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BRIDGING THE SUSTAINABILITY GAP, THE ROLE OF GREEN FINANCE IN MALAYSIAN SMES

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Abstract:

Small and medium-sized enterprises (SMEs) face significant challenges in integrating sustainability into their business operations, particularly due to resource constraints, a lack of knowledge, and weak inter-institutional coordination. To address these challenges, this conceptual paper proposes an integrated theoretical framework explaining the role of green finance in supporting the SME transition toward more sustainable business models. The study suggests that the role of green finance extends beyond the mere provision of financial resources; it has the potential to act as a catalyst for building organizational strategic capabilities. Grounded in a combination of Institutional Theory and the Natural-Resource-Based View (NRBV), the framework illustrates how external institutional pressures and demands can drive SMEs to adopt green finance. Meanwhile, internal organizational capabilities influence the effectiveness of utilizing these resources to generate green innovations, strengthen environmental, social, and governance (ESG) practices, and build sustainable competitive advantages. From a theoretical perspective, this framework expands the discourse on sustainable finance by integrating macro-level institutional

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environmental influences with micro-level organizational capabilities and resource management. Practically, the proposed framework can assist policymakers in developing green finance instruments and mechanisms that are better aligned with SME needs. More importantly, it can guide SME owners and managers in leveraging access to green financing to develop strategic capabilities and achieve long-term competitiveness.

Keyword:

Sustainability, Green Finance, Institutional theory, Natural Resource-Based View

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Introduction

Sustainability has become a critical global agenda due to the rise in climate-related disasters, environmental degradation, biodiversity loss, and resource scarcity. Driven by commitments to the UN Sustainable Development Goals (SDGs) and the Paris Climate Agreement, organizations have increasingly integrated environmental, social, and governance (ESG) considerations into their business strategies (Weick, 2016; Koundouri et al., 2025). Small and medium-sized enterprises (SMEs) are also part of this sustainability commitment. They represent 90% of global businesses and contribute significantly to employment, innovation, and economic growth (Shari et al., 2024). In Malaysia, SMEs account for over 97% of business establishments and play a pivotal role in GDP, employment, exports, and entrepreneurial development (Azian et al., 2025). However, collectively, SME activities also exert a significant environmental impact through resource and energy consumption, waste generation, and carbon emissions (Hossain et al., 2025). Consequently, enhancing sustainability practices among SMEs is essential to supporting the national development agenda and fulfilling Malaysia's sustainability commitments (Bidin et al., 2023).

The Malaysian government has introduced various mechanisms including green technology financing, sustainable finance frameworks, tax incentives, renewable energy programs, ESG reporting guidelines, and environmental certifications aimed at encouraging sustainable business transformation (Kannan & Gambetta, 2025; Azian et al., 2025). However, compared to large-scale organizations, the adoption of sustainability practices among SMEs remains relatively slow, indicating that existing support has not yet fully succeeded in driving the transformation of SMEs towards sustainability (Siow et al., 2026). This concept paper aims to

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
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establish a theoretical framework that models the adoption of green finance among SMEs. The study synthesizes existing literature spanning sustainable finance, institutional dynamics, and strategic management to build a conceptual bridge between macro-level institutional drivers and micro-level SME capabilities. Through this approach, the study provides a structured foundation for future empirical validation and policy formulation within the context of emerging markets.

Problem Statement

Although sustainability is increasingly becoming a key business agenda, small and medium-sized enterprises (SMEs) in Malaysia remain constrained by a significant gap between sustainability aspirations and operational implementation. Despite the growing need to integrate ESG practices, enhance climate resilience, and support the transition to a low-carbon economy, resource and capability constraints limit the ability of SMEs to implement comprehensive sustainability initiatives (Johnson & Schaltegger, 2016; OECD, 2021). These challenges encompass limited funding for green technology and process investments, a lack of knowledge regarding ESG and green finance, deficiencies in technological and managerial capabilities, and institutional barriers such as complex financing procedures, documentation requirements, and information asymmetry (Hami et al., 2018; Motta & Sharma, 2020; Rashidi et al., 2022; Indiran et al., 2025). This situation raises the question of how green finance can be effectively leveraged to help SMEs overcome these constraints and achieve sustainable business transformation.

Previous studies have tended to isolate external institutional influences from a firm's internal capabilities, thereby failing to adequately explain how the two interact to translate access to green finance into a sustainable competitive advantage (DiMaggio & Powell, 1983; Hart, 1995; Burbano et al., 2022; Durugbo & Amankwah-Amoah, 2019; Putri et al., 2025). Furthermore, the literature on sustainable finance is largely based on large firms and advanced economies, whereas the context of SMEs in rapidly developing economies like Malaysia is characterized by limited resources, more informal governance, and immature ESG capabilities (Hami et al., 2018; OECD, 2021; Indiran et al., 2025; Rashidi et al., 2025; Securities Commission Malaysia, 2021).

Green finance is also typically viewed as a passive financing instrument rather than a mechanism capable of developing SMEs' strategic capabilities in technology acquisition, green innovation, and ESG management (Beck & Sidik, 2020; Pasupuleti & Ayyagari, 2023; Hart & Dowell, 2011; Mishra & Yadav, 2021). Consequently, there is an urgent need to bridge the gap between sustainable financing policies at the macro level and their implementation at the firm level. An approach that positions green finance as an organizational enabler has the potential to establish a clearer link between institutional pressures, SMEs' internal capabilities, and long-term sustainability outcomes (Motta & Sharma, 2020; OECD, 2021).

Literature Review

Sustainability Challenges among Malaysian SMEs

In recent years, environmental degradation, climate change, and rising stakeholder expectations have transformed the global business landscape, making sustainability a strategic necessity for organizations. Since the publication of the Brundtland Report in 1987,

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
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Volume: 8 Issue: 29 (September 2026) PP. 2362-2380

sustainability has increasingly been understood not merely as a response to environmental concerns, but as a broader concept encompassing responsible environmental management, social responsibility, and economic viability. Today, the *Triple Bottom Line* (TBL) approach provides a widely recognized framework for achieving business sustainability by emphasizing the need to balance economic performance, environmental protection, and social well-being (Elkington, 1997).

SMEs are increasingly gaining attention in sustainability discussions, particularly due to their significant collective contribution to the economy and the environment (Hami et al., 2018; Johnson & Schaltegger, 2016). Globally, SMEs account for over 90% of all businesses, provide more than half of all employment opportunities, and contribute significantly to national Gross Domestic Product (GDP) (Organisation for Economic Co-operation and Development [OECD], 2023; World Bank, 2023). In the Malaysian context, SMEs constitute more than 97% of all business establishments and play a pivotal role in generating employment, fostering innovation, expanding export activities, and supporting regional economic development (Department of Statistics Malaysia [DOSM], 2025; SME Corporation Malaysia, 2025).

Despite their significant role in economic and social development, SMEs face sustainability challenges that differ from those encountered by large-scale organizations. Large corporate entities typically possess advantages such as dedicated sustainability departments, broader environmental expertise, greater financial flexibility, and more robust governance structures (Afolabi Salami, 2024). Conversely, most SMEs operate with limited financial resources, simpler organizational structures, and strategic priorities that tend to be short-term oriented. These constraints often result in sustainability efforts within SMEs being implemented reactively rather than as part of a planned organizational strategy. Consequently, sustainability initiatives are usually driven by the need to comply with regulations or meet customer demands, rather than by efforts to create long-term value for the organization (Tavares & Ramos, 2026). Recent studies emphasize that sustainability should not be viewed merely as an increase in operating costs, but rather as a strategic investment to enhance innovation, operational efficiency, organizational resilience, and competitive advantage (Porter & Kramer, 2011). Implementing sustainable business practices not only reduces operating costs through improved energy efficiency, waste reduction, and optimized resource utilization, but also strengthens corporate reputation and opens doors to broader access in markets that increasingly prioritize environmental sustainability (Ambec et al., 2013; Gangi et al., 2020; Toromade & Chiekezie, 2024).

Despite the widely acknowledged benefits of sustainability, its adoption among SMEs remains lower than expected. Previous studies consistently attribute this adoption gap to various constraints, including limited financial resources, insufficient management capabilities, inadequate institutional support, and limited access to sustainability-related knowledge and information (Johnson & Schaltegger, 2016). These persistent constraints indicate that SMEs require effective enabling mechanisms to help them overcome existing barriers and support the transition toward more sustainable business practices (Johnson & Schaltegger, 2016)

The transition towards sustainability presents challenges for SMEs regarding economic factors, the institutional environment, and the national financing landscape. Although Malaysia has introduced various sustainability-related initiatives including the Twelfth Malaysia Plan, the National Energy Transition Roadmap (NETR), the Green Technology Master Plan, and Bank Negara Malaysia's Climate Change and Principle-based Taxonomy, the adoption of these

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
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Volume: 8 Issue: 29 (September 2026) PP. 2362-2380
initiatives among SMEs remains relatively slow (Dariah et al., 2023; Hami et al., 2018; Indıran et al., 2025; Oehler-Şincai, 2024).

A primary challenge hindering the adoption of sustainability practices among SMEs is financial constraint. Investments in renewable energy technologies, energy-efficient equipment, and waste reduction processes typically require substantial upfront capital, whereas most SMEs operate with limited capital reserves (Toromade & Chiekezie, 2024). Unlike large corporations, SMEs struggle to allocate financial resources to sustainability initiatives without compromising funding for other core business operations (Hami et al., 2018; Toromade & Chiekezie, 2024). This challenge is further compounded by resource limitations, organizational management weaknesses, and the financial instability often faced by SMEs. Collectively, these factors restrict the ability of SMEs to bear the costs required to support the transition towards greener business practices (Hami et al., 2018).

Technological barriers further hinder sustainability adoption. The use of eco-friendly technology requires specialized knowledge, digital capabilities, and technical expertise that most SMEs currently lack (Toromade & Chiekezie, 2024). This situation is exacerbated by technological uncertainty, high initial investment costs, unclear financial returns, and internal resistance to organizational change. These factors hinder investment decisions regarding sustainable technologies (Ambec et al., 2013; Toromade & Chiekezie, 2024). Furthermore, limited access to proprietary green technologies from developed nations slows the diffusion of low-carbon innovations in Malaysia (Susskind et al., 2020).

Challenges in implementing sustainability are also closely linked to institutional fragmentation and weak policy coordination. The fragmented management of sustainability programs across various ministries, government agencies, financial institutions, and development organizations has resulted in overlapping initiatives, administrative complexities, and information asymmetries (Susskind et al., 2020). The situation is further complicated by policy conflicts between federal and state governments, limited regulatory capacity, inconsistent enforcement, and the absence of a dedicated agency to coordinate decarbonization efforts. These institutional constraints make it difficult for SMEs to identify suitable financing opportunities and navigate complex application procedures, thereby limiting their ability to effectively implement sustainability initiatives (Susskind et al., 2020).

Overall, a combination of technological constraints, weak institutional coordination, and other implementation barriers contributes to a persistent sustainability gap among SMEs. Although SMEs recognize the importance of sustainability, this awareness has not yet fully translated into the implementation of sustainable practices within their business operations (Hami et al., 2018). Survey findings involving 127 SMEs in Malaysia indicate that the level of sustainable manufacturing practice implementation remains low to moderate. These findings reflect a significant gap between the growing importance of environmental initiatives and the extent to which sustainability practices are integrated into SME operational and business activities (Hami et al., 2018). Consequently, bridging this gap requires integrated interventions addressing financial, knowledge, technological, and institutional aspects. In this regard, policymakers play a crucial role in providing appropriate financial support, expanding educational programs, streamlining regulatory procedures, and fostering an environment conducive to supporting the SME transition towards sustainability (Susskind et al., 2020; Toromade & Chiekezie, 2024).

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 2362-2380

Green Finance: Concepts and Evolution

Green finance has emerged as a strategic mechanism for mobilising financial resources toward environmentally sustainable investments. Although definitions vary across jurisdictions, global practices, and academic traditions, the term is most consistently understood as a classification system "based on environmentally friendly business or economic activities, which supports environmental protection efforts and climate change mitigation and adaptation" (Dariah et al., 2023). At its core, green finance refers broadly to financial activities, instruments, and policies designed to support projects that generate positive environmental outcomes while maintaining financial viability (Dariah et al., 2023).

A defining feature of green finance is its explicit incorporation of environmental considerations into investment decision-making. Unlike conventional finance, where the economic merits of a project are evaluated primarily through the lenses of risk-adjusted return and creditworthiness, green finance introduces a parallel evaluation layer in which the environmental contribution of an activity becomes a precondition for, or material feature of, capital allocation (Dariah et al., 2023). To operationalise this principle, financial regulators across jurisdictions have developed green taxonomies that classify economic activities according to their environmental alignment, providing "a better understanding and make it easier for financial services sector actors to classify green activities in developing a portfolio of financial services products" (Dariah et al., 2023).

The taxonomy-driven approach has, in turn, given rise to a broad spectrum of green financial products. These include green loans, green bonds, sustainability-linked loans, green venture capital, climate funds, blended finance, ESG investment products, carbon financing, and public green financing schemes, all of which sit beneath a unified conceptual umbrella of environmental value creation (Dariah et al., 2023). Green taxonomies in jurisdictions such as Malaysia classify economic activities into categories ranging from Energy Efficiency, Transportation, Green Technology and Manufacturing, Renewable Energy, and Waste Management through Agriculture, Forestry, and Land Conservation, providing a multi-tiered structure through which finance can be directed toward verifiable environmental outcomes (Dariah et al., 2023).

The evolution of green finance has been propelled by several converging global developments. The Paris Agreement, which has been ratified by 175 countries, calls for limiting the global mean temperature rise to below 2°C, and ideally below 1.5°C, relative to pre-industrial levels (Susskind et al., 2020)(Susskind et al., 2020) Alongside the Paris framework, the United Nations Sustainable Development Goals have elevated environmental performance into the mainstream investment agenda, encouraging the alignment of capital flows with climate change mitigation and adaptation (Dariah et al., 2023). Compounding these regulatory and normative drivers, investor demand for ESG investments has expanded significantly, generating institutional pressure on banks, asset managers, and listed corporates to demonstrate credible green strategies.

Institutional Framework and Green Financing Instruments in Malaysia

In Malaysia, sustainable finance policy is gaining increasing attention through the development of a coordinated institutional framework that encompasses national climate commitments, regulatory initiatives, and green financing mechanisms. In 2009, former Prime Minister Najib

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 2362-2380
Razak announced the nation's commitment to reduce carbon emission intensity by 40% from 2005 levels by 2020 during the United Nations Framework Convention on Climate Change (UNFCCC) meeting in Copenhagen. This commitment was subsequently supported by the Green Technology Master Plan 2017–2030, which outlined multi-sectoral efforts to reduce greenhouse gas emission intensity by 45% by 2030 while driving economic growth through the adoption of green technology (Susskind et al., 2020).

In 2019, Bank Negara Malaysia (BNM) initiated discussions with financial institutions, asset managers, rating agencies, and non-governmental stakeholders to reinforce sustainable finance by regulating economic activities aligned with climate goals. In 2021, the Climate Change and Principle-based Taxonomy (CCPT) framework was introduced to enable financial institutions to classify economic activities into "Climate Supporting," "Transition," and "Watchlist" categories (Dariah et al., 2023). Based on this institutional framework, various green financing instruments have been developed to support the adoption of environmentally sustainable technologies and activities.

One of the key initiatives implemented is the Green Technology Financing Scheme (GTFS), launched in 2009 and managed by GreenTech Malaysia, which was under former Ministry of Energy, Green Technology and Water. This scheme enables certified green technology producers and users to obtain government-backed financing from participating financial institutions. The government provides a guarantee covering 60% of the total approved financing amount, subject to specific limits: RM100 million for producers and RM10 million for users. Additionally, the government provides a 2% subsidy on the interest rates charged by the participating financial institutions (Susskind et al., 2020). This concessional architecture directly addresses SMEs' core financing constraint by reducing lender risk exposure and lowering the effective cost of capital

Green Finance Instruments Supporting SMEs

The green finance landscape also offers SMEs the opportunity to participate in sustainability-oriented capital markets through various categories of instruments, each underpinned by its own policy and market rationale (Dariah et al., 2023; Toromade & Chiekezie, 2024). Currently, green loans remain one of the most widely used financing mechanisms, supporting investments in renewable energy, energy-efficient equipment, pollution control technologies, waste reduction systems, and sustainable manufacturing processes (Toromade & Chiekezie, 2024). A key feature of these instruments is the inclusion of clearly defined environmental conditions, linked either to the use of the proceeds or to the borrower's environmental performance.

Green bonds have emerged as an important capital market instrument in Malaysia that has been expanded through Shariah-compliant instruments. The world's first green sukuk was introduced in June 2017 that channels funds into environmentally sustainable infrastructure projects (Susskind et al., 2020). Additionally, the Net Energy Metering (NEM) mechanism supports renewable energy adoption by allowing domestic, commercial, and industrial electricity consumers to install solar panels for self-consumption and sell excess electricity to the grid. The value of the electricity supplied to the grid is then deducted from the consumer's electricity bill, thereby providing a financial incentive for solar energy usage (Susskind et al., 2020).

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 2362-2380

In addition to debt instruments, green venture capital provides tailored equity financing for innovative and environmentally sustainable small and medium-sized enterprises (SMEs) (Susskind et al., 2020; Toromade & Chiekezie, 2024). The Green Technology Master Plan has established a structurally conducive ecosystem for green equity instruments targeting SMEs, although the distribution of this ecosystem remains uneven. New instruments are also emerging, such as blended finance, which combines public and private capital to mitigate the risk of projects failing to meet commercial return thresholds. Meanwhile, carbon finance creates direct financial incentives for emission reductions through the monetization of certified carbon credits (Susskind et al., 2020; Dariah et al., 2023).

Even though the green finance landscape in Malaysia is evolving and maturing, its benefits largely favor larger corporations, while small and medium-sized enterprises (SMEs) continue to face limited access. Various factors have contributed to this discrepancy, including a lack of capital reserves, limited awareness of available green finance products, stringent eligibility criteria, insufficient collateral, and restricted access to long-term financing (Toromade & Chiekezie, 2024). For instance, the stipulation linking specific green financing terms to the achievement of established environmental, social, and governance (ESG) performance indicators poses a significant challenge for SMEs. Under this approach, companies demonstrating improved environmental performance may benefit from more favorable interest rates, whereas weaker performance could result in financial penalties. Consequently, the implementation of such instruments requires compliance with detailed reporting and the provision of verified ESG metrics. This requirement is quite difficult for SMEs to meet, given their lack of specialized personnel or sufficient technical capacity (Hami et al., 2018; Toromade & Chiekezie, 2024).

Green Finance and SME Sustainability: Current Evidence

Environmental investment acts as a driver of potential competitive advantage rather than merely a cost burden (Ambec et al., 2013). This view is supported by Porter, who stated that "pollution is often a waste of resources, and pollution reduction can lead to increased resource productivity." In the context of SMEs, green finance and related sustainable business practices have been shown to facilitate eco-innovation, enhance resource efficiency, improve energy management, reduce carbon emissions, and strengthen long-term competitiveness (Toromade & Chiekezie, 2024). However, current literature reveals significant inconsistencies regarding the positive relationship between green finance and organizational sustainability performance. First, most empirical studies focus primarily on environmental outcomes, while organizational capabilities such as management efficiency, technological infrastructure, and governance structures receive less attention. Yet, these factors serve as mediators in translating green finance into substantive sustainability transformation (Toromade & Chiekezie, 2024).

Secondly, empirical research has largely focused on large listed companies rather than SMEs, resulting in a lack of evidence-based specific to SMEs (Hami et al., 2018). SMEs differ substantially from larger companies in terms of financial capacity, governance structure, management expertise, and institutional support. Consequently, findings derived from samples of large companies cannot be directly generalized to the SME segment (Hami et al., 2018). Malaysian-context research involving 127 SMEs in the manufacturing sector revealed that the level of SMP implementation among them was low to moderate, indicating that environmental initiatives (in a broad sense) remain under-implemented despite the existence of policies specifically targeted at SMEs (Hami et al., 2018).

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 2362-2380

Third, previous studies often conceptualize green finance as a standalone financing mechanism. In real fact, green finance is a component of a broader sustainability ecosystem involving government policies, financial institutions, regulatory frameworks, technological capabilities, and stakeholder pressures (Susskind et al., 2020; Toromade & Chiekezie, 2024). Malaysia's policy experience strongly supports this view: the implementation of the Green Technology Financing Scheme, Feed-in Tariffs, Net Energy Metering, and green 'sukuk' all rely on complementary institutional capacities—specifically a "dedicated decarbonization agency (Susskind et al., 2020).

Malaysia's deeper experience with sustainable finance reform highlights another systemic gap. Despite the country's commitment to global climate goals dating to 2009 and its current pledge to reduce greenhouse gas emission intensity by 45% by 2030 under the Green Technology Master Plan, enforcement has been uneven, undermined by federal-state friction, limited regulatory capacity at the state level, and underdeveloped enforcement infrastructure outside major urban areas (Susskind et al., 2020). The systemic constraints suggest that the literature has, to date, insufficiently explored the institutional determinants of green finance effectiveness in emerging-market contexts (Susskind et al., 2020).

Taken together, these inconsistencies point to the need for a more integrated conceptual perspective that explains how green finance enables sustainability transformation encompassing managerial capability, technological readiness, regulatory coherence, and institutional alignment rather than treating green finance as a standalone instrument that finances discrete environmental projects. Such a perspective is particularly important in the Malaysian and broader Southeast Asian context, where the institutional environment, financial systems, and SME characteristics differ materially from the largely Chinese and developed-economy settings in which most existing empirical evidence has been generated (Hami et al., 2018;Toromade & Chiekezie, 2024;Susskind et al., 2020).

Theoretical Foundation

The transition to a sustainable economy presents a particular challenge for small and medium-sized enterprises (SMEs), which face increasing environmental expectations but may lack the financial and organisational resources needed to respond effectively. Although green finance can support sustainability-related investments, its availability does not necessarily ensure that SMEs can access the funding or translate it into meaningful sustainability outcomes. To explain this challenge, this study integrates Institutional Theory (DiMaggio & Powell, 1983) and the Natural Resource-Based View (NRBV) (Hart, 1995; Hart & Dowell, 2011). Institutional Theory explains the external pressures that shape SMEs' sustainability decisions, whereas NRBV explains how firms can develop environmental capabilities that potentially generate sustainability benefits and competitive advantage. Together, these perspectives provide a theoretical basis for examining the role of green finance in addressing sustainability challenges among Malaysian SMEs.

Institutional Theory: External Pressures and Green Finance Adoption

Institutional Theory explains how organisations respond to external expectations to maintain legitimacy within their institutional environments. DiMaggio and Powell (1983) argued that organisational practices are shaped not only by efficiency considerations but also by pressures

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 2362-2380
to conform to established rules, norms and beliefs. Abreu et al. (2016) discussed the regulative, normative and cultural-cognitive dimensions of institutions, which shape organisational behaviour and social expectations.

Three mechanisms of institutional isomorphism are particularly relevant to SME sustainability. Coercive pressures arise from regulations, government policies and environmental disclosure requirements that encourage compliance with institutional expectations (Bolognesi et al., 2025; Krueger et al., 2024). In Malaysia, Bank Negara Malaysia's Climate Change and Principle-based Taxonomy provides regulatory guidance for assessing climate-related economic activities (Bank Negara Malaysia, 2021). Normative pressures emerge from industry standards, professional networks, sustainability certifications and stakeholder expectations regarding responsible business conduct (García-Quevedo et al., 2019; Tyler et al., 2018). Mimetic pressures occur when organisations imitate the practices of successful or legitimate firms, particularly when facing uncertainty about appropriate sustainability strategies (Chithambo et al., 2020; Pizzi & Coronella, 2024).

These pressures can encourage SMEs to adopt sustainable practices and seek green financing to meet regulatory requirements, respond to stakeholder expectations and maintain market legitimacy. However, institutional pressure does not guarantee effective adoption because SMEs may lack the resources and expertise required to comply with sustainability requirements. This creates a potential gap between external expectations and SMEs' capacity to implement sustainability initiatives. Green finance may help address this gap by providing dedicated funding for environmentally oriented investments and reducing some of the financial barriers to sustainability adoption (Ogunyemi & Ishola, 2024; Oyewole et al., 2024). Instruments such as green loans, green bonds and sustainability-linked financing can support eligible investments while signalling alignment with environmental and market expectations (Kuteesa et al., 2024; OECD, 2022). Such alignment may strengthen SMEs' legitimacy among investors and other stakeholders (Yuran & Anwar, 2025; Zarrouk et al., 2025). Nevertheless, access to green finance may remain constrained by financing eligibility requirements, reporting obligations and limited internal expertise. Institutional Theory therefore explains the external motivations for sustainability engagement while highlighting why SMEs may struggle to respond to these pressures.

Natural Resource-Based View: Environmental Capabilities and Sustainable Value Creation

Whereas Institutional Theory explains why SMEs may pursue sustainability, NRBV explains how environmental initiatives can contribute to organisational value. Hart (1995) extended the resource-based perspective by recognising the natural environment as a strategic consideration and proposing that environmental capabilities can become sources of competitive advantage. This perspective shifts the emphasis from treating environmental management solely as a cost to recognising its potential contribution to operational efficiency, differentiation and long-term business performance (Hart, 1995; Hart & Dowell, 2011).

NRBV identifies three interconnected environmental strategies: pollution prevention, product stewardship and sustainable development (Hart, 1995). Pollution prevention reduces waste and emissions at source, potentially lowering resource consumption and operating costs (Chen et al., 2016; McDougall et al., 2021). Product stewardship incorporates environmental considerations throughout the product life cycle, potentially supporting product differentiation and stakeholder trust (Miemczyk et al., 2016; Schmidt et al., 2021). Sustainable development

emphasises long-term environmental and economic viability through cleaner technologies and sustainability-oriented business practices (Hart, 1995; McDougall et al., 2021).

Developing these capabilities requires investment in technology, knowledge and organisational processes. For SMEs, financial limitations and insufficient technical expertise may restrict the adoption of cleaner production systems, green innovation and environmental management practices. Green finance can potentially ease these constraints by funding sustainability-related investments that might otherwise be financially inaccessible (Appiah-Kubi et al., 2024; Ogunyemi & Ishola, 2024; Ullah et al., 2021).

Such investments may enable SMEs to adopt renewable energy and cleaner production technologies, strengthen green innovation and eco-design, improve sustainable supply-chain practices, and establish environmental monitoring and ESG reporting systems (Albort-Morant et al., 2016; Appiah-Kubi et al., 2024; Dangelico et al., 2016; Ji et al., 2023; Prieto-Sandoval et al., 2019). These capabilities may contribute to resource efficiency, environmental performance and organisational resilience. However, financing and technology acquisition alone do not guarantee sustained competitive advantage. From an NRBV perspective, the benefits depend on whether firms develop valuable capabilities that are embedded in organisational routines, knowledge and stakeholder relationships and are difficult for competitors to replicate (Garcés-Ayerbe et al., 2021; Hart, 1995; Ullah et al., 2021).

NRBV therefore highlights the importance of SMEs' capacity to convert financial resources into effective environmental practices. Green finance represents a potential means of supporting this process, while the development and deployment of environmental capabilities determine the extent to which financing may contribute to sustainability outcomes.

Integrating Institutional Theory and NRBV: Implications for Malaysian SMEs

Institutional Theory and NRBV explain complementary stages of the SME sustainability process. Institutional Theory identifies the external pressures that motivate sustainability engagement and green finance adoption, while NRBV explains how financial resources may be converted into environmental capabilities and organisational value. Green finance connects these perspectives by potentially providing the resources SMEs need to respond to institutional expectations and implement sustainability initiatives (DiMaggio & Powell, 1983; Hart, 1995; Ogunyemi & Ishola, 2024).

This integration highlights a central challenge for Malaysian SMEs: the presence of sustainability policies and green financing instruments does not necessarily translate into effective sustainability adoption. Although institutional expectations may increase the need for environmental compliance and improvement, SMEs may lack the financial resources, technical expertise and organisational readiness to access financing and implement the required changes. Consequently, a gap may arise between external sustainability expectations and SMEs' internal capacity to meet them.

Addressing this gap requires attention to both financing accessibility and the capabilities needed to utilise financing effectively. From an institutional perspective, the relevant issues include the pressures encouraging sustainability adoption and the requirements that SMEs must satisfy to obtain financing. From an NRBV perspective, the concern is whether SMEs can use available resources to develop environmental capabilities that improve sustainability

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 2362-2380
performance. Green finance may facilitate this transition, but its contribution depends on the interaction between external institutional conditions, access to funding and SMEs' ability to implement sustainability-related investments.

The integrated framework thus provides a basis for examining the sustainability challenges faced by Malaysian SMEs and the potential role of green finance in addressing them. It directs attention beyond the availability of financing instruments to the broader conditions that shape their adoption, utilisation and contribution to sustainability. In doing so, the framework connects institutional expectations, financial constraints and environmental capability development within a unified theoretical explanation of SME sustainability

Discussion and Implications of the Study

Green Finance as a Bridge between Sustainability Ambition and Implementation

Green finance plays a pivotal role as a potential mechanism for realizing the sustainability aspirations of Malaysian SMEs (OECD, 2022; Ogunyemi & Ishola, 2024; Putri et al., 2025). Although SMEs are increasingly aware of the importance of sustainability, the financial constraints, technological limitations, and capability gaps continue to hinder its implementation (Indıran et al., 2025; Omowole et al., 2024). Sustainability initiatives often require substantial initial investments, while the financial benefits may only materialise over the long term (Khan et al., 2021; OECD, 2022). For SMEs in Malaysia, Indiran et al. (2025) found that "high costs emerged as a principal barrier, driven by substantial investments required for sustainable technologies and materials, which are often unfeasible for SMEs with limited resources."

Green finance addresses this challenge by reducing financial barriers and providing targeted funding mechanisms for sustainability-related investments (Kuteesa et al., 2024; Ogunyemi & Ishola, 2024; Oyewole et al., 2024). Through green loans, sustainability-linked financing, government-supported financing schemes, and blended finance mechanisms, SMEs can obtain the necessary resources to adopt environmentally responsible practices (Attipoe et al., 2025; González & Morales-García, 2022; OECD, 2022). In Malaysia, the Green Technology Financing Scheme under the National Green Technology Policy, alongside Bursa Malaysia's FTSE4Good index and Bank Negara Malaysia's ESG integration frameworks, has been developed to close precisely this gap between ambition and capacity (Anita, n.d.; Ezuma & Matthew, 2022; Yatim et al., 2017). However, the effectiveness of these instruments in reaching Malaysian micro, small and medium-sized enterprises remain contested. Ezuma & Matthew (2022) emphasised that "barriers are still lingering that may hamper the extent of the initiatives' effectiveness.". Green finance should therefore not be viewed merely as a financing solution, but as a strategic mechanism that enables SMEs to develop sustainability capabilities and transform their business models (Ogunyemi & Ishola, 2024; Oyewole et al., 2024; Putri et al., 2025).

Integrating Institutional Pressures and Organisational Capabilities

Institutional Theory and the Natural Resource-Based View (NRBV) offer complementary explanations regarding the adoption of green finance and SME sustainability. Institutional Theory explains how regulatory requirements, stakeholder expectations, and industry practices drive SMEs to adopt sustainability-oriented practices (DiMaggio & Powell, 1983; Afolabi et al., 2022; Thomas et al., 2021). However, there is no guarantee that institutional pressures will

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translate into effective implementation, particularly if SMEs lack the financial and organizational resources to respond.

The NRBV complements Institutional Theory by explaining how firms can utilize existing resources to develop environmental capabilities and strengthen their competitive position (Hart, 1995). Green finance bridges these two perspectives by helping SMEs mobilize resources to support green innovation, environmental management systems, sustainability certifications, and workforce proficiency (Appiah-Kubi et al., 2024; Omowole et al., 2024). Thus, the proposed framework emphasizes that sustainability outcomes depend not only on external pressures to adopt green practices but also on the ability of SMEs to transform financial resources into valuable organizational capabilities.

Contributions of the Study

Theoretical Contributions

This study integrates Institutional Theory and the Natural Resource-Based View (NRBV) into a unified conceptual framework, thereby contributing to the corporate sustainability literature. Institutional Theory focuses on the pressures SMEs face from stakeholders to adopt sustainability practices, while the NRBV explains how they can develop environmental capabilities to support competitive advantage (DiMaggio & Powell, 1983; Hart, 1995). This study offers an integrated perspective on SME sustainability that transcends the examination of these theories in isolation by positioning green finance as a linking mechanism between external institutional pressures and internal capability development.

Second, this study extends the conceptualization of green finance beyond its conventional role as a source of capital. Grounded in the NRBV, the study recognizes green finance as an enabler of environmental capability development, allowing SMEs to support green innovation, strengthen environmental management, and pursue long-term competitiveness (Khan et al., 2021; OECD, 2021). This perspective elaborates on the function of green finance, shifting the focus from mere funding availability to how financial resources can be mobilized to build capabilities that are valuable and difficult to imitate.

Practical and Policy Contributions

For policymakers and financial regulators, this framework highlights the importance of designing green financing mechanisms that address the financial constraints and capacity gaps faced by SMEs. Mechanisms proposed should encompass the provision of financing incentives, support for ESG reporting preparation, more efficient application procedures, and technical assistance tailored to SME capabilities (Bank Negara Malaysia, 2021; Indiran et al., 2025). More importantly, enhancing access to existing financing schemes is expected to strengthen coordination between financial institutions and SME support agencies, thereby enabling SMEs to fulfill their sustainability commitments.

From the perspective of SME owners and managers, this study emphasizes the strategic value of green finance in supporting sustainability-related investments. Green financing should not be viewed merely as debt or an additional compliance cost; instead, SMEs should consider how it can foster eco-innovation, enhance operational efficiency, and strengthen their position within sustainability-oriented supply chains. Integrating financing decisions with long-term

capacity building can help SMEs transition from short-term compliance toward greater sustainability and enduring competitiveness.

Conclusion

The transition towards sustainable business practices represents both a challenge and an opportunity for Malaysian SMEs. Although SMEs play a critical role in economic development, their sustainability adoption remains constrained by financial limitations, knowledge gaps, technological challenges, and institutional barriers. This conceptual paper argues that green finance provides a strategic pathway for bridging the sustainability gap among Malaysian SMEs. Rather than functioning merely as a source of funding, green finance enables SMEs to develop environmental capabilities, adopt sustainable technologies, enhance innovation, and achieve long-term competitiveness.

By integrating Institutional Theory and the Natural Resource-Based View, this paper develops a conceptual framework explaining how external institutional pressures and financial mechanisms interact with internal organisational capabilities to facilitate sustainability transformation. The study highlights that achieving SME sustainability requires more than supporting environmental awareness. It requires a supportive ecosystem involving policymakers, financial institutions, industry stakeholders, and SMEs themselves. For Malaysia to achieve its sustainability ambitions and transition toward a low-carbon economy, ensuring inclusive access to green finance among SMEs is essential. Green finance therefore represents not only a financial instrument but also a strategic catalyst for sustainable economic transformation.

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Declaration on the Use of Artificial Intelligence (AI) "The author(s) declare that generative AI or AI-assisted technologies were used during the preparation of this manuscript. The following tool(s) were used: [ChatGPT]. The tool(s) were used for language editing. All AI-assisted content was reviewed and verified by the author(s), who take full responsibility for the accuracy, originality, integrity, and final content of the manuscript."

References

Abdul Rahman, N. A., & Abdul Rahim, Z. (2025). Performance of the MSMEs manufacturing sector in Malaysia: An overview. *Information Management and Business Review, 17*(3(I)), 282–291.

Ambec, S., Cohen, M. A., Elgie, S., & Lanoie, P. (2013). The Porter Hypothesis at 20: Can environmental regulation enhance innovation and competitiveness? *Resources, Conservation and Recycling, 75*, 5–14. https://doi.org/10.1016/j.resconrec.2013.01.002

Appiah-Kubi, E., Koranteng, F. O., Dura, C., & Boateng, F. (2024). Green financing and sustainability reporting among SMEs: The role of pro-environmental behavior and digitization. *Journal of Environmental Management, 368*, 122129. https://doi.org/10.1016/j.jenvman.2024.122129

Asad, M., Majali, T., Aledeinat, M., & Trad, A. (2023). Green entrepreneurial orientation for enhancing SMEs' financial and environmental performance: Synergetic moderation of green technology dynamism and knowledge transfer and integration. *Business Strategy and the Environment, 32*(8), 4831–4849. https://doi.org/10.1002/bse.3442

Azad, M. A. K., Begum, H., Chowdhury, H. J., & Sultana, T. (2025). Green finance and management efficiency as determinants of firm performance in an emerging economy. *Future Business Journal, 11*(1), 1–22. https://doi.org/10.1186/s43093-025-00392-1

Beck, T., & Sidik, M. (2020). Financing green SMEs: A study of Islamic banks in Indonesia. *Journal of Sustainable Finance & Investment, 10*(1), 64–80. https://doi.org/10.1080/20430795.2019.1595946

Burbano, V., Delmas, M. A., & Cobo, M. J. (2022). The past and future of corporate sustainability research. *Sustainability, 14*(3), 1244. https://doi.org/10.3390/su14031244

Dangelico, R. M., Pujari, D., & Pontrandolfo, P. (2016). Green product innovation in manufacturing firms: A sustainability-oriented dynamic capability perspective. *Journal of Business Ethics, 135*(1), 75–91. https://doi.org/10.1007/s10551-014-2487-0

Dariah, A. R., Mustika Rani, A., & Srisusilawati, P. (2023). Green taxonomy for sustainable production across countries. *International Journal of Research and Innovation in Social Science, 7*(1), 123–138. https://doi.org/10.47772/IJRISS.2023.7010211

de Felipe, I., Lopez, R. S., & Palacios-Marques, D. (2017). Drivers of eco-innovations in the Spanish hotel industry. *Sustainability, 9*(9), 1576. https://doi.org/10.3390/su9091576

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160. https://doi.org/10.2307/2095101

Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone.

Gangi, F., Daniele, L. M., & Varrone, N. (2020). How do corporate environmental policy and corporate reputation affect risk-adjusted financial performance? *Business Strategy and the Environment, 29*(7), 3195–3214. https://doi.org/10.1002/bse.2563

Hami, N., Mat Yamin, F., Mohd Shafie, S., & Saad, M. (2018). Sustainable manufacturing practices among SMEs in Malaysia. *International Journal of Entrepreneurship and Small Business, 33*(2), 260–279. https://doi.org/10.1504/IJESB.2018.093101

Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review, 20*(4), 986–1014. https://doi.org/10.2307/258963

Henderson, K., & Loreau, M. (2023). A model of Sustainable Development Goals: Challenges and opportunities in promoting human well-being and environmental sustainability. *Ecological Modelling, 475*, 110164. https://doi.org/10.1016/j.ecolmodel.2022.110164

Hofmann, K. H., Theyel, G., & Wood, C. H. (2012). Identifying firm capabilities as drivers of environmental management and sustainability practices: Evidence from small and medium-sized manufacturers. *Business Strategy and the Environment, 21*(8), 522–536. https://doi.org/10.1002/bse.739

Indiran, L., Abdullah, M., Raj, J., & Ramayah, T. (2025). The challenges of sustainability practices among SMEs: Interview with CEOs in Malaysia. *International Journal of Business and Technology Management, 7*(1), 65–78.

Jiang, R., Li, L., & Lin, Y. (2018). Green finance and sustainability performance of SMEs in China: The moderating role of environmental regulation. *Sustainability, 10*(12), 4738. https://doi.org/10.3390/su10124738

Johnson, M. P., & Schaltegger, S. (2016). Two decades of sustainability management tools for SMEs: How far have we come? *Journal of Small Business Management, 54*(2), 481–505. https://doi.org/10.1111/jsbm.12154

Kannan, S., & Gambetta, N. (2025). Technology-driven sustainability in small and medium-sized enterprises: A systematic literature review. *Journal of Small Business Strategy, 35*(1), 129–157. https://doi.org/10.53703/001c.126636

Koundouri, P., Landis, C. F. M., Dellis, K., & Plataniotis, A. (2025). Integrating Sustainable Development Goals in environmental, social, and governance criteria and the sustainability transformation of the EU business sector. *Annual Review of Resource Economics, 17*, 381–404. https://doi.org/10.1146/annurev-resource-111920-032833

Lewis, K., Cassells, S., & Roxas, H. (2012). SMEs and the potential for a collaborative path to environmental responsibility. *Journal of Business Ethics, 107*(3), 281–297. https://doi.org/10.1007/s10551-011-1030-0

Miemczyk, J., Howard, M., & Johnsen, T. E. (2016). Dynamic development and execution of closed-loop supply chains: A natural resource-based view. *International Journal of Operations & Production Management, 36*(12), 1690–1718. https://doi.org/10.1108/IJOPM-03-2015-0135

Motta, V., & Sharma, A. (2020). Lending technologies and access to finance for SMEs in the hospitality industry. *International Journal of Hospitality Management, 86*, Article 102371. https://doi.org/10.1016/j.ijhm.2019.102371

Nordin, R., & Hassan, R. A. (2019). The acceptance of green technology in SMEs: Financial and cultural perspectives. *International Journal of Business and Social Science, 10*(2), 210–221.

Organisation for Economic Co-operation and Development. (2021). *Financing SMEs for sustainability: Challenges and opportunities*. OECD Publishing.

Pasupuleti, A., & Ayyagari, L. R. (2023). A thematic study of green finance with special reference to polluting companies: A review and future direction. *Environmental Processes, 10*(2), 24. https://doi.org/10.1007/s40710-023-00624-0

Rashidi, N. A., Chai, Y. H., & Yusup, S. (2022). Biomass energy in Malaysia: Current scenario, policies, and implementation challenges. *BioEnergy Research, 15*(3), 1371–1386. https://doi.org/10.1007/s12155-021-10350-7

Robins, N. (2018). Green finance: A new frontier for social policy? *Journal of Social Policy, 47*(1), 771–792. https://doi.org/10.1017/S004727941800012X

Salami, A. (2024). SMEs' dependency on large corporations' technology for sustainability in the United States. *World Journal of Advanced Science and Technology, 6*(2), 35–46. https://doi.org/10.53346/wjast.2024.6.2.0052

Scott, W. R. (2014). *Institutions and organizations: Ideas, interests, and identities* (4th ed.). Sage.

Shari, W., Abu Hassan, M. H., Mohd Ezanee, A. A., Abdul Wahab, N. M., & Abd. Wahab, N. (2024). Ways to promote sustainable practices among Malaysian SMEs from the viewpoints of experts. *Journal of Asian Scientific Research, 14*(4), 597–611. https://doi.org/10.55493/5003.v14i4.5180

Siow, K. Q., Sulaiman, A., Zakaria, N., Foo, S. M., & Kamaludin, K. (2025). Advancing sustainable technology adoption: Insights from SMEs in beauty, health, and wellness sectors. *Sustainable Technology and Entrepreneurship, 5*(1), 100073. https://doi.org/10.1016/j.stae.2024.100073

Susskind, L., Chun, J., Goldberg, S., Hellgren, J., Ketchum, R., Sastry, A., & Ward, H. (2020). Breaking out of carbon lock-in: Malaysia's path to decarbonization. *Frontiers in Built Environment, 6*, 31. https://doi.org/10.3389/fbuil.2020.00031

Tavares, M. C. C., & Ramos, A. (2026). Sustainability in SMEs: Business excellence, SDGs silence? *World, 7*(3), 50. https://doi.org/10.3390/world7030050

Toromade, A. S., & Chiekezie, N. R. (2024). Driving sustainable business practices in SMEs: Innovative approaches for environmental and economic synergy. *International Journal of Management & Entrepreneurship Research, 6*(8), 2637–2647. https://doi.org/10.51594/ijmer.v6i8.1411

Weick, V. (2016). Green economy and sustainable development. In *Handbook of sustainable development* (pp. 205–220). Edward Elgar Publishing. https://doi.org/10.4337/9781783473816.00016

Yatim, P., Ngan, S. L., & Lam, H. L. (2017). Financing green growth in Malaysia: Enabling conditions and challenges. *Renewable and Sustainable Energy Reviews, 75*, 1151–1159. https://doi.org/10.1016/j.rser.2016.11.144

Zhao, X., Benkraiem, R., Abedin, M. Z., & Wang, D. (2024). The charm of green finance: Can green finance reduce corporate carbon emissions? *Energy Economics, 133*, 107520. https://doi.org/10.1016/j.eneco.2024.107520

Zarrouk, H., Abdennadher, S., Galloway, L., & Tyler, B. B. (2025). Exploring the drivers of green SMEs: A multidimensional qualitative study. *Sustainable Development, 33*(3), 1234–1260. https://doi.org/10.1002/sd.3210