

POLICY IMPLICATIONS CONTRIBUTING TO SUSTAINABLE DEVELOPMENT: A CASE STUDY OF THE EMERGING ECONOMY IN VIETNAM

IMPLICAÇÕES POLÍTICAS QUE CONTRIBUEM PARA O DESENVOLVIMENTO SUSTENTÁVEL: UM ESTUDO DE CASO DA ECONOMIA EMERGENTE DO VIETNÃ

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Le Tuan Hiep*

*University of Finance and Business Administration (UFBA), Hung Yen Province, Vietnam

Orcid: <https://orcid.org/0000-0001-9996-3437>

hiep.lt@ufba.edu.vn

Phan Thanh Tam**

**Faculty of Postgraduate Studies, Lac Hong University (LHU), Dong Nai Province, Vietnam

Orcid: <https://orcid.org/0000-0003-2387-7756>

tampt@lhu.edu.vn

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Abstract

Sustainable development has become a strategic priority for emerging economies seeking to balance economic growth, social inclusion, and environmental protection. This study examines the policy determinants of sustainable development in Vietnam using a mixed-methods research design. Qualitative insights were obtained through in-depth discussions with 45 economic experts in Ho Chi Minh City. At the same time, quantitative data were collected via an online survey of 750 economic managers across five major Vietnamese cities, yielding 681 valid responses, which were analyzed using structural equation modeling. The results indicate that community and business awareness are the most influential direct drivers of sustainable development, followed by science and technology, economic policy, and social and environmental policies. Notably, the study identifies a moderating role of law policy in the relationship between science and technology and sustainable development. This finding suggests that technological advancement contributes more effectively to sustainable development outcomes when supported by strong and enforceable legal frameworks. Economic policy also plays a significant role by providing macroeconomic stability, while social and environmental policies serve as essential long-term foundations for inclusive and environmentally responsible development. This study contributes to the sustainable development literature by providing empirical evidence from an emerging economy

Resumo

O desenvolvimento sustentável tornou-se uma prioridade estratégica para as economias emergentes que buscam equilibrar crescimento econômico, inclusão social e proteção ambiental. Este estudo examina os determinantes políticos do desenvolvimento sustentável no Vietnã, utilizando uma metodologia de pesquisa mista. Foram obtidas informações qualitativas por meio de discussões aprofundadas com 45 especialistas em economia na cidade de Ho Chi Minh. Simultaneamente, dados quantitativos foram coletados por meio de uma pesquisa online com 750 gestores econômicos em cinco grandes cidades vietnamitas, resultando em 681 respostas válidas, que foram analisadas utilizando modelagem de equações estruturais. Os resultados indicam que a conscientização da comunidade e das empresas são os principais impulsionadores diretos do desenvolvimento sustentável, seguidos por ciência e tecnologia, política econômica e políticas sociais e ambientais. Notavelmente, o estudo identifica um papel moderador da política legal na relação entre ciência e tecnologia e desenvolvimento sustentável. Essa descoberta sugere que o avanço tecnológico contribui de forma mais eficaz para os resultados do desenvolvimento sustentável quando apoiado por estruturas legais fortes e aplicáveis. A política econômica também desempenha um papel significativo ao proporcionar estabilidade



context and by highlighting the interactive effects between technological and institutional factors. The findings offer valuable policy insights for Vietnam and other emerging economies seeking to design coherent, practical strategies for sustainable development aligned with global sustainability agendas.

Keywords: Law Policy. Sustainable Development. Public Policy. Science and Technology. Emerging Economy.

macroeconômica, enquanto as políticas sociais e ambientais servem como fundamentos essenciais de longo prazo para um desenvolvimento inclusivo e ambientalmente responsável. Este estudo contribui para a literatura sobre desenvolvimento sustentável, fornecendo evidências empíricas de um contexto de economia emergente e destacando os efeitos interativos entre fatores tecnológicos e institucionais. As conclusões oferecem informações valiosas para políticas públicas no Vietnã e em outras economias emergentes que buscam elaborar estratégias coerentes e práticas para o desenvolvimento sustentável, alinhadas às agendas globais de sustentabilidade.

Palavras-chave: Política Jurídica. Desenvolvimento Sustentável. Políticas Públicas. Ciência e Tecnologia. Economia Emergente.

1 INTRODUCTION

Sustainable development has emerged as a central paradigm in contemporary economic policy, particularly for emerging economies striving to achieve rapid growth while addressing social inequality and environmental degradation. The integration of economic, social, environmental, and institutional dimensions into a coherent development strategy has become increasingly critical amid globalization, technological transformation, and climate change. For countries such as Vietnam, which have experienced remarkable economic expansion over the past decades, the challenge lies not only in sustaining growth but also in ensuring its long-term quality and inclusiveness (Ahn *et al.*, 2023). Significant policy reforms across multiple domains, including economic management, legal frameworks, science and technology, social welfare, and environmental protection, have accompanied Vietnam's transition toward a market-oriented economy. However, the effectiveness of these policies in promoting sustainable development remains uneven and fragmented. Previous studies have often examined these policy dimensions in isolation, overlooking their interactive and systemic effects (Zhou *et al.*, 2024). As a result, there is a need for empirical research that adopts an integrated and interdisciplinary approach to understanding how different policy

instruments jointly influence sustainable development outcomes in emerging economies (Hong & Xiao, 2024).

Science and technology have increasingly been recognized as key drivers of sustainable development by enhancing productivity, supporting green innovation, and improving governance efficiency. At the same time, economic and legal policies provide the institutional foundations necessary for market stability, regulatory enforcement, and investment in sustainable practices. Social and environmental policies, although often characterized by delayed impacts, play an essential role in promoting social cohesion and ecological resilience. Moreover, growing community and business awareness has reshaped the implementation of public policies, as non-state actors become active participants in sustainability initiatives (Hoss-Golan *et al.*, 2024; Manasakis & Taliouris, 2022).

Despite the growing body of literature on sustainable development, empirical evidence from emerging economies, particularly Southeast Asian countries, remains limited. Existing studies often rely on macro-level indicators or single-method approaches, which may fail to capture the complexity of policy interactions at the managerial and institutional levels. Addressing this gap, the present study investigates the policy implications for sustainable development in Vietnam using a mixed-methods research design. Qualitative insights from expert discussions are combined with quantitative analysis using Structural Equation Modeling (SEM) based on survey data collected from economic managers across major Vietnamese cities.

By examining both direct and moderating effects among policy dimensions, this study contributes to the literature by providing a comprehensive empirical framework for understanding sustainable development in an emerging economy context. The findings offer valuable theoretical contributions and practical policy implications for Vietnam and other emerging economies pursuing sustainable and inclusive development trajectories.

2 THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

This study is grounded in an interdisciplinary theoretical framework that integrates endogenous growth theory, institutional theory, and stakeholder theory to explain the determinants of sustainable development in an emerging economy context. Endogenous growth theory emphasizes the role of knowledge, innovation, and

technological progress as internal drivers of long-term economic development, highlighting the importance of science and technology in enhancing productivity and sustainability outcomes (Quach *et al.*, 2022). Institutional theory underscores the significance of formal rules, legal systems, and policy coherence in shaping economic behavior and development trajectories, particularly in transitional economies such as Vietnam.

Meanwhile, stakeholder theory extends the analytical scope by recognizing the active role of communities, businesses, and non-state actors in influencing policy effectiveness and sustainable development performance (Awan *et al.*, 2023; Ahmed *et al.*, 2022). Within this integrated framework, sustainable development is conceptualized as a multidimensional construct reflecting economic viability, social equity, and environmental sustainability. Public policies are viewed as interrelated instruments that jointly influence sustainable development rather than operating independently. Science and technology, economic policy, social policy, environmental policy, law policy, and community and business awareness are therefore incorporated as key latent variables influencing sustainable development.

In emerging economies, policy effectiveness is often contingent upon institutional capacity and technological readiness. Science and technology not only directly impact sustainable development but also enhance the effectiveness of legal and regulatory frameworks by improving transparency, enforcement, and governance efficiency. Consequently, this study proposes both direct and moderating relationships among policy variables, reflecting the complex and interactive nature of sustainable development governance.

3 SCIENCE AND TECHNOLOGY AND SUSTAINABLE DEVELOPMENT

Science and technology play a pivotal role in driving sustainable development by fostering innovation, increasing resource efficiency, and supporting digital transformation (Mu *et al.*, 2025). Technological advancement enables the adoption of cleaner production processes, enhances environmental monitoring, and improves public service delivery (Dědeček & Dudzich, 2022; Grossmann *et al.*, 2022). In Vietnam, investments in digital infrastructure, innovation ecosystems, and research and development have been identified as key enablers of sustainable growth

H1: Science and Technology have a positive and significant effect on Sustainable Development

4 ECONOMIC POLICY AND SUSTAINABLE DEVELOPMENT

Economic policy provides the macroeconomic and structural foundation for sustainable development by fostering fiscal stability, promoting investment incentives, and regulating markets. Sound economic policies encourage long-term investment, promote efficient resource allocation, and support inclusive growth (Saboori *et al.*, 2024; Abbas *et al.*, 2024). In emerging economies, coherent economic policy is essential for balancing growth objectives with sustainability considerations (Biggeri *et al.*, 2023; Okere & Fasanya, 2024).

H2: Economic Policy has a positive and significant effect on Sustainable Development.

5 SOCIAL POLICY AND SUSTAINABLE DEVELOPMENT

Social policy contributes to sustainable development by enhancing social inclusion, reducing inequality, and strengthening human capital (Mousazadeh, 2025). Policies related to education, healthcare, labor protection, and social security improve societal resilience and long-term development capacity (Biney, 2023). Although social policy impacts may materialize gradually, their role in ensuring equitable development is indispensable.

H3: Social Policy has a positive and significant effect on Sustainable Development

6 ENVIRONMENTAL POLICY AND SUSTAINABLE DEVELOPMENT

Environmental policy aims to mitigate environmental degradation and promote sustainable resource management. Regulatory instruments, environmental standards, and green incentives play a crucial role in guiding sustainable production and consumption patterns (Adebayo *et al.*, 2022). In developing and emerging economies, environmental

policies often face implementation challenges, yet remain critical for long-term sustainability.

H4: Environmental Policy has a positive and significant effect on Sustainable Development

7 COMMUNITY AND BUSINESS AWARENESS AND SUSTAINABLE DEVELOPMENT

Community and business awareness reflect the extent to which economic actors and local communities recognize, support, and actively participate in sustainable development initiatives. High levels of awareness among businesses and communities can translate policy objectives into practical actions, thereby strengthening sustainable development outcomes (Effah *et al.*, 2023; Halstead *et al.*, 2022). In emerging economies, where state capacity may be constrained, the role of non-state actors becomes particularly critical (Henfrey *et al.*, 2022).

H5: Community and Business Awareness have a positive and significant direct effect on Sustainable Development.

8 LAW POLICY AND SUSTAINABLE DEVELOPMENT

Law policy constitutes a fundamental institutional pillar for sustainable development by providing regulatory clarity, enforcement mechanisms, and governance stability. In emerging economies, effective legal policies enhance policy credibility, reduce uncertainty, and facilitate the implementation of sustainable development strategies. However, the impact of law policy is highly dependent on institutional capacity and implementation effectiveness (Azam *et al.*, 2021; Lauwo *et al.*, 2022; Leavesley *et al.*, 2022). Law policy establishes the institutional and regulatory foundation necessary for sustainable development. Effective legal frameworks enhance policy enforcement, governance quality, and institutional credibility.

H6: Law Policy has a positive and significant effect on Sustainable Development.

9 MODERATING ROLE OF LAW POLICY

Science and technology are widely recognized as key drivers of sustainable development through innovation, productivity enhancement, and the diffusion of green and digital technologies. However, the effectiveness of science and technology in promoting sustainable development depends mainly on the legal and institutional environment. In emerging economies, inadequate legal frameworks, weak enforcement, or regulatory uncertainty may constrain the positive impacts of technological advancement (Saini *et al.*, 2023; Yee *et al.*, 2024; Forouei *et al.*, 2025). Law policy plays a critical moderating role by providing clear regulations, protecting intellectual property rights, and ensuring compliance with environmental and technological standards. When law and policy are strong and effectively enforced, scientific and technological innovations are more likely to be directed toward sustainable outcomes (Verhoef *et al.*, 2021). Therefore, the positive relationship between science and technology and sustainable development is strengthened under robust law and policy conditions.

H7: Law Policy positively moderates the relationship between Science and Technology and Sustainable Development.

Figure 1:

A research model for critical factors influencing sustainable development

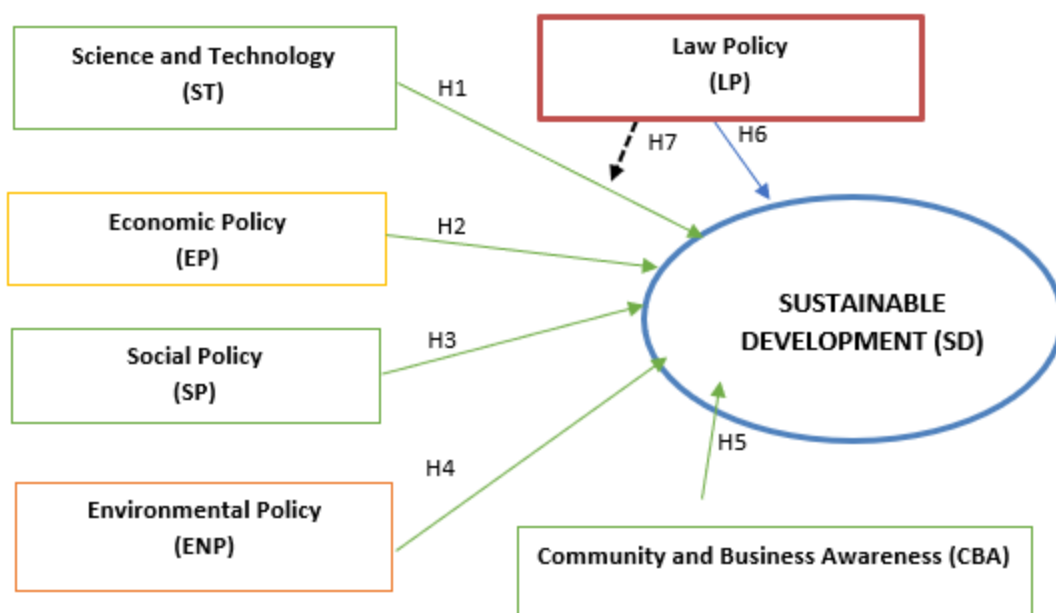


Figure 1 shows the research model empirically tested using Structural Equation Modeling (SEM), which allows the simultaneous examination of direct and moderating effects. The proposed framework provides a comprehensive understanding of how structural, institutional, social, environmental, and behavioral factors interact within a digitally evolving and legally structured context to shape sustainable development in Vietnam. This multidimensional model contributes to the expanding body of literature on sustainability by incorporating both established determinants and emerging contextual moderators, thereby offering a more nuanced perspective on sustainability mechanisms in developing economies.

10 RESEARCH METHODS

This study adopts a mixed-methods research design that integrates qualitative and quantitative approaches to comprehensively examine the policy implications for sustainable development in an emerging economy. The mixed-methods approach enhances the robustness of the research by allowing triangulation between expert insights and empirical data, thereby improving the validity and interpretability of the findings.

Qualitative Research: The qualitative component of the study was conducted through in-depth discussions with 45 economic experts based in Ho Chi Minh City, Vietnam. The experts were purposively selected based on their academic qualifications, professional experience, and involvement in economic policy formulation, public administration, and sustainable development projects. This group included university professors, senior policymakers, economists, and managers from public and private institutions (Hair *et al.*, 2019).

Semi-structured discussion guidelines were developed to explore expert perspectives on the role of science and technology, economic policy, social policy, environmental policy, legal frameworks, and community and business awareness in promoting sustainable development. The discussions provided valuable insights into contextual factors, policy interactions, and implementation challenges specific to Vietnam's development trajectory. The qualitative findings were used to refine the research framework, validate the relevance of the selected constructs, and support the development of survey items for the quantitative phase.

Quantitative Research: The quantitative phase employed a structured questionnaire survey targeting economic managers in both the public and private sectors across five major cities in Vietnam: Ho Chi Minh City, Hanoi, Da Nang, Can Tho, and Hai Phong. These cities represent key economic hubs with diverse development characteristics.

A total of 750 online questionnaires were distributed using professional networks and institutional channels. After data screening to remove incomplete and inconsistent responses, 681 valid questionnaires were retained for analysis, representing a response rate of 90.8%. This sample size exceeds the minimum requirements for structural equation modeling and ensures sufficient statistical power for hypothesis testing.

All measurement items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The constructs were operationalized based on established scales from previous studies and adapted to the Vietnamese context. A pilot test was conducted to ensure clarity, reliability, and content validity of the survey instrument.

The study applied Structural Equation Modeling (SEM) using a variance-based approach (PLS-SEM) to test the proposed hypotheses. PLS-SEM was selected for its suitability to complex models involving multiple latent constructs, interaction effects, and non-normal data distributions. This method is particularly appropriate for exploratory and policy-oriented research in emerging economies (Hair *et al.*, 2019). The evaluation of the research model was conducted in accordance with established PLS-SEM criteria. The measurement model was assessed using Cronbach's alpha and composite reliability (thresholds above 0.70) and average variance extracted (AVE) exceeding 0.50 to ensure convergent validity. Discriminant validity was examined using the Fornell–Larcker criterion and the HTMT ratio ($HTMT < 0.85$). The structural model was evaluated based on path coefficients (β), t-statistics (≥ 1.96 , $p < 0.05$), R^2 values, and the significance of the moderating effect through the interaction term.

The analysis followed a two-step procedure. First, the measurement model was evaluated by examining internal consistency reliability (Cronbach's alpha and composite reliability) and convergent validity (average variance extracted). Second, the structural model was assessed using path coefficients, t-statistics, and p-values across 5,000 bootstrap resamples. The moderating effect of Science and Technology on the

relationship between Law, Policy, and Sustainable Development was tested through an interaction term.

11 RESULTS

11.1 Demographic information of the study sample based on 681 respondents

This study is based on data collected from 681 valid respondents, comprising economic managers from both public and private sectors across five major cities in Vietnam. The demographic profile of the respondents is presented to provide an overview of the sample characteristics and to assess the dataset's representativeness. Regarding gender distribution, the sample consists of 282 male respondents (41.4%) and 399 female respondents (58.6%). The relatively balanced gender composition, with a slight predominance of female respondents, reflects the increasing participation of women in economic management and policy-related roles in Vietnam. In terms of marital status, 261 respondents (38.3%) reported being single, while 420 respondents (61.7%) indicated that they are married. This distribution suggests that the majority of respondents are in stable family situations, which may influence long-term perspectives on sustainable development, particularly regarding social and environmental concerns.

Regarding age structure, the sample is composed mainly of respondents in their prime working and managerial years. Specifically, 56 respondents (8.2%) are aged 20 to 25 years, 158 respondents (23.2%) are aged 25 to 35 years, and the most significant proportion, 359 respondents (52.7%), are aged 35 to 45 years. The remaining 108 respondents (15.9%) are aged 45 years and above.

Table 1

Testing of Cronbach's alpha and composite reliability

Factors	Code	Items	Mean	Std. Deviation	Cronbach's alpha	Composite reliability	Average variance extracted
1. Science and Technology	ST	4	3.123	0.931	0.914	0.940	0.795
2. Economic Policy	EP	4	3.225	0.923	0.941	0.958	0.850
3. Social Policy	SP	4	3.074	0.916	0.857	0.880	0.657
4. Environmental Policy	ENP	4	3.156	0.935	0.934	0.951	0.829
5. Community and Business Awareness	CBA	4	3.031	0.909	0.897	0.936	0.829
6. Law Policy	LP	4	3.118	0.940	0.867	0.905	0.706

7. Sustainable Development	SD	3	3.047	0.918	0.830	0.898	0.745
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Table 1 presents the results of the reliability and convergent validity assessment for the measurement model. The findings indicate that all constructs demonstrate satisfactory internal consistency and validity. Specifically, Cronbach's alpha values range from 0.830 to 0.941, exceeding the recommended threshold of 0.70, thereby confirming strong internal reliability across all latent variables. Among the constructs, Economic Policy ($\alpha = 0.941$) and Environmental Policy ($\alpha = 0.934$) exhibit particularly high reliability, reflecting the consistency of their measurement items. Similarly, Composite Reliability (CR) values for all constructs exceed 0.88, with the highest value observed for Economic Policy (CR = 0.958). These results further confirm the robustness of the measurement scales and indicate that the observed indicators reliably capture their respective latent constructs. Convergent validity is assessed using Average Variance Extracted (AVE), with all values exceeding the minimum acceptable threshold of 0.50.

Table 2

Testing the SEM model for factors influencing the sustainable development

Factors	Original sample	Sample mean	Standard deviation	T statistics	P values
CBA → SD	0.305	0.303	0.038	8.040	0.000
ENP → SD	0.082	0.086	0.027	3.074	0.002
EP → SD	0.155	0.155	0.032	4.770	0.000
LP → SD	0.136	0.142	0.031	4.431	0.000
LP x ST → SD	0.100	0.096	0.033	3.040	0.002
SP → SD	0.078	0.084	0.035	2.234	0.026
ST → SD	0.243	0.245	0.036	6.728	0.000

Table 2 presents the results of the structural equation modeling analysis examining the factors influencing sustainable development. The findings indicate that all hypothesized paths are statistically significant, providing strong empirical support for the proposed research model. Among the direct effects, Community and Business Awareness (CBA) has the most decisive influence on Sustainable Development ($\beta = 0.305$, $t = 8.040$, $p < 0.001$), highlighting the critical role of stakeholder engagement and private-sector awareness in advancing sustainability outcomes. This result underscores the importance of non-state actors in translating policy objectives into practical implementation, particularly in emerging economies.

Figure 2

Testing the SEM for factors influencing the sustainable development

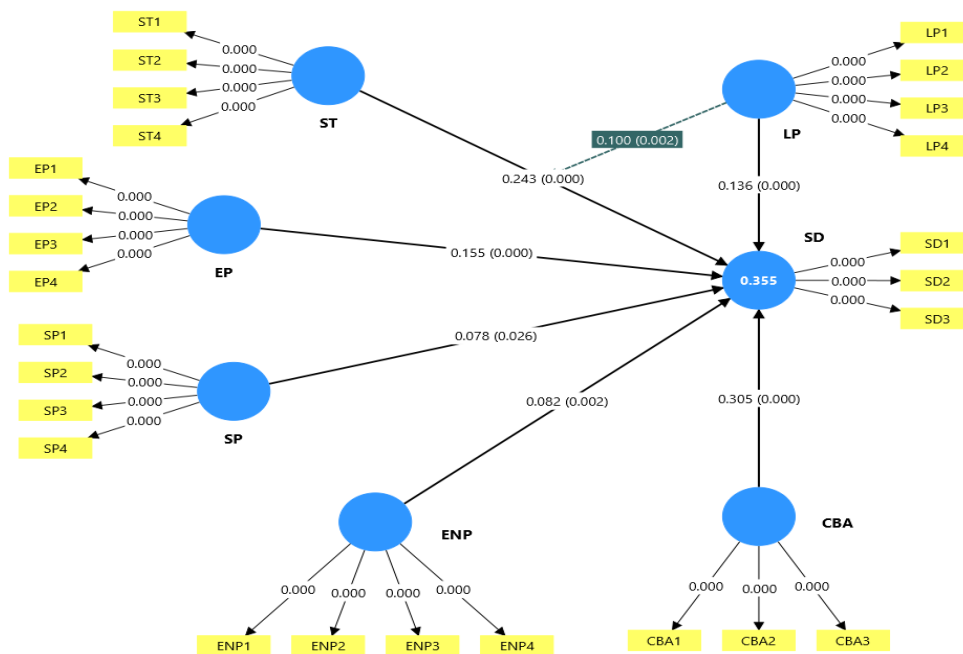


Figure 2 presents the structural equation model examining the factors influencing sustainable development in Vietnam. The model explains 35.5% of the variance in Sustainable Development ($R^2 = 0.355$), indicating a moderate explanatory power suitable for policy-oriented research in an emerging economy context. Among the direct effects, Community and Business Awareness exerts the most decisive influence on sustainable development ($\beta = 0.305$, $p < 0.001$), emphasizing the critical role of stakeholder engagement. Science and Technology also demonstrate a substantial positive effect ($\beta = 0.243$, $p < 0.001$), highlighting the importance of innovation and digital transformation. In addition, Economic Policy ($\beta = 0.155$, $p < 0.001$) and Law Policy ($\beta = 0.136$, $p < 0.001$) significantly contribute to sustainable development. Although Social Policy and Environmental Policy show smaller coefficients, their effects remain statistically significant. Notably, the interaction effect between Law Policy and Science and Technology is significant ($\beta = 0.100$, $p < 0.01$), confirming the moderating role of technology in enhancing the effectiveness of legal frameworks for sustainable development.

12.2 Discussion of findings

The findings of this study provide empirical evidence on the multifaceted role of public policies in promoting sustainable development within an emerging economy context. The results highlight that Community and Business Awareness is the most influential factor, underscoring the importance of stakeholder engagement and private sector participation in sustainability initiatives. This finding aligns with stakeholder theory, which emphasizes the role of non-state actors in enhancing policy effectiveness and translating sustainability objectives into actionable practices. In Vietnam, where decentralized governance and public–private partnerships are increasingly promoted, heightened awareness among businesses and communities appears to be a critical driver of sustainable development outcomes.

The significant effect of science and technology supports endogenous growth theory, reaffirming that innovation and technological advancement are central to long-term sustainable development (Driel *et al.*, 2024). Beyond its direct influence, the moderating role of science and technology in strengthening the relationship between law, policy, and sustainable development suggests that legal frameworks become more effective when supported by digital governance and technological capacity (Cunningham *et al.*, 2022). This finding extends existing literature by demonstrating the interactive role of technology in institutional effectiveness, particularly in transitional economies.

Furthermore, the positive impacts of economic policy and law policy highlight the importance of macroeconomic stability and regulatory quality in fostering sustainable development. These results are consistent with institutional theory, which posits that strong institutions enhance development performance (Maclure, 2023; Breitmeier *et al.*, 2021). Although social policy and environmental policy exhibit smaller effect sizes, their statistical significance indicates their essential long-term contributions to inclusive growth and environmental sustainability.

Overall, the findings emphasize that sustainable development in emerging economies requires a coherent and integrated policy framework that combines technological innovation, institutional quality, and active stakeholder participation.

13 CONCLUSIONS AND POLICY RECOMMENDATIONS

13.1 Conclusions

This study investigates the policy determinants of sustainable development in Vietnam by employing a mixed-methods approach that combines expert discussions and structural equation modeling. The findings confirm that sustainable development in an emerging economy is influenced by complex interactions among technological, institutional, and stakeholder factors rather than by isolated policy instruments. Community and business awareness emerge as the most influential direct drivers of sustainable development, emphasizing the crucial role of non-state actors in translating sustainability objectives into practice. Science and technology also exert a significant positive effect on sustainable development, highlighting the importance of innovation, digital transformation, and technological capacity in supporting long-term sustainability. Notably, the study demonstrates that law policy plays a moderating role in the relationship between science and technology and sustainable development. This finding suggests that technological progress contributes more effectively to sustainable outcomes when supported by a strong and enforceable legal framework. Economic policy further contributes by providing macroeconomic stability, while social and environmental policies, although with lesser effects, remain essential for inclusive and environmentally responsible development. Finally, the study provides empirical evidence from an emerging economy context and underscores the need for an integrated policy framework that aligns technological advancement with legal institutions and stakeholder engagement. These insights offer valuable guidance for policymakers in Vietnam and other emerging economies pursuing sustainable development pathways.

13.2 Policy recommendations

Based on the standardized path coefficients obtained from the structural equation model, this study proposes a set of prioritized policy recommendations to enhance sustainable development in Vietnam and other emerging economies. The recommendations are organized by the relative magnitude of the estimated effects, ensuring that policy actions align with empirical evidence.

(1) Prioritizing community and business awareness: Given that Community and Business Awareness exhibits the most potent effect on sustainable development ($\beta = 0.305$), policymakers should prioritize initiatives that enhance sustainability awareness among businesses and local communities. Government agencies should promote sustainability education programs, encourage corporate social responsibility (CSR), and integrate environmental, social, and governance (ESG) standards into business practices. Strengthening public–private partnerships and incentivizing sustainable entrepreneurship can further mobilize non-state actors to contribute to national sustainability goals actively.

(2) Accelerating science and technology development: Science and Technology rank as the second most influential factor ($\beta = 0.243$) and also play a critical moderating role in enhancing the effectiveness of law policy. Policymakers should therefore increase investment in research and development, digital infrastructure, and innovation ecosystems. Expanding e-government platforms and data-driven governance systems can improve policy implementation, transparency, and regulatory enforcement. Integrating science and technology strategies with sustainable development objectives is essential for maximizing policy synergies.

(3) Strengthening economic policy frameworks: With a standardized coefficient of $\beta = 0.155$, Economic Policy remains a significant driver of sustainable development. Policymakers should ensure macroeconomic stability while embedding sustainability criteria into fiscal, monetary, and investment policies. Green finance mechanisms, sustainable public procurement, and incentives for low-carbon industries can align economic growth with sustainability objectives. Coordinated economic policies can create an enabling environment for long-term sustainable development.

(4) Enhancing legal and institutional effectiveness: Law Policy demonstrates a meaningful impact on sustainable development ($\beta = 0.136$), particularly when reinforced by technological capacity. Policymakers should focus on strengthening regulatory quality, legal enforcement, and institutional transparency. Legal reforms should be accompanied by digital tools that support monitoring, compliance, and accountability. This integrated approach can significantly enhance the effectiveness of sustainability-related regulations.

(5) Sustaining social and environmental policy commitments: Although Environmental Policy ($\beta = 0.082$) and Social Policy ($\beta = 0.078$) exhibit smaller coefficients, their roles remain indispensable. Policymakers should maintain long-term

commitments to environmental protection and social inclusion by strengthening environmental regulations, expanding social welfare programs, and promoting inclusive development. These policies provide the structural foundation for sustainable development and ensure that economic growth does not compromise social equity or environmental integrity.

Limitations and Future Research: Despite its contributions, this study has several limitations. First, the cross-sectional design restricts the ability to capture dynamic changes in policy impacts over time. Second, the data are based on self-reported perceptions of economic managers, which may be subject to response bias. Third, the study focuses on major cities in Vietnam, potentially limiting the generalizability of its findings to rural or less developed regions. Future research could employ longitudinal data, incorporate objective sustainability indicators, and extend the analysis to comparative studies across emerging economies to further validate and enrich the proposed framework.

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Authors' Contribution

All authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

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