

THE ROLE OF AUDIT IN SUSTAINABLE DEVELOPMENT STRATEGY

Lusine Arustamyan

Northern University, Ph.D. student

lusinearustamyan758@gmail.com

ORCID ID: <https://orcid.org/0009-0005-2368-3275>

Abstract: Sustainable development strategies aim to balance economic growth, social inclusion, and environmental protection to meet present needs while safeguarding the ability of future generations to fulfill their own. Effective implementation of these strategies necessitates transparent governance and strong financial control mechanisms, with auditing emerging as a pivotal tool in managing risks, improving governance, and achieving Sustainable Development Goals (SDGs). Historically, audits have focused primarily on financial processes and reports. However, today's audits encompass environmental, social, and governance (ESG) factors, providing a more comprehensive evaluation of organizational practices. This research investigates how financial control mechanisms, including internal and external audits, accountability, and transparency, play a critical role in sustainable development initiatives.

Keywords: Sustainable development, financial control, ESG practices, accountability, transparency, sustainable finance, global standards

JEL codes: M41, M42

Research aims: The primary goal of this research is to analyze how sustainable development principles influence financial control systems, particularly focusing on the role of auditing in ensuring effective implementation of sustainability strategies. Specifically, the study examines how financial mechanisms, such as internal and external audits, contribute to transparency, accountability, and the achievement of the SDGs. By evaluating the role of auditing in financial decision-making processes and sustainability practices, the research aims to provide insights into improving governance structures that align with sustainable development goals.

Research novelty: This paper's contribution lies in its novel approach to understanding the intersection of financial control mechanisms and sustainability practices. While audits traditionally focused on financial performance, the expansion of auditing to include environmental, social, and governance (ESG) factors is relatively recent and critical in shaping the future of sustainable development. This research not only investigates the role of auditing in implementing sustainable strategies but also highlights the importance of evolving international standards and frameworks such as the EU Taxonomy and IFRS Sustainability Standards. Moreover, it addresses the emerging concern of greenwashing and how auditing serves as a safeguard against misleading sustainability claims.

Introduction

Sustainable development has become a cornerstone of modern economic, environmental, and social policies, focusing on creating an inclusive society, protecting the environment, and fostering economic growth that does not compromise future generations'

needs. However, achieving sustainable development requires more than just good intentions; it demands strong governance, accountability, and transparency. One of the critical components in ensuring that sustainable development strategies are executed effectively is financial control, especially auditing. Auditing provides a mechanism to assess and evaluate an organization's adherence to sustainability principles and ensures that financial resources are allocated responsibly. Traditionally, audits focused on financial reports and processes.

However, as the importance of environmental, social, and governance (ESG) factors in organizational decision-making has increased, auditing now encompasses these non-financial elements. The role of auditing in sustainable development is indispensable for managing risks, increasing transparency, and ensuring organizations' accountability towards stakeholders. Through independent evaluations, audits can help identify discrepancies, mitigate risks, and improve governance structures, thus fostering a more sustainable future.

One of the key functions of financial control in sustainable development is ensuring both financial and non-financial accountability. For example, sustainability accounting standards such as GRI (Global Reporting Initiative) and IFRS Sustainability Standards require organizations to report not only their financial indicators but also their environmental and social impacts (GRI, 2022).

Although these requirements have good intentions, they do not always ensure true transparency. There are many companies that include ESG (Environmental, Social, Governance) data in their

reports but do not actually apply these standards. For example, some oil companies fund renewable energy projects, but their main profits continue to rely on fossil fuels.

Financial control mechanisms enable public authorities and financial institutions to regulate and monitor the direction and effectiveness of sustainable investments.

For example, the European Union has introduced the EU Taxonomy for Sustainable Finance, which defines the criteria for green investments and monitors their compliance (EU Taxonomy for Sustainable Activities).

Many banks and investment funds remain cautious about financing green projects, as many of these do not provide long-term profitability. Moreover, access to such financing is limited in developing countries.

The methodology

The methodology used in this paper combines qualitative research methods, including a literature review and case study analysis, to explore the role of auditing in promoting sustainable development, to analyze the effectiveness and challenges of sustainable finance instruments, such as green bonds and sustainability-linked loans (SLLs), in fostering environmental and social sustainability. The literature review examines theoretical frameworks related to auditing, financial control, and sustainable development, focusing on studies that discuss the integration of ESG factors into auditing practices. By synthesizing findings from both theoretical and empirical research, the paper offers a

comprehensive understanding of how auditing can facilitate the realization of sustainable development goals.

The focus is on the role of financial oversight and the integration of Artificial Intelligence (AI) in improving transparency, accountability, and risk management in sustainable finance.

Research results

Financial risks related to sustainable development may include the consequences of climate change, market volatility, and violations of environmental regulations. (Deniz A. Appelbaum, Alexander Kogan, Miklos A. Vasarhelyi, 2017).

The application of Artificial Intelligence (AI) and big data analytics can serve as effective tools in this field. However, caution must be exercised to ensure that the use of AI does not lead to unnecessary automation without expert involvement. For instance, if a system autonomously determines which companies are “green,” there is a risk of misclassification or bias in the evaluation process.

The integration of AI into auditing and control processes contributes to faster identification of risks and increases the efficiency of predicting financial irregularities.

Financial control is one of the most essential tools for sustainable development, ensuring not only economic stability but also a high level of accountability and effective risk management. (Bebbington, J., & Larrinaga, C. 2014).

There are several green financing instruments that promote the implementation of beneficial projects. See Table 1.

Table 1. Comparative analysis of green financing instruments

Tool	Description	Examples
Green bonds	Special bonds that target environmental projects such as renewable energy, water management projects, and energy-efficient infrastructure.	Apple Green Bonds, World Bank Green Bonds
Sustainability-linked loans	Loans that are tied to a company's ESG (Environmental, Social, Governance) performance. If a company improves its sustainability metrics, the loan interest rate decreases.	BNP Paribas Sustainability-Linked Loans

Green bonds have gained significant popularity in financial markets over the past decade. They are investment instruments through which companies and governments raise funds to implement sustainable development projects. (Green Bonds: An Overview 2018).

The effectiveness of bonds depends on monitoring and accountability mechanisms. There are cases where organizations utilize green bonds without actually ensuring the environmental benefits of their projects (“greenwashing”). For example, in 2019, some major energy companies were financed through green bonds, yet their primary revenues continued to rely on fossil fuels. (Green Bonds Mobilising the Debt Capital Markets for a Low-Carbon Transition 2015) OECD.

Green financing instruments have advantages and disadvantages relative to each other (see Table 2).

Table 2. Analysis of the advantages and disadvantages of green financing instruments

Tool	Advantages	Disadvantages
Green bonds	Long-term financing that supports environmental improvement. Support from governments and international financial institutions enhances credibility.	There are greenwashing risks that can undermine the actual impact. There is no clearly defined mechanism for assessing the impact of projects.
Sustainability - linked loans	Creates financial incentives for companies to improve sustainability standards. Reduces interest rates in case of improved ESG performance.	Access is primarily available to large companies with ESG ratings, while this mechanism is often inaccessible to small businesses.

These two sustainable financing instruments each have their own advantages and limitations. Green bonds can have a significant environmental impact, but their effectiveness heavily depends on robust monitoring to avoid greenwashing. On the other hand, sustainability-linked loans provide clearer incentives for companies to improve their sustainability performance, but they are mostly accessible to large corporations.

Artificial Intelligence (AI) plays a crucial role in the field of financial oversight for sustainable development by enhancing resource management efficiency, increasing transparency, and ensuring long-term economic sustainability.

1. Improving data analysis and reporting

Artificial Intelligence (AI) enables financial institutions to effectively process and analyze large volumes of data related to Environmental, Social, and Governance (ESG) factors, leading to more accurate sustainability reporting and compliance. (Corina Wipfler, 2024) The integration of AI into data analysis significantly improves the accuracy and efficiency of sustainability reporting, ensuring that financial institutions can more effectively meet regulatory requirements and stakeholder expectations.

2. Improving risk assessment and management

By using artificial intelligence (AI), financial institutions can better assess and manage sustainability-related risks, such as the impact of climate change and regulatory changes, leading to more informed investment decisions.

3. Increase in Transparency and Efficiency

Artificial Intelligence (AI) contributes to greater transparency and efficiency in financial operations by automating processes and providing real-time insights into sustainability performance, thereby enhancing trust among stakeholders. (Yue Zhao, 2024).

4. Support for Sustainable Investment Strategies

The use of Artificial Intelligence (AI) in investment strategy awareness ensures that capital is allocated to projects and companies committed to sustainability, thereby ensuring positive environmental and social outcomes.

5. Regulatory Compliance Enhancement

Artificial Intelligence (AI) helps financial institutions navigate complex regulatory landscapes by managing compliance requirements and automating reporting processes, thereby reducing the risk of non-compliance. The application of Artificial Intelligence (AI) in regulatory compliance not only minimizes the risk of penalties but also enables institutions to quickly adapt to evolving regulations while maintaining their commitment to sustainable practices.

6. Promotion of Financial Inclusion

Through innovations in Artificial Intelligence (AI), financial services can be extended to marginalized communities, enabling financial institutions to help reduce inequality and promote inclusive economic growth, which are key aspects of sustainable development.

Financial control in sustainable development involves the implementation of mechanisms such as auditing, accountability, and transparency to ensure the efficient use of resources and the achievement of intended goals.

Strong financial control mechanisms are crucial for preventing the misallocation of funds and building public trust in sustainability initiatives. (see Table 3)

The introduction of these mechanisms ensures responsible management of sustainable development projects, fostering credibility and attracting further investment.

Table 3. Financial control mechanisms in sustainable development

Mechanism	Description	Connection to Sustainable Development
Internal Audit	Conducted within organizations to assess the effectiveness of internal controls.	Contributes to the effective implementation of sustainable strategies.
External Audit	Independent evaluation of financial statements and regulatory compliance.	Enhances organizational financial transparency and accountability.
Accountability	The organization's obligation to report, explain, and be answerable for its actions. Regular reporting to stakeholders.	Allows for the assessment of the real practical impact of sustainability.
Transparency	Openness in exchanging financial information with stakeholders and the public.	Promotes legal and ethical conduct.

Auditors act as trusted third parties who assess an organization's behavior and accountability in the context of sustainability. Their main roles include:

- ✓ Ensuring an independent and objective evaluation,
- ✓ Identifying shortcomings and risks,
- ✓ Proposing improvements for strategic decision-making.

According to the study by Martínez-Ferrero, García-Sánchez, and García-Benau (2021), organizations that implement independent assurance of sustainability reporting are more effective in formulating and implementing sustainable policies. Assurance increases the reliability of reports for stakeholders and promotes responsible governance.

Auditing is a powerful tool for building trust. It helps not only management to make informed decisions but also external stakeholders-investors, the public, and regulatory bodies - to assess the organization's actual impact on sustainable development (Simnett, Vanstraelen & Chua, 2009). (Table 4).

Table 4. Value provided by the audit of beneficiaries

Stakeholder	Value Provided by Auditing
Organization Management	Improved strategic management and risk management
Investors	Assurance regarding the company's sustainability practices
Society	Awareness of the organization's social and environmental impact
Regulatory Bodies	A helpful tool for verifying compliance with laws and standards

International experience shows that independent auditing of sustainability reports is becoming a standard requirement. For example, in Germany and the Netherlands, organizations are mandatorily subjected to external verification according to GRI standards (Global Reporting Initiative, 2021). According to the latest research by KPMG, around 79% of organizations worldwide include

sustainability reports, with a significant portion being subject to third-party auditing (KPMG, 2022).

To enhance the effectiveness of sustainability audits, international auditing bodies have issued new guidelines. In January 2025, the International Auditing and Assurance Standards Board (IAASB) published the International Standard for Sustainability Assurance 5000, aiming to increase the rigor and consistency of assessing companies' ESG requirements. These guidelines help prevent "greenwashing" and ensure that the reported data is reliable (Simon Jessop, Virginia Furness. 2025).

Furthermore, the US Environmental Protection Agency (EPA) has initiated audits of renewable fuel producers to verify the authenticity of their reported feedstock. This action addresses concerns about potential fraud related to sustainability requirements, emphasizing the need for thorough auditing to maintain the integrity of environmental initiatives (Leah Douglas, 2024).

We think that auditing is indispensable for sustainable development. By providing independent verification of sustainability efforts, auditors help build public trust and encourage organizations to adopt real and effective ESG practices. The evolving guidelines and increased oversight by auditing bodies further strengthen the reliability of sustainability reporting, which is crucial for informed decision-making by stakeholders and the successful implementation of global sustainability goals.

Audit provides the ability to assess and monitor the effectiveness of green finance programs. This is crucial as it ensures that the

programs achieve their goals and have a positive impact on the environment.

Conclusion

Sustainable financial control is no longer a peripheral concept - it is now a core pillar of responsible economic development. As green finance instruments such as green bonds and sustainability-linked loans (SLLs) gain momentum in global markets, it becomes increasingly vital to ensure accountability, transparency, and risk management through robust control mechanisms.

However, the growing threat of greenwashing, limited access for small and medium enterprises (SMEs), and the lack of clearly defined impact assessment frameworks indicate that financial oversight must evolve alongside innovation. Instruments alone are not enough - effective financial supervision, based on international standards like GRI and IFRS Sustainability Standards, must accompany them.

Moreover, the integration of Artificial Intelligence (AI) and big data analytics into sustainable finance offers a powerful opportunity to enhance data accuracy, real-time risk assessment, ESG reporting, and regulatory compliance. By automating processes and enabling inclusive access to financial services, AI technologies also support financial inclusion and inclusive growth, aligning investment portfolios with long-term sustainability goals.

In conclusion, auditing plays a crucial role in ensuring that organizations are accountable for their sustainable development practices. Through the independent and objective assessment of ESG factors, audits contribute to building public trust, preventing greenwashing, and ensuring that financial resources are allocated

efficiently and effectively. The growing importance of sustainability audits, fueled by international regulations and global standards, is essential for achieving sustainable development goals. The research also emphasizes the need for continuous development in auditing practices to adapt to evolving challenges and emerging standards in sustainability reporting.

Additionally, the paper underscores the importance of financial institutions and organizations to implement robust auditing practices, particularly in green finance, to mitigate risks associated with misleading environmental claims and ensure that investments align with true sustainable development objectives. As the demand for transparent and reliable sustainability reporting grows, auditing will remain a key mechanism in driving corporate responsibility and accountability in the pursuit of a more sustainable future.

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Լուսինե Առուստամյան

Հյուսիսային համալսարան, ասպիրանտ

Բանալի բառեր – կայուն զարգացում, ֆինանսական վերահսկողություն, ESG պրակտիկա, հաշվետվողականություն, կայուն ֆինանսավորում, գլոբալ չափորոշիչներ

Կայուն զարգացման ռազմավարությունները նպատակ ունեն հավասարակշռել տնտեսական աճը, սոցիալական ներառականությունը և բնապահպանական պաշտպանությունը՝ բավարարելով ներկա պահանջները, միաժամանակ պահպանելով ապագա սերունդների կարողությունը իրենց անհրաժեշտությունները բավարարելու համար: Հետազոտությունը ուսումնասիրում է,

թե ինչպես են ֆինանսական վերահսկողության մեխանիզմները, ներառյալ ներքին և արտաքին աուդիտները, հաշվետվողականությունը և թափանցիկությունը, կարևոր դեր խաղում կայուն զարգացման նախաձեռնություններում: Եվ ավելին, այն ընդգծում է անկախ կայունության աուդիտների աճող միտումը աշխարհում, որը ղեկավարվում է կարգավորող շրջանակներով, ինչպիսիք են Եվրոմիության Տաքսոնոմիան և IFRS Կայունության չափորոշիչները: Աուդիտները ապահովում են ֆինանսական ռեսուրսների պատշաճ օգտագործումը կայուն զարգացման նպատակների համար՝ օգնելով կանխել կանաչ լվացումը և ամրապնդելով հասարակության վստահությունը կազմակերպությունների կայունության պարտավորություններին:

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