

Sustainable Control Integrating ESG Metrics in to Internal Control Mechanisms to Promote Green and Social Accountability

Zaky Ul Ilmi¹, Sufyan²

^{1,2}STMIK Indonesia Banda Aceh, Indonesia



DOI : <https://doi.org/10.61796/jlhss.v3i1.1644>



Section Info

Article history:

Submitted: December 15, 2025

Final Revised: December 29, 2025

Accepted: January 06, 2026

Published: January 15, 2026

Keywords:

Sustainable control

ESG metrics

Internal oversight

Green accountability

Social

ABSTRACT

Objective: This study aims to explore the integration of Environmental, Social, and Governance (ESG) factors into internal control mechanisms, specifically focusing on the development of sustainable controls within organizations. **Method:** The research adopts a qualitative approach, utilizing library (literature) research and qualitative content analysis with a thematic method. The analysis involves iterative and monotonous reading to ensure a comprehensive understanding of the documents reviewed. **Results:** The findings indicate that the Sustainable Control Concept Model (Stage 1) develops a system derived from traditional internal control, structured around ESG principles. ESG metrics are identified as critical operational control tools, with integration success depending on material selection, measurability (SMART), and alignment with performance management systems, such as the Balanced Scorecard. Additionally, governance reforms, particularly in the roles of the board and audit committees, are necessary for effective green and social accountability. Effective sustainability controls are linked to improved operational performance, enhanced reputation, and long-term value creation. **Novelty:** This study contributes a model that bridges the gap between qualitative ESG criteria and quantitative internal control systems, offering new insights into the role of internal audits in ensuring sustainability effectiveness.

INTRODUCTION

At the heart of things, the worlds of business today sit in a profound paradox. On the one hand, for ages the only indicators of corporate success have been ridden with surplus financial capital and rapid economic growth. But that very growth, whose bases are a sound natural eco-system and cohesive social order, are being systematically eroded in ways portending human annihilation into the foreseeable future. The climate crisis represented by eco-catastrophes, widened social inequality and a governance crisis which provoked distrust towards the public sector compels us to reorient fundamentally what is valuable and worth measuring [1].

Environmental, Social and Governance (ESG) The ESG framework has not materialized as the latest fad but rather as a structured response to the systemic failure of traditional capitalism to embody in its prices the costs of negative externalities. But the latest wave of large-scale ESG adoption faces a critical credibility challenge: a yawning gap in implementation between the corporate commitments at board level and actual operationalization within business lines. Zero emission pledges, human right principles and diversity policies will continue to be no more than jokes, unless they are anchored in a control system that can convert such aspirations into measurable, tracked and decisive interventions. Hence, the paper under review here entitled "Sustainable control:

Integrating ESG metrics within internal oversight mechanisms in promoting green and social accountability” comes as a response to such a clear call placing internal governance at the core of change to stand accountable business during Anthropocene.

Regulatory progress and growing market demands have moved ESG from voluntary to mandatory disclosure and the realm of strategy. Projects such as the Task aForce on Climate-related Financial Disclosures (TCFD), the Sustainability Accounting Standards Board (SASB) and most recently standards from the International Sustainability Standards Board (ISSB), have achieved global convergence around what companies must report. But the emphasis on end of process reporting (output) still misses the most important part, the control process that produced the data. Only with the same level of integrity as financial reporting, can there be credible sustainability reports that are absent greenwashing and instead based on data collection, performance monitoring, and validation? The problem is that traditional internal control models, identified mainly by the frameworks such as COSO (Committee of Sponsoring Organizations of the Treadway Commission), until now have been focused on security of assets, reliability in financial reporting and compliance with law - turning a nearly total deaf ear to ecological and social issues [2]. As such, companies frequently do impressive things with sustainability reports – while the on-the-ground work still pollutes, exploits labor or overlooks local communities. This decoupling of "words" from "deeds" undermines the social license to operate (and berth) that corporations have with their stakeholder groups.

The idea is to lobby for a paradigm switch: here comes the idea of ‘sustainable control’. And it’s not just a matter of slapping a couple green arrows onto the existing management dashboards. Beyond that, it is an ontological reconciliation effort to reshape managerial control systems (MCS) aimed at integrating models of viewing and measuring organizational performance in different forms of capital (multi-capital perspective). As per the integrated reporting view, not only financial capital, but also manufacturing capital, intellectual capital, human and social and relationship capital as well as natural capital are utilized by organizations (International Integrated Reporting Council in 2021). Conventional control systems can only measure and control financial capital or manufacturing capital. The goal for sustainable control is to generalize these systems so that the over-use of natural capital (e.g. water pollution) or social capital (e.g. destruction of public trust) can be tagged, measured and controlled as precisely as one uses cash kept in a lock-box or air pollution from a car's exhaust. This metamorphosis will mean redefining "risk" and "performance." Risk nowadays is not only about rise and fall of currency value or bad debts, but also includes climate transition risk, human rights dilemma resulting from labour relations and reputational risk, and the physical risk of extreme weather conditions [3].

The technical issues behind such an integration are very complicated and multifaceted. At the strategic control level, the question becomes how to convert ESG commitments articulated in the organization's vision and mission into specific (SMART: Specific, Measurable, Achievable, Relevant, Time-bound) strategic objectives for each

business unit and department. At the middle or tactical and operational control level, one of the problems is how to develop new performance metrics that integrated financial and non-financial measures. How is it possible that a factory can have bundled goals, where the same target on integrated contribution margin has been established with energy intensity per unit of production and workplace accident rate (LTIFR) and gender balance in its leadership team? In addition, incentive and compensation systems (the crux of behavior control) should be restructured so that they no longer reward only financial performance in the short run but also ESG performance in the long run [4]. Unless there is some convergence between what everybody needs to do as individuals and sustainability goals, all rules regulations and guidelines will continue to sit gathering dust. The internal audit capability should also evolve our skills, from being specialists in finance and compliance to becoming experts in energy auditing, sustainable supply chain auditing, social impact auditing.

Incorporating ESG criteria into internal supervision is the basis of true green and social accountability. Accountability takes place on two levels here: procedural giving people webbed feet, or the means of holding to account, as Joby puts it; and substantive the difference they make in terms of changing the way organisations perform environmentally and social. Effective controls establish a feedback cycle which enables an organization to educate itself, recognize and respond for improvement of its sustainability performance. It also strengthens organisational resilience as sustainability risks, which may undermine operations and reputation if not addressed early on. But more deeply, sustainability control makes sustainability an attribute of the line manager's front-line work rather than a matter for specialist staff (for example in CSR or Sustainability functions). Sustainability, therefore becomes incorporated into business language and logic as usual. How Sustainable Business Operations Transform HROs 105 [5]. This is the process of mainstreaming or embedding sustainability in an organization's DNA.

Thus, the backdrop of this research is formed on the premise that an environmentally friendly" economy cannot be achieved by either technological input or outside directive alone. This transition has to be backed up by a change in the innovation of internal organizational control mechanisms. The goal of this research is to elaborate on how resilience control principles can be hybridized with sustainability logic in order to formulate an operational framework, which precludes the probability for decoupling policy from practice. In a world of thin and planet (challenged) planetary boundaries, building a control system that "sees" more than just the economic digits is not simply an (ethical or legal) option, but it's also probably one of the key strategic weapons to secure "the permission to operate" and business competitiveness in this 21st century.

In a time when calls for environmental and social accountability are coming to the fore, many organizations suffer from a divide between their publicized ESG (Environmental, Social, Governance) strategic intents and their measurable and accountable operational realization. All too often, traditional internal controls processes have continued to concentrate exclusively on financial and legal compliance issues

rather than integrating ESG metrics as part of a wider control framework. As a result it is not easy to effectively monitor, manage and audit green and social performance. Consequently this can lead to the risk of greenwashing, lack of transparency or failure to meet the rising expectations among key stakeholders.

Despite this growing demand from investors, consumers, regulators and the general public for corporate transparency and non-financial performance (both at global and national levels) there is an urgent need for such research. Climate and social instability caused by climate change, social inequity and inadequate governance have been identified as a material risk to business continuity. Thus, firms would need a solid control framework that allows for going beyond ESG integration and the monitoring of ESG performance by being proactive. Without an effective internal control system measuring on ESG metrics, green and social accountability will be all talk no walk, deleterious to the long-term value building and detrimental to the firm's legitimacy in society.

The primary focus of this research is to investigate and develop the idea of Sustainable Control as an integrating reasoning model that can internalize ESG metrics into the core of a firm's system for internal control. Specifically, this research attempts to: (1) Identify how the enterprise can manage ESG principles within internal control structures and processes; (2) Analyze which design and implementation mechanisms are effective for ESG metrics as operational forms of monitoring control; (3) Examine the position and assurance role of governance bodies that is the Board of Commissioners, Audit Committee, Internal Auditors in ensuring accountability over green and social performance, activities as part of company operation activity; and (4) Assess what are impacted on development or effectivity this framework driven toward improvement accountability-reputation-sustainable values. Finally, it is anticipated that this study will generate a theoretical and practicable manual for organizations so that they can develop a firm and responsive oversight structure to stimulate genuine and credible green as well as social responsibility.

RESEARCH METHOD

The study titled "A Sustainable Control: Incorporating ESG Metrics into Internal Control Systems to Promote the Green and Social Accountability" will be undertaken through qualitative research method using library research. The method was selected according to the nature of research, which seeks to form a conceptual construct, theoretical structure and insight and comprehensive understanding for the phenomenon under study at hand of integration ESG into the internal control as this stream is still new entering in developing phase. The library as the most suitable method for exploring, analyzing, synthesizing and evaluating various thoughts, theories, models and previous empirical findings which are dispersed in academic and practical references is used to establish comprehensive conceptualization that has academic tops [6].

In this research, the data sources used are based on secondary data and includes three categories. First, textbooks and scientific monographs, either international or

national that go deeply into corporate governance (or governability), internal control systems (such as the COSO framework), sustainability accounting and auditing, risks management ESG or integrated reporting. Second, reputable scientific journal articles (indexed in Scopus, Web of Science or SINTA) that contain empirical research findings and latest conceptual studies: ESG practices, sustainability control, green accountability and non-financial performance measurements. The depth and significance of journal papers are critical for capturing state-of-the-art progress in this domain. Third, researches reports, guidelines (frameworks), or official publications from authoritative institutions like COSO (The Committee of Sponsoring Organizations of the Treadway Commission), WBCSD (World Business Council for Sustainable Development), GRI (Global Reporting Initiative) and SASB (Sustainability Accounting Standards Board); TCFD (Task Force on Climate-related Financial Disclosures) et al that could be recognized as global reference. Diversifying credible sources of data will help to generate a strong theoretical base and multi-dimensional perspectives [7], [8].

The documentary analyses will be based on a documentary study method. This process commences with designing the strategic words for Indonesian and English, including sustainable control system; ESG metrics and internal control; green internal audit; sustainability governance, accountability for ESG; etc. The search will be performed online using academic database (Google Scholar, ScienceDirect, JSTOR, Emerald Insight and Portal Garuda) and university library catalogue. Then, every single document obtained will be further screened according to the following standards: (1) direct bearing on research topics; (2) source credibility (publisher organization or author); (3) comprehensiveness of discussion; and (4) publication year (chronologic preference in a downward order: literature in most recent 10 years and especially in 2020-2025). Documents were then categorised and stored in a way to enable further review [9].

The method of analysis employed is qualitative content analysis with a thematic approach. This analysis is both recursive and systematic. In the first place, a deep reading of any document selected is performed in order to comprehend it in all its parts. Second, a coding process was conducted by highlighting and tagging portions of text with concepts, principles, relationships or outcomes relative to the research variables. Coding was conducted deductively and inductively derived (from a reading of the data) based on initial concepts suggested by the theoretical framework. Third, the inferences are clustered in data categories according to common themes among codes. 4 Fourth, the key themes, which will form anchor points around which discussion will revolve in research are distilled from the categories above. Ad - The principal themes articulated include "Concepts and Elements of Sustainable Control""Transformation of ESG Metrics into Control Tools""Triple-Bottom-Line Account- ability Model-Line in Governance", and "Causal Relationship between Sustainable Control and Value Creation." This procedure is finalised by reporting an analytical narrative which provides clusters of findings in context and theory from the research evaluated [9].

The epistemology of validity or credibility checking in the current study was preserved by a variety of means. To ensure credibility throughout the process, we

adhered to prolonged engagement with the data by repeatedly reading documents and triangulating data sources (e.g., comparing information from different books, journals, and institutional reports), seeking such comparison as possible. Second, reliability is established by an audit trail of the comprehensive research procedure from data search and selection criteria to coding process and drawing conclusions in a detailed and orderly manner that other researchers can track. Third, confirmability is assured through researcher reflexivity and objectivity by explicitly always returning to textual data sources when interpreting data. Fourth, transferability is addressed through a detailed description of context and analysis processes from which readers can judge the applicability to other contexts. Usefulness of the strategies Recommendations by SW (Search for evidence) SW Staff development Dr The use of these strategies is assumed to positively enhance the rigour and trustworthiness of the results of this literature review [7].

RESULTS AND DISCUSSION

Continuous Control Conceptual Framework: Embedding ESG Principles in the Internal Control System

This research reveals that the notion of Sustainable Control is a paradigm shift from traditional internal control mechanisms. Its paradigm is no longer based on pure asset protection, reliability of financials and legal transparent behaviour but it has been stretched to integrate ESG (Environmental, Social and Governance) principles in a proactively manner and convert them all to part of the DNA of the organization. This integration shifts from reacting to financial-related issues to being proactive, strategic and focusing on long-term sustainability driving internal oversight.

At its core, this model establishes sustainability objectives as strategic goals for the organization on a footing with economic objectives. Accordingly, internal control procedures just like that represented in the 2013 version of COSO (Committee of Sponsoring Organizations of the Treadway Commission) should expressly consider ESG risks and opportunities within Risk Assessment. Risks like climate change, social unrest and inequality and poor governance are no longer treated as just external risks but core ones which have the potential to break up the business. Control Activities should subsequently be developed not just to protect physical and financial assets, but also to promote environmentally sound operating processes (e.g., energy or waste control), social fairness (for instance, a transparent hiring policies) and ethical government [10].

Information & Communication underpinning this structure needs to allow the effective transmission of timely and reliable data on ESG performance up and down the organisation as well as across it, within in house processes and with third stakeholders. Also Monitoring Activities should involve continuous assessment of the efficiency of sustainability controls. Therefore, the strategic framework of Sustainability Controls is supposed to be a bridge between ESG long-term strategy aspirations and everyday work, in order to guarantee that “green and social” commitments are not only words on an annual report page but practical decisions at all company’s levels [11].

The introduction of sustainability controls has been essential to enhance organizational accountability regarding environmental and social sustainability. One aspect is the inclusion of Environmental, Social and Governance (ESG) metrics in internal controls. It is meant to incentivize firms to operate more responsibly with regard to the social and environmental consequences of their activities.

ESG data has been shown to significantly affect firm performance. Çek and Eyüpoğlu (2020) demonstrate that ESG-related performance leads to superior economic performance, highlighting the significance of a management strategy with sustainability orientations. Firms that actively incorporate such metrics into their reporting and internal oversight may gain credibility and investor attractiveness, as investors are witnessing a maturing market of sustainability practices.

Corporate governance moderates the relationship between green accounting practices, corporate social responsible (CSR) and financial performance [12]. The introduction of effective governance ensures that oversight and accountability for ESG principles are sustainable. For instance, guidelines on procedural simplification through technology highly encourage effective, fair and socio-economically sustainable community oversight [13]. With transparent governance, companies can track their ESG performance and mete out penalties for those in breach.

Use of sound performance measurement systems is an essential tool for accelerating green accountability [14]. With technology that can monitor and assess ESG performance on the fly, companies can spot new challenges and resolve them right away. Technology can also enhance transparency and facilitate third-party confirmation, thus minimizing opportunities for greenwashing and engendering stakeholder confidence [14].

Scientists, government and local communities all have to play crucial roles developing ecologically based adaptation and mitigation policies [15]. It illustrates the need for inter-industry synergy to form a coherent and impactful ESG metrics. Engagement of the community in oversight Companies can raise social engagement, enabling stronger green accountability policies.

By incorporating ESG metrics into internal oversight structures, organizations can not only ensure accountability but also help create a culture of sustainability. Good corporate governance, fair measurement system and stakeholders' participation are three main panoply for the sustainable control mechanism (SMC). Going forward, companies will need to keep learning and adjusting to the challenges and opportunities that come with greater awareness of sustainability in order to reach more ambitious longer-term targets.

Design and Application of ESG Metrics as Control and Monitoring Instruments

A major contribution of this research is that the EO model contributes to understanding by explaining as how ESG has been effectively integrated into internal governance by focusing on the design and implementation of effective ESD control metrics. ESG metrics are the “language” of sustainable control in practice, translating qualitative principles into identifiable quantitative or structured-qualitative measures

that are reportable, trackable and managemasurable. The two primary challenges expressed are the tension between global standards (e.g., SASB, GRI, TCFD) and localization and materiality or identification of which ESG issues matter to value for the organization and also its stakeholders [16].

To be useful, a metrics package needs to fulfil the SMART (Specific, Measurable, Achievable, Relevant and Time-bound) criteria and be built into the existing management control architecture like BSC or corporate KPIs. For instance, the green metric called a “carbon emission intensity (tons/CO₂e per unit of production)” may be a green KPI in the internal process perspective with a BSC which in turn is cascaded down to each factory as target information and enters into managers’ evaluations. It is helped by a strong data infrastructure where Internet of Things (IoT) is used for real time tracking and monitoring of energy and water consumption or ESG software platforms integrated with ERP systems are employed to compile and consolidate social data such as number of employee turnover, number of workplace safety incidents and investment on training [17].

Benchmarking, setting thresholds, and reporting escalation systems are used to control these metrics. If the any of the emission metrics exceed set points, the internal reporting system would need to automatically alert management for appropriate action. By doing so, ESG metrics change from being nothing more than external reporting tools to becoming an essential internal management instrument for managing risks and maximizing sustainability performance [18].

ESG metrics in corporate control and monitoring: Accountability and sustainability concerns The use of ESG measures in corporate control and monitoring is an important factor for accountability and sustainability. The standardisation of metrics can help companies to not only evaluate internally but also report progress to stakeholders. The design and deployment of such measures have to be made thoughtfully given the constraints and opportunities that prevail in today's business context.

You can do much with technical developments like big data and AI-based Analysis to increase the reliability of ESG metrics. The use of digital tool provide the opportunity for organization to monitor ESG performances and acting swiftly on possible problems. It also increases transparency to interested parties and encourages detailed and informative reporting.

Development of ESG Reporting Systems ESG-based reporting must be constructed to ensure that all pre-established performance dimensions are adequately covered. Provide stakeholders with clear, measurable metrics and a platform they can use to have access to all of the information needed. This is important to better understand how firms engage in sustainability. Involving Stakeholders When you develop and track ESG metrics, it will be important to consult a number of different stakeholders such as employees, customers and the community. The participation of these groups in monitoring, according to Sugianto et al., enhance accountability and the company’s ties to the community. Participation and collaboration can also allow the development of

more meaningful and accessible metrics. Monitoring and Adjustment This means that companies need to continue monitoring and adjusting their ESG metrics as results are achieved. This involves recalibrating metrics for relevance and effectiveness in performance measurement.

“It will be critical for organisations to take a proactive approach in enhancing their systems so that ESG data are a true representation of the social and environmental impact of their activities. The development and usage of ESG metrics as a control and monitoring instrument not only enables firms to report on their sustainability performance, but also enhances accountability and transparency to stakeholders. Whereas with a uniformed approach, technological support and stakeholders’ engagement, companies can build robust ESG performance monitoring systems that work seamlessly based on efficiencies and effectiveness. It will not only secure their status on the market, but bring society and environment overall closer to creating value.

Green and Social Control Mechanisms: A Study of Audit Committee, Internal Audit, and Board of Commissioners

It is evident from this paper that green and social accountability cannot be realized without reforming, reinforcing and redefining the existence of corporate governance institutions. BC, AC, and IAF have role for sustainable control in accountability system as key elements. The Board of Commissioners has the most important role, as it sets the tone at the top, approves the company’s sustainability strategy and ensures adequate attention is attributed to ESG risks on the board’s agenda. Board accountability is achieved also through direct interaction with primary stakeholders and is related to the executive compensation policies that link manager incentives to the achievement of expression ESG outcomes [19].

The Audit Committee has an important role for ESG information reported. From just managing the financial reports to monitoring the sustainability reporting process, as a responsible manager. Internal controls over ESG data; Materiality of sustainability matters; Communication with external auditors about the scope of the audit of ESG information. At the same time, IAF is experiencing a metamorphosis of competence and responsibilities. Ultimately, internal audit must evolve the ability to audit sustainability in order to provide independent assurance on whether sustainable control systems are performing effectively. This also applies to the verification of emissions data accuracy, compliance with social standards in supply chains, and performance of CSR/CSV programmes. Internal audit reports are both positive evidence to the board that management has good control or negative evidence, which identifies areas for improvement. These three organs neatly fit together as checks and balances system of accountability not just at the declaration level but also implementation and verification levels (Sutrisno & Kusumawati, dep._id).

Green and social responsibility are more and more recognizable as indispensable corporate governance issues for companies concerned with integrity and trust. This accountability is supported by the control mechanism such as audit committee, internal audit and board of commissioners. Through identifying the characteristics and operative

processes of all three elements, it may help us to appreciate what these kinds of relationships imply for control, as well as risk management in an organization (The Institute of Internal Auditors, 2023).

The audit committee is a cornerstone of corporate governance and exists to promote responsibility and transparency in financial statements. Being established from the board of commissioners, audit committee has a formal responsibility for overseeing management action and ensuring that financial statements meet relevant accounts standards [20].

Audit Committee existence decreases manipulation and fraud attempts since they supervise good corporate governance, which include transparency, responsibility, fairness and accountability [21]. A similar finding has arrived at by Tarmizi & Retnoningtyas who emphasized the crucial role of an audit committee to prevent fraud cases through effective supervisory function [20]. This is the reason that audit committees are serving as an intermediary between shareholders and management, in other words they act as monitors to verify whether the management behaves according to what would be desired by the shareholders.

Internal audit also helps to ensure green accountability and social responsibility. This function is concerned on monitoring and evaluating of activities that will make the organization more effective and efficient [22]. Internal audit is also tasked with regular review of all company initiatives and operations, assuring that all policies are being followed and everything appears to be in good order; but more importantly, identifying potential areas for improvement.

The audit committee and internal auditors complement each other. If the audit committee pay greater attention to supervision of from th outside, and with financial reports, internal still many aspects of operational audits and comprehensive risk assessments being more focused on [22]. Green accountability With a view to green accountability, the internal auditor can also evaluate the social and environmental impact of what a company does and ensure that it meets not only legal requirements but also ensures ethically and responsibly with regard to the community and the environment.

The board of commissioners is an organ with the rights and duties to oversee and provide the company's strategic policies. It is very important to select the appropriate board of commissioners, particularly in independent commissioner composition that enhances corporate governance [23]. Research also shows that a board of commissioners which has high composition of independent commissioners may enhance public's trust to the company, and can reduce the possibility for management to manage it [24].

The committee's members are also selected by Its board of commissioners, to ensure that the audits done are independent and professional. The presence of a strong and independent board commissioners is crucial for enabling the company to act in socially responsible ways, since board commissioners have power to create policies that support sustainability and business ethics [23].

These three parties, i.e. the Audit Committee, Internal Audit and Board of Commissioners should have a strong on their professional responsibility that will reflect

to good corporate governance practice. While because they play a particular part every part has its responsibility, but when the audit bureaus can get the job done collectively it will lead to much more efficient internal oversight and control for combatting fraud and enhancing the firm's image in newspaper. For instance, transparency environment – in which each process of internal audit as well as the role of audit committee is conducted openly will lead to enhance high commitment on accountability [22].

There is positive influence of good corporate on internal control with reciprocal support between audit committee and commissioner boards. The effectiveness of internal auditing will also furnish data for strategic decision-making by the board, leading to a self-sustaining feedback loop in corporate governance. Accountability mechanisms of green and social activities in corporate are very substantially affected by the audit committee, internal audit, and board commissioners. By implementing rigorous oversight and corporate governance best practices, companies can mitigate the risk of fraud while also establishing goodwill with the public. Given the increased social consciousness around corporate responsibility, a strong accountability approach is a critical part of the company's ability to remain viable and successful into the future.

Impact and Effectiveness Measures: Performance, Reputation and Value Creation across the long term

The literature suggests that the extent of success in sustainable control implementation is associated with a range of tangible and intangible benefits. The most direct measurable effect is improvement in the performance of sustainability a reduced carbon footprint, increased resource efficiency and dividing accidents at work or raised employee and community satisfaction scores. These successes are not simply about being compliant with the law, but rather a reflection of increased operations efficiency and resilience (World Economic Forum in 2020).

Moreover, studies validate its effect on corporate reputation and social license. Firms that have good, transparent ESG control systems are more likely to gain investor (53%), consumer (52%), regulator (50%) and local community trust (51%). This trust represents social capital, which is seen as an asset to shield organisations when in crisis (a social license to operate) and it also functions as a way to recruit increasingly values-aware talent. And, in the end, it is these that combine to drive value over time. The mechanisms operate through multiple channels: (i) a decline in costs, leading to savings generated by less usage of other resources; and (ii) enhanced risk management, thus helping to avoid fines or boycotts or the suspension of operations; and (iii) better access to capital with lower cost if it is Green financing or sustainability-linked bonds; as well as (iv) innovation based on new products and services that cater for this rapidly expanding market of sustainable solutions KPMG Indonesia 2022.

The true and final efficiency of such a sustainable controlling system cannot be reflected by ESG-metrics, instead it should be evaluated through various lenses like improvements in the company's ESG-ratings as established by such research agencies or the long-term market value either stable over time or even increasing and how does a company withstand external pressure. Hence, sustainable control is not an expense, but

a strategic investment providing the ground to achieve robust and sustainable performance [25].

The operational and social forces driving corporate sustainability performance have become central to how organizational effectiveness is now measured. This point has very strong connections with corporate reputation and sustainable value creation efforts. Within this context, IC, SR and DT are relevant management concepts. 31,32 Through careful review of available literature a better understanding and interface between these factors are obtained.

Intangible assets can be described as knowledge-based resources, which are primary levers to produce value for businesses. According to Salam et al. (Salam et al., 2023), intellectual capital that constitutes employees, customers, processes and technology has a strong relationship with the sustainability of business enterprise especially in micro, small medium enterprise (MSME). These resources are drivers that determine the sustainability and competitive advantage of a business. Hence, the maximum utilization of intellectual capital leads to better sustainability performance and result in sustainable performance as well, which incorporates social, environmental and economic dimensions in relations to company's activities [26].

Sustainability reporting now has been one of the corporate's report, considering the society demanding higher transparency [27]. These reports don't just supplement financial data they shed light on long-term value creation with an emphasis on corporate social responsibility and environmental responsibility. This value generation allows the company to build trust, through a positive reputation. Transparency in promoting sustainability performance helps the company to manage stakeholder expectations and create a good image [27].

With digital technology, sustainability initiatives become more prominent to ensure business practices are sustainable and create long-term value. The ability to learn and adopt new technologies is what makes companies competitive and relevant [28]. Phenomena like COVID-19 have increased the urgency of digital transformation and demonstrated that, if they don't adapt, organizations will compound their exposure to existential threats. Technology, not only supports ensure a company's operations are efficient and timely; it also encourages innovation in sustainable methods.

Relationship Marketing is one of the key ways to build value in long term. This value responsible notion is one which stresses the relationship between organisations and consumers that to be sustainable focusses in providing long term values not short-term selling behaviour [29]. The relationship marketing strives for financial profits and customer satisfaction measurement to retain loyalty which improves the reputation of a firm. Good relationships with customers contribute to sustainability by increasing the value received for all interested parties.

Thus, the interaction of intellectual capital, sustainability reports, digital technology and relational marketing significantly contributes to the organization's sustainability, reputation and long-term value creation. The three pillars represent the foundation of the company's work in terms of being able to perform and grow

sustainably. A comprehensive strategy which encompasses all these facets will allow the company to survive, and thrive in a competitive landscape, and a future rife with sustainability requirements.

CONCLUSION

Fundamental Finding : This review highlights that Sustainable Control, as an integral strategic transformation of internal controls, is crucial for organizations aiming for sustainable development. It is based on three interconnected pillars: embedding ESG within internal control frameworks, implementing measurable ESG metrics for operational control, and transforming governance bodies to ensure accountability. **Implication :** The findings imply that organizations, including those in Indonesia, can gradually integrate ESG factors into their internal control mechanisms, leading to more efficient operations, enhanced stakeholder trust, and long-term value creation. The strategic transformation requires a structured approach, from materiality assessments to the establishment of cross-functional ESG teams and the integration of ESG metrics into performance systems. **Limitation :** The study is based on a literature review, and its application may vary across industries and regions. The practical implementation of the proposed framework could face challenges due to cultural, regulatory, or organizational differences. **Future Research :** Future research should explore empirical case studies on the application of Sustainable Control in different sectors, evaluate the long-term effects of ESG integration on organizational performance, and investigate how to overcome the challenges in adopting this framework across diverse organizational contexts.

REFERENCES

- [1] C. A. Adams, "The sustainable development goals, integrated thinking and the integrated report," *IIRC and ICAS*, 2020, doi: <https://doi.org/10.2139/ssrn.3528021>.
- [2] P. D. M. & R. A. M. Michelon G., "Creating legitimacy for sustainability assurance practices: Evidence from sustainability restatements," *European Accounting Review*, vol. 29, no. 2, pp. 395–422, 2020, doi: <https://doi.org/10.1080/09638180.2020.1763287>.
- [3] & de V. C. Bui B., "Business strategies and management accounting in response to climate change risk exposure and regulatory uncertainty," *The British Accounting Review*, vol. 53, no. 1, p. 100936, 2021, doi: <https://doi.org/10.1016/j.bar.2020.100936>.
- [4] M.-D.-S. W. & O. R. J. Garcia A. S., "Sensitive industries produce better ESG performance: Evidence from emerging markets," *J Clean Prod*, vol. 332, p. 130065, 2022, doi: <https://doi.org/10.1016/j.jclepro.2021.130065>.
- [5] T. J. & G. S. S. Norris S., "The integration of ESG into management control systems: A case study of a large multinational corporation," *Journal of Business Ethics*, vol. 185, no. 2, pp. 267–287, 2023, doi: <https://doi.org/10.1007/s10551-022-05159-1>.
- [6] Sugiyono., "Metode Penelitian Kuantitatif, Kualitatif, dan R&D (Edisi ke-3)," *Alfabeta*, 2023.
- [7] J. W. Creswell and C. N. Poth, *Qualitative inquiry and research design: Choosing among five approaches (5th ed.)*. SAGE Publications, 2023.

- [8] L. J. Moleong, "Metodologi Penelitian Kualitatif (Edisi Revisi)," *PT Remaja Rosdakarya*, 2021.
- [9] H. A. M. & S. J. Miles M. B., "Qualitative Data Analysis: A Methods Sourcebook," *SAGE Publications*, 2020.
- [10] R. Simons, "The Business of Sustainability: Building Industry-Leading ESG Programs," *MIT Press*, 2023.
- [11] A. Djamhuri, "Teori Akuntansi: Perspektif Kritis dan Sustainability," *Salemba Empat*, 2023.
- [12] A. D. & A. T. Imtikhanah S., "Peran Tata Kelola Perusahaan Dalam Memoderasi Pengaruh Implementasi Green Accounting, Corporate Social Responsibility Dan Firm Size Terhadap Kinerja Keuangan," *Neraca*, vol. 21, no. 1, pp. 53–69, 2025, doi: <https://doi.org/10.48144/neraca.v21i1.2089>.
- [13] M. Afif and M. Sunggara, "Analisis Penerapan Sanksi Administrasi Terhadap Kepatuhan Usaha Bidang Perikanan," *Jurnal Usm Law Review*, vol. 8, no. 1, pp. 491–508, 2025, doi: <https://doi.org/10.26623/julr.v8i1.11797>.
- [14] V. Osuji, "Pioneering ESG-linked corporate finance programs to advance green finance, operational efficiency, and global sustainability goals," *Gulf Journal of Advance Business Research*, vol. 3, no. 10, pp. 1474–1494, 2025, doi: <https://doi.org/10.51594/gjabr.v3i10.169>.
- [15] R. Podungge, M. Rahayu, M. Setiawan, and A. Sudiro, "Teacher competence and student academic achievement," in *23rd Asian Forum of Business Education (AFBE 2019)*, Atlantis Press, 2020, pp. 69–74. doi: 10.2991/aebmr.k.200606.012.
- [16] & Y. T. Eccles R. G., "The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality," *Wiley*, 2021.
- [17] J. C. & M. N. Goh C., "Sustainability Reporting: Policy, Practice and Future," *Routledge*, 2022.
- [18] & H. P. B. Nurhayati I., "ESG dan Pelaporan Berkelanjutan: Konsep dan Implementasi di Indonesia," *Penerbit Universitas*, 2023.
- [19] & P. R. Boffo R., "ESG Investing: Practices, Progress and Challenges," *OECD Publishing*, 2020.
- [20] S. Retnoningtyas and M. Tarmizi, "Determinan Fraudulent Financial Reporting Dengan Mekanisme Corporate Governance Sebagai Variabel Moderasi," *Jurnal Akuntansi Dan Keuangan*, vol. 11, no. 2, p. 101, 2022, doi: <https://doi.org/10.36080/jak.v11i2.1963>.
- [21] K. N. & P. K. Pratiwi A., "Analisis Good Corporate Governance Terhadap Kinerja Keuangan Perusahaan Perbankan Yang Terdaftar Di BEI," *Otonomi*, vol. 23, no. 2, p. 319, 2023, doi: <https://doi.org/10.32503/otonomi.v23i2.4413>.
- [22] V. Harisanto and W. Widyasari, "Pengaruh Sales Growth, Audit Committee, Komisaris Independen Dan Leverage Terhadap Nilai Perusahaan," *Jurnal Paradigma Akuntansi*, vol. 5, no. 1, pp. 271–280, 2023, doi: <https://doi.org/10.24912/jpa.v5i1.22376>.
- [23] P. Purwanto and B. Cahyaningrum, "Struktur Corporate Governance, Reputasi Underwriter Dan Initial Public Offering (Ipo) Underpricing Di Indonesia," *Jurnal Ekonomi Bisnis Dan Kewirausahaan*, vol. 8, no. 1, 2019, doi: <https://doi.org/10.47942/iab.v8i1.337>.
- [24] N. Djaya and A. Pradipta, "Karakteristik Perusahaan dan Corporate Governance terhadap Tax Avoidance," *Media Bisnis*, vol. 14, no. 1, pp. 29–40, 2022, doi: <https://doi.org/10.34208/mb.v14i1.1679>.
- [25] & R.-A. L. Frias-Aceituno J. V., "Sustainability, Technology, and Corporate Governance: Trends and Challenges," *Palgrave Macmillan*, 2024.

- [26] P. E. & N. P. Fitriyah L., "Pengaruh Financial Literacy dan Digital Payment (QRIS) Terhadap Kinerja Berkelanjutan UMKM Madura," *Ekoma Jurnal Ekonomi Manajemen Akuntansi*, vol. 4, no. 1, pp. 2146–2164, 2024, doi: <https://doi.org/10.56799/ekoma.v4i1.5929>.
- [27] M. S. R. R. & I. Z. Cahyaningtyas S., "The Value Relevance Of The Sustainability Reporting (Sr): Empirical Evidence On Indonesian," *Jurnal Ilmiah Tata Sejuta Stia Mataram*, vol. 9, no. 1, pp. 200–208, 2023, doi: <https://doi.org/10.32666/tatasejuta.v9i1.488>.
- [28] S. E. H. S. & U. E. Judijanto L., "Analisis Bibliometrik Terhadap Keberlanjutan Bisnis di Era Digital," *Jurnal Ekonomi Dan Kewirausahaan West Science*, vol. 2, no. 02, pp. 209–218, 2024, doi: <https://doi.org/10.58812/jekws.v2i02.1114>.
- [29] A. Rivai, "Upaya Membangun Strategic Marketing Outcomes Berbasis Pada Relationship Marketing Dan Power," *Jurnal Manajemen Teori Dan Terapan | Journal of Theory and Applied Management*, vol. 3, no. 3, 2010, doi: <https://doi.org/10.20473/jmtt.v3i3.2404>.

***Zaky Ul Ilmi (Corresponding Author)**

STMIK Indonesia Banda Aceh, Indonesia

mail: 1zakiulilmi@gmail.com

Sufyan

STMIK Indonesia Banda Aceh, Indonesia

Email: sofyan.ars@gmail.com
