

GUIDELINES, MEASURES, AND ADAPTATION STRATEGIES TO SUPPORT THE TRANSITION OF COMPANIES TOWARD ESG-BASED BUSINESS

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Received: 24 April 2026 / Revised: 16 June 2026 / Accepted: 25 June 2026

ABSTRACT

Purpose – This study develops guidelines, measures, and strategies for Thai listed companies transitioning toward ESG-driven business operations, framed as an “18-Month ESG Roadmap.”

Methodology – The roadmap integrates the Context, Input, Process, and Product (CIPP) model with Management by Objectives (MBO) principles across seven stages (Phases 0–6). Its core components include a Double Materiality assessment, an organizational structure based on the Three Lines of Defense model, and a comprehensive Master ESG Data Dictionary together designed to link sustainability performance with the organization's financial value. The framework was validated using the Appropriateness Evaluation Criteria Framework (AECF), drawing on insights from 30 subject-matter experts to confirm its suitability, feasibility, and practical utility.

Results – The resulting measures serve as a strategic instrument enabling listed companies to strengthen their position in the SETESG Index and secure sustainable competitive advantage in the Thai capital market. Expert evaluation under the AECF model rated the manual and strategies at the highest level of approval, confirming their effectiveness amid the accelerating global and local trend toward sustainable investing.

Implications – The validated guidelines function as a strategic blueprint, helping companies cultivate a distinct competitive edge while streamlining access to capital through enhanced institutional credibility.

Originality/Value – The study's contribution lies in providing listed companies with actionable ESG management strategies and frameworks for sustainable growth. By adopting these practices, organizations can drive positive transformation in the Thai capital market, aligning corporate objectives with both international sustainability trends and national policy directions.

Keywords: Strategic plan, Sustainable growth, Long-term value creation, ESG, CIPP Model

Research Type: Research Article

INTRODUCTION

The contemporary global landscape is grappling with an escalating environmental crisis, marking a definitive transition into the era of “Global Boiling.” This shift has catalyzed an urgent systemic reconfiguration of economic models toward a Green Economy. Central to this survival strategy is the Paris Agreement, a pivotal international framework aimed at mitigating greenhouse gas (GHG) emissions through mechanisms such as carbon credits to maintain the global temperature threshold below 1.5°C (United Nations, 2023).

Citation:

Thanikornchot, S., & Panyanuwat, A. (2026). Guidelines, measures, and adaptation strategies to support the transition of companies toward ESG-based business. *RMUTT Global Business Accounting and Finance Review*, 10(1), 59-71.
<https://doi.org/10.60101/gbafr.2026.287875>

At the COP26 summit, Thailand articulated a resolute commitment to these global imperatives, pledging to achieve Carbon Neutrality by 2050 and Net Zero Emissions by 2065. Despite Thailand's contribution to global CO₂ emissions ranking 21st (approximately 0.87%) (MReport, 2023), the exigencies of international trade regulations and impending carbon taxes necessitate accelerated adaptation. Consequently, the Bio-Circular-Green (BCG) Economy model has emerged as a cornerstone for Thai industries to generate value-added growth while ensuring ecological equilibrium.

The Environmental, Social, and Governance (ESG) framework has evolved into a fundamental benchmark for global institutional investors. Its multidimensional criteria encompass the Environmental dimension (rigorous energy management, waste reduction, and GHG mitigation), the social dimension (protection of human rights, occupational safety, and holistic human capital development), and the Governance dimension (corporate transparency, ethical equity, and robust risk management architectures). Empirical data underscores this trend: ESG Integration investment strategies witnessed a 143% growth rate between 2016 and 2020 (Global Sustainable Investment Alliance, 2020), suggesting that enterprises prioritizing ESG metrics do not merely hedge against long-term operational costs and fraudulent risks, but also significantly enhance their competitive edge and facilitate easier access to global capital markets.

While the number of Thai listed companies meeting the SET ESG Ratings criteria has surged from 51 in 2015 to 228 in 2025 (Stock Exchange of Thailand, 2024), a critical disparity persists. Sustainable adaptation remains disproportionately concentrated among large-scale corporations possessing superior capital and technological infrastructure. Furthermore, a substantial portion of the Net Asset Value (NAV) in Thai sustainable funds is currently allocated to Global Equity, with domestic sustainable stocks accounting for a mere 4% of these portfolios (Morningstar, 2021). This resource gap raises a central concern: what strategic measures, guidelines, and business-model components can be developed to support the transition of SET-listed companies toward ESG-based business practices, and to what extent are such measures appropriate, feasible, beneficial, and acceptable according to expert evaluation?

To address these questions, this study formulates a comprehensive “Blueprint” enabling Thai listed companies to navigate the ESG transition systematically. By incorporating Double Materiality assessments and developing centralized ESG databases, the research seeks to bridge the resource gap between large-cap and small-cap enterprises. Accordingly, it pursues two objectives: first, to develop an ESG transition framework comprising strategic measures, guidelines, and business-model components for SET-listed companies; and second, to assess the appropriateness, feasibility, benefits, and acceptability of the proposed framework through expert evaluation. In doing so, the study contributes a Thai-context, governance-integrated transition framework that operationalizes ESG adoption through an evaluable, phased roadmap, offering both a theoretical synthesis and a practical instrument for listed companies, policymakers, and investors.

LITERATURE REVIEW

To establish a robust conceptual foundation for the subsequent analysis and strategic development, this study synthesizes an extensive body of literature, fundamental theories, and pertinent research. The theoretical underpinning is constructed through the integration of international benchmarks and national policy frameworks, focusing on three pivotal dimensions:

Theoretical Basis for Sustainable Integration

The synthesis of this research is anchored in a tripartite framework that aligns global imperatives with localized strategic philosophies shown in Figure 1. First, the study connects sustainable development goals (SDGs), drawing a direct correlation between the UN's 17 global goals and the core pillars of ESG. The Environmental dimension is mapped against Goals 6, 7, 9, 12, 13, 14, and 15; the Social dimension intersects with Goals 1–5 and 8–11; while the Governance dimension is intrinsically linked to Goals 16 and 17, emphasizing peace, justice, and global partnerships (OECD, 2018; SDG Move, 2024). In addition, the BCG Economy Model plays a central role in Thailand's strategic transformation by integrating the Bio, Circular, and Green economies. This model aims to shift the country from relying primarily on traditional comparative advantages toward

developing high-value competitive advantages. Science, Technology, and Innovation (STI) are therefore positioned as fundamental mechanisms for driving economic growth, enhancing sustainability, and strengthening national competitiveness (Ministry of Higher Education, Science, Research and Innovation, 2021; National Science and Technology Development Agency, 2019). Finally, the Sufficiency Economy Philosophy (SEP), which originates from Thai royal wisdom, serves as the overarching ethical and operational foundation of this framework. SEP provides a resilient basis for both BCG and ESG initiatives by encouraging moderation, reasonableness, and self-immunity. As a result, development can remain balanced, sustainable, and adaptive to the volatile changes of the global environment.



Figure 1. Sustainability Synergy Framework (SEP-BCG-SDGs Integration)

Note. Figure created by the author using a generative AI image tool ([May] 2026) based on the author's prompt. The conceptual structure was adapted from Tantayanon (2016)

ESG Strategic Management and Value Creation

Transitioning toward an ESG-centric business model extends far beyond mere regulatory compliance; it represents a strategic pivot toward multidimensional value augmentation. Rather than treating environmental, social, and governance considerations as isolated obligations, this approach reframes them as interdependent drivers of long-term organizational resilience and competitiveness. Accordingly, this study categorizes these enhancements into three core pillars—Environmental, Social, and Governance—each contributing distinctively to the creation of sustainable business value.

The Environmental (E) pillar centers on the implementation of tangible resource management protocols, energy efficiency optimization, and verifiable GHG mitigation strategies. These measures not only reduce operational costs and exposure to environmental risk but also position the organization to capitalize on the transition toward a low-carbon economy. The Social (S) pillar concerns the cultivation of robust stakeholder engagement frameworks rooted in human rights advocacy and social equity, thereby strengthening the trust, legitimacy, and human capital on which durable performance depends. The Governance (G) pillar, in turn, emphasizes the institutionalization of transparency, rigorous auditability, and comprehensive anti-corruption mandates, ensuring that strategic decisions are accountable and that the integrity of the organization is safeguarded across all levels.

Taken together, these three pillars demonstrate that ESG strategic management functions as a cohesive value-creation system rather than a fragmented set of compliance activities. By embedding environmental stewardship, social responsibility, and sound governance into the core of the business model, organizations can convert sustainability commitments into measurable competitive advantage and enduring stakeholder value.

Evaluative Frameworks and Methodological Tools

To ensure a systematic and comprehensive assessment of ESG initiatives, this study employs two specialized diagnostic models that complement each other in evaluating both the implementation

process and the strategic appropriateness of ESG-related projects. The first model is the CIPP Model, which serves as a holistic evaluation framework for examining four key components: Context, Input, Process, and Product. Through this model, the study is able to assess the relevance of ESG initiatives to organizational needs and external conditions, the adequacy of resources and strategic support, the effectiveness of implementation procedures, and the extent to which the intended outcomes are achieved. As a result, the CIPP Model provides a structured basis for data-driven decision-making, particularly in the planning, monitoring, improvement, and iterative refinement of ESG projects. The second model is the Appropriateness Evaluation Criteria Framework (AECF), which functions as a rigorous strategic assessment tool for determining the overall suitability and practical value of ESG initiatives. This framework utilizes seven distinct criteria: utility, feasibility, practicality, acceptance, satisfaction, comprehension, and innovation or novelty. These criteria enable the study to evaluate whether ESG initiatives are useful for stakeholders, feasible within organizational constraints, practical for real-world implementation, acceptable to relevant parties, satisfactory in terms of perceived outcomes, understandable to users and implementers, and innovative in creating new values. Therefore, the integration of the CIPP Model and AECF allows this study to assess ESG initiatives in a more balanced, systematic, and multidimensional manner (Stufflebeam, 2003).

Research Synthesis and Identification of Structural Gaps

An extensive meta-analysis of 49 academic sources reveals a predominantly positive correlation between ESG integration and financial fortitude (Yu & Xiao, 2022; Friede et al., 2015; Fatemi et al., 2018). While these studies converge on a predominantly positive ESG–performance relationship, its magnitude varies across markets, samples, and disclosure regimes (Khan et al., 2016; Eccles & Klimenko, 2019; Katsamakos & Sanchez-Cartas, 2023), and evidence specific to the Thai market remains comparatively limited (S. Panich, 2022). Nevertheless, this study identifies six critical lacunae within the Thai corporate context that remain under-addressed. The first is Temporal Breadth, reflecting a pronounced lack of longitudinal studies spanning a decade or more to capture long-term structural shifts. The second is Substantive Depth, a prevailing reliance on binary “dummy variables” rather than measuring substantive operational outcomes (substance over form). The third is Investor Heterogeneity, characterized by insufficient differentiation between the behavioral perspectives of institutional versus retail investors in the Thai capital market. The fourth concerns Integrated Mechanisms, namely a lack of clarity on how ESG mandates are functionally embedded into internal KPIs or Management by Objectives (MBO) frameworks. The fifth is Carbon Market Dynamics, marked by a dearth of empirical evidence regarding the participation of Thai firms in voluntary or mandatory carbon trading schemes. Finally, the sixth is Mediating Variables, the absence of a definitive Structural Path Model that delineates the specific causal trajectory from ESG commitment to firm valuation.

Conceptual Framework

This research is anchored in a comprehensive Input-Process-Output (IPO) framework shown in Figure 2, designed to capture the dynamic transformation of corporate entities as they transition toward sustainable paradigms:

Input: An analytical baseline comparing pre- and post-adaptation business environments, specifically focusing on the strategic integration of ESG criteria.

Process: The systematic assimilation of ESG principles into core management systems and corporate governance architecture, ensuring that sustainability is embedded at the institutional level.

Output/Outcome: The realization of enhanced corporate valuation, superior financial performance, and increased institutional investor appetite. Within this framework, ESG-integration practices function as the independent constructs that are expected to influence the dependent outcomes (firm valuation, financial performance, and investor appetite), with governance structures and data infrastructure operating as enabling mechanisms that condition the strength of this relationship.

The Core Objective: At the heart of this framework is the formulation of “Adaptation to ESG Conditions” a specialized suite of guidelines, measures, and strategies. These outputs are

rigorously tested and verified to serve as a high-fidelity strategic instrument, enabling Thai listed companies to navigate the transition toward systemic sustainability with precision and resilience.

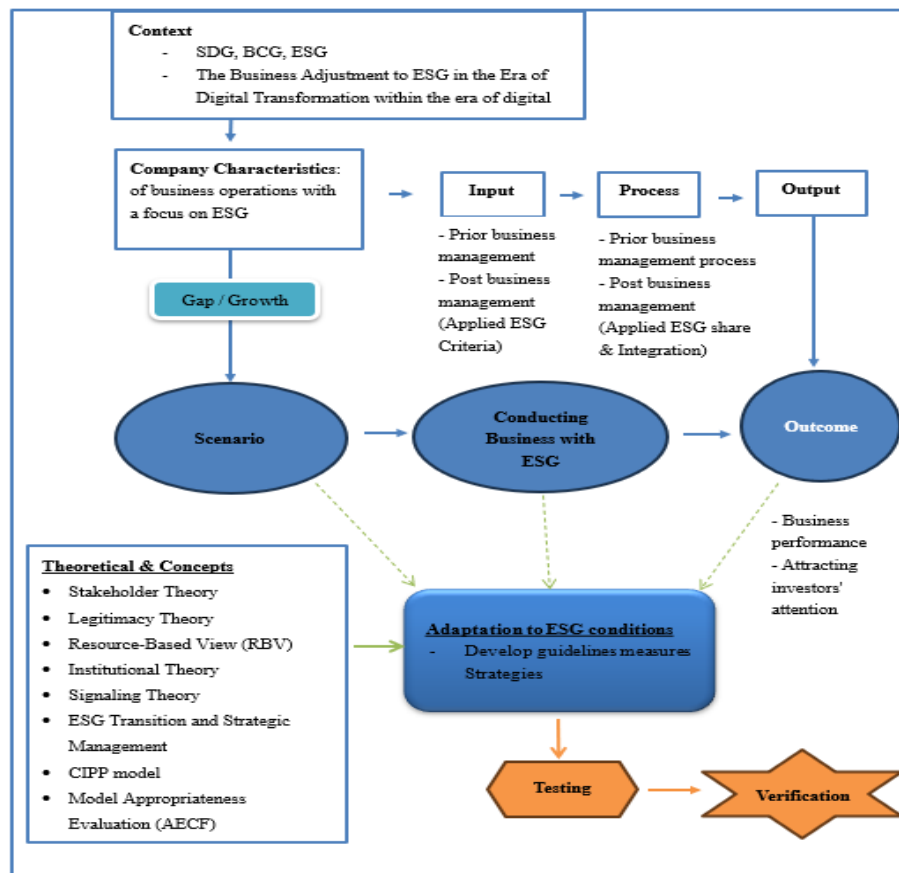


Figure 2. The Research Conceptual Framework

METHODOLOGY

The formulation of the guidelines, measures, and adaptation strategies for ESG integration within Thai listed companies is grounded in the authors' own analysis and synthesis of secondary data (Authors' analysis, 2026). This study adopts a qualitative-dominant, developmental research design, in which an extensive documentary synthesis is used to construct the framework, which is then validated through expert evaluation. The research proceeds in the following phases:

Qualitative Phase: A rigorous documentary analysis was conducted to examine the contexts, operational characteristics, and performance trajectories of companies listed on the SET ESG Index. This longitudinal analysis spans a ten-year epoch, tracing the transformative evolution of firms as they aligned their business models with ESG mandates to secure inclusion in the sustainability index. Documentary sources comprised annual reports, 56-1 One Reports, and sustainability disclosures of SET ESG-listed companies, together with regulatory publications of the SET and SEC, purposively selected on the basis of continuous SET ESG (formerly THSI) inclusion during 2015–2024. These materials were examined through thematic content analysis, in which recurring practices were coded, categorized, and synthesized into the components of the proposed framework.

Developmental and Validation Phase: The framework synthesized from the qualitative phase was operationalized into a strategic handbook and subjected to expert validation. Consistent with a qualitative-dominant, developmental design, this study relies on an expert-judgment approach rather than a broad-based investor survey: the appropriateness, feasibility, utility, and acceptability of the proposed measures were assessed quantitatively by purposively selected experts using a structured evaluation instrument (see the Verification and Strategic Evaluation section).

The empirical evidence derived from both phases was subsequently synthesized to architect the proposed measures and strategies under a formal ESG project development scheme. The findings from the documentary and expert-validation phases were integrated using triangulation to develop and refine the ESG strategic framework.

Verification and Strategic Evaluation

To ensure the theoretical and practical integrity of the proposed framework, the Appropriateness Evaluation Criteria Framework (AECF) was utilized. The strategies were meticulously appraised based on seven evaluative dimensions defined by the AECF: Utility, Feasibility, Practicability, Acceptability, Satisfaction, Understanding, and Novelty.

The evaluation engaged a panel of 30 Key Informants, selected via Purposive Sampling to ensure specialized expertise. Experts were selected against predefined criteria, namely, at least ten years of experience in ESG, sustainability, corporate strategy, or institutional investment, and a master's degree or higher and the panel comprised a balanced composition of corporate executives from SET-listed companies and investment specialists. This panel was bifurcated into two strategic groups: 1. Executives or Sustainability managers from Thai-listed companies. 2. Investment Specialists, providing a critical lens from the perspective of market evaluators.

The primary instrument for data collection was a structured evaluation form employing a five-point Likert-type rating scale (Likert, 1932), designed to assess the strategic handbook and proposed measures. The internal consistency reliability (Cronbach's alpha) ranged from good to excellent across constructs, with an overall coefficient of 0.91 (Table 1), exceeding the 0.70 threshold recommended by Nunnally (1978). Following data collection, the results were interpreted using the mean-range interpretation method established by Best and Kahn (2000), with class intervals calculated to ensure statistical rigor.

Table 1. Internal Consistency Reliability (Cronbach's Alpha) of the Evaluation Instrument

Dimension	No. of Items	Cronbach's Alpha (α)	Interpretation
Suitability	2	0.84	Good
Feasibility	2	0.81	Good
Utility	2	0.87	Good
Acceptability	2	0.83	Good
Overall Scale	10	0.91	Excellent

Note. Cronbach's alpha (α) $\geq .70$ indicates acceptable reliability; $.80-.89$ good; $\geq .90$ excellent (Nunnally, 1978).
Source: Compiled by the authors.

RESULTS

Research Findings: Consistent with the methodological procedures, the primary findings regarding corporate adaptation guidelines derived from the thematic synthesis of the documentary analysis are presented as follows:

Strategic Guidelines for ESG Adaptation

The research indicates that successful adaptation necessitates a robust institutional foundation, primarily through the alignment of sustainability initiatives with the overarching corporate trajectory. Key strategic imperatives include:

Implementation of Double Materiality Assessment: Organizations must adopt a dual-perspective evaluation. This involves analyzing Outside-In impacts (how external environmental and social shifts influence the firm's financial viability) alongside Inside-Out impacts (the extrinsic footprint of the firm's operations on the environment and society).

The "Three Lines of Defense" Governance Framework: To ensure systemic integrity, the study proposes a tripartite governance structure: 1) Operational Units: The front-line business functions directly responsible for executing sustainability mandates and managing day-to-day ESG risks. And 2) Risk Management and Compliance: The specialized oversight functions tasked with policy formulation, monitoring, and ensuring adherence to regulatory standards. 3. Internal

Audit: The independent assurance function that evaluates the transparency, efficacy, and robustness of the entire ESG management ecosystem.

Critical Strategic Measures for Empirical Reporting

To ensure high-fidelity data measurement and reporting integrity, organizations must institutionalize a suite of rigorous operational instruments: Establishment of a Master ESG Data Dictionary: The creation of a centralized “Data Lexicon” is imperative to standardize definitions and data collection protocols across the enterprise. This measure effectively mitigates systemic redundancies and eradicates data discrepancies, ensuring a “single version of truth” for ESG metrics. Organizational Restructuring and Oversight: The formal appointment of a Sustainability (ESG) Committee is essential to provide high-level strategic oversight. This governing body is tasked with aligning localized ESG tactics with the broader institutional policy and long-term sustainability mandates. Adherence to Global Reporting Standards: Systematic reporting must be aligned with internationally recognized frameworks, such as GRI (Global Reporting Initiative) and TCFD (Task Force on Climate-related Financial Disclosures), or the SEC’s “One Report” mandate (Eccles & Krzus, 2010). Such transparency is vital for institutional communication, providing investors with the granular data necessary for informed capital allocation.

Strategic Adaptation and the ESG Roadmap

Based on the expert-judgment approach for the Strategic Adaptation and the ESG Roadmap Appropriateness Evaluation, the transition of listed companies into fully ESG-driven entities requires a systematic, phased orchestration. This proposed 18-month ESG Roadmap is engineered to navigate the organization from initial awareness to the deep institutionalization of ESG values essentially embedding sustainability into the corporate DNA. The roadmap comprises seven critical phases (Phases 0–6), meticulously integrating the CIPP-MBO framework to ensure that every strategic milestone is both measurable and governed by rigorous oversight.

Phase 0-1: Foundation & Diagnostics (Months 1–3): This inaugural phase serves as the structural cornerstone for the entire ESG architecture. It focuses on fostering a shared organizational vision, defining strategic direction, and conducting a systematic baseline assessment. This phase aligns with the Context and Input dimensions of the CIPP model.

Phase 2: Strategy, Targets & Capital Plan (Months 4–6): The second phase shifts toward the crystallization of objectives and strategic orientation. It represents the core application of the Management by Objectives (MBO) framework, where high-level goals are translated into actionable targets.

Phase 3: Governance & Operational Structure (Months 7–9): This stage involves constructing the necessary “governance infrastructure.” It ensures that strategic mandates can be executed efficiently through robust accountability mechanisms, corresponding to the Input and Process stages of the CIPP model.

Phase 4: Execution via 12 Integrated Workstreams (Months 10–12): This is the operational deployment phase, where responsibilities are decentralized across relevant business units. It focuses on the Process dimension of CIPP, driving the organization toward the predefined MBO targets through active implementation.

Phase 5: Reporting & Assurance (Months 13–15): As operational outcomes materialize, the focus transitions to data aggregation, disclosure, and external assurance. This phase is designed to establish institutional credibility and aligns with the Product (Output) component of the CIPP framework.

Phase 6: Evaluation & Continuous Improvement (Months 16–18): The final phase involves a holistic evaluation of the roadmap’s efficacy. By utilizing the full spectrum of the CIPP model, the organization “closes the loop” on the learning cycle, utilizing empirical insights to refine and recalibrate strategies for subsequent cycles.

The empirical validation of the proposed framework, derived from the rigorous assessment of 30 subject-matter experts via the AECF model, demonstrates that the developed guidelines and strategies achieved the “Highest” quality rating across all evaluative dimensions (overall $\bar{x} = 4.46$,

S.D. = 0.55; see Table 2). These results provide a resolute confirmation that the strategic handbook is exceptionally well-suited for implementation within listed companies.

Table 2. Evaluation Results of the Appropriateness of the ESG Manual and Strategies (AECF Model, N = 30)

Evaluation Dimension	$\bar{x}$	S.D.	Evaluation Level
1. Utility	4.55	0.50	Highest
2. Feasibility	4.45	0.51	Highest
3. Practicability	4.58	0.50	Highest
4. Acceptability	4.46	0.55	Highest
5. Satisfaction	4.34	0.63	Highest
6. Understanding	4.37	0.66	Highest
7. Novelty	4.48	0.52	Highest
Overall	4.46	0.55	Highest

Note. N = 30 experts. Ratings on a five-point scale; 4.21–5.00 = Highest. Source: Compiled by the authors from the AECF expert evaluation.

As shown in Table 2, Practicability ($\bar{x}$ = 4.58) and Utility ($\bar{x}$ = 4.55) received the highest ratings, whereas Satisfaction ($\bar{x}$ = 4.34) and Understanding ($\bar{x}$ = 4.37) were comparatively lower; nonetheless, all seven dimensions remained at the highest level, and the low standard deviations (0.50–0.66) indicate strong consensus among the 30 experts.

Key strengths identified by the panel include the optimization of resource allocation, the seamless integration into existing operational workflows, and the innovative sophistication that fortifies competitive advantage. Both quantitative metrics and qualitative insights from executives and institutional investors corroborate that this manual effectively addresses the critical void in concrete ESG practices, thereby fostering long-term stakeholder confidence.

In conclusion, this ESG management framework and strategic suite has proven to be a high-caliber research output characterized by robust content validity and significant practical feasibility. It stands as a pivotal instrument capable of driving substantive positive transformation within the Thai capital market, aligning at a highly significant level—with both international sustainability trajectories and national policy mandates.

DISCUSSION AND IMPLICATIONS

Discussion

The findings of this study provide strong empirical support for the argument that ESG integration constitutes a strategic transformation rather than a compliance-oriented activity. The high evaluation scores across all dimensions suggest that the proposed framework is not only conceptually sound but also operationally viable within the context of Thai listed companies. This aligns with stakeholder theory, which emphasizes that firms must balance the interests of multiple stakeholders to sustain long-term value creation (Freeman, 1984). From an institutional perspective, the results reflect increasing coercive and normative pressures on organizations to adopt ESG practices, particularly in emerging markets where global capital flows are increasingly conditioned by sustainability criteria (DiMaggio & Powell, 1983). The strong ratings in utility and suitability further indicate that organizations perceive ESG not as a cost burden but as a strategic enabler—supporting prior findings that ESG enhances firm value through risk mitigation and improved access to capital (Friede et al., 2015; Yu & Xiao, 2022). The slightly lower score in feasibility, however, suggests that practical implementation challenges remain, particularly in terms of organizational readiness, data infrastructure, and human capital capabilities. This finding is consistent with recent studies highlighting that ESG transformation requires significant internal alignment and capability development (Kotsantonis et al., 2016), and it reinforces the importance of governance mechanisms, such as the three lines of defense, and structured data systems like ESG data dictionaries. To pinpoint the salient aspects, the discussion proceeds objective by objective.

The development of strategic measures and practical guidelines to support the transition to ESG-based business revealed several key issues. First, regarding strategic integration via structure and measurable goals, the study found that effective strategic measures must commence with building leadership commitment and establishing a clear governance structure (Phase 0–1). This aligns with Eccles and Krzus (2018), who emphasized that Sustainability Governance is the foundational bedrock for driving corporate strategy. Defining SMART goals and utilizing MBO/OKR systems to cascade targets to the operational level (Phase 2) ensures that ESG is embedded as part of the corporate DNA rather than existing as a fragmented project. Second, in terms of creating shared value and double materiality management, adopting the Double Materiality approach to assess material issues (Phase 1) reflects a deepened understanding of the organization's societal role. The external impact dimension (Impact Materiality) aligns with the Triple Bottom Line theory (Elkington, 1997), viewing success through a balanced lens of economy, society, and environment, while the internal impact dimension (Financial Materiality) aligns with the Creating Shared Value (CSV) concept of Porter and Kramer (2011), indicating that solving societal and environmental problems can genuinely build competitiveness and increase business value.

Third, with respect to elevating data and reporting standards to international levels, practical guidelines for data collection and reporting (Phase 5) referencing IFRS S1 and S2 (IFRS Foundation, 2023) and GRI standards act as critical mechanisms to reduce the risks of erroneous data and greenwashing. The utilization of a Master ESG Data Dictionary and a Three Lines of Defense audit system align with the study by R. Panich (2022) on SET-listed companies, which found that quality and systematic sustainability disclosure has a significant positive relationship with Tobin's Q, reflecting the acceptance and value investors assign to transparent companies. The development of these tools directly addresses Panich's finding that Thai capital market investors currently look beyond mere ESG policies to prioritize data reliability and comparability. Furthermore, R. Panich (2022) noted that high-ESG companies often enjoy a lower cost of capital, consistent with this manual's emphasis on proactive risk management to build creditor and institutional investor confidence, enabling access to Green Finance under more lenient conditions. Implementing the 18-month Roadmap is thus a vital mechanism for increasing firm value through tangible risk reduction and operational efficiency enhancement. Fourth, concerning proactive adaptation in the environmental and circular economy dimensions, the environmental strategy (E)—aiming for carbon neutrality and calculating GHG baselines per TGO (2020–2023) guidelines, combined with applying the Circular Economy framework (Geissdoerfer et al., 2017) in production processes allows Thai listed companies to concretely transition to a low-carbon economy. The results demonstrate that environmental measures are not merely cost burdens but strategic factors for accessing green funding and mitigating systemic risks arising from government policies such as the BCG Model.

The Nexus between ESG Strategy and Business Value in the Thai Capital Market Context: The development of the roadmap and strategic measures in this objective reinforces the importance of transitioning to ESG business as a tangible value driver. When considered alongside the Objective 1 analysis—which found that SETESG (formerly THSI) companies possess significantly higher average performance and return value than general listed companies it aligns with R. Panich (2022), suggesting that the Thai capital market has begun considering ESG disclosure as a “signal” of management quality and future sustainability. The superior performance of the SETESG group can be explained by the concept that systematic ESG operations (as proposed in Phase 4 of this manual) enable organizations to reduce systematic risk and enhance resource efficiency. Moreover, R. Panich's (2022) research underscores that capital markets reward transparent companies, aligning with statistical findings that SETESG companies have higher Tobin's Q or market valuation because investors trust international standard disclosure processes such as IFRS S1 and S2 and GRI, defined in the reporting phase (Phase 5) of this manual.

Beyond these foundational stakeholder considerations, the phased roadmap also functions as a mechanism for mitigating systematic and regulatory risks. By front-loading double-materiality assessment and greenhouse-gas baselining, firms can anticipate exposure to carbon

taxes, the EU Carbon Border Adjustment Mechanism (CBAM), and domestic BCG mandates risk factors that increasingly shape firm valuation, the cost of and access to green finance, and credit ratings in the Thai context. In this sense, the roadmap converts regulatory pressure into a structured, anticipatory risk-management capability rather than a reactive compliance burden. Therefore, the strategic measures developed in Objective 1 act as instruments helping listed companies elevate themselves into the SETESG group to generate abnormal returns and reduce financial costs (WACC), as evidenced by the quantitative results of the prior study. ESG operation is thus not merely a social activity but a core strategy for wealth management and for creating sustainable competitive advantage for Thai listed

The evaluation results regarding the suitability, feasibility, utility, and acceptability of the ESG manual, guidelines, and strategic measures were found to be at the highest level overall. This reflects that the developed tools are not merely theoretical frameworks but actionable management innovations. The most outstandingly rated aspect was practicability, particularly regarding scalability and personnel training, demonstrating that the proposed measures are flexible and reduce the complexity of organizational transition to sustainability. Analyzing the reasons for the highest-level evaluation, these strategic measures were designed based on a high degree of alignment between existing business processes and efficient resource management. This aligns with the Creating Shared Value (CSV) concept of Porter and Kramer (2011), which holds that businesses grow sustainably by creating economic value in a way that simultaneously creates value for society. By addressing societal problems and needs through the business model, these measures help listed companies perceive tangible benefits rather than cost burdens, consistent with the Value Driver Hypothesis, which views ESG as a tool for increasing long-term competitiveness.

In the dimension of acceptability, the study found that the model aligns with organizational strategic direction at the highest level, directly linking to Elkington's (1997) Triple Bottom Line (TBL) theory emphasizing the balance of Profit, People, and Planet. The measures in the manual transform TBL theory into tangible performance indicators, resulting in strong management commitment to adoption. Furthermore, the high novelty score regarding elevating the organization to innovation leadership reflects the application of Sustainable Business Model Innovation, aligning with Geissdoerfer et al. (2017), who explained that sustainability transition requires systematic adjustment of the organization's value creation and value delivery. Compared to past research, these findings align with Ratanawarocho (2018), who found that companies with outstanding ESG operations attract investor interest and build a positive image affecting financial performance, and they concur with Yu and Xiao (2022), who indicated a positive relationship between ESG performance and corporate value (Tobin's Q), particularly in environmental and social aspects that reduce resource management risks. However, despite the highest overall evaluation, the issue of employee readiness and operational understanding remains a point requiring additional focus. This aligns with Eccles and Krzus (2018), who emphasized that integrating sustainability into an organization requires transparent communication and reporting to build shared understanding at all levels (Integrated Reporting). In the context of the Stock Exchange of Thailand, these evaluated strategic measures serve as a "Sustainability Compass" meeting both SEC regulatory criteria and institutional investor expectations. The expert confirmation of these measures' suitability and legal feasibility demonstrates that the proposed ESG business model can mitigate reputational risks and increase opportunities to access lower-cost capital sources (Green Finance), aligning with the current situation in which Responsible Investment has become the primary norm in the Thai capital market.

Implications

Based on the proposed ESG strategic framework, the implications of this study can be considered from three major perspectives: management, academia, and policy. From a management perspective, this study implies that organizations should move beyond fragmented CSR activities and embed ESG into the core of corporate strategy. ESG should not be treated as a symbolic reporting practice, but as a strategic management mechanism that influences firm value, competitiveness, and long-term resilience. Managers should identify material ESG factors that are

directly relevant to business operations and stakeholder expectations, then translate them into measurable objectives through MBO and KPI cascades. The proposed roadmap also highlights the importance of shared accountability, where ESG performance is integrated into departmental targets and executive incentive systems. By aligning sustainability goals with performance measurement, firms can ensure that ESG implementation becomes part of daily decision-making, resource allocation, risk management, and organizational culture.

From an academic perspective, this study contributes to the ESG and strategic management literature by offering an integrated framework that links strategic planning, implementation, and evaluation. The combination of the CIPP evaluation model and Management by Objectives provides a process-oriented approach that extends prior ESG studies, which often focus mainly on outcomes rather than implementation mechanisms. This framework also advances stakeholder theory by showing how stakeholder expectations can be transformed into measurable strategic actions. In addition, it extends institutional theory by explaining how external pressures, such as global sustainability standards, investor expectations, and ESG disclosure requirements, are internalized through governance structures, data systems, and performance management. Future research may empirically test this roadmap across industries, particularly by examining mediating variables, investor heterogeneity, and carbon-market dynamics.

From a policy perspective, this study suggests that regulators, government agencies, and the Stock Exchange of Thailand should strengthen the institutional environment that supports ESG adoption among Thai listed firms. Standardized reporting frameworks, capacity-building programs, and clearer ESG data guidelines are necessary to improve the transparency, comparability, and credibility of sustainability disclosures. Policymakers should also encourage third-party assurance to enhance stakeholder confidence and reduce the risk of greenwashing. Moreover, ESG policies should be aligned with international standards, such as IFRS S1 and S2, as well as emerging regulatory pressures related to carbon taxes, CBAM, and green finance. By promoting responsible investment and reliable ESG disclosure, policymakers can help Thai firms reduce systematic risk, access sustainable capital, and strengthen their position in the global capital market.

LIMITATIONS AND FUTURE RESEARCH POSSIBILITIES

Despite its contributions, this study has several limitations. First, the reliance on expert judgment, while appropriate for framework validation, may introduce subjectivity. Future research could employ quantitative methods, such as structural equation modeling, to further validate the relationships within the proposed framework. Second, the study focuses on the Thai capital market, which may limit generalizability. Comparative studies across different emerging markets would provide deeper insights into contextual variations in ESG adoption. Third, the study does not empirically test financial performance outcomes. Future research could examine the longitudinal impact of ESG implementation on firm value and risk. Fourth, the framework was validated through a purposive sample of 30 experts; while appropriate for developmental research, this may limit the generalizability of the findings. In addition, the integration of multiple frameworks (CIPP, MBO, AECF, and the Three Lines of Defense) may introduce practical complexity during real-world implementation. Future research could further enrich these directions by examining mediating and moderating variables in the ESG–firm value relationship, as well as industry-specific differences in ESG implementation across sectors.

CONCLUSION

This study set out to develop and validate an 18-month ESG transition framework for Thai listed companies and to assess its appropriateness, feasibility, benefits, and acceptability through expert evaluation. The key finding is that ESG integration is most effective when treated as a phased strategic transformation rather than a compliance exercise: by combining the CIPP model with Management by Objectives across seven phases, anchoring the framework in a Double Materiality assessment, a Three Lines of Defense governance structure, and a Master ESG Data

Dictionary, the roadmap translates sustainability commitment into measurable performance and tangible firm value. Expert evaluation rated the manual, guidelines, and strategic measures at the highest level overall, with practicability particularly scalability and personnel emerging as the strongest dimension, confirming that the proposed tools are actionable management innovations rather than purely theoretical constructs.

The significance of this research lies in its capacity to bridge the documented gap between large-and small-cap enterprises and to convert escalating regulatory pressure carbon taxes, CBAM, and BCG mandates into an anticipatory risk-management capability that lowers the cost of capital and eases access to Green Finance. Its principal contribution is a Thai-context, governance-integrated transition framework that operationalizes ESG adoption through an evaluable, phased roadmap, offering listed companies a practical “Blueprint,” policymakers a lever for advancing Responsible Investment, and researchers a process-oriented model for future inquiry. By aligning corporate objectives with both international sustainability standards and national policy directions, the framework equips Thai listed companies to strengthen their standing in the SETESG Index and to secure a sustainable competitive advantage within an increasingly sustainability-driven capital market.

CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest found in this research.

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