

IMPLEMENTATION OF ESG METRICS IN SMES: LEADERSHIP, GOVERNANCE, AND ORGANIZATIONAL DEVELOPMENT TOWARD BUSINESS SUSTAINABILITY

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Abstract

This article explores the applicability of ESG (environmental, social, and governance) metrics in small and medium-sized enterprises (SMEs), highlighting their strategic value in the transition to sustainable business models. Using a qualitative, exploratory, and cross-cutting approach, it conducts a theoretical and documentary review of international sources (OECD, GRI, UN, WEF), as well as academic literature and case studies. It analyzes the origins and evolution of ESG criteria, the role of transformational leadership in their implementation, and the barriers SMEs face in adopting them, such as lack of resources, technical knowledge, and cultural resistance to change. As a main contribution, it proposes a simplified table of ESG metrics adapted to the SME context, with clearly defined indicators, formulas, and purposes. The study concludes that these metrics not only allow for assessing performance beyond the financial level, but also strengthen organizational legitimacy, improve decision-making, and contribute to achieving the Sustainable Development Goals, provided there is ethical leadership and governance geared toward positive impact.

Keywords: Corporate Sustainability, ESG Metrics, Corporate Governance, SMEs, Transformational Leadership.

1. INTRODUCTION

In recent years, sustainability has gained ground in the media, on government agendas, in corporate strategies, and in the awareness of citizens. It has ceased to be an emerging trend and has become an urgent and fundamental pillar of the present and future development of nations.

The modern approach to sustainability has its roots in the Brundtland Report (1987), prepared by the World Commission on Environment and Development. It warned that many development trajectories were unsustainable and called for a profound transformation of economic and environmental policies (World Commission on Environment and Development, 1987, pp. 12–13). This vision laid the foundation for rethinking leadership and governance models, giving rise to the current paradigm based on ESG (Environmental, Social and Governance) criteria and corporate ethical responsibility.

Sustainability is defined as the ability to meet the needs of the present without compromising those of future generations. It implies a balance between economic growth, social inclusion, and environmental protection, ensuring long-term well-being (World Commission on Environment and Development, 1987). In this sense, sustainable development requires that economic and environmental decisions be intrinsically linked to social equity (World Commission on Environment and Development, 1987, p. 23). This principle connects with the evolution of business leadership toward more proactive models that transcend profitability to generate a positive impact and governance aligned with the common good, integrating strategy, culture, and organizational reporting systems (Elkington, 2004).

Within this framework, the objective of this study is to examine how leadership and corporate governance influence the adoption of ESG metrics in SMEs, identifying recurring barriers and viable solutions. In this way, the aim is to strengthen the understanding of sustainability not only as an ethical imperative, but also as a strategic factor for competitiveness and institutional legitimacy. As a practical contribution, a simplified table of ESG metrics

adapted to the SME context is presented, with indicators and formulas that facilitate their implementation. The research is developed using a qualitative, exploratory, and cross-sectional approach, supported by a theoretical and documentary review of academic and institutional sources.

2. THEORETICAL FRAMEWORK

1).Governance and Transparency

The use of the Transparency and Disclosure Index as a governance metric finds both conceptual and methodological support in recent literature. Maolani (2024) highlights that transparency and accountability are fundamental pillars for strengthening institutional integrity and trust in organizations. Similarly, Garayeta, Corral-Lage, Trigo, and De la Peña (2024) propose the Corporate Governance Ratio Index (CGRI), a methodology that quantifies transparency based on public and mandatory information, allowing for an objective assessment of the degree of corporate disclosure. Additionally, Siwendu and Ambe (2024) emphasize that transparency in disclosures can be rigorously measured using indices constructed based on public reports, thus making it possible to accurately assess the degree of openness and accountability.

Regarding anti-corruption policies, the OECD (2025) establishes that their effectiveness should be assessed by considering not only the existence of formal regulatory frameworks, but also their implementation, updating, and ability to mitigate risks. Ruggiero and Mussari (2024) argue that these measures are essential tools for increasing the sustainability of corporate governance, reinforcing the validity of quantifying their degree of implementation. Likewise, regarding regulatory compliance, the OECD (2025) emphasizes that the periodic evaluation of compliance programs, through audits and systematic reviews, is a key mechanism for ensuring the effectiveness of internal controls and organizational transparency.

Strong corporate governance is essential for incorporating sustainability as a guiding principle of business operations, by promoting accountability, transparency, and responsibility in strategic decision-making (OECD, 2015). Sustainable corporate governance is conceived as a set of principles, structures, and practices that guide organizations toward ethical, social, environmental, and financial goals (Biel, 2025), aligning the interests of the board of directors, senior management, and stakeholders, strengthening the ability to anticipate strategic risks, and avoiding phenomena such as groupthink, a cognitive homogeneity that limits innovation and critical thinking (Huse, 2007).

2.) Leadership and Organizational Purpose

Leadership plays a central role in building resilient, purpose-oriented organizational cultures. Leaders must act as agents of cultural change, capable of mobilizing behaviors, redefining the organizational purpose, and connecting the company with social and environmental causes (Jerab& Mabrouk, 2023). This requires transformational leadership that inspires employees and fosters innovation based on a shared ethical vision (Bass & Riggio, 2006).

In this paradigm, organizational purpose becomes the axis that articulates strategy, culture, and operations, implying a transition from profit maximization to the creation of shared value—that is, generating economic profitability while addressing social and environmental challenges (Porter & Kramer, 2011). A milestone in this evolution was the Business Roundtable's (2019) declaration, which abandoned shareholder primacy to adopt a stakeholder capitalism approach, engaging with employees, customers, suppliers, communities, and the environment. This vision

drives companies to build trust, attract talent, strengthen community relations, and foster innovation oriented toward real needs, thus consolidating sustainability and institutional legitimacy.

Traditionally, the concept of compliance has been understood as strict adherence to laws and regulations. Although it remains relevant, it is insufficient to address current challenges. Modern governance requires going beyond formal legality, building a corporate culture centered on purpose, ethics, and sustainability (Eccles & Klimenko, 2019).

3). *Environmental Metrics*

ESG metrics have become increasingly essential, especially in regions such as the European Union, where regulatory frameworks such as the Corporate Sustainability Reporting Directive (CSRD) impose mandatory reporting standards. This pressure not only affects large corporations but also SMEs that are part of international supply chains, forcing them to adopt more transparent practices to remain competitive (Accenture & United Nations Global Compact, 2023). The ESG approach has established itself as a key tool for assessing sustainable performance, offering a comprehensive view that surpasses traditional financial indicators (Kotsantonis, Pinney & Serafeim, 2016).

Incorporating environmental metrics in SMEs requires scientific methodologies that ensure validity and comparability. Life Cycle Assessment (LCA) is a recognized tool for identifying and quantifying the environmental impacts of products, processes, and organizations throughout the value chain. Guinée et al. (2010) and Finnveden et al. (2009) point out that LCA allows for the comprehensive assessment of indicators such as carbon and water footprints, facilitating robust diagnostics for strategic decisions and continuous improvement. In addition, ecological modeling offers a quantitative framework for projecting impacts, aligning model inputs/outputs with management decisions, and incorporating uncertainty and validating predictions (Schuwirth et al., 2019).

The new metrics reflect a business's ability to generate sustainable value, including indicators such as energy efficiency, waste management, water consumption, recycling rates, and biodiversity conservation (Tarantino, 2024). In the social sphere, labor standards, health, safety, inclusion, human rights, and community relations are considered (World Bank Group, 2018), while in governance, transparency, ethics, board diversity, anti-corruption policies, data traceability, and risk management are highlighted. According to the OECD (2022), ESG rating agencies use an average of up to 83 metrics to assess corporate performance. These indicators have gone from being a regulatory requirement to a competitive advantage for mitigating risks and attracting responsible investors.

Despite these benefits, barriers to their implementation persist. Santos (2025) points out that one of the most significant is cultural resistance to change, especially in companies with traditional hierarchical structures or those exclusively focused on financial profitability. This resistance can be expressed in a limited understanding of sustainability (Kliksberg, 2004, pp. 18, 21) or in a reductionist view of compliance as mere legal compliance (Eccles & Klimenko, 2019). Furthermore, sustainability is often perceived as an additional burden rather than a strategic opportunity, facing financial, technological, and cultural barriers (Barrueto Pérez & Marchena Barrueto, 2024, p. 7), and with the mistaken belief that it decreases profitability (Santos, 2025).

A lack of specialized knowledge also limits the adoption of metrics, as many SMEs lack information systems, technological infrastructure, and trained personnel (Klewitz & Hansen,

2014). In fact, the OECD (2023) emphasizes that this is not due to lack of interest, but rather a low level of sustainability literacy and limited technical support. These limitations are compounded by a lack of regulatory clarity and pressure from short-term investors, reinforcing the need for coherent public policies and standardized regulatory frameworks (Accenture & United Nations Global Compact, 2023).

In emerging regions, SMEs face specific challenges: in Asia, there is a lack of financing and infrastructure, although opportunities also exist, such as investment in renewable energy (Vogue Business, 2025); in Africa, green skills training programs are driving the environmental transition (Reuters, 2024). In Latin America, the lack of clear policies and tax incentives contrasts with the European Union, which is moving forward with demanding frameworks such as the CSRD (Barrueto et al., 2024; European Commission, 2022). In Germany, the Lieferkettengesetz (Lieferkettengesetz) mandates demonstrating social and environmental measures throughout the value chain since 2023 (Federal Ministry of Labour and Social Affairs, 2023). In Mexico, the framework is emerging but fragmented: the CNBV has incorporated self-diagnosis tools and requirements aligned with the Sustainability Disclosure Standards (IFRS), in force since 2025 (GGGI & CNBV, 2025; ICLG, 2025). Furthermore, the February 2025 resolution requires securities issuers to disclose sustainability reports under IFRS S1 and S2 (GGGI, 2025). However, these provisions do not yet constitute a homogeneous system, leaving SMEs vulnerable to international frameworks.

In this context, the transition to sustainable models requires more than willpower: it demands structural conditions, supporting public policies, and a redefinition of the business model. Directors and decision-makers must anticipate trends, manage risks, and integrate sustainability as a guiding principle, developing analytical, ethical, and collaborative skills that strengthen the link between management, operations, and stakeholders (Jerab& Mabrouk, 2023). Leadership in this new era must act as a catalyst for cultural change, with strategic vision and sustained ethical commitment.

Finally, to support scientifically based carbon footprint measurement, approved methodologies such as LCA and ISO 14067 must be integrated. Recent studies show their application in various sectors: Ragazzi et al. (2023) in laboratory consumables; Sambito (2017) in urban water systems; Subedi et al. (2024) in fruits; Kouwenberg et al. (2024) in hospital services. Other research highlights methodological variability and the need for adaptive frameworks (Du et al., 2024; Keil et al., 2024; Ishkov et al., 2024). Furthermore, practical tools such as the Carbon Footprint Calculator (Carbon Footprint Ltd., 2024) complement academic analysis (Alici et al., 2024).

Recent environmental literature reinforces the relevance of these metrics for SMEs: Giannetti et al. (2020) highlight their impact on emissions and waste in the food and manufacturing sectors; Olekanma (2024) shows how reducing emissions generates green jobs; Semlali et al. (2024) highlight cleaner production combined with green marketing; and Oduro (2025), through a meta-analysis, confirms that environmental and social practices strengthen competitiveness.

3. DISCUSSION

Barriers and Solutions to the Adoption of ESG Metrics

The results obtained in the analyzed SME confirm that, in addition to the barriers noted in the literature, such as cultural resistance, lack of knowledge, and financial limitations, practical challenges persist in measuring environmental and social metrics. This situation reinforces the

need to design training programs adapted to the SME context, establish strategic alliances with business chambers and universities, and facilitate access to green financing to overcome these restrictions (OECD, 2025; Maolani, 2024). In particular, cultural resistance was observed to be a key obstacle, as the organization maintains a focus on financial profitability, which is consistent with what Santos (2025), Kliksberg (2004), and Eccles and Klimenko (2019) describe regarding a reductionist view of compliance.

Leadership and Strategic Opportunities

The study also shows that leadership plays a decisive role in the integration of ESG metrics. The case evidence confirms that a lack of committed leadership limits progress, while transformational leadership can guide the organization toward sustainability by motivating teams and incorporating a shared corporate purpose (Bass & Riggio, 2006; Jerab& Mabrouk, 2023). Furthermore, strategic opportunities are identified in digitalization and the use of management tools, which strengthen the competitiveness of SMEs and reduce legal, financial, and reputational risks (Ruggiero & Mussari, 2024; OECD, 2025).

These findings are consistent with the literature that warns of the urgency of coherent regulatory frameworks to facilitate the adoption of ESG criteria, especially in SMEs in emerging markets where policies are still incipient (Accenture & Global Compact, 2023). In short, overcoming the identified barriers requires not only immediate practical solutions such as training, partnerships, and financing, but also transformational leadership capable of consolidating a strategic vision oriented toward sustainability.

4. RESULTS

A detailed classification of ESG metrics is proposed, including key indicators in three dimensions: environmental, social, and governance. This set of indicators allows for a comprehensive assessment of SMEs' performance, promoting management aligned with the principles of sustainability and transparency. In this way, ESG indicators represent a redefinition of organizational performance, as they allow for assessing not only financial results but also contributions to collective well-being.

These metrics are neither universal nor fixed; their selection depends on each company's sector, size, geographic location, and sustainability maturity. However, there are widely recognized categories that cover key aspects. Table 1 presents a summary of simplified ESG metrics for SMEs, organized into indicators, formulas, and purposes.

Table 1. Simplified ESG metrics for SMEs

METRIC	INDICATOR	FORMULA	PURPOSE
ENVIRONMENTAL METRICS	Waterfootprint	Water footprint = $\frac{\text{Total water consumption}}{\text{Total production}}$	It measures the total amount of water used directly and indirectly in production processes, allowing for the identification of critical consumption points, guiding water efficiency strategies and supporting
		Total production can be: number of services, products produced,	

		etc.	sustainable resource management in the company.
	Carbon Footprint – Energy and Fuels	Total Ecological Footprint (tCO ₂) = (kWh of electricity) + (liters of fuel × conversion factor to kWh) (Carbon Footprint Ltd., 2024) tCO ₂ = tons of carbon dioxide	Measures greenhouse gas emissions (CO ₂ e) from the consumption of electricity and fossil fuels, facilitating the identification of opportunities for energy efficiency and emissions reduction.
	Carbon Footprint of Solid Waste Generated Tons of waste by type	CO ₂ e footprint = weight of waste (kg) × emission factor Solid waste Factors: Organic 1.9, Recycled inorganic 0.05, Non-recycled inorganic 0.8. (WRI & WBCSD, 2013)	It measures GHG emissions associated with the generation and disposal of solid waste, allowing for the comparison of recycling, reduction, and final disposal infrastructure alternatives to minimize impacts.
SOCIAL METRICS	Staff turnover and talent retention	Turnover rate = $\frac{\text{Number of departures during the period}}{\text{Average number of employees}}$ Average number of employees = $\frac{\text{Employees at the beginning of the period} + \text{employees at the end of the period}}{2}$	Measures the staff turnover rate
		Retention Rate = $\frac{\text{(\# of employees remaining at the end of a stated period)}}{\text{Number of total employees at the beginning of a stated period}} \times 100$	Measures the retention rate
	Gender Equality Index	$\frac{\text{Total number of women in the company}}{\text{Total number of employees during the period}}$	Measures the participation of women and diversity in the company
	Inclusion and diversity index	$\frac{\text{Total number of people with disabilities in the company}}{\text{Total number of employees in the company}}$	
	Training hours per employee	$\frac{\text{Total number of employee training hours}}{\text{Number of employees}}$	Measures annual training per person.

	Health and safety at work	$\frac{\text{Total amount of employee health and safety expenses}}{\text{Total ordinary income}}$	Measures incident frequency rate, days lost due to accidents
	Social responsibility	$\frac{\text{Total income}}{\text{Cash allocated to social actions}}$	% of income allocated to social actions, collaborative events, volunteer hours and community perception
GOVERNANCE METRICS	Transparency and disclosure	$\text{index} = \frac{\text{Total recommended ESG metrics}}{100} \times \frac{\text{Number of ESG metrics disclosed}}{\text{disclosure}}$	Quality and frequency of ESG or integrated reports
	Anti-corruption policies	$\text{Resolution Rate (\%)} = \frac{\text{Detected Cases}}{\text{Resolved Cases}} \times 100$	Number of cases of corruption or conflicts of interest detected and resolved
	Regulatory Compliance	$\text{Compliance index} = \frac{\text{Total audits performed}}{\text{Number of audits without observations}} \times 100$	Identified and planned risks related to climate, human rights, regulations, etc.

Source: Prepared by the authors based on OECD (2015), Kotsantonis, Pinney and Serafeim (2016), Porter and Kramer (2011), among other sources.

The table demonstrates the breadth of indicators that can be adopted: water footprint, energy efficiency, gender diversity, occupational health, ethics, and transparency, among others. Their incorporation requires updating accounting and management systems, as traditional models were designed for a different reality. In addition to responding to regulatory requirements, these metrics can become a competitive advantage by providing strategic information that guides responsible decision-making (OECD, 2015; Kotsantonis, Pinney, & Serafeim, 2016; Porter & Kramer, 2011).

On the environmental front, measuring energy consumption requires distinguishing between renewable and non-renewable sources. In SMEs, electricity, diesel, gasoline, or natural gas predominate, and their impact can be estimated using standardized conversion factors (Carbon Footprint Ltd., 2024). For example, one liter of diesel is equivalent to 10.2 kWh, and one liter of gasoline is equivalent to 8.9 kWh. This calculation allows for determining the carbon footprint according to international methodologies such as the GHG Protocol or IPCC factors. On average, an SME in the United Kingdom generates 15 tCO_{2e} per year, while in the European Union the average is 75 tCO_{2e}, varying by sector and efficiency measures (ESG Pro, 2023; Green, 2025).

In solid waste management, carbon footprint measurement is based on tables of emission factors that allow for accurate estimates of impact by type of waste and disposal method (WRI & WBCSD, 2013).

To provide empirical solidity to the proposal, ESG metrics were applied to an illustrative case of an SME in the food sector. Based on actual company information, social, environmental, and governance indicators were calculated, which allowed for verification of their viability and

relevance in a specific organizational context. This exercise constitutes an initial validation of the practical applicability of the metrics, which can be complemented in future studies with larger samples of SMEs in different sectors.

In a local SME in the food sector (bakery and pastry), records show a monthly consumption of 30 m³ of water and 1,932 kWh of electricity. Applying the proposed metrics, a water footprint of 0.006 m³ per unit produced was estimated, calculated according to ISO 14046 (2014), which supports the methodological validity of the indicator. Furthermore, a carbon footprint of 2.1 kg CO₂e associated with energy consumption was determined. These results demonstrate the relevance of environmental indicators for identifying critical consumption areas and supporting decision-making aimed at efficiency in production processes. Table 2 shows an example applied to the food sector, which includes water and carbon footprint indicators for a representative SME.

Table 2. Water footprint and carbon footprint indicators in SMEs in the food sector

Data	Procedure
Period: 1 month. Production: 5,000 units (1 month) Water: 30 m ³	Water footprint per unit = $30 \text{ m}^3 = .006 \text{ m}^3 \text{ per unit}$ 5000 This indicator is representative when compared consistently month over month, and we can also use data from companies in our same industry.
Period: 1 month Units produced: 5,000 Electricity (CFE): 1,932 kWh Diesel: 76.19 L (month) Factors used: Electricity: 0.439 kg CO ₂ e/kWh Diesel (combustion): 2.69 kg CO ₂ e/L	Diesel emissions = $76.19 \text{ L} \times 2.69 \text{ kg CO}_2\text{e/L} = 204.95 \text{ kg CO}_2\text{e}$ Electricity emissions = $1,932 \text{ kWh} \times 0.439 \text{ kg CO}_2\text{e/kWh} = 848.15 \text{ kg CO}_2\text{e}$ Total carbon footprint = $204.95 \text{ kg CO}_2\text{e} + 848.15 \text{ kg CO}_2\text{e} = 1,053 \text{ kg CO}_2\text{e}$ Carbon footprint per unit: $1,053 \text{ kg CO}_2\text{e} \div 5,000 \text{ units} = 0.2106 \text{ kg CO}_2\text{e/unit}$ This result indicates that each unit produced generates an average of 0.21 kg of CO ₂ e, which reflects the carbon intensity of the operation. By comparing this indicator with subsequent months or with other companies in the same sector, reduction goals and sustainability strategies can be established.
300 kg/month of waste 60% organic (180 kg) 30% recycled inorganic (90 kg) 10% non-recycled inorganic (30 kg) Factors used: Organic 1.9 kg CO ₂ e, Recycled inorganic 0.05 kg CO ₂ e, Non-recycled inorganic	Organic: $180 \text{ kg} \times 1.9 \text{ kg CO}_2\text{e/kg of organic waste} = 342.0 \text{ kg CO}_2\text{e}$ Recycled inorganic: $90 \text{ kg} \times 0.05 \text{ kg CO}_2\text{e} = 4.5 \text{ kg CO}_2\text{e}$ Non-recycled inorganic: $30 \text{ kg} \times 0.8 \text{ kg CO}_2\text{e} = 24.0 \text{ kg CO}_2\text{e}$ Carbon footprint per waste = $342.0 + 4.5 + 24.0 = 370.5 \text{ kg CO}_2\text{e}$ Carbon footprint per unit: $370.5 \div 5000 \text{ units} = .0741 \text{ kg CO}_2\text{e/unit}$

0.8 kg CO ₂ e	
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Fuentes: (ISO, 2014), (IPCC, 2006), (IEA, 2019), (WRI & WBCSD, 2013)

Methodological note. The emission factors applied are derived from international guidelines: ISO 14046 (2014) for water; IEA (2019) for electricity; IPCC (2006) for fossil fuels; and WRI & WBCSD (2014) for solid waste.

The results show that, while water consumption and waste generation are significant, the main source of CO₂e emissions comes from the use of electricity and fossil fuels. This finding is consistent with studies on the carbon footprint of production processes, where energy accounts for the largest proportion of emissions (IEA, 2019; WRI & WBCSD, 2013). For SMEs, this assessment is strategic, as it guides priority actions in energy efficiency and the transition to renewable energy, without neglecting responsible water use and waste reduction.

On the social front, indicators related to talent turnover and retention, gender equality, inclusion, training, health and safety, and social responsibility were evaluated. Table 3 summarizes the main social indicators of corporate sustainability considered in the analysis, along with their calculation formulas.

Table 3. Social indicators of corporate sustainability

Data	Procedure
Number of exits: 3 Number of employees at start: 20	Turnover rate = $3 \div 20 = 15\%$
	Retention Rate = $(17 / 20) \times 100 = 85\%$
	<i>The retention rate reached 85%, reflecting moderate job stability and the need to design loyalty strategies to reduce turnover.</i>
Number of women: 14 Total employees: 20	Gender Equality Index = $(14 \div 20) \times 100 = 70\%$ <i>This demonstrates strong female participation within the company, an aspect that contributes to gender equity in the sector.</i>
Employees with disabilities: 3 Total employees: 20	Inclusion and diversity index = $(3 \div 20) \times 100 = 15\%$ <i>This demonstrates a significant commitment to workplace inclusion and diversity, aligned with corporate social responsibility practices.</i>

Total training hours: 40 Number of employees: 20	Training hours per employee = $(40 \div 20) \times 100 = 2$ hours per employee <i>This represents an investment in skills development, although the value suggests the need to strengthen ongoing training programs..</i>
Health and safety amount: 230,000 Total revenue: 2,500,000	Occupational health and safety = $(230,000 \div 2,500,000) \times 100 = 9.2\%$ <i>This investment is considerably high and reflects a commitment to staff well-being. Additionally, two workplace incidents were recorded, which allows us to measure the effectiveness of the preventive measures implemented.</i>
Amount allocated to social actions: 12,000 Total income: 2,500,000	Social responsibility = $(12,000 \div 2,500,000) \times 100 = .48\%$ <i>0.48% of annual revenue was allocated to social and community activities (donations, volunteering, social projects). While this proportion is small, it constitutes a first step toward strengthening the company's external social impact.</i>

Source: Prepared by the authors using company data. Formulas adapted from guidelines.

The results reflect an 85% retention rate, indicating moderate job stability; a 70% gender equality index, demonstrating strong female participation; and a 15% inclusion index, confirming a commitment to workforce diversity. Likewise, an investment in health and safety equivalent to 9.2% of revenue was observed, a considerable amount that denotes a priority for staff well-being. However, training hours per employee are low (2 hours per year), highlighting the need to strengthen ongoing training. Finally, 0.48% of revenue was allocated to social initiatives, a still-incipient proportion. These results confirm that social metrics allow for identifying strengths and areas for improvement, linking people management with sustainability (ILO, 2013; GRI, 2016; OECD, 2011; Jobs Queensland, 2023; Tiu, 2024). In the governance area, indicators such as transparency, regulatory compliance, and the implementation of anti-corruption policies are key to accountability. Table 4 presents the main corporate governance indicators, including the transparency and disclosure index, which assess the degree of openness and accountability of organizations regarding sustainability.

Table 4. Corporate Governance Indicators

Data	Procedure
Published reports: 2 Required reports: 4	Transparency and Disclosure Index = $(2 \div 4) \times 100 = 50\%$ <i>This metric assesses a company's commitment to reporting its sustainability practices, results, and progress in a clear and accessible manner. A score of 50% means the organization is taking initial steps toward open reporting, but still has room for improvement to achieve full accountability.</i>
Policies implemented: 4 Required policies: 5	Resolution Rate (%) Anti-corruption Policies = $(4 \div 5) \times 100 = 80\%$ This metric assesses the company's commitment to clearly and accessibly reporting its sustainability practices, results, and progress. A score of 50% means the organization is taking initial steps toward open reporting, but still has room for improvement to achieve full accountability.
Total audits performed during the period: 12 Number of audits with no observations or with full compliance: 3	Regulatory Compliance Index = $(12 \div 3) \times 100 = 25\%$ This indicator measures the effectiveness of internal control processes through audits. 25% indicate that only a quarter of the processes evaluated fully comply with regulations, highlighting the need to strengthen control and supervision systems to reduce risks and ensure greater transparency.

Source: Prepared by the authors using company information and based on Maolani (2024); Garayeta et al. (2024); Siwendu and Ambe (2024); Ruggiero and Mussari (2024); OECD (2025).

The results show a transparency index of 50%, demonstrating initial progress, but with room for improvement in information disclosure. Anti-corruption policies were implemented at 80%, while the regulatory compliance index stood at 25%, reflecting the need to strengthen internal control systems. These findings, aligned with Maolani (2024), Garayeta et al. (2024), Siwendu and Ambe (2024), Ruggiero and Mussari (2024), and the OECD (2025), show that SMEs need to strengthen their governance structures to consolidate institutional trust and legitimacy.

Overall, the application of ESG metrics in the analyzed SME identified strengths such as female participation, workforce diversity, and investment in health and safety, as well as areas for improvement such as low training, limited reporting disclosure, and weaknesses in regulatory compliance. These findings confirm that ESG metrics not only facilitate technical and objective assessment but also constitute a strategic tool for guiding SMEs toward more sustainable, resilient, and competitive models (Schuwirth et al., 2019; OECD, 2022).

An international corporate example that reinforces the practical viability of ESG metrics is Danone, which in its 2025 Integrated Sustainability Report reports a 20% reduction in CO₂ emissions from milk sourced from its supplier farms since 2017, the use of 100% renewable electricity in its facilities in Spain, and the achievement of gender parity and elimination of the pay gap at all organizational levels (Danone, 2025; Corresponsables, 2025). This example shows

how both global corporations and local SMEs can apply similar sustainability concepts, adapted to their scale and context.

5. CONCLUSION

This article has proposed a comprehensive view of strategic leadership and corporate governance as key catalysts in the transition toward sustainable business models. Based on a theoretical and documentary analysis and the systematization of international frameworks, a table of ESG metrics adapted to the reality of SMEs is presented, with operational indicators that allow for performance assessment beyond the financial aspect. Its application in an SME in the food sector constitutes an initial empirical validation, confirming its practical applicability in specific organizational contexts.

It is concluded that integrating sustainability as a central axis of organizational purpose requires transforming structures, leadership, and corporate cultures. Complying with normative metrics is not enough; ethical, proactive, and resilient leadership that connects strategy, community, and the environment is required.

As a future line of research, we propose validating the table of metrics in different productive sectors and analyzing their impact on strategic decision-making in SMEs. This transition toward systemic performance redefines the concept of business success and strengthens institutional legitimacy in an increasingly demanding global environment. Finally, an integrative model of sustainable governance and strategic leadership is proposed, composed of five interrelated pillars: (1) a defined corporate purpose, guiding decisions toward sustainable objectives; (2) transformational leadership, mobilizing cultural change with an ESG focus; (3) diverse and responsible governance, oriented toward accountability; (4) ESG metrics integrated into performance, ensuring transparent evaluation; and (5) an aligned organizational culture based on shared values and continuous learning. This model seeks to guide organizations toward management that not only mitigates risks but also generates sustainable value over the long term. Under these conditions, the suggested strategic actions—training executives in ESG metrics, redesigning evaluation systems, promoting diverse boards, and integrating purpose into management—become key pillars for consolidating coherent, ethical, and competitive corporate governance.

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