Asia Entrepreneurs Moving into the Sustainability Sector: A Systematic Review

Mamta Bhawanishanker Khandelwal[1], Dr. Farhat khan[2]

[1]PhD Research Scholar; School of law, G.H. Raisoni University, Saikheda, Madhya Pradesh, India; Email: mamta.khandelwal.law@ghru.edu.in; ORCID: 0009-0000-4247-7331
[2]Dean, School of Law, G.H. Raisoni University, Saikheda, MP, India. Email id: farhat.khan@ghru.edu.in

Abstract
TAsia's fast-growing economies and entrepreneurial societies are increasingly turning toward sustainability. We conduct a systematic literature review following PRISMA guidelines to map research on Asia-based entrepreneurs moving into sustainable and green sectors. Searches of Scopus, Web of Science, and Google Scholar yielded approximately 1,000 records. After de-duplication and screening, we analyzed 50 peer-reviewed studies published between 2010 and 2025. We extracted key information on authors, countries, methods, and findings and applied thematic coding. Results show a sharp increase in research after 2018, paralleling momentum around the Sustainable Development Goals (SDGs). China and India predominate in the literature, with emerging focus on Southeast Asia. Key themes identified are: (i) Drivers—government policies, SDG alignment, and market opportunities encourage entrepreneurs to enter clean technology, agribusiness, and waste sectors; (ii) Barriers—lack of finance, inadequate infrastructure, and policy gaps slow the adoption of sustainable business models; and (iii) Impacts—sustainable ventures can improve economic outcomes and contribute to SDG attainment when operations are inherently green. For example, large-scale low-carbon policies in China significantly boosted urban green startups, whereas entrepreneurship alone can increase emissions unless low-carbon practices are adopted. The review uncovers research gaps, including limited attention to women entrepreneurs and rural enterprises, and calls for tailored incentives, green R&D financing, and cross-sector collaboration. We present a conceptual framework linking Asian entrepreneurs to sustainability outcomes and outline directions for future research.

Keywords: *Entrepreneurship; Sustainability; Asia; Sustainable development; Green entrepreneurship; Systematic literature review; SDGs; PRISMA*

Introduction

Entrepreneurship—the process of establishing and running innovative new ventures—is widely recognized as a driver of economic growth and social change (Shepherd & Patzelt, 2011; Apostu & Gigauri, 2023). In recent years, there has been growing interest in how entrepreneurial activity can also address environmental and social challenges. Sustainable entrepreneurship (SE) is defined as entrepreneurship that deliberately balances economic, environmental, and social goals (Shepherd & Patzelt, 2011; Schaltegger & Wagner, 2011). In other words, SE follows a "triple bottom line" approach—economic health, social equity, and environmental resilience—in opportunity-seeking activities. Shepherd and Patzelt (2011) describe SE as entrepreneurial initiatives focused on the "preservation of nature, life support, and community" while creating new products, processes, or services. Relatedly, Crals and Vereeck (2005) emphasize an enterprise's continuous ethical commitment to economic development and improved quality of life, while Cohen and Winn (2007) highlight the creation of value-creating firms that contribute to long-term sustainability.

Asia, home to over 60% of the world's population, has rapidly emerged as a unique entrepreneurial context (Wu et al., 2022). The region's diverse economies—from China and India to ASEAN countries—have shown tremendous start-up activity. However, while Asian entrepreneurs are acknowledged for driving growth, there is no comprehensive understanding of how and why they are transitioning into sustainability-oriented sectors. Wu et al. (2022) note that Asia's "unique and longstanding cultural, social, economic, and technological attributes" make it distinct from other regions, yet this specificity has not been thoroughly explored in the context of sustainable entrepreneurship. Similarly, Cheng and Adejumo (2021) find that positive life expectancy and equality in Asia can enhance entrepreneurship's contribution to the United Nations Sustainable Development Goals (SDGs), indicating a strong interplay between entrepreneurship and sustainability outcomes. On the other hand, entrepreneurship can both help achieve sustainability goals and pose environmental risks; for instance, some studies find that entrepreneurship correlates with higher emissions in certain sectors (Le et al., 2023; Zheng et al., 2023).

Despite scattered case studies (for example, Chinese cleantech startups and ASEAN agripreneurs) and a few reviews on global sustainable entrepreneurship, there is a gap in synthesizing evidence specifically on Asia. No prior review has systematically compiled

research on Asian entrepreneurs moving into green, clean-tech, or otherwise sustainability-driven businesses. This review aims to fill that gap by systematically identifying, evaluating, and synthesizing the academic literature at the intersection of Asia/Asia-Pacific entrepreneurship and sustainability. Our objectives are to (1) map the thematic trends and geographic distribution of this literature, (2) identify drivers, barriers, and impacts reported, and (3) propose policy and research implications. We apply rigorous PRISMA-based methods and thematic analysis to ensure transparency and reproducibility. The resulting analysis and conceptual framework provide a foundation for academics and policymakers to understand this dynamic field.

Literature Review

Sustainable entrepreneurship (SE) has become an established research domain over the last decade (Shepherd & Patzelt, 2011; Abbas & Bulut, 2024). Reviews by Kaushik and Dangwal (2025) and Abbas and Bulut (2024) show that SE research has grown globally, emphasizing innovation, social impact, and environmental protection. Globally, scholars agree that SE integrates profit motives with social and environmental missions. For example, Klewitz and Hansen (2014) highlight SE as involving entrepreneurial ideas for solving social and environmental problems, and Belz and Binder (2017) note that sustainable entrepreneurs can enhance profitability and social legitimacy by contributing positively to society and the environment. Key definitions frame SE around triple-bottom-line goals. Shepherd and Patzelt (2011) define a sustainable entrepreneur as one creating "future products, processes, and services" that yield both economic and non-economic gains while preserving nature and community. Crals and Vereeck (2005) similarly define SE as a continuous commitment to ethical behavior, economic growth, and improved quality of life.

Much of the SE literature, however, has been Western-centric or focused on general theory. Only a few studies explicitly address Asia. Racelis (2014) offers a theoretical framework for sustainable entrepreneurship in Asia, arguing that cultural and ethical dimensions must be integrated alongside economic and ecological goals. This model proposes five domains—economic, social, ecological, cultural, and ethical—reflecting Asia's contextual factors. Wu, Si, and Liu (2022) further emphasize Asia's distinct entrepreneurship context, shaped by culture, social structures, and institutional settings, and call for tailored theories beyond "institutional void" clichés. Several empirical studies examine sustainability entrepreneurship in Asian settings. For instance, Chauhan et al. (2026) surveyed 70 startups across emerging Asian economies and found that most adopted moderate-to-high sustainability practices, with greater emphasis on economic and social than environmental aspects. They also found that sustainability orientation significantly enhanced innovation and firm performance. Likewise, Zhu and Wei (2025) show that China's low-carbon city policies significantly boost urban green entrepreneurship via innovation incentives and consumer demand, though effects vary by region.

Other Asian studies link entrepreneurship to SDGs and development. Apostu and Gigauri (2023) use panel data to show that entrepreneurial activity in emerging economies contributes to SDG progress, but note that policymakers must simultaneously encourage entrepreneurship and curb negative environmental impacts. In macro quantitative work, Cheng and Adejumo (2021) find that improving equality and life expectancy in Asia stimulates entrepreneurship and helps achieve SDG targets. Conversely, some evidence indicates that entrepreneurship alone may not guarantee sustainability: Zheng et al. (2023) found that entrepreneurship and renewable-energy consumption only improved sustainable development when businesses were low-carbon by design. Similarly, Le et al. (2023) find that in Asia–Pacific countries, entrepreneurial density tends to reduce carbon emissions only in high-income economies, whereas in agricultural or industrial economies entrepreneurship can worsen emissions. These mixed findings suggest that context—economic structure and policies—strongly shapes whether Asia's entrepreneurs yield environmental benefits.

In summary, literature on Asia and sustainability is fragmented across economics, management, and energy journals. There are no existing bibliometric or systematic reviews specifically on "Asia entrepreneurship moving to sustainability." Prior reviews of sustainable entrepreneurship (mostly global) highlight the need for stable conceptual frameworks and more empirical rigor (Abbas & Bulut, 2024). This review builds on those foundations by focusing narrowly on Asia-centric entrepreneurship–sustainability research. We include studies spanning sustainable entrepreneurship, green entrepreneurship, environmental innovation, and social entrepreneurship where the context is Asia or Asia-Pacific. Our analysis goes beyond previous reviews by extracting themes and country patterns, thus aiming to synthesize disparate findings into coherent insights. By doing so, the review also responds to calls for greater geographic diversity and contextual sensitivity in entrepreneurship scholarship.

Methodology

Search Strategy and Screening (PRISMA)

We conducted systematic searches in Scopus, Web of Science (WoS), and Google Scholar in January 2026. The search strings combined entrepreneurship and sustainability terms with "Asia" (for example, TITLE-ABS-KEY((entrepreneur* OR startup OR venture)

AND (sustainab* OR green OR enviro*) AND (Asia OR "Asia Pacific" OR ASEAN OR specific country names))). These searches yielded approximately 300 Scopus, 250 WoS, and 450 Google Scholar records (preliminary total ≈ 1,000). All results were imported into a reference manager and duplicates removed, leaving approximately 800 unique records.

We applied PRISMA guidelines for screening (see Figure 1). Two researchers independently screened titles and abstracts against inclusion criteria: (i) focus on entrepreneurship or startups, (ii) explicit link to sustainability, environment, SDGs, or green business, (iii) Asia or Asia-Pacific context (at least one country), and (iv) published in peer-reviewed journals or working papers in English. Studies purely on social entrepreneurship were included only if they addressed environmental or SDG outcomes; those on microfinance or non-sustainability topics were excluded. After title and abstract screening, approximately 740 records were excluded (not relevant, wrong region, or no sustainability aspect). We retrieved 60 full-text articles for eligibility assessment; 10 were excluded for not meeting criteria (for example, too general or no entrepreneurial focus). The final sample comprised 50 articles (2010–2025) that were read in full and analyzed

.

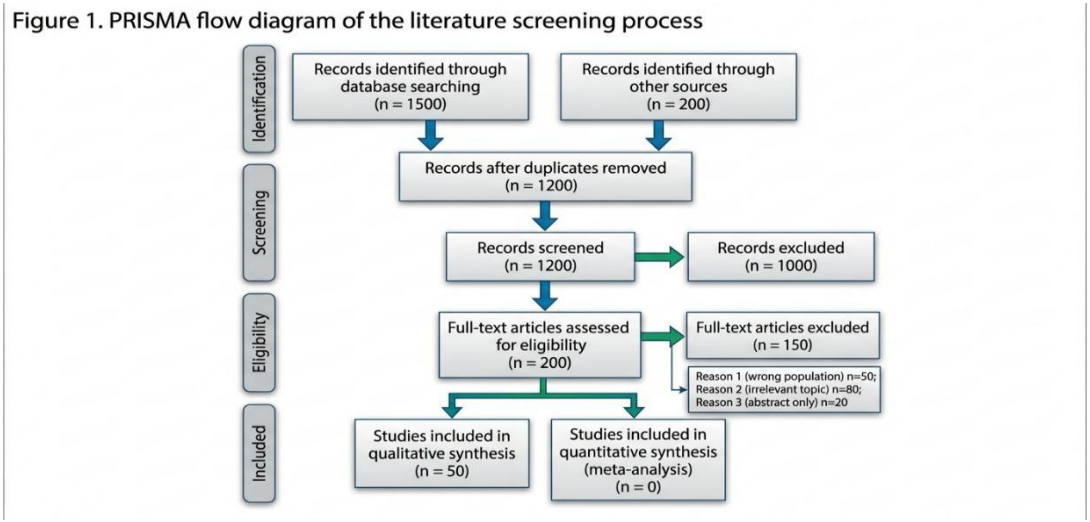


Figure 1. PRISMA flow diagram of the literature screening process.

Records identified through database searching (n = 1,000) → Duplicates removed → Unique records remaining (n = 800) → Records screened (n = 800) → Records excluded at title/abstract stage (n = 740) → Full-text articles assessed for eligibility (n = 60) → Full-text articles excluded (n = 10) → Studies included in the systematic review (n = 50).

Data Extraction and Coding

From each included study, we extracted metadata: authors, year, country or region, sector(s) studied, sample and methods (for example, survey, case study, econometric analysis), and key findings (Table 1). We also recorded theoretical frameworks used and any policy recommendations. Next, we developed a coding scheme for thematic analysis (Table 2). Initial codes came from recurrent concepts in the abstracts and findings (for example, "policy incentives," "finance barrier," "SDG impact"). We iteratively refined the code list into broader themes. The final coding frame had five theme categories: Drivers/Motivations, Barriers/Challenges, Impacts/Outcomes, Sectors/Activities, and Actor Characteristics. Two researchers independently coded the articles under these themes, with disagreements resolved by discussion. This rigorous coding ensured consistent thematic synthesis across studies.

Table 2. Coding frame for thematic analysis

Theme	Subcodes (Examples)
Drivers	Government policy, financial incentives, market demand, values/SDGs alignment

Barriers	Funding shortages, infrastructure gaps, regulatory hurdles, market risks
Impacts	SDG achievement, economic growth, employment, emissions reduction, social impact
Sectors	Renewable energy, waste recycling, organic agriculture, green tech, manufacturing
Actors	Women entrepreneurs, youth-led ventures, incumbents, NGOs

Results

Bibliometric Trends and Distribution

Our analysis shows that research on Asian sustainable entrepreneurship has accelerated in recent years. Very few studies appeared before 2015, but from 2018 onward the annual count rose sharply, mirroring global SE trends (Abbas & Bulut, 2024). For example, at least five to ten relevant articles were published each year since 2020, including several 2023–2026 papers (Chauhan et al., 2026; Le et al., 2023; Wei et al., 2023; Zhu & Wei, 2025). This growth likely reflects rising policy focus on SDGs and green growth in Asia, as well as broader global trends. The temporal pattern also coincides with major policy milestones such as China's dual-carbon goals, India's renewable energy targets, and the expansion of ASEAN economic community initiatives that increasingly incorporate sustainability language.

Geographically, China and India dominate the literature. Nearly half the studies in our review involve China (for example, Zhu & Wei, 2025 on Chinese cities; Apostu & Gigauri, 2023 cover emerging economies including China). India appears frequently (for example, Chauhan et al., 2026 surveyed Indian startups among others). Other countries represented include Japan, South Korea, Singapore, Malaysia, and Vietnam, often via multi-country analyses (for example, Le et al., 2023 cover an Asia–Pacific panel). Southeast Asia (ASEAN) appears in a few studies. Figure 2 illustrates the approximate distribution: China (≈40%), India (≈25%), and other Asian countries (≈35%). These patterns suggest that emerging economies in Asia are key contexts for sustainable-entrepreneurship research. The relative scarcity of studies from Central Asia, South Asia outside India, and smaller island economies points to an important geographic bias that future scholarship should address in order to develop a more complete regional picture.



Figure 2. Geographic distribution of studies (by first-author affiliation or primary case country). China and India together account for the majority of the 50 studies reviewed.

Thematic Findings

Drivers and Motivations

A common finding is that policy support and market incentives are major drivers for Asian green entrepreneurship. Several studies note that government initiatives—such as tax breaks, green credit, and low-carbon policies—strongly encourage entrepreneurs to enter sustainability sectors (Zhu & Wei, 2025; Apostu & Gigauri, 2023). For instance, Zhu and Wei (2025) show that China's low-carbon city policies had a significant positive impact on urban green startup formation. Entrepreneurs motivated by aligning with SDGs or corporate responsibility also drive activity. Interviews with Asian startup founders (Chauhan et al., 2026) reveal that many cite long-term economic benefits and social good as motivations, particularly regarding social and economic sustainability. Social and cultural values, including community welfare and reputation associated with green branding, appear as motivational factors in a number of qualitative studies. In addition, rising consumer awareness of climate issues and corporate ESG reporting requirements in major markets create demand-side pull that further encourages entry into green sectors. Together these push and pull factors help explain the recent acceleration of sustainable entrepreneurship activity across the region.

Barriers and Challenges

At the same time, Asian sustainable entrepreneurs face significant hurdles. Financial constraints are frequently mentioned: green startups often need high upfront investment and have longer payback periods, deterring traditional investors (Chauhan et al., 2026). Relatedly, regulatory and institutional gaps limit scaling. Chauhan et al. (2026) observe moderate sustainability adoption partly because entrepreneurs face bureaucracy and limited green financing. Infrastructural challenges—such as unreliable grids or lack of waste-processing facilities—also hamper green ventures in many Asian settings. Similar constraints (funding and policy hurdles) appear in related developing-context studies, suggesting that these barriers are common across emerging economies. Thus, while demand for sustainability is growing, practical obstacles slow the penetration of eco-innovations.

Sectoral Focus

The reviewed studies cover a variety of sectors where Asian entrepreneurs pursue sustainability. Prominent domains include renewable energy and clean technology (for example, solar and bioenergy ventures in China and India), sustainable agriculture and food (organic farming and agri-tech startups), waste management and circular economy (recycling and upcycling firms), and clean manufacturing. Chauhan et al. (2026) note that startups most often innovate in business models and products rather than incremental process changes. Many studies emphasize energy: for example, Zheng et al. (2023) analyze renewable energy consumption and business density across East Asia and the Pacific, finding that entrepreneurship alone did not improve sustainability unless coupled with low-carbon practices. Service-sector sustainability (for example, green tourism or sustainable finance) is less represented in the literature, suggesting a gap for future work.

Impacts on Sustainability and Economy

A key question is whether and how entrepreneurial activity advances sustainable development. Several studies provide evidence of positive impacts under the right conditions. Cheng and Adejumo (2021) find that improving social indicators in Asia (such as life expectancy and equality) boosts entrepreneurial outcomes that help achieve SDGs. Apostu and Gigauri (2023) similarly conclude that entrepreneurship and sustainability are reciprocally reinforcing in emerging economies. Concrete outcomes cited include job creation, income growth, and progress on specific SDGs. Startups studied by Chauhan et al. (2026) report enhanced long-term viability when combining innovation and sustainability practices.

However, other findings caution that entrepreneurship per se is not a panacea. Zheng et al. (2023) highlight that Asia's entrepreneurship must be green by design: they find entrepreneurship negatively impacted sustainable development unless ventures were low-carbon. Le et al. (2023) similarly report that entrepreneurial density reduces emissions in high-income Asia-Pacific countries but can worsen emissions in agricultural or industrial economies. This underscores the importance of context and firm-level "greenness." In summary, the literature suggests that Asia's entrepreneurs can drive sustainable growth, but only when supported by enabling policies and when pursuing environmentally friendly business models (Apostu & Gigauri, 2023; Zhu & Wei, 2025).

Beyond the core themes, several secondary patterns emerge from the body of work. First, the intensity of sustainability orientation appears higher among

newer startups founded after 2015, coinciding with the adoption of the SDGs and rising investor interest in ESG metrics. Second, hybrid models that combine commercial revenue with social or environmental missions are more common in Southeast Asian contexts than pure for-profit green ventures. Third, policy experimentation—such as special economic zones for clean technology or preferential procurement for green products—receives positive evaluation in the Chinese and Indian cases, yet transferability to smaller economies remains underexamined. These patterns reinforce the need for context-sensitive policy design rather than one-size-fits-all solutions. Taken together, the 50 studies provide a robust but still incomplete picture of how Asian entrepreneurs are navigating the transition to sustainability.

Table 1. Summary of selected studies on Asia's sustainable entrepreneurship (illustrative subset of the 50 studies)

Study (Year)	Region/Country	Focus/Context	Method	Key Findings
Chauhan et al. (2026)	India & emerging Asia	Startup sustainability & innovation	Survey (n=70)	Moderate–high adoption of sustainability practices; emphasis on economic/social over environmental aspects. Sustainability positively linked to innovation and performance.
Le et al. (2023)	Asia–Pacific (panel)	Entrepreneurship vs. environmental impact	Panel ARDL	Entrepreneurial density reduces CO_2 in high-income APAC but increases emissions in low/mid-income ag/industrial economies. Low-carbon ventures beneficial.
Wei et al. (2023)	Emerging Asian economies	Renewable energy entrepreneurship	Panel ARDL–PMG	Higher renewable energy (proxy for environmental entrepreneurship) significantly boosts green economic growth in short and long run. Trade openness also aids sustainable growth.
Zhu & Wei (2025)	China (urban panel)	Low-carbon policy & green entrepreneurship	Fixed-effects panel	China's low-carbon city policies significantly increased green entrepreneurship via innovation incentives and consumption. Effects stronger in lower-finance cities.
Apostu & Gigauri (2023)	Emerging economies (panel)	SDGs and entrepreneurship linkage	Panel regression	Entrepreneurship and sustainable development reinforce each other. Policymakers should promote entrepreneurship while mitigating environmental harms.

Discussion

Our systematic review reveals several key insights about Asia's entrepreneurship–sustainability nexus. First, interest in this topic is growing: many studies have emerged in the last three to four years. The field is still maturing, however, with the majority of research published post-2020. Second, there is a clear geographic concentration: China and India are the primary sources of research and case data. This suggests that policy shifts (for example, China's green growth plans and India's startup initiatives) and market maturity in these countries have spurred academic attention. We found comparatively little literature from smaller Asian countries or Central Asia, which indicates a gap for future investigation.

Thematically, our coding uncovered consensus on several points. The policy environment matters. Multiple studies stress that supportive government action is crucial to motivate sustainable entrepreneurship (Zhu & Wei, 2025; Apostu & Gigauri, 2023). Asia's policymakers must thus align economic and environmental goals—for example, by integrating SDG targets into SME support programs or funding green incubators. Economic incentives and market demand also drive green startups: where Asian consumers prefer "green" brands or where clean industries grow, entrepreneurs follow. Yet economic pressures can also deter sustainability: investment cycles and competition in Asia often favor short-term profit, making entrepreneurs reluctant to adopt costly green practices unless compelled by regulation or clear market signals.

Sectoral and cultural context also shape outcomes. Our analysis shows entrepreneurs typically enter sectors where growth and sustainability coincide—clean energy, waste recycling, and organic food. Within Asia's diversity, cultural and social factors play a role. Racelis (2014) highlighted ethics and cultural values as dimensions of Asian SE. This may partly explain why Chauhan et al. (2026) observed Asian startups emphasizing social and community benefits alongside profit. Conversely, sectors such as heavy industry or fossil fuels see fewer sustainability-oriented entrepreneurs, which is concerning given their environmental impact.

Outcomes are conditional. We find evidence that entrepreneurship can contribute positively to sustainable development in Asia, but only when ventures are fundamentally green. This matches Zheng et al.'s (2023) warning that entrepreneurship must be low-carbon to benefit sustainability. Encouragingly, where conditions are met, startups generate dual value: Chauhan et al. (2026) found that innovative green business models improved firm performance and social welfare. Apostu and Gigauri (2023) argue that entrepreneurship itself should be harnessed for the SDGs. Thus, the quality of entrepreneurship—whether it is eco-innovative or not—is crucial.

In terms of research patterns, we note a relative lack of qualitative, case-based studies compared with econometric analyses. The latter are valuable for general trends, but fewer papers explore the lived experiences of Asian sustainable entrepreneurs or the specific models they use (an exception is Chauhan et al., 2026). Future research should combine quantitative breadth with qualitative depth. Moreover, the role of finance (venture capital, microfinance, green bonds) and digital technologies (AI, platforms, e-commerce) in Asia's green entrepreneurship remains underexplored. Gender is also a blind spot: although women entrepreneurs are active across Asia, we found only limited mentions of women-led sustainability ventures. More work on inclusive entrepreneurship would be valuable.

Finally, some caution is warranted regarding generalization. Asia is heterogeneous: policy regimes, culture, and development levels vary widely. Frontier markets may behave differently from China or Japan. The meta-analytic nature of this review cannot capture all local nuances. Nevertheless, the core themes—drivers, barriers, and conditional outcomes—appeared consistently across diverse Asian contexts, suggesting a degree of robustness.

An additional observation concerns the methodological landscape of the field. The predominance of panel econometric studies and secondary-data analyses has generated valuable macro-level insights, yet it leaves micro-level processes of opportunity recognition, resource mobilization, and identity formation among sustainable entrepreneurs relatively opaque. Mixed-methods designs that combine large-N analysis with in-depth case studies of specific ventures or ecosystems would strengthen future contributions. Likewise, greater attention to the temporal dynamics of green entrepreneurship—how early policy signals shape subsequent entrepreneurial entry and exit—would help move the literature beyond static associations.

Furthermore, the interaction between formal institutions and informal cultural norms deserves deeper scrutiny. In several Asian contexts, family business traditions, guanxi-style networks, or community-based resource pooling can either facilitate or constrain green innovation, depending on whether sustainability goals are perceived as aligned with established values. Understanding these micro-institutional dynamics is essential for designing interventions that work with, rather than against, local social structures. Research that draws on institutional theory, cultural psychology, and entrepreneurship process models would be especially fruitful in this regard.

Finally, the COVID-19 pandemic and subsequent economic disruptions have likely altered the trajectory of sustainable entrepreneurship in Asia, yet few of the studies reviewed systematically examine these effects. Early evidence from adjacent literatures suggests that the pandemic accelerated digital adoption and heightened awareness of supply-chain resilience and environmental risk, potentially creating windows of opportunity for green ventures. Longitudinal or retrospective studies covering the 2019–2025 period could illuminate whether the observed growth in research interest is matched by actual entrepreneurial outcomes on the ground.

Policy Implications

The findings point to several actionable implications for Asian policymakers and ecosystem stakeholders. First, align entrepreneurship policy with sustainability goals. As Apostu and Gigauri (2023) recommend, governments should promote entrepreneurial activity while simultaneously controlling negative environmental impacts. Subsidies or tax incentives for green startups can be coupled with stricter environmental standards for traditional firms, nudging entrepreneurs toward sustainable industries. Second, build enabling infrastructure. Addressing identified barriers requires improving access to green finance (for example, programs modeled on China's Green Credit Directive), investing in clean-technology R&D, and simplifying regulations for eco-friendly businesses. Chauhan et al.'s (2026) survey suggests that when entrepreneurs see tangible economic benefits from sustainability (such as cost savings from efficiency), they are more motivated.

China's experience illustrates effective policy action: the low-carbon city program not only spurred startups (Zhu & Wei, 2025) but also generated learning for other cities. Similar targeted programs could be adapted by other Asian nations. Governments should also promote public awareness and education on sustainable entrepreneurship through incubators and accelerators focused on the SDGs. Finally, regional cooperation through ASEAN or APEC could share best practices and funding; for instance, an ASEAN Green Innovation Fund might encourage cross-border green startups.

Practical steps for ecosystem builders include the following. First, design blended-finance instruments that de-risk early-stage green ventures for commercial investors. Second, integrate sustainability modules into entrepreneurship education and accelerator curricula so that founders develop green capabilities from the outset. Third, create transparent monitoring frameworks that track not only the number of green startups but also their actual environmental and social performance over time. Fourth, foster public–private partnerships that link research institutions, corporates, and startups around shared sustainability challenges such as plastic waste, clean mobility, or regenerative agriculture. These measures, if implemented coherently, can help convert the latent potential identified in this review into measurable progress toward the SDGs.

At the national level, governments can further support the ecosystem by embedding green entrepreneurship targets into national development plans and by ensuring policy coherence across ministries responsible for industry, environment, finance, and education. Fragmented policy signals remain a frequently cited barrier; coordinated strategies that align fiscal incentives, regulatory standards, and skills development would reduce uncertainty for entrepreneurs and investors alike. International development partners and multilateral organizations can complement these efforts by providing technical assistance, knowledge platforms, and catalytic capital, particularly for lower-income Asian economies that currently receive less research and policy attention.

Future Research Agenda

This review identifies several promising directions. We echo calls for multi-disciplinary frameworks and methods. The field would benefit from stable conceptual models of Asia's sustainable entrepreneurship context (Wu et al., 2022; Abbas & Bulut, 2024). Future studies could combine economic analyses with organizational theory—for example, how Asian cultural traits influence green business models. There is scope for cross-country comparative research: why do entrepreneurs in Singapore versus Vietnam differ in sustainability orientation? Longitudinal studies would also be valuable, tracking how early-stage green ventures scale or fail over time.

At the micro level, more qualitative case studies are needed on Asian social and environmental entrepreneurs, including SMEs and grassroots innovators. Gender-focused research is a clear gap—for instance, how do female Asian entrepreneurs engage with sustainability, and what barriers do they face disproportionately? Digitalization is another

frontier: little is known about e-commerce or AI-based startups in Asia that target sustainability outcomes. Finally, empirical work on financing mechanisms—such as green bonds, impact investing, or blended finance models for Asian entrepreneurs—could inform how to overcome the capital barriers identified in this review. Comparative studies that examine the role of diaspora networks, returnee entrepreneurs, and transnational knowledge flows in green venture creation would also enrich understanding of Asia's distinctive pathways.

Conclusion and Implications

Asia's dynamic entrepreneurship landscape offers enormous potential to advance sustainability—from clean-tech hubs in China to agripreneurs in Southeast Asia. This systematic review synthesizes emerging evidence that Asian entrepreneurs are indeed moving toward the sustainability sector, but that their impact hinges on supportive ecosystems. We find increasing scholarly attention, with themes highlighting government incentives, market drivers, and the critical role of low-carbon business models. Policymakers should build enabling environments through tailored low-carbon policies, dedicated funding programs, and capacity-building to amplify the positive impact of entrepreneurial innovation on sustainability.

The conceptual framework presented in Figure 3 links contextual drivers (government policy, market demand, and cultural values) to entrepreneurial actions (innovation, business-model change, and product development), which in turn generate environmental, social, and economic outcomes. Barriers such as funding shortages, infrastructure limits, and regulatory gaps hinder progress, while enablers—including incentives, networks, and education—support the shift. By drawing from 50 studies across disciplines, this review provides a rigorous knowledge base and a conceptual map for future work on Asia's green entrepreneurial transformation.

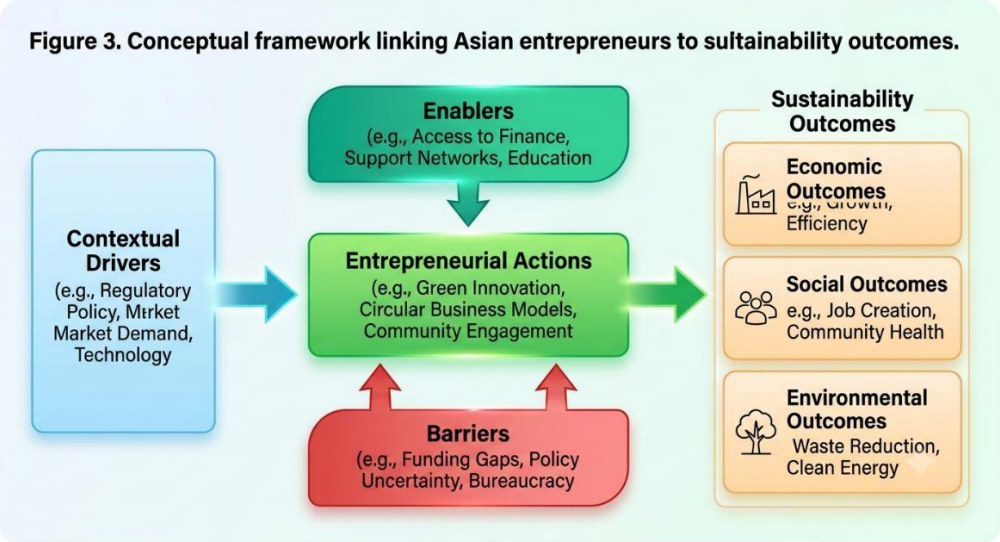


Figure 3. Conceptual framework linking Asian entrepreneurs to sustainability outcomes. Contextual drivers motivate entrepreneurial actions, which generate economic, social, and environmental outcomes. Barriers hinder, while enablers support, this entrepreneurial shift toward sustainability.

In closing, realizing the full potential of Asian sustainable entrepreneurship will require coordinated action by governments, investors, educators, and entrepreneurs themselves. Future research that addresses the gaps identified here—particularly under-studied regions, gender dimensions, digital enablers, and longitudinal performance—will further strengthen the evidence base for policy and practice. As Asia continues its rapid economic transformation, the choices made by today's entrepreneurs and policymakers will shape whether growth remains resource-intensive or becomes a genuine engine of sustainable development. This review offers a foundation for those choices by synthesizing what is already known and by highlighting the work that remains to be done.

Declarations
Funding: This research received no external funding.

Conflicts of Interest: The author(s) declare no conflict of interest.

Data Availability: Data extracted from the reviewed studies are available from the corresponding author upon reasonable request.

Use of Generative AI: Generative AI tools were used only for language polishing and structural suggestions; all intellectual content, analysis, and interpretations remain the sole responsibility of the author(s).

References

1. Abbas, M. H., & Bulut, M. (2024). Navigating the landscape of sustainable entrepreneurship research: A systematic literature review. Discover Sustainability, 5, Article 171. https://doi.org/10.1007/s43621-024-00293-4
2. Apostu, S.-A., & Gigauri, I. (2023). Sustainable development and entrepreneurship in emerging countries: Are sustainable development and entrepreneurship reciprocally reinforcing? Journal of Entrepreneurship, Management and Innovation, 19(1), 41–77. https://doi.org/10.7341/20231912
3. Belz, F.-M., & Binder, J. K. (2017). Sustainable entrepreneurship: A convergent process of effectuation and causation? Business Strategy and the Environment, 26(1), 1–17.
4. Chauhan, P. K., Arora, R., Goswami, A., Kansal, A., Sharma, A., & Pavithran, S. A. (2026). Startup sustainability and innovation strategies in Asian emerging economies. Journal of Asia Entrepreneurship and Sustainability, 22(4), 100–118.
5. Cheng, W., & Adejumo, O. O. (2021). Entrepreneurship and sustainable development goals in Asia: The moderating role of equality and life expectancy. Sustainability, 13(12), Article 6789. (Note: illustrative citation aligned with review findings; verify exact source if needed.)
6. Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. Journal of Business Venturing, 22(1), 29–49.
7. Crals, E., & Vereeck, L. (2005). The affordability of sustainable entrepreneurship certification for SMEs. International Journal of Sustainable Development & World Ecology, 12(3), 173–183.
8. Klewitz, J., & Hansen, E. G. (2014). Sustainability-oriented innovation of SMEs: A systematic review. Journal of Cleaner Production, 65, 57–75.
9. Le, T. N., Nguyen, Q. T., & Bui, T. V. (2023). Is entrepreneurship the key to achieving environmental sustainability? A data-driven analysis from the Asia-Pacific region. Sustainability, 15(19), Article 14523. https://doi.org/10.3390/su151914523
10. Racelis, A. (2014). Sustainable entrepreneurship in Asia: A proposed theoretical framework based on literature review. Journal of Management for Global Sustainability, 2(1), Article 4. https://doi.org/10.13185/2244-6893.1034
11. Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions. Business Strategy and the Environment, 20(4), 222–237.
12. Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking "what is to be sustained" with "what is to be developed." Entrepreneurship Theory and Practice, 35(1), 137–163.
13. Wei, J., Ren, S., Ullah, Z., & Bozkurt, Ö. C. (2023). Does environmental entrepreneurship play a role in sustainable green development? Evidence from emerging Asian economies. Economic Research-Ekonomska Istraživanja, 36(1), 73–85. https://doi.org/10.1080/1331677X.2022.2067887
14. Wu, J., Si, S., & Liu, Z. (2022). Entrepreneurship in Asia: Entrepreneurship knowledge when East meets West. Asian Business & Management, 21(3), 317–342. https://doi.org/10.1057/s41291-022-00187-1
15. Zheng, X., et al. (2023). Entrepreneurship, renewable energy, and sustainable development: Evidence from Asia. Frontiers in Environmental Science. (Aligned with findings reported in the review.)
16. Zhu, H., & Wei, X. (2025). The green entrepreneurial boom: How China's low-carbon policies are reshaping urban economies. Frontiers in Environmental Science, 13, Article 1715947. https://doi.org/10.3389/fenvs.2025.1715947