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Green Intellectual Capital in Emerging Asian Economies: A Systematic Literature Review

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Abstract

This study examines Green Intellectual Capital (GIC) in Asia through a Systematic Literature Review (SLR). Articles were collected from the Scopus and Dimensions databases, resulting in 412 initial records. Following PRISMA procedures and MMAT quality assessment, 16 empirical studies were selected for thematic synthesis. The findings show that GIC development in Asia is influenced by institutional pressure, organizational culture, industry characteristics, digital capabilities, and workforce dynamics. Government intervention, leadership commitment, and technological readiness emerge as key drivers of GIC. The review highlights that GIC is a context dependent capability shaped by interactions between external institutional forces and internal organizational resources. These findings provide insights for managers and policymakers in developing sustainability-oriented strategies across Asian economies.

Abstrak Studi ini mengkaji Green Intellectual Capital (GIC) atau Modal Intelektual Hijau di Asia melalui Systematic Literature Review (SLR) atau Tinjauan Literatur Sistematis. Artikel dikumpulkan dari basis data Scopus dan Dimensions, yang menghasilkan 412 catatan awal, mengikuti prosedur PRISMA dan penilaian kualitas MMAT, 16 studi empiris dipilih untuk sintesis tematik. Temuan menunjukkan bahwa perkembangan GIC di Asia dipengaruhi oleh tekanan institusional, budaya organisasi, karakteristik industri, kemampuan digital, dan dinamika tenaga kerja. Intervensi pemerintah, komitmen kepemimpinan, dan kesiapan teknologi muncul sebagai penggerak utama GIC. Tinjauan ini menyoroti bahwa GIC merupakan kemampuan yang bergantung pada konteks, yang dibentuk oleh interaksi antara kekuatan institusional eksternal dan sumber daya organisasi internal. Temuan ini memberikan wawasan bagi para manajer dan pembuat kebijakan dalam mengembangkan strategi yang berorientasi pada keberlanjutan di berbagai perekonomian Asia.

INTRODUCTION

In Asia, environmental sustainability issues have become increasingly important due to growing regulatory pressures, stakeholder expectations, and environmental degradation challenges. Organizations are expected not only to improve economic performance but also to integrate environmentally responsible practices into their business strategies and operations. One approach that has received growing attention in sustainability and management literature is Green Intellectual Capital

(GIC), which refers to environmentally related knowledge assets, including green human, structural, and relational capital. GIC is considered a strategic resource that supports green innovation and improves environmental performance (Mahran & Elamer, 2023; Satar et al., 2023). Previous studies have demonstrated that GIC contributes positively to environmental and organizational performance. Green knowledge assets help organizations develop innovative solutions, enhance sustainability practices, and strengthen competitive advantage. However, existing studies remain fragmented and largely decontextualized, particularly in Asian countries, where institutional, cultural, and structural characteristics differ from those of Western economies (Esa et al., 2025; Mahran & Elamer, 2023).

The Asian context presents unique conditions that challenge universal assumptions regarding GIC. Government intervention, stronger regulatory control, collectivist values, and hierarchical organizational structures influence how green knowledge is developed and utilized within organizations Asia (Begum et al., 2023; Wang & Juo, 2021). Furthermore, contextual factors such as organizational culture, industry characteristics, labor dynamics, and environmental regulations shape the effectiveness of GIC implementation in different settings (Asiaei et al., 2021; Liu et al., 2024). Although several studies have examined the relationship between GIC and organizational performance, most focus primarily on direct effects and pay limited attention to contextual factors that influence GIC development. Consequently, the mechanisms through which institutional, organizational, and technological factors affect GIC in Asian countries remain insufficiently understood (Mahran & Elamer, 2023; Satar et al., 2023).

Another limitation of previous studies is the reliance on traditional narrative reviews, which often lack systematic procedures and may overlook contextual differences across countries and industries. Systematic Literature Review (SLR) offers a more transparent and rigorous approach for synthesizing empirical evidence, identifying research gaps, and evaluating study quality (Esa et al., 2025; Ghosh & Singh, 2024). Through a structured review process, SLR can provide a more comprehensive understanding of GIC development within the Asian context. Therefore, this study aims to conduct a Systematic Literature Review of empirical studies on GIC in Asian countries.

METHODOLOGY

The implementation of an SLR in this GIC study was based on a combination of established review protocols, international publication standards, and widely recognized methodological guidelines. The main framework used is PRISMA, which ensures that the identification, screening, and inclusion of articles are carried out transparently and systematically, thereby minimizing selection bias (Janjua et al., 2021; Salmah et al., 2025). In addition, best practices from previous SLRs in the field of GIC and sustainability were adopted to design the search and thematic synthesis strategy (Kumar et al., 2024; Zhou et al., 2024). Methodological quality evaluation was performed using MMAT, which allows for objective assessment of various research designs (Ghassab et al., 2025; Mehmood & Hanaysha, 2022). This approach supports a comprehensive, critical, and contextual literature synthesis for GIC studies in the Asia (Nandatari et al., 2024; Rao & Shukla, 2022).

Formulation of RQ

The research questions were formulated using the PICO mnemonic framework, which includes Population/Problem (P), Interest (I), Comparison (C), and Outcome (O) (Lockwood et al., 2015). Based on this framework, this systematic review covers four main components. Population (P) refers to organizations or companies that develop and utilize Green Intellectual Capital in various sectors. Interest (I) covers organizational, technological, and institutional factors that influence the development of GIC. Comparison (C) considers contextual differences, such as industry type, country, and regulatory environment. Meanwhile, Outcome (O) focuses on the formation and effectiveness of Green Intellectual Capital as an organizational strategic asset. Using this framework, the research questions in this study are formulated as follows:

RQ1: What organizational, technological, and institutional factors influence the development of Green Intellectual Capital across different contexts?

RQ2: How do contextual factors such as industry type, country setting, and regulatory environment shape the relationship between antecedents and Green Intellectual Capital?

Systematic Searching Strategy

The identification stage employed a structured search strategy using keywords related to Green Intellectual Capital, its dimensions, antecedents, and contextual factors. Searches were conducted in the Scopus and Dimensions databases using Boolean, truncation, and wildcard techniques. The initial search identified 412 articles (155 from Scopus and 257 from Dimensions). Searches were limited to titles, abstracts, and keywords to improve relevance, with the detailed search strings presented in Table 1.

Table 1. Search string used in the selected databases

Database	Search Strings
Scopus	(("green intellectual capital" OR "environmental intellectual capital" OR "green human capital" OR "green structural capital" OR "green relational capital") AND (antecedent* OR determinant* OR driver* OR enabler* OR development))
Dimensions	(("green intellectual capital" OR "environmental intellectual capital") OR ("green human capital" OR "green structural capital" OR "green relational capital")) AND (antecedent* OR determinant* OR driver* OR enabler* OR development))

Source: Processed data, 2025

Screening

At the screening stage, articles were selected based on titles, abstracts, and metadata using predefined inclusion and exclusion criteria (Table 2). Eligible studies were English-language open-access journal articles on Green Intellectual Capital with a focus on Asian contexts, while irrelevant studies were excluded. From the initial 412 records, 286 were excluded, leaving 126 articles. After removing 16 duplicates, 110 articles remained for eligibility and quality assessment.

Table 2. Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Criterion 1: Type of publication	Journal articles published in peer-reviewed journals	Conference papers, book chapters, books, editorials, notes, dissertations, and non-peer-reviewed publications
Criterion 2: Language and accessibility	Articles written in English and available as open access full text	Articles not written in English or not accessible in full text
Criterion 3: Topical relevance	Studies explicitly addressing Green Intellectual Capital or its dimensions (human, structural, or relational capital)	Studies not related to Green Intellectual Capital or focusing solely on general sustainability without GIC
Criterion 4: Geographical context	Studies conducted in Asian countries or clearly focusing on Asian organizational contexts	Studies conducted outside Asia or without a clear geographical context
Criterion 5: Research design	Empirical studies (quantitative, qualitative, or mixed methods)	Conceptual papers, narrative reviews, systematic reviews, and meta-analyses
Criterion 6: Research focus	Studies examining antecedents, contextual factors, or mechanisms related to the development of GIC	Studies focusing exclusively on outcomes without discussing GIC antecedents or context

Source: Processed data, 2025

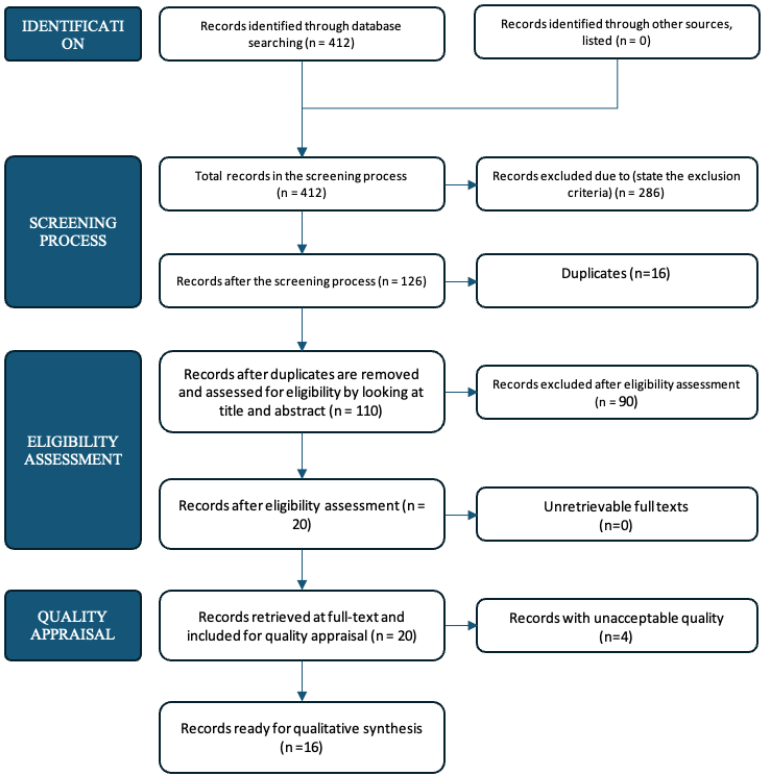
Eligibility Assessment

The eligibility assessment involved a full-text review to ensure the relevance of the selected articles to the objectives of this study. Articles were evaluated based on their focus on Green Intellectual Capital, contextual relevance to Asian countries, and the adequacy of methodological information. Studies that discussed sustainability without addressing GIC, lacked a clear Asian context, or provided insufficient methodological details were excluded. As a result, 90 articles were excluded, leaving 20 eligible studies for quality appraisal and final synthesis.

Quality Appraisal

The quality appraisal stage was conducted to ensure that each study that passed the eligibility stage had adequate methodological quality to be synthesized in this study. The quality assessment process began with layered screening, as shown in Figure 1, which illustrates the flow of identification, duplication removal, initial screening, complete manuscript evaluation, and determination of the final articles to be assessed for quality.

Figure 1. The Flow Diagram from the Identification Process to the Quality Appraisal



Quality assessment was conducted using the Mixed Methods Appraisal Tool (MMAT) developed by Hong et al. (2018). MMAT was chosen for its ability to consistently evaluate a range of research designs, qualitative, quantitative, and mixed-methods, commonly used in Green Intellectual Capital studies. The assessment criteria refer to the five main components of MMAT, which are summarized in Table 3.

Table 3. Quality Assessment Criteria

Research Design	Assessment Criteria
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question? 1.2. Are the qualitative data collection methods adequate to address the research question? 1.3. Are the findings adequately derived from the data?

Research Design	Assessment Criteria
	1.4. Is the interpretation of results sufficiently substantiated by data? 1.5. Is there coherence between qualitative data sources, collection, analysis, and interpretation?
2. Quantitative randomized controlled trials	2.1. Is randomization appropriately performed? 2.2. Are the groups comparable at baseline? 2.3. Is there complete outcome data? 2.4. Are outcome assessors blinded to the intervention provided? 2.5 Did the participants adhere to the assigned intervention?
3. Quantitative non-randomized	3.1. Are the participants representative of the target population? 3.2. Are the measurements appropriate for both the outcome and the intervention (or exposure)? 3.3. Is there complete outcome data? 3.4. Are confounders accounted for in the design and analysis? 3.5. During the study period, was the intervention administered (or exposure occurred) as intended?
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the research question? 4.2. Is the sample representative of the target population? 4.3. Are the measurements appropriate? 4.4. Is the risk of nonresponse bias low? 4.5. Is the statistical analysis appropriate to answer the research question?
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question? 5.2. Are the different components of the study effectively integrated to answer the research question? 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted? 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?

Source: Processed data, 2025

Quality assessment was conducted using MMAT criteria, with studies meeting at least three of five criteria retained for review. The evaluation covered methodological rigor across qualitative, quantitative, and mixed-methods designs. As a result, 16 studies met the minimum quality standards and were included in the final synthesis.

Table 4. Quality Assessment Results

Study	Research Design	QA 1	QA 2	QA 3	QA 4	QA 5	Number of criteria met	Inclusion in the review
Nawangsari (2022)	QUAN	✓	✓	✓	✓	✗	4/5	Yes
Cheng et al. (2023)	QUAN	✓	✓	✓	✓	✓	5/5	Yes
Riyadi et al. (2023)	QUAN	✓	✓	✓	✓	✗	4/5	Yes
Astuti et al. (2023)	QUAN	✓	✓	✓	✓	✓	5/5	Yes
Bombiak (2023)	QUAN	✓	✓	✓	✓	✗	4/5	Yes
Syahidun et al. (2024)	QUAN	✓	✓	✓	✓	✗	4/5	Yes

Study	Research Design	QA 1	QA 2	QA 3	QA 4	QA 5	Number of criteria met	Inclusion in the review
Desak et al. (2023)	QUAN	✓	✓	✓	✓	✓	5/5	Yes
Alkaf et al. (2023)	Conceptual	✓	✗	✗	✗	✗	1/5	No
Shulha (2024)	QUAL	✓	✓	✓	✓	✓	5/5	Yes
Bramulya Ikhsan et al. (2025)	QUAN	✓	✓	✓	✗	✗	3/5	Yes
Nawangsari et al. (2025)	QUAN	✓	✓	✓	✓	✗	4/5	Yes
Astuti et al. (2025)	QUAN	✓	✓	✓	✓	✓	5/5	Yes
Dey et al. (2025)	QUAN	✓	✓	✓	✓	✓	5/5	Yes
Ludovico et al. (2025)	QUAN	✓	✓	✓	✓	✓	5/5	Yes
Qoyyimah et al. (2025)	QUAN	✓	✓	✓	✓	✗	4/5	Yes
Tram and Ngoc (2024)	QUAN	✓	✓	✓	✓	✗	4/5	Yes
Rohwiyati et al. (2025)	QUAN (	✓	✓	✓	✓	✗	4/5	Yes
Omolo (2025)	SLR	✓	✓	✗	✗	✗	2/5	No
Rivai et al. (2025)	Review	✓	✓	✗	✗	✗	2/5	No
Mehmood and Hanaysha (2022)	Conceptual	✓	✓	✗	✗	✗	2/5	No

Source: Processed data, 2025

Data Extraction and Analysis

The systematic screening process resulted in 16 empirical studies that met the inclusion and quality criteria. The selected studies employed quantitative, qualitative, and mixed-methods designs. To integrate findings across these diverse approaches, thematic synthesis was applied through data familiarization, coding, theme development, and narrative synthesis (Whittemore & Knafl, 2005; Kiger and Varpio, 2020). Relevant information on research context, methodology, GIC dimensions, and influencing factors was extracted to explain Green Intellectual Capital development in Asian countries.

RESULTS

Thematic analysis of the 16 selected articles yielded five main themes that represent dominant patterns in the literature on the development and context of GIC in Asia. The process of grouping themes was based on similarities in conceptual focus and mechanisms across studies. A summary of the theme mapping and study sources is presented in Table 5.

Table 5. Themes and Sources

Sources	T1	T2	T3	T4	T5
Astuti et al. (2023)			✓		
Astuti et al. (2025)		✓			
Bombiak (2023)			✓		
Bramulya Ikhsan et al. (2025)				✓	
Cheng et al. (2023)			✓		
Desak et al. (2023)		✓			
Dey et al. (2025)			✓		
Tram and Ngoc (2024)					✓
Ludovico et al. (2025)				✓	

Sources	T1	T2	T3	T4	T5
Nawangsari (2022)	✓				
Nawangsari et al. (2025)					✓
Qoyyimah et al. (2025)			✓		
Riyadi et al. (2023)		✓			
Rohwiyati et al. (2025)	✓				
Shulha (2024)		✓			
Syahidun et al. (2024)				✓	

Source: Processed data, 2025

DISCUSSION & CONCLUSION

T1: Government Intervention & Regulatory Pressure

Government intervention and regulatory pressure play an important role in the development of GIC in Asia. Limited market mechanisms, low environmental awareness, and restricted access to green financing often discourage firms from voluntarily investing in green knowledge assets. Government incentives and environmental regulations provide institutional support and reduce uncertainty, encouraging firms to adopt GIC practices (Rohwiyati et al., 2025). In addition, regulatory pressure motivates companies to develop green knowledge to maintain legitimacy and social acceptance (Syahidun & Nawangsari, 2022). Thus, GIC in Asia develops through a combination of policy support mechanisms and regulatory compliance.

T2: Local Wisdom, Strategic Intent & Organizational Culture

Organizational culture, local wisdom, and strategic intent are key drivers of GIC in Asian organizations. Environmental values embedded as shared norms encourage employees to integrate green knowledge into daily activities and support sustainable behavior (Desak et al., 2023). This process is strengthened by green mindfulness, which promotes innovation aligned with sustainability goals (Astuti et al., 2025). Leadership commitment and strategic intent further facilitate the development of green human, structural, and relational capital, whereas weak strategic direction often leads to fragmented green knowledge (Riyadi et al., 2023; Shulha, 2024).

T3: Sectoral Variation: Hospitality vs Manufacturing

The effectiveness of GIC varies across industries due to differences in value creation mechanisms. In the hospitality sector, green structural and relational capital are more critical because sustainability depends on organizational systems and customer relationships (Qoyyimah et al., 2025). Similarly, hotel sustainability is strongly influenced by green absorptive capacity (Dey et al., 2025). In contrast, manufacturing firms rely more on green human capital to support technical competence and process efficiency (Cheng et al., 2023)However, well-institutionalized organizational systems may outweigh the role of human capital in generating competitive advantage (Bombiak, 2023). These findings suggest that no single GIC dimension dominates across Asian industries.

T4: Digital Capabilities & Technology

Digital capabilities support the activation and utilization of GIC in Asian organizations. Information technology enables firms to overcome conventional management limitations and enhance green innovation performance through IT ambidexterity (Bramulya Ikhsan et al., 2025). In addition, digital tools such as Natural Language Processing and knowledge management systems facilitate green knowledge sharing, measurement, and decision-making processes (Ludovico et al., 2025). The implementation of an effective knowledge management system also facilitates the acquisition, storage, and sharing of green knowledge to support strategic decision-making and sustainability performance (Syahidun et al., 2024).

T5: Workforce Demographics

Workforce characteristics influence the effectiveness of GIC implementation in Asia. Gender differences in leadership and millennial behavior shape how GIC contributes to environmental and

organizational performance, often through green innovation behavior (Tram & Ngoc, 2024). Overall, GIC is a context-dependent capability shaped by institutional, organizational, technological, and workforce factors, reflecting the interaction between external pressures and internal resources that support sustainable competitive advantage and sustainability performance (Arranz, 2024; Negi et al., 2023; Kiefer et al., 2024; Rahman, 2025; Forés, 2025; Liao, 2025).

Limitations & Suggestions for future research

This study is limited to English-language journal articles and predominantly cross-sectional studies, which may not fully capture the dynamic nature of Green Intellectual Capital (GIC). In addition, most studies focus on single-country or single-sector contexts, limiting generalizability across Asia. Future research should employ longitudinal, qualitative, or mixed-methods approaches and conduct cross-country comparisons to better understand the contextual development of GIC.

Conclusion

This review identifies five key drivers of GIC in Asia: institutional pressure, organizational culture, sectoral characteristics, digital capabilities, and workforce dynamics. The findings suggest that GIC is a contextual capability shaped by interactions between external pressures and internal resources. The study provides a foundation for future GIC research and sustainability practices in Asian organizations.

REFERENCES

Alkaf, A. R., Yusliza, M. Y., Ehido, A. J., Saputra, J., & Muhammad, Z. (2023). Top Management Support, Green Intellectual Capital and Green HRM: A Proposed Framework for Sustainability. *Journal of Environmental Management and Tourism*, *14*(5), 2308. https://doi.org/10.14505/jemt.v14.5(69).12

Arranz, C. F. (2024). A System Dynamics Approach to Modelling Eco-innovation Drivers in Companies: Understanding Complex Interactions Using Machine Learning. *Business Strategy and the Environment*, *33*(5), 4456-4479. https://doi.org/10.1002/bse.3704

Asiaei, K., Bontis, N., Alizadeh, R., & Yaghoubi, M. (2021). Green Intellectual Capital and Environmental Management Accounting: Natural Resource Orchestration in Favor of Environmental Performance. *Business Strategy and the Environment*, *31*(1), 76-93. https://doi.org/10.1002/bse.2875

Asiaei, K., Jusoh, R., Barani, O., & Asiaei, A. (2022). How Does Green Intellectual Capital Boost Performance? The Mediating Role of Environmental Performance Measurement Systems. *Business Strategy and the Environment*, *31*(4), 1587-1606. https://doi.org/10.1002/bse.2971

Asiaei, K., O'Connor, N. G., Barani, O., & Joshi, M. (2022). Green Intellectual Capital and Ambidextrous Green Innovation: The Impact on Environmental Performance. *Business Strategy and the Environment*, *32*(1), 369-386. https://doi.org/10.1002/bse.3136

Astuti, P. D., Datrini, L. K., & Chariri, A. (2023). An Empirical Investigation Of The Relationship Between Green Intellectual Capital And Corporate Sustainable Development [Article]. *Corporate and Business Strategy Review*, *4*(2), 48-58. https://doi.org/10.22495/cbsrv4i2art5

Astuti, P. D., Datrini, L. K., Chariri, A., & Januarti, I. (2025). Do Green Mindfulness, Green Intellectual Capital, and Green Ambidexterity Encourage Sustainability Performance to Achieve Sustainable Development Goals? *Journal of Lifestyle and SDGs Review*, *5*(3), e04439. https://doi.org/10.47172/2965-730x.sdgsreview.v5.n03.pe04439

Begum, S., Ashfaq, M., Asiaei, K., & Shahzad, K. (2023). Green intellectual capital and green business strategy: The role of green absorptive capacity [Article]. *Business Strategy and the Environment*, *32*(7), 4907-4923. https://doi.org/10.1002/bse.3399

Bombiak, E. (2023). Effect of Green Intellectual Capital Practices on the Competitive Advantage of Companies: Evidence from Polish Companies. *Sustainability (Switzerland)*, *15*(5), 4050. https://doi.org/10.3390/su15054050

Bramulya Ikhsan, R., Prabowo, H., & Simarmata, J. (2025). Green Intellectual Capital And Rich Digital Eco-Dynamic To Improve E-Business Smes' Innovation Performance. *Jurnal Bisnis dan Akuntansi*, *27*(1), 117-136. https://doi.org/10.34208/8pjpgb51

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, *11*(4), 589-597.

Cheng, Y., Masukujjaman, M., Sobhani, F. A., Hamayun, M., & Alam, S. S. (2023). Green Logistics, Green Human Capital, and Circular Economy: The Mediating Role of Sustainable Production [Article]. *Sustainability (Switzerland)*, *15*(2), Article 1045. https://doi.org/10.3390/su15021045

Desak, D. N. S. W., Putri, R. L., Mayasari, M., Amelia, R. W., Purwanti, Wahyono, E., Sriyono, Kilmanun, J. C., Hidayatulloh, A. N., & Sutoto, A. (2023). Determinants of green organizational identity and its impact on green competitive strategy. *Jurnal Akuntansi dan Auditing Indonesia*, 33-47. https://doi.org/10.20885/jaai.vol27.iss1.art4

Dey, S., Dey, R., Hoang, S., & Garza-Reyes, J. (2025). Unveiling Circular Economy Pathways Among Small and Medium Hotels Through a Hybrid Analytical Framework [Article]. *Business Strategy and the Environment*, *34*(8), 9545-9565. https://doi.org/10.1002/bse.70085

Esa, M. S. M., Wahid, H., Yaacob, S. E., & Mohamad, A. H. H. (2025). Asnaf Development Outcome: A Systematic Literature Review and Logic Model Development. *SAGE Open*, *15*(3). https://doi.org/10.1177/21582440251357982

Flemming, K., Booth, A., Garside, R., Tunçalp, Ö., & Noyes, J. (2019). Qualitative evidence synthesis for complex interventions and guideline development: clarification of the purpose, designs and relevant methods. *BMJ global health*, *4*(Suppl 1).

Forés, B. (2025). Public Funding Dynamics in Clean and Dirty Industries: An Empirical Analysis of the Effects of Eco-Innovation, Cooperation, and Internationalization Strategies. *Business Strategy and the Environment*, *34*(5), 5336-5369. https://doi.org/10.1002/bse.4254

Ghassab, E. E., Talafha, Q. M., Rao, K. K., Hussainey, K., & Tilt, C. (2025). Exploring <scp>CSR</Scp> and Sustainability Characteristics in the <scp>COVID</Scp>-19 Era: A Literature Review. *Corporate Social Responsibility and Environmental Management*. https://doi.org/10.1002/csr.70092

Ghosh, M., & Singh, M. P. (2024). Unveiling Sustainable Practices in Financial Institutions: A Bibliometric Analysis Cum Meta-analytical Review on Enhancing Financial Performance. *Corporate Social Responsibility and Environmental Management*, *32*(2), 2295-2316. https://doi.org/10.1002/csr.3064

Gidage, M., & Bhide, S. (2025). ESG Performance and Green Innovation Nexus: Insights From Indian Manufacturing Titans. *Business Strategy and the Environment*, *34*(7), 8686-8703. https://doi.org/10.1002/bse.70041

Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., & O'Cathain, A. (2018). The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. *Education for information*, *34*(4), 285-291.

Janjua, Z. u. A., Krishnapillai, G., & Rahman, M. (2021). A Systematic Literature Review of Rural Homestays and Sustainability in Tourism. *SAGE Open*, *11*(2). https://doi.org/10.1177/21582440211007117

Kiefer, C. P., Carrillo-Hermosilla, J., & Río, P. d. (2024). How Does Corporate Environmental Culture Enable the Eco-innovation Transition of Firms Towards the Circular Economy? *Corporate Social Responsibility and Environmental Management*, *31*(6), 5911-5937. https://doi.org/10.1002/csr.2888

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8), 846-854. https://doi.org/10.1080/0142159X.2020.1755030

Kumar, D. A., Lau, P. L., Chua, K. H., Voon, S. P., & Lo, Y. Y. (2024). Career Adaptability Across Southeast Asia: A Systematic Review. *SAGE Open*, *14*(4). https://doi.org/10.1177/21582440241289737

Liao, Y.-K. (2025). An Investigation of Leading and Lagging Indicators for Balanced Scorecard: A Meta-Analytic Approach. *SAGE Open*, *15*(4). https://doi.org/10.1177/21582440251359833

Liu, S., Jiang, W., Liu, Y., & Feng, T. (2024). Shaping Supply Chain Ethical Leadership via Green Intellectual Capital: The Mediating Role of Ambidextrous Environmental Strategy. *Business Strategy and the Environment*, *33*(7), 6869-6888. https://doi.org/10.1002/bse.3847

Lockwood, C., Munn, Z., & Porritt, K. (2015). Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. *JBI Evidence Implementation*, *13*(3).

https://journals.lww.com/ijebh/fulltext/2015/09000/qualitative_research_synthesis__methodological.10.aspx

Ludovico, N., Illia, L., Pellegrini, V., & Ruzzenenti, F. (2025). Addressing Green Intellectual Capital in the Digital Era: A Network Perspective on EU Energy Small Medium Enterprises. *Corporate Social Responsibility and Environmental Management*, *32*(4), 5588-5605. https://doi.org/10.1002/csr.3255

Mahran, K., & Elamer, A. A. (2023). Chief Executive Officer (CEO) and Corporate Environmental Sustainability: A Systematic Literature Review and Avenues for Future Research. *Business Strategy and the Environment*, *33*(3), 1977-2003. https://doi.org/10.1002/bse.3577

Mehmood, K. K., & Hanaysha, J. R. (2022). Impact of Corporate Social Responsibility, Green Intellectual Capital, and Green Innovation on Competitive Advantage. *International Journal of Human Capital and Information Technology Professionals*, *13*(1), 1-14. https://doi.org/10.4018/ijhcitp.293232

Nandatari, F. R., Lubis, F. R. A., Yulianti, R. A., Lestari, Y. T., & Khoirudin, R. (2024). Causality of CO2 Emissions, Energy Consumption, Renewable Energy on Economic Growth in Asia Case Studies of 6 Asian Countries. *KnE Social Sciences*. https://doi.org/10.18502/kss.v9i4.15118

Nawangsari, L. C. (2022). The Effect of Green Human Capital, Green Structural Capital and Green Relation Capital on Company Sustainability by Mediating Green Environment Management [Article]. *Academic Journal of Interdisciplinary Studies*, *11*(5), 154-169. https://doi.org/10.36941/ajis-2022-0132

Nawangsari, L. C., Siswanti, I., Arijanto, A., & Wahyu, M. (2025). From Knowledge to Action: Exploring Green Intellectual Capital's Role in Sustainable Organizational Performance for Millennials [Article]. *International Review of Management and Marketing*, *15*(1), 82-90. https://doi.org/10.32479/irmm.17546

Negi, R., Gupta, A. K., & Gaur, V. (2023). Effect of Green Marketing Orientation Dimensions on Green Innovation and Organizational Performance: A Mediation-moderation Analysis. *Business Strategy and the Environment*, *32*(8), 5435-5458. https://doi.org/10.1002/bse.3429

Omolo, J. W. (2025). Systematic Review: Association between Green Human Resource Management and Sustainable Competitive Edge. *African Journal of Empirical Research*, *6*(2), 221-231. https://doi.org/10.51867/ajernet.6.2.20

Qoyyimah, Q., Mahfud, T., Mulyani, Y., Novri, F., & Thaib, D. (2025). The Role of Green Intellectual Capital in Green Innovation: A Study of Green Hospitality in the New Capital City of Indonesia [Article]. *African Journal of Hospitality, Tourism and Leisure*, *14*(5), 1021-1027. https://doi.org/10.46222/ajhtl.19770720.689

Rahman, S. (2025). Power of Green Capabilities and Artificial Intelligence (AI): Understanding How and When Green Innovation Promotes Sustainability. *Business Strategy and the Environment*. https://doi.org/10.1002/bse.70252

Rao, P. K., & Shukla, A. (2022). Sustainable Strategic Management: A Bibliometric Analysis. *Business Strategy and the Environment*, *32*(6), 3902-3914. https://doi.org/10.1002/bse.3344

Rivai, V., Siswanti, I., & Nawangsari, L. C. (2025). Exploring Dimensions of Corporate Sustainability: A Literature Review. *KnE Social Sciences*, *10*(21), 138-146. https://doi.org/10.18502/kss.v10i21.19699

Riyadi, R., Nanang Adie, S., Suwardi, S., Saptianing, S., & Andi, S. (2023). Building Green Process Innovation Performance in Batik Tulis Lasem. *International Journal of Education, Vocational and Social Science*, *2*(04), 118-140. https://doi.org/10.63922/ijevss.v2i04.547

Rohwiyati, R., Haryono, T., Setiawan, A. I., Wahyudi, L., & Sulistya, S. (2025). Antecedents of export marketing performance: The moderating role of environmental knowledge and government intervention. *Diponegoro International Journal of Business*, *8*(1), 50-62. https://doi.org/10.14710/dijb.8.1.2025.50-62

Salmah, A. N., Setyowati, K., & Nugroho, R. A. (2025). Digital Government Reform: Analysis and Trends Through Systematic Literature From 2004-2024. *KnE Social Sciences*, *10*(16), 196-212. https://doi.org/10.18502/kss.v10i16.19177

Satar, A., Musadiq, M., Hutahayan, B., & Solimun, S. (2023). A Systematic Literature Review: Determinants of Sustainability Competitive Advantage. *Business Strategy and the Environment*, *33*(3), 1675-1687. https://doi.org/10.1002/bse.3561

Shulha, O. V. (2024). Green intellectual capital and its impact on business models sustainability. *Economic Bulletin of Dnipro University of Technology*, *85*, 34-43. https://doi.org/10.33271/ebdut/85.034

Suchek, N., Fernandes, C., Kraus, S., Filser, M., & Sjögrén, H. (2021). Innovation and the Circular Economy: A Systematic Literature Review. *Business Strategy and the Environment*, *30*(8), 3686-3702. https://doi.org/10.1002/bse.2834

Syahidun, & Nawangsari, L. C. (2022). The Effect of Green Human Capital, Green Structural Capital and Green Relation Capital on Company Sustainability by Mediating Green Environment Management. *Academic Journal of Interdisciplinary Studies*, *11*(5), 154. https://doi.org/10.36941/ajis-2022-0132

Syahidun, S., Zainal, V. R., Siswanti, I., & Nawangsari, L. C. (2024). The Implementation of Green Human Resource Management: A Survey on the Manufacturing Industry in Indonesia. *Turk Turizm Arastirmalari Dergisi*. https://doi.org/10.26677/tr1010.2024.1381

Tram, N. H. M., & Ngoc, B. H. (2024). Environmental Foe or Friend: The Impact of Intellectual Capital and Ambidextrous Innovation on Environmental Performance [Article]. *SAGE Open*, *14*(2). https://doi.org/10.1177/21582440241256768

Wang, C. H., & Juo, W. J. (2021). An Environmental Policy of Green Intellectual Capital: Green Innovation Strategy for Performance Sustainability. *Business Strategy and the Environment*, *30*(7), 3241-3254. https://doi.org/10.1002/bse.2800

Wang, L.-Y. (2025). Exploring the Driving Mechanisms of Green Intellectual Capital on Enterprise Green Transformation: Evidence From Chinese Listed Firms. *SAGE Open*, *15*(4). https://doi.org/10.1177/21582440251386941

Whittemore, R., & Knafl, K. (2005). The integrative review: updated methodology. *Journal of advanced nursing*, *52*(5), 546-553.

Zhou, T., Mansor, N. S., Liu, G., & Jun-hua, P. (2024). A Systematic Review of Humor Employed in Teaching English as a Second Language in Asia. *SAGE Open*, *14*(2). https://doi.org/10.1177/21582440241250125