

PROTOCOL FOR STRATEGIC SYNERGY AND DOUBLE MATERIALITY: AN ANALYSIS OF PRIVATE SOCIAL INVESTMENT IN THE NEOENERGIA GROUP'S ESG+F MODEL

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Abstract

This study analyzes the strategic integration of the Neoenergia Institute's Private Social Investment (PSI) with the social axis of the ESG+F (*Finance*) commitment, from the perspective of Double Materiality and the generation of Shared Value. The research explores how social actions transcend traditional philanthropy to consolidate themselves as strategic assets aligned with the 2030 Agenda. Given the relevance of ABNT PR 2030, the research examines the synergy between the Sustainable Development Goals (SDGs) and corporate goals. The methodology is based on a qualitative and documentary approach, structured by the *SDG Compass* protocol and the proposal of a synergy analysis protocol based on the Synergy Ratio, calculated based on the frequency of common goals between the institutional and social spheres. The results show that ISP acts as a catalyst for sustainability, integrating territorial performance with the value of the Group's intangible assets and the maintenance of its Social License to Operate. The study also discusses the phenomenon of *impression management*, the limits of institutional *disclosure*, and the risk of reputational bias in the sources analyzed.

Keywords: Private Social Investment; Double Materiality; ESG+F; SDGs; Strategic Synergy.

1. Introduction

The contemporary debate on sustainability and its transposition to the corporate and financial domain was driven in 2004 by the genesis of the acronym ESG (*Environmental, Social, and Governance*), institutionalized in the report *Who Cares Wins*. This initiative demonstrated that the integration of environmental, social, and governance criteria is not merely an ethical imperative but a critical determinant in risk mitigation and financial strategy formulation (ALVES, 2024). From this perspective, the transition to sustainable business models requires governance to transcend traditional risk management, incorporating long-term value creation for all *stakeholders*.

Subsequently, the promulgation of the 17 Sustainable Development Goals (SDGs) by the United Nations (UN) in 2015 established the metrics and global action plan necessary for the operationalization of the 2030 Agenda (BARBOSA, 2024). In the Brazilian context, the maturity of this agenda was evident in the publication of ABNT PR 2030 (2022) and ABNT PR 2030-1 (2024), which provide systematic guidelines and materiality criteria for the implementation of ESG strategies in the private sector. Within the scope of the Social (S) pillar of this standard, the constructs of Social Dialogue and Territorial Development stand out.

It is in this context that Private Social Investment (PSI) comes into play, conceptualized as the voluntary, planned, and monitored allocation of private resources for the generation of public benefit (ABNT, 2022). Data from the GIFE Census (2023) point to a transition from welfare philanthropy to strategic social investments aimed at creating Shared Value (PORTER; KRAMER, 2011), postulating the interdependence between business economic performance and social progress in the territories where they operate. However, the strategic effectiveness of the ISP depends on its ability to overcome the risk of *greenwashing*—communication practices that camouflage negative impacts with superficial social actions—through transparent disclosure based on evidence of real impact. In this sense, the proposal of this synergy protocol is in line with the vision of Bakker et al. (2023), who argue that the SDGs are no longer just ethical guidelines but have become critical components of a resilient business strategy focused on value creation.

The Neoenergia Group, a subsidiary of the Spanish group Iberdrola and one of the main players in the national electricity sector, operationalizes this integration through the Neoenergia Institute. Operating in the segments of networks, renewable sources, and liberalized markets (NEOENERGIA, 2024a), the organization uses the Institute as the executive arm of its sustainability strategy. In 2023, it reported the implementation of 17 social initiatives mapped under the SDGs (NEOENERGIA, 2024a). This structure reinforces the financial component (+F) of the ESG model, in which social performance is integrated with the reduction of socio-environmental liabilities and the strengthening of the group's sustainability *rating*.

Despite the documented advances reported, there is a scientific gap in understanding how such social projects are effectively integrated into the organization's financial commitment, called ESG+F, from the perspective of Dual Materiality (ADAMS et al., 2021). This concept assesses the bidirectional impact between socio-environmental performance (*impact materiality*) and the company's financial value (*financial materiality*). Financial integration (+F) assumes that ISP is not only a social cost but also an asset capable of mitigating operational risks, reducing the cost of capital, and ensuring institutional sustainability.

Therefore, this qualitative study, based on documentary analysis, aims to investigate the convergence between Neoenergia's ISP, its corporate strategy, and the SDGs. It seeks to demonstrate the role of social investment as a catalyst for corporate resilience and the maintenance of the Social License to Operate (BOUTILIER; THOMSON, 2011), while recognizing the intrinsic limitations of sustainability reports as primary sources and the need to separate institutional discourse from actual practice.

2. Literature Review

2.1. Sustainable Development: SDG Framework and 2030 Agenda

The evolution of the construct of sustainability reached a new level of operationalization with the ratification of the 2030 Agenda by the United Nations (UN) in 2015 (UN, 2015). The proposal of the 17 Sustainable Development Goals (SDGs), embodied in 169 interdisciplinary targets, established a global *framework*

that integrates the environmental, social, and economic dimensions in an inseparable manner.

As Atchabahian (2022) asserts, this milestone guides collective responsibility strategies that transcend state governance, calling on the corporate sector to act as a proactive agent of socio-environmental transformation through the systemic integration of global goals in local contexts. However, critical literature warns that superficial adoption of the SDGs without a change in *core business* can characterize *SDG Washing*, where companies select easily achievable goals (*cherry-picking*) for reputational purposes, without altering impactful productive structures (BAKKER et al., 2023).

In the contemporary business scenario, the incorporation of SDGs into business strategies reflects the transition from a reactive stance to a proactive orientation. Barbosa (2023) argues that alignment with global goals is not limited to the mitigation of socio-environmental risks, but is configured as a vector of competitive differentiation and innovation. By addressing systemic challenges, organizations promote the generation of Shared Value, a paradigm that supports the inseparability between the financial health of a corporation and the progress of the communities within its territories of operation (PORTER; KRAMER, 2011).

In this sense, recent literature introduces the concept of Double Materiality (ADAMS et al., 2021), which posits that the impact of companies on society and the environment (impact materiality) is as relevant to financial decision-making as the impact of external factors on the market value and sustainability of the company itself (financial materiality). This bidirectionality is what underpins the viability of the ESG+F model, transforming socio-environmental externalities into financial performance indicators.

2.2. The ESG Paradigm and Stakeholder Capitalism

The acronym ESG (*Environmental, Social, and Governance*) has established itself as the management paradigm that integrates sustainability criteria into the core of financial decision-making processes. Unlike traditional Corporate Social Responsibility (CSR), ESG prioritizes the materiality and measurement of quantifiable indicators that impact business continuity and asset management

(ALVES, 2024).

It is imperative to note, however, the phenomenon of *Impression Management*, where the corporate narrative in sustainability reports is constructed to project an image of socio-environmental excellence that does not always match the verified impact (NEU et al., 1998). The literature on *Greenwashing* points out that exclusive reliance on institutional sources requires careful analysis, differentiating between "reported evidence" and "verified impact" by third parties (LYON; MONTGOMERY, 2015).

ABNT PR 2030 (2022) conceptualizes ESG as a set of cross-cutting and interdependent criteria that serve as guidelines for assessing investment risks and opportunities. The adoption of this strategic architecture enhances institutional performance through: (i) Risk Management Optimization; (ii) Regulatory Compliance; (iii) Market Value and Reputation. This change in rationale underpins what is known as "Stakeholder Capitalism," where maximizing sustainable value in the long term depends on balancing shareholder expectations and the well-being of impacted communities (ALVES, 2024).

2.3. The Social Axis (S) and Social Materiality

Within the ESG framework, the Social axis is often highly complex to measure, as it focuses on human relations and subjective territorial impacts. Barbosa (2024) emphasizes that contemporary society demands that organizations act to supplement state shortcomings, operating as catalysts for well-being.

The financial integration of this axis is manifested in the concept of "Financial Social Materiality": the inability to manage social impact (such as conflicts with communities or job insecurity) translates into tangible costs, such as legal fines, operational disruptions, and an increase in the risk premium demanded by investors. For the electricity sector, these guidelines converge on the construct of Energy Justice (HEFFRON, 2021), which advocates for equity in the distribution of benefits and social burdens derived from energy infrastructure, ensuring the Social License to Operate. Table 1 summarizes the taxonomy of these criteria according to national regulations.

Table 1 – Regulatory Framework.

Strategic Dimension	Themes (Unit of Analysis)	Evaluation Criteria (ABNT PR 2030)	Impact on the Financial Dimension (+F)
Social Capital	Territorial Development	Private Social Investment (PSI) and Engagement.	Maintenance of Social License to Operate and reduction of interruptions.
Ethics and Human Rights	Human Rights	Prevention of violations and monitoring.	Mitigation of liabilities and reputational risks.
Human Capital	Work Practices	Health, safety, and development.	Talent retention and <i>turnover</i> reduction.
Governance	Value Chain	ESG certification and business ethics.	Resilience and operational continuity.

Source: Prepared by the authors (2026), based on ABNT PR 2030.

2.4. Private Social Investment (PSI) and the ESG+F Model

Private Social Investment (PSI) is defined by ABNT PR 2030 as the voluntary, planned, and systematic allocation of private resources to generate public benefits. The Institute for the Development of Social Investment (IDIS, 2024) highlights the transition from welfare-based philanthropy to strategic philanthropy. While the traditional model was characterized by sporadicity, the contemporary conception of PSI treats resources as investments guided by measurable social returns and aligned with *the organizational core business*.

In the ESG+F model, SII acts as a driver of financial resilience. Unlike a one-off donation, strategic SII in the "+F" dimension aims at business sustainability through the valuation of intangible (reputation) and tangible (reduction of operating losses) assets. Financial integration occurs when the social performance of the ISP influences metrics such as the ISE-B3 or the Dow Jones Sustainability Index (DJSI), directly impacting the company's share value and cost of capital (SESI, 2022).

3. Methodology

This research is characterized as a qualitative case study, exploratory and descriptive in nature, guided by the interpretive paradigm. The research seeks to understand the strategic integration of Private Social Investment (PSI) in the

management model of an organization in the electricity sector, using the Neoenergia Group as a unit of observation due to its relevance in the Corporate Sustainability Index (ISE-B3).

3.1. Data Collection and Definition of *the Corpus*

The literature review was conducted through a bibliographic survey in the Google Scholar, Scielo, and CAPES Periodicals databases, using the combined (Boolean) descriptors: "ESG" AND "Private Social Investment" AND "Electricity Sector." Publications from the 2020-2025 period were prioritized to ensure adherence to the normative evolution of the 2030 Agenda and the ABNT Recommended Practices. The methodological design is based on Document Analysis (CELLARD, 2008), a technique that enables the extraction of evidence from stable primary sources. The document *corpus* was intentionally constituted, comprising the following institutional documents from the Neoenergia Group and the Neoenergia Institute: (i) Annual and Sustainability Reports (fiscal years 2022 and 2023); (ii) Impact Reports and Greenhouse Gas (GHG) Inventories; (iii) Neoenergia Institute Biennial Action Strategy (2024-2025); (iv) Iberdrola Group Foundations Master Plan (2022-2025). It should be noted that the selection of documents was guided by the criteria of Double Materiality, selecting sources that report both the organization's socio-environmental impacts (*impact materiality*) and the reflection of these impacts on the Group's financial value and governance (*financial materiality*). The analysis also considered adherence to the standards of *the Global Reporting Initiative* (GRI) and the *Sustainability Accounting Standards Board* (SASB), which guide the financial *disclosure* of ESG issues (ALVES, 2024).

3.2. Content Analysis and Validation Procedures

Data processing followed the assumptions of Content Analysis (BARDIN, 2011), processed in three phases: (i) Pre-analysis; (ii) Material Exploration; (iii) Results Processing.

To ensure scientific rigor and mitigate subjectivity, a "Peer Validation" procedure (triangulation of researchers) was adopted, whereby the coding of each initiative

was independently reviewed by two authors, with discrepancies resolved by consensus.

In addition, a critical section on *Disclosure Bias* was instituted. It is recognized that institutional reports operate under the logic of *Impression Management*; therefore, the analysis focused on the search for "supporting evidence" (quantified goals, executed budgets, and indicators audited by third parties) rather than "affirmative narratives" lacking metric data. This differentiation between "reported evidence" and "verified impact" is fundamental to the sustainability of the theoretical inferences of this study.

3.3. Integration Framework: SDG Compass Protocol

To structure the convergence between the matrix guidelines (Iberdrola, 2026) and territorial operationalization (Instituto Neoenergia), the *SDG Compass* protocol (GRI; UN GLOBAL COMPACT; WBCSD, 2015) was applied. The analysis operationalized the five stages of the protocol, as detailed in Table 2.

Table 2 – SDG Compass Operationalization.

Protocol Stage	Application Procedure	Documentary Evidence Used
1. Understanding the SDGs	Translation of the goals into the context of the electricity sector.	Agenda 2030; CNAE (National Classification of Economic Activities) Electric Sector.
2. Define Priorities	Application of the Synergy Ratio on material topics.	Neoenergia Materiality Matrix.
3. Establish Goals	Identification of social KPIs (<i>Key Performance Indicators</i>) and time horizons.	2022-2025 Foundation Master Plan.
4. Integration	Alignment of the ISP with +F Governance and the <i>core business</i> .	Sustainability Reports (GRI).
5. Reporting/Communication	Transparency verification and	Audit Opinions (PwC - PricewaterhouseCoopers/KPMG)

	external assurance.	- <i>Klynveld Peat Marwick Goerdeler</i> .
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Source: Prepared by the authors (2026), based on GRI, UN Global Compact, and WBCSD (2015).

As part of Stage 2 (Definition of Priorities), strategic synergy was quantified by calculating the Synergy Ratio (SR), defined by the formula:

$$SR = (Mc/Mt) \times 100$$

Where:

- Mc (Common Goals): represents the number of SDG goals (unit of analysis: specific goal level, e.g., 6.1, 7.1) identified as convergent between the *holding* company's strategic plan and the institute's lines of action.
- Mt (Total Goals): the total universe of goals mapped in the Neoenergia Institute's ISP portfolio (2024) in the period analyzed.

The adoption of a binary approach (1 for presence of the goal; 0 for absence) is justified by the need for objectivity in the Document Content Analysis, allowing the extent of strategic alignment to be identified. It is recognized as a limitation that this approach does not measure the intensity of financial investment per goal, but rather the strategic centrality of each SDG in the organization's governance. For practical validation, the coding followed concrete examples: if a rural sanitation initiative by the Institute explicitly mentioned access to drinking water, it was coded as Goal 6.1 (Presence = 1). If the *Holding Company* also listed Goal 6.1 in its sustainability commitments, this goal would be included in the Mc set. This rigor seeks to avoid causal extrapolations without documentary support.

4. Results and Discussion

The integrated analysis of the governance instruments of the Iberdrola Group, Neoenergia, and its Institute reveals an architecture that seeks to operationalize the Dual Materiality Theory (ADAMS et al., 2021; EDMANS, 2023). The data suggest that the organization monitors how the climate scenario affects its financial performance (financial materiality) and how its operations impact the social capital of the territories (impact materiality). Unlike competitors such as Engie Brasil, which focuses its social strategy on a just energy transition, or EDP Brasil, which has a

strong emphasis on urban innovation, Neoenergia uses the Institute as a "frontier arm" to manage social risks in concession areas (NEOENERGIA, 2024b).

4.1. Neoenergia Group: Institutional Context and ESG+F Commitment

The organization's purpose converges with the concept of Energy Justice (HEFFRON, 2021). As detailed in Table 3, the Financial (+F) component manifests itself in what Serafeim (2022) defines as "Integrated Performance," where social metrics are internalized for value protection and operational risk mitigation. Maintaining the Social License to Operate (BOUTILIER; THOMSON, 2011) is the main intangible asset identified. Table 4 shows how the network of institutional partnerships acts as an external validation mechanism, reducing the perception of risk for investors.

Table 3 – Holding Commitments Matrix.

Strategic Axis	SDG	Operational Action (Evidence)	SDG Compass Target	Financial Materiality (+F) / Justification
Decarbonization	13	Policy against Climate Change and electric fleet.	13.2	Liability mitigation and risk premium.
Universalization	7	"Light for All" program (rural areas).	7.1	Expansion of the asset base and contractual guarantees.
Innovation	7	R&D (Research and Development) in <i>Smart Grids</i> and intelligent networks.	7.b	Reduction of theft and optimization of CAPEX (<i>Capital Expenditure</i>).
Social Justice	10	Efficiency in vulnerable communities.	10.2	Reduction of default and reputational capital.

Source: Prepared by the authors (2026), based on Neoenergia (2024b) and ABNT PR 2030.

Table 4 – Partnership Network.

Level of Engagement	Strategic Partners	SDGs	Function in the ESG+F Protocol	Validation Metric
Global	Global Compact; Iberdrola.	17	Alignment with global standards.	Assurance Audit (GRI).

Sector	CEBDS (Brazilian Business Council for Sustainable Development); Ethos Institute.	17	Leadership and sector <i>benchmarking</i> .	Maintenance in the ISE-B3 Index.
Territorial	Universities; local NGOs.	4 and 6	Management of externalities and support for the Social License to Operate.	Reduction of territorial disputes.

Source: Prepared by the authors (2026), based on Neoenergia (2024b) and Lyon et al. (2018).

4.2. The Neoenergia Institute and Corporate Political Responsibility

The application of the Synergy Ratio (SR), formalized in the methodology, allowed the qualitative analysis to be transposed into a governance metric. Table 5 presents the binary matrix (1 or 0) that served as the basis for coding, while Table 6 systematizes the percentage of alignment found using the Synergy Ratio formula.

Table 5 – Binary Intersection Matrix.

SDG Analyzed	Neoenergia (Brazil)	Institute (ISP)	Iberdrola (Global)	Synergy Classification
SDG 1 (Poverty)	[1]	[1]	[1]	Common Core
SDG 2 (Hunger)	[1]	[0]	[0]	Exclusive <i> Holding</i>
SDG 3 (Good Health)	[0]	[1]	[1]	Synergy Institute + Headquarters
SDG 4 (Education)	[1]	[1]	[1]	Common Core
SDG 5 (Gender)	[1]	[1]	[1]	Common Core
SDG 6 (Water)	[0]	[1]	[0]	Exclusive Institute
SDG 7 (Energy)	[1]	[1]	[0]	Local Synergy (Brazil)
SDG 8 (Work)	[1]	[0]	[0]	Exclusive <i> Holding</i>
SDG 9 (Industry)	[1]	[0]	[0]	Exclusive <i> Holding</i>
SDG 10 (Inequality)	[1]	[1]	[1]	Common Core
SDG 11 (Cities)	[1]	[0]	[0]	Exclusive <i> Holding</i>
SDG 13 (Climate)	[1]	[0]	[0]	Exclusive <i> Holding</i>
SDG 17 (Partnerships)	[0]	[1]	[1]	Synergy Institute + Matrix

Source: Prepared by the authors (2026). Note: The coding [1] is based on the identification of documentary evidence linked to the specific goals of the 2030 Agenda.

Table 6 – Synergy Ratio (SR) Results and Theoretical Interpretation.

Synergy Category	Synergy Ratio (SR %)	Representative SDGs	Inference on the ESG+F Model
Common Core	31	1, 4, 5, and 10	Global Identity: Reflects the cross-cutting values of the European matrix.
Exclusive Holding	38	2, 8, 9, 11, and 13	Business Strategy: Focus on green infrastructure and decarbonization (+F).
Exclusive Institute	8	6	Frontier Management: Water risk management and Social License to Operate.
Other Synergies	23	3, 7, and 17	Scalability: Local adaptation and mission-based partnerships.

Source: Prepared by the authors (2026). Note: Calculation based on the application of the Synergy Ratio.

4.3. Critical Discussion: *Disclosure Bias and Greenwashing*

Despite the identified documentary synergy, it is imperative to analyze the data from the perspective of *Impression Management* (NEU et al., 1998). The literature on *Greenwashing and Impression Management* (LYON; MONTGOMERY, 2015) warns that companies in sectors with high environmental impact tend to emphasize the Social pillar (ISP) to mitigate scrutiny of negative externalities. Unlike "verified evidence," what the reports present is "reported evidence" of strategic intent. Table 7 exemplifies this practical coding, demonstrating the potential connection between social action and financial gain (+F).

Table 7 – Methodological Framework: Examples of Coding and Financial Evidence.

SDG	ISP Initiative (Evidence)	SDG Compass / Agenda 2030 Goal	Evidence of Integration +F (Suggested)
SDG 5	Women's School (Electrician Training).	5.5: Ensure women's full and effective participation and equal opportunities.	Reduction in external recruitment costs and decrease in technical <i>turnover</i> .
SDG 6	Sanitation and Water Projects for rural communities.	6.1: Achieve universal and equitable access to safe and clean drinking water.	Minimization of territorial disputes, water security, and maintenance of the Social License to Operate.
SDG 7	Light for All Program (rural electrification).	7.1: Ensure reliable, sustainable, and modern access to energy for all.	Expansion of the active customer base, increase in gross revenue, and asset valuation.

SDG 13	Electrification of the Operational Fleet (Electric Vehicles).	13.2: Integrate climate change measures into strategies and planning.	Reduction of fuel costs and anticipation of future carbon taxation.
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Source: Prepared by the authors (2026).

In short, the identified "strategic synergy" suggests sophisticated risk management. While the *holding company* focuses on renewable CAPEX, the Institute acts in the management of critical externalities (SDG 6).

However, without the disclosure of detailed financial performance data, the +F dimension remains partially demonstrated, based on the premise that improved ESG ratings (ISE-B3) result in lower funding costs (ALVES, 2024).

4.4. Cross-cutting discussion: Financial materiality and the new frontier of socio-environmental value

The strategic convergence identified between the *holding company* and its social arm should not be interpreted merely as an alignment of guidelines, but as a response to the evolution of Dual Materiality in the post-2024 global scenario.

While the Synergy Ratio (SR) results show a "Common Core" of 31%, critical analysis suggests that this intersection operates as a mechanism for Social Efficiency. According to Henderson (2020), the survival of corporations in a polycrisis scenario depends on the ability to reimagine capitalism, where profit is a consequence of solving systemic problems. In the case of Neoenergia, the alignment on issues of dignity and equity (SDGs 1, 5, and 10) signals that the organization seeks to internalize what Sandel (2020) describes as the pursuit of the "Common Good," mitigating the "tyranny of merit" through territorial development in regions where state gaps are latent.

From the perspective of the ESG+F model, the Institute's activities in areas of low direct synergy with its core business – such as SDG 6 (Border Management) – constitute what Serafeim (2022) defines as Integrated Performance. The "water

ethic" proposed by Hoekstra (2020) establishes that water efficiency and universal access are not only operational goals but imperatives of equity that sustain environmental sustainability. For the Neoenergia Group, by ensuring sanitation in vulnerable communities, the organization not only fulfills a social function, but also protects the intangible asset of reputation and guarantees the maintenance of the Social License to Operate, which in 2026 is already priced as a critical capital risk by institutional investors.

In this sense, the documented synergy acts as a reducer of information asymmetry. With the consolidation of global sustainability disclosure standards (IFRS S1 and S2, 2024/2025) and the maturation of ABNT PR 2030-1 (2024), the market requires that social impact (materiality of impact) be translated into financial resilience metrics (financial materiality).

Additionally, the robustness of this integration in the ESG+F model is ratified by external third-party assurance (Table 2), which mitigates the risk of *greenwashing* and lends credibility to the reported impact indicators. This external validation is what allows Neoenergia to overcome the barrier of purely reputational social investment to achieve financial materiality, evidenced by the growing issuance of debt securities linked to sustainability goals (*Sustainability-Linked Bonds*).

In this scenario, the Institute's exclusive focus on SDG 6 (Frontier Management) proves to be a critical differentiator, filling gaps in sanitation and water management in areas where the *holding company's* commercial operations encounter technical or ethical limitations. The social arm works to reduce territorial liabilities and transition risks. Thus, the +F component ceases to be a theoretical projection and materializes in lower capital costs and greater attractiveness for investment funds operating under the guidelines of cutting-edge Brazilian regulations for the sector.

It can be concluded that the +F component of the analyzed model reflects the transition to a "Mission Economy," as outlined by Mazzucato (2021). "Energy Justice" ceases to be an accessory discourse and becomes a prerequisite for governance, ensuring that the shared value generated by the ISP is the foundation for maintaining the organization's competitiveness and capital attractiveness in the 2026 scenario.

5. Conclusions

This study analyzed the synergy of the Sustainable Development Goals (SDGs) in the Social Action initiatives of the Neoenergia Institute, understanding its role as the executor of Private Social Investment (PSI) in the Social Axis of the Neoenergia Group's ESG+F Commitment. The investigation showed that the use of *the SDG Compass framework* allowed the organization to translate its sustainability strategy from the theoretical plan into a measurable territorial impact.

The main inferences of this study, based on the application of the Synergy Ratio Protocol (SR), highlight that:

(i) Strategic Integration and Double Materiality: The Neoenergia Institute transcends traditional philanthropy, consolidating itself as a link that humanizes the brand and guarantees the Social License to Operate. Its actions demonstrate Dual Materiality, in which social investment (impact materiality) mitigates operational and reputational risks that could directly impact the company's financial value (financial materiality).

(ii) Territorial Intelligence and Risk Management: Exclusive action on SDG 6 (Water and Sanitation) identifies proactive risk management, mitigating gaps in basic infrastructure that direct commercial operations cannot reach, protecting the Group's reputation in vulnerable areas.

(iii) Shared Value: The convergence in the SDGs of dignity and equity (1, 5, and 10) validates the premise that diversity and social development are vectors of resilience and competitive differentiation.

(iv) Integrated Performance (+F): The inclusion of the Financial component in the ESG model suggests that social performance is strategically linked to financial *rating*, although direct causality requires validation by external audited data.

The analysis showed that, despite the operational distinctions between the parent company and the subsidiary, there remains a robust strategic intersection. The Neoenergia Institute acts as the catalyst that allows the ESG strategy to be translated into territorialized social impact. A central finding lies in the cross-cutting nature of the action: the praxis of social actions goes beyond the scope of the formal

priority SDGs, conferring ethical legitimacy on *the holding company*.

Despite the rigor applied, the work has methodological limitations intrinsic to the use of secondary sources and corporate *disclosure* documents. It is recognized that annual reports are strategic communication tools and may contain biases of self-assessment or impression management. Therefore, the results presented here describe the strategic architecture planned by the organization, and future field research is recommended to contrast the reported indicators with the actual impact perceived by the final beneficiaries.

As an agenda for future work, we propose: (i) In-depth Impact Studies: Field research with beneficiaries to contrast social perception with the reported indicators; (ii) Comparative Analysis (*Benchmarking*): Application of this protocol to other *players* in the electricity sector to verify whether ESG+F integration is a sectoral trend; (iii) Longitudinal Financial Correlation: Econometric investigations to assess the quantitative correlation between the ISP and market value (ISE-B3).

Finally, this study proposes the synergy analysis protocol outlined here as a replicable methodological tool for future investigations that seek to assess the real alignment between institutional discourse and the effective practices of the 2030 Agenda.

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