systems based on ESG principles is becoming a crucial element of the management strategy for modern enterprises. These systems not only influence the internal culture of an organization but also define its position in the global market, where sustainable development issues are increasingly important. Integrating ESG goals into incentive systems offers a range of perspectives and potential benefits that can be realized across various aspects of a company's operations:

a) Increased Employee Engagement and Loyalty: Incentive systems focused on ESG goals enhance employee engagement, as more employees seek meaning in their work and want to contribute to corporate actions that align with their values. Motivating employees through goals related to ecology, social responsibility, and ethical management fosters loyalty and a sense of belonging to the company.
b) Improved Company Image and Stakeholder Relations: Companies that effectively implement ESG-based incentive systems gain favor with external stakeholders such as investors, customers, business partners, and local communities. These companies are perceived as responsible and committed to solving global problems.
c) Increased Innovation and Operational Efficiency: Motivating top management to achieve ESG goals can lead to innovations in products, services, and operational processes. Companies that promote environmentally and socially responsible approaches often discover new ways to reduce costs, increase energy efficiency, and minimize waste and carbon emissions.
d) Easier Adaptation to Legal Regulations and Risk Reduction: ESG-based incentive systems can help companies adapt to rapidly changing regulations, such as those under the "European Green Deal." Companies that proactively implement ESG practices can minimize legal and operational risks associated with non-compliance with both domestic and international requirements.
e) Potential for Long-Term Company Value Growth: Companies that successfully integrate ESG goals with incentive systems often experience long-term value growth. Sustainable development promotes long-term business stability and can contribute to increased shareholder value by enhancing the company's attractiveness in financial markets.

Integrating ESG goals into incentive systems requires a strategic approach from companies and a willingness to make thoughtful investments in human resource development and internal management processes. However, the potential to achieve lasting benefits, both on a micro scale (e.g., improved employee motivation, operational efficiency) and on a macro scale (e.g., market position, financial stability), makes these actions not only beneficial but essential for contemporary companies striving for sustainable success.

8. Summary

The scientific article presents key aspects and possibilities for integrating ESG principles with incentive systems in the mining industry. It highlights the growing importance of responsible management and transparency, which are essential for the long-term stability and operational efficiency of mining enterprises. The introduction of well-designed incentive systems that incorporate ESG goals has the potential to significantly increase the engagement and productivity of management, which can directly translate into improved financial and operational results for the company.

ESG standards and European regulations, such as SFDR, CSRD, and the EU Taxonomy, play a fundamental role in shaping sustainable development. By introducing increasingly stringent reporting and corporate responsibility requirements, the European Union poses new challenges for companies but also opens up new opportunities for sustainable development.

The implementation of ESG-based incentive systems in company management, particularly in the mining industry, is a critical element in promoting sustainable development. These systems not only support the achievement of environmental and social goals but also contribute to increased innovation, operational efficiency, and better compliance with legal regulations.

However, integrating ESG with incentive systems requires not only changes in company structures and policies but also the commitment and openness of management to innovation and long-term planning.

The conclusions drawn from the article emphasize that only through coordinated actions and the integration of incentive systems with ESG goals can mining companies effectively face global environmental, social, and governance challenges, while simultaneously building lasting value and stability for the future.

References

1. Abbah, T. (2014). Employee Motivation: The Key to Effective Organizational Management in Nigeria. *IOSR Journal of Business and Management, 16(4),* 1-8.
2. Armstrong, M. (1997). *Jak być lepszym menadżerem*. Warszawa: Dom wydawniczy ABC.
3. Daniels, A.C., Bailey, J.S. (2016). *Performance Management: Changing Behavior that Drives Organizational Effectiveness (5th edition).*
4. Baratta, A., Cimino, A., Longo, F., Solina, S., Verteramo, S. (2023). The Impact of ESG Practices in Industry with a Focus on Carbon Emissions: Insights and Future Perspectives. *Sustainability, 15(8),* 6685.
5. Bebchuk, L.A., Fried, J.M. (2003). Executive Compensation as an Agency Problem. *Journal of Economic Perspectives, 17(3),* 71-92.
6. Chopra, S.S., Dissanayake, D.P. (2024). Navigating the Challenges of Environmental, Social, and Governance (ESG) Reporting: The Path to Broader Sustainable Development. *Sustainability, 16(2),* 606.

7. Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 Supplementing Directive 2013/34/EU of the European Parliament and of the Council as Regards Sustainability Reporting Standards.
8. Deloitte (n.d.). *What Is ESG?* Retrieved from: https://www2.deloitte.com/ce/en/pages/global-business-services/articles/esg-explained-1-what-is-esg.html
9. Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 Amending Regulation (EU) No. 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as Regards Corporate Sustainability Reporting.
10. European Commission (2023). *Sustainable Finance Package*. Retrieved from: https://finance.ec.europa.eu/publications/sustainable-finance-package_en
11. European Commission (n.d.). *Overview of Sustainable Finance*. Retrieved from: https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en.
12. Forner, V.W., Jones, M., Berry, Y., Eidenfalk, J. (2021). Motivating Workers: How Leaders Apply Self-Determination Theory in Organizations. *Organization Management Journal*, *18(2)*, 76-94.
13. Giner, B., Luque-Vílchez, M. (2021). Commentary on the "New" Institutional Actors in Sustainability Reporting Standard-Setting: A European Perspective. *Sustainability Accounting, Management and Policy Journal*. ISSN: 2040-8021.
14. Harvard Law School (2023). *EU Finalizes ESG Reporting Rules with International Impacts.* Retrieved from: https://corpgov.law.harvard.edu/2023/01/30/eu-finalizes-esg-reporting-rules-with-international-impacts/
15. Harvard Law School (2023). *EU Finalizes ESG Reporting Rules with International Impacts.* Retrieved from: https://corpgov.law.harvard.edu/2023/01/30/eu-finalizes-esg-reporting-rules-with-international-impacts/
16. Kopertyńska, M.W. (2009). *Motywowanie pracowników: Teoria i praktyka*. Warszawa: Placet.
17. Kopycińska, D., Wiśniewski, R. (2016). Systemy motywacyjne członków zarządów spółek giełdowych w Polsce: Studium przypadku. *Studia i Prace WNEiZ US*, *44(2).*
18. Kozłowski, W. (2022). *Zarządzanie motywacją pracowników*. Warszawa: CeDeWu.
19. Mabey, C. (2013). Leadership Development in Organizations: Multiple Discourses and Diverse Practice. *International Journal of Management Reviews*, *15*.
20. Michalak, A., Turek, M. (2014). Analiza systemu oceniania kadry zarządzającej w spółkach z udziałem Skarbu Państwa na przykładzie przedsiębiorstwa górniczego. *Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie*, *70*.
21. Mintzberg, H., Lampel, J., Ahlstrand, B. (2005). *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management*.
22. Moczydłowska, J. (2008). *Zarządzanie kompetencjami zawodowymi a motywowanie pracowników*. Warszawa: Difin.

23. Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on Sustainability-Related Disclosures in the Financial Services Sector.
24. Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to Facilitate Sustainable Investment, and Amending Regulation (EU) 2019/2088.
25. Reykowski, J. (1979). *Motywacja: Postawy prospołeczne a motywacja*. Warszawa: PWN.
26. S&P Global (n.d.). *A Short Guide to the EU's Taxonomy Regulation*. Retrieved from: https://www.spglobal.com/esg/insights/a-short-guide-to-the-eu-s-taxonomy-regulation
27. Sekuła, Z. (2008). *Motywowanie do pracy: Teoria i instrument*. Warszawa: PWE.
28. Shauhrat, S.C., Supunsala, S.S., Dissanayake, P.D., Amasha, W.P., Chib, R., Rhee, J.H., Ok, Y.S. (2024). Navigating the Challenges of Environmental, Social, and Governance (ESG) Reporting: The Path to Broader Sustainable Development. *Sustainability*, *16(2)*, 606.
29. Skowroński, A. (2006). Zrównoważony rozwój perspektywą dalszego postępu cywilizacyjnego. *Problemy Ekorozwoju*, *1(2)*, 47-57.
30. Sobczyk, W. (2007). Badania opinii respondentów na temat uciążliwości środowiskowej górnictwa węgla kamiennego. *Górnictwo i Geoinżynieria*, *31(3/1)*.
31. Tamvada, M. (2020). Corporate Social Responsibility and Accountability: A New Theoretical Foundation for Regulating CSR. *International Journal of Corporate Social Responsibility*, *5, Article 2*.
32. Torelli, R. (2023). Sustainability, Responsibility and Ethics: Different Concepts for a Single Path. *Social Responsibility Journal*. ISSN: 1747-1117.
33. Trzcielińska, J.K., Fiedler, M., Jasiewicz, A. (2023). Analiza porównawcza działań motywujących w trzech przedsiębiorstwach. *Zeszyty Naukowe Politechniki Poznańskiej*, *Organizacja i Zarządzanie*, *87*.
34. Vaessen, M. (2023). *First Set of ESRSs is Now Out!* Updated 27 September 2023.
35. Vroom, V.H., Yetton, P.W. (1973). *Leadership and Decision-Making*. London.