

GREENWASHING IN THE MALAYSIAN PALM OIL INDUSTRY: A CONCEPTUAL ANALYSIS OF SUSTAINABILITY REPORTING AND FINANCIAL IMPLICATIONS

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Abstract: *This theoretical paper discusses the concept of greenwashing in the palm oil sector of Malaysia with specific reference to sustainability reporting and its financial implications. With the growing importance of environmental, social, and governance (ESG) reporting in the formation of corporate legitimacy and investment decision-making, there has been a growing focus on the degree to which sustainability reporting captures substantive environmental performance, as opposed to symbolic compliance. The rising instances of greenwashing are threatening to erode stakeholder confidence, to distort competition in the market, and to hide material environmental impacts, particularly in environmentally sensitive industries such as palm oil. Grounded in legitimacy theory, this paper develops a conceptual framework that explains the drivers and the processes that lead to greenwashing in corporate sustainability reporting and how the practices mediate the relationship between sustainability disclosure and firm-level performance. This study further introduces third-party verification as a moderating mechanism that shapes the credibility of sustainability disclosures and their financial consequences. The Malaysian environment, defined by compulsory Malaysian Sustainable Palm Oil (MSPO) certification, increased international scrutiny, and growing ESG regulatory demands, offers a severe environment in which sustainability claims and its financial consequences can be evaluated. The paper also explains on the possible implications of the*

greenwashing on reputational risk, capital access, cost of finance and long-term financial sustainability. The research has conceptual value in that it has made conceptual development in proposing theories and offering policy implications to the regulators, investors, and corporate decision-makers to enhance the credibility of sustainability reporting in the environmentally sensitive industries.

Keywords: *greenwashing, sustainability reporting, palm oil industry, Malaysia, financial implications*

Introduction

The palm oil industry is one of the major economic contributors of the country since Malaysia is the second-largest palm oil producer, with an export value of more than RM114 billion in 2024 and a share of about 2.3% of GDP and close to a third of the world supply (MPOC, 2025; Selangor Journal, 2025). The industry contributes to employment, rural development, and foreign exchange earnings and covers 5.612 million hectares in planted area in 2024, a 17% decrease compared to the year before as a result of replanting efforts and land-use conversion (MPOB, 2024). Although palm oil farming has been an effective high-yield crop in terms of the oil yield per hectare compared to other vegetable oils, the production of palm oil has continued to be linked with deforestation, loss of biodiversity, and greenhouse gas emissions, especially by the conversion of peatlands (Meijaard et al., 2020; Colchester et al., 2019). The environmental externalities have increased global questioning and increased demands of plausible sustainability undertakings by the producers of Malaysian palm oil. The prevalence of greenwashing within the sustainability reports of major palm oil corporations suggests that sustainability discourse is strategically constructed to reinforce corporate reputation and organizational legitimacy, rather than to reflect a substantive commitment to ecological integrity and social transformation (Ahmar et al., 2025). In addition, Silvan et al. (2026) highlight the importance of adopting interdisciplinary perspectives and implementing practical, policy-oriented strategies to effectively address greenwashing and promote genuine sustainability practices. In Malaysia, the rise in environmental consciousness and regulatory requirements has led to increased scrutiny of greenwashing, particularly within the palm oil industry.

It is shown in empirical studies that there is little integration of ESG into corporate strategy by Malaysian companies, with only 22 percent of the top 100 companies showing meaningful ESG alignment (KPMG, 2022), and transparency and independence of the auditor in certification is also a concern of civil society reports (Greenpeace, 2022; Environmental Investigation Agency, 2023). The rising instances of greenwashing are threatening to erode stakeholder confidence, to distort competition in the market, and to hide material environmental impacts in a high-risk industry. The current governance and enforcement issues are also highlighted by the fact that Malaysia is ranked 56th in the 2022 Environmental Performance Index (Yale Centre for Environmental Law and Policy, 2022).

While there is an increase in sustainability standards and reporting frameworks in the Malaysian palm oil sector, concerns remain over the credibility of corporate environmental reporting and its link to sustainability performance. Prior studies have extensively examined greenwashing as a disclosure distortion and ESG reporting as a transparency mechanism

(Dempere et al., 2024; Hu et al., 2024). However, these streams of literature remain largely fragmented. In particular, existing reviews tend to (i) focus on the outcomes rather than the process of greenwashing, and (ii) are lacking in their discussion of the dynamic relationship between sustainability reporting, greenwashing and financial impacts, especially in emerging resource-based economies (Radi Mugisana et al., 2025; Hu et al., 2024).

This paper seeks to overcome these shortcomings in three ways. First, it defines greenwashing as a process that links sustainability reporting to corporate financial performance, rather than a standalone variable. Second, it integrates third-party verification as a governance moderator to understand when and why sustainability reporting leads to perceived legitimacy rather than symbolic compliance. Third, it embeds these dynamics within the Malaysian palm oil industry, where government policy (for example, MSPO accreditation), international pressure, and ESG-focused capital allocation intersect to influence disclosure practices. By synthesising these components into a holistic conceptual framework, this paper enhances legitimacy theory by showing how symbolic and substantive pathways of sustainability reporting engender distinct financial consequences, such as reputational risk, cost of capital and shareholder value.

Conceptualising Greenwashing

The concept of greenwashing is gradually turning into a strategic organisational option in which companies spread false, overstated, or unprovable assertions about their environmental performance to give an impression of sustainability without any meaningful operational transformation. In modern literature, the concept is expanded into the idea of selective sustainability disclosure, symbolic ESG reporting, impression management, and manipulation of non-financial reporting (Janik & Ryszko, 2025; Chen & Dagestani, 2023). Instead of being seen as a communication error, greenwashing is perceived as a legitimacy-seeking approach that is influenced by regulatory loopholes, pressure on the stakeholders, and the competitive forces. It tends to be expressed in selective application of Global Reporting Initiative (GRI) indicators, positive framing, non-representation of adverse environmental effects, and non-credible third-party assurance in the sustainability reporting context, negatively affecting the ability of stakeholders to evaluate actual environmental performance (Li et al., 2023; Janik & Ryszko, 2025).

More recent literature also highlights the deliberate and motivational aspect of greenwashing, which has been attributed to agency issues and capital market information asymmetry. Managers can exaggerate sustainability performance to minimise perceived risk, improve corporate reputation, attract ESG-oriented investment, or obtain favorable financing terms without necessarily bearing the entire cost of environmental change (Shen et al., 2025). Weaker enforcement mechanisms and institutional complexity can strengthen such behavior in emerging and resource-dependent economies, especially in environmentally sensitive industries. In the Malaysian palm oil industry, sustainability discourses of certification programs and ESG pledges coexist with the continuing debates of deforestation and social effects, which casts the question of whether disclosure practices are reflective of indicative sustainability performance or merely symbolic legitimacy practices.

Sustainable Reporting and Greenwashing

Sustainability reporting can be defined as corporate reporting that conveys to the stakeholders environmental, social, and governance (ESG) effects, risks, and performance (KPMG, 2022).

Theoretically, this kind of reporting increases transparency, decreases information asymmetry, and helps a stakeholder to make an informed decision. Through incorporating the non-financial information in the corporate communication, companies indicate responsibility and long-term orientation. Nonetheless, the voluntary and narrative-based character of sustainability reporting provides managers with a great deal of discretion in terms of content and framing, which allows the management of impressions and strategic disclosure. Due to that, sustainability reporting can be viewed not as a responsibility mechanism but as a reputation positioning tool.

The quality of sustainability reporting in Malaysia is still sectoral. Whereas certain companies have shown better ESG transparency and disclosures in the form of metrics, other companies use a lot of qualitative narratives with fewer performance metrics or external assurance (Kishan & Azhar, 2025). This is especially relevant to the palm oil industry, as it has such a large environmental footprint and can be subject to international criticism. In this regard, sustainability reporting and certification programs can serve as signalling mechanisms which provide legitimacy without necessarily providing material environmental benefits.

Theoretical Background: Legitimacy Theory

Legitimacy theory assumes that organizations aim to align their operations with the existing social norms and expectations in order to gain social acceptance and organizational survival (Suchman, 1995). Increased environmental scrutiny encourages firms to increase sustainability disclosures to reflect compliance with changing institutional pressures. However, in the case of disclosures that are symbolic as opposed to substantive, greenwashing becomes a legitimacy-seeking approach that bridges perceived gaps in legitimacy but does not change underlying operational policies (Hu et al., 2024). In this sense, sustainability reporting becomes a strategic reaction to the outside pressure and not a precise indication of sustainability performance.

Although legitimacy theory offers the key perspective to explain symbolic disclosure actions, this research also implicitly incorporates information asymmetry and agency theories. Information asymmetry describes the role of discretionary reporting in shaping investor perceptions and agency theory outlines the managerial motivations to engage in strategic disclosure. This integration enhances the explanatory power of the framework by connecting legitimacy-seeking behaviour with financial market outcomes and hence considers greenwashing as not only a strategy to align social perceptions but also as a form of financial reporting distortion.

Greenwashing in the Malaysian Palm Oil Situation

Rating and Reporting Landscape

Malaysia has established sustainability governance in the palm oil industry with a compulsory Malaysian Sustainable Palm Oil (MSPO) certification scheme, encompassing environmental management, labor standards, and legal compliance. According to Suraj et al. (2025), the latest updates focus on traceability, transparency, and ethical practices, which is an attempt to increase the credibility of reporting and its acceptance at the international level. Yet, certification does not always translate into substantive sustainability delivery, especially in situations where audit independence, monitoring capacity, and enforcement are still

inadequate. As a result, MSPO certification will be perceived more as symbolic compliance than an efficient system of environmental change.

Mechanisms of Greenwashing

The typical characteristics of greenwashing in palm oil sustainability reporting include the use of aspirational language, non-measurable targets, selective reporting of positive signs, and using certification symbols without evidence on specific performance (Janik and Ryszko, 2025). Companies can focus on stories of compliance and report fewer material risks, including exposure to deforestation, biodiversity destruction, greenhouse gas emissions, or unresolved supply-chain scandals. The practices enable the firms to meet the formal disclosure obligations without being held responsible for the fundamental sustainability issues.

Market Pressures and Regulatory Pressures

The forces of the international market by ESG-oriented investors and importing areas that enforce strict regulations on sustainability further increase incentives to make Malaysian palm oil companies establish compliance. Nonetheless, compliance costs can unintentionally promote symbolic reporting policies instead of meaningful change when the cost of compliance is elevated, and the enforcement of regulatory policies is skewed (Zhou & Chen, 2024). This market-regulatory interaction supports the risks of greenwashing by promoting legitimacy through disclosure and not performance-based sustainability.

Financial Implications of Greenwashing

Reputational Risk and Firm Value

Greenwashing has a lot of implications on the financial performance of corporations, especially through reputational channels. Even though, in its early forms, sustainability disclosure can positively impact corporate image and investor perception, the revelation of misleading or exaggerated environmental statements can spark reputational harm, loss of trust, and negative capital market responses. Empirical studies show that the abnormal returns of the firms involved in greenwashing or ESG scandals are negative, stock price volatility is increased, and valuation discounts are in the long run (Ledeboer & Kil, 2023; Xu et al., 2025). Similarly, the studies by Boiral et al. (2024) have shown that the financial advantages of sustainability programs are conditional on the credibility of the disclosures; investor confidence is reduced in case ESG claims are viewed as exploitative or unrelated to performance.

Reputational exposure is highly acute in those sectors that are environmentally sensitive, like palm oil, because of the ongoing allegations regarding deforestation, impoverishment of the biosphere, and social war. Recent studies by Huang (2022) and Moolkham (2025) stated that credibility is an important determinant of firm value, as institutional investors and multinational buyers are increasingly using ESG screening and exclusion criteria when making decisions. Greenwashing, therefore, removes the positive linkage between sustainability reporting and firm valuation by compromising stakeholder trust and enhancing the perceived environmental risk.

Cost of Capital and Availability of Finance

The reduced cost of capital and better financing terms are becoming more and more linked with sustainability performance and the transparent disclosure of ESG. According to Shad et al. (2020), plausible sustainability reporting will eliminate information asymmetry, increase

transparency, and reduce perceived risk, which will reduce both the cost of equity and cost of debt. Nevertheless, in the case of sustainability reporting being viewed as greenwashing, Ballabio (2024) suggested that investors and lenders can discount ESG data, raising the returns required and reducing the availability of sustainability-related financing instruments.

In the case of Malaysian palm oil companies, green bonds, sustainability-related loans, and ESG-oriented funds can only be readily accessed when the environmental performance indicators reported are reliable. Greenwashing creates uncertainty as to true environmental exposure and regulation compliance, which may raise risk premiums and financing limitations. In this way, La Rosa & Bernini (2022) stated that the anticipated financial gains of sustainability reporting is contingent on the integrity of disclosure; the symbolic or misleading ESG reporting can compensate for the anticipated decreases in capital costs.

Regulatory and Litigation Risk

The increased regulation of ESG-related matters worldwide has increased legal and compliance risks linked to deceptive sustainability reports. Companies that become known to be involved in greenwashing may be subject to regulatory inquiries, fines, required corrective disclosures, and even civil lawsuits. There is evidence that ESG scandals and reporting inconsistencies lead to heightened regulatory oversight and exacerbation of downside financial risk (Ruan et al., 2025). With the coming together of sustainability standards to more rigorous global standards, there is a decreasing tolerance of unverifiable environmental claims.

Despite the changing level of enforcement in Malaysia, Malaysian palm oil companies incorporated into global supply chains are becoming increasingly vulnerable to extraterritorial regulatory frameworks and trade restrictions. Policies like import restrictions on deforestation increase compliance costs and the monetary value of false sustainability representations. Thus, greenwashing not only causes reputational damage but also subjects companies to the rising regulatory expenses, possible legal suits, market marginalization, and financial bankruptcy.

Conceptual Framework and Propositions

The conceptual framework identifies sustainability reporting as the key signalling instrument, including narrative disclosures, ESG indicators, and certification claims. Yet, the effectiveness of these signals is moderated by governance factors such as regulatory pressure, market pressure, and the availability of independent verification systems. Greenwashing is then defined as a mediation process in this structure that describes the extent to which sustainability reporting is a representation of symbolic rather than actual environmental performance. Selective, unverifiable, and manipulative disclosures enhance the potential for greenwashing, and, in turn, stakeholder distrust.

Crucially, third-party verification (e.g., independent assurance, audit quality, certification credibility) is proposed as a moderating factor that impacts the magnitude and sign of the effect of sustainability reporting on greenwashing. Strong verification reduces information asymmetry and constrains opportunistic disclosure behaviour. In turn, greenwashing has financial implications such as reputational risk, cost of finance, financial access and long-term firm value. Therefore, the model proposes a causal link:

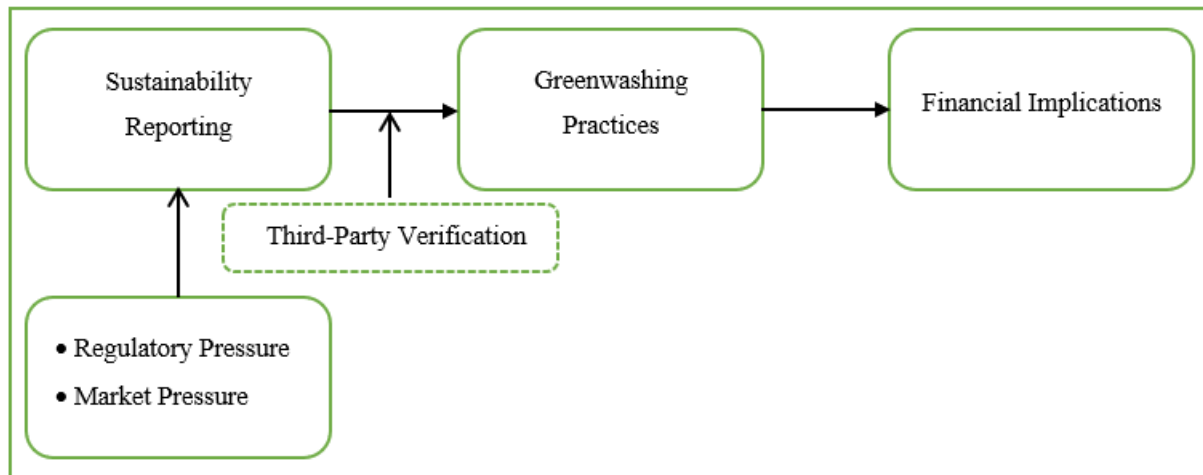


Figure 1: Proposed Conceptual Framework

Conceptual Propositions

This research advances three propositions based on the literature on sustainability reporting and the legitimacy theory.

P1: The alignment between sustainability reporting and actual environmental performance is negatively associated with greenwashing practices.

P2: Greenwashing mediates the relationship between sustainability reporting and financial performance, such that higher levels of greenwashing weaken the positive financial effects of sustainability disclosure.

P3: Third-party verification moderates the relationship between sustainability reporting and greenwashing, such that stronger independent assurance reduces the likelihood of greenwashing.

P4: The negative financial consequences of greenwashing (for example, reputational damage, higher cost of capital) are increased under conditions of high regulatory and market pressure.

Discussion and Implications

The conceptual framework of this analysis shows that financial implications do not arise directly from sustainability reporting. Rather, it depends on the credibility or symbolism of the disclosures. Greenwashing is an important channel for either weakening or inverting the anticipated effects of ESG reporting. As such, financial effects are not predicted by the number of disclosures, but by the quality of disclosures, which is enhanced through greenwash and governance.

Theoretical Contributions

This study contributes to two main ways toward the sustainability accounting and finance literature. First, it promotes conceptual clarity by making greenwashing a mediating process, but not a side disclosure result. This reframing combines the legitimacy restoration processes with the capital market implications, which provides a dynamic explanation of the translation of symbolic reporting to financial risk. Second, the paper seeks to broaden the current research

on greenwashing to an emerging economy setting where economic reliance on exports, establishment of regulations, and international challenges collide with the Malaysian palm oil industry. This contextualisation adds to the sustainability reporting scholarship, which has been traditionally dominated by evidence of the developed markets.

Managerial Implications

The findings highlight to the corporate managers the fact that sustainability reporting is to be viewed as a strategic governance tool, rather than a reputational marketing tool. The measures that should be taken to avoid the perception of greenwashing include investments in the measurable environmental performance, independent assurance, supply chain traceability, and transparent target-setting. Companies that overuse narrative sustainability arguments without operational consistency face the risk of long-term valuation sanctions. The boards of directors must empower ESG management by having sustainability committees, incorporating ESG measures in executive compensation, and having audit committees play greater roles in non-financial disclosures. Agency-driven incentives of greenwashing can be alleviated using strong governance mechanisms.

Policy and Regulatory Implications

The results are important in the eyes of regulators and policymakers, especially Bursa Malaysia, the Securities Commission Malaysia, and the Malaysian Palm Oil Board (MPOB), because:

- Enhancing the assurance requirements of the disclosure of sustainability.

- Improving transparency in MSPO audit procedures.

- Aligning the reporting standards with the international frameworks, like the IFRS Sustainability Disclosure Standards.

- The enlargement of enforcement capacities and the punishment of false environmental claims.

The increased regulatory clarity decreases the ambiguity that otherwise can support the symbolic compliance.

Conclusion

Greenwashing is a major problem for sustainability reporting in the Malaysian palm oil industry. Although sustainability disclosure can lead to improvement in firm value, lowered financing costs, and increased global competitiveness, such gains depend on the credibility of disclosures. This study offers a systematic theoretical basis upon which future empirical research can be conducted by conceptualising greenwashing as a mediating variable between sustainability reporting and financial performance. Enhancing disclosure integrity is not only vital to financial sustainability but also to environmental stewardship and long-term industry legitimacy.

References

- Ahmar, N., Astuti, T., Darminto, D. P., Sekar, C., & Asyraf, M. (2025). Between Commitment and Image: Greenwashing Practices in Indonesia's Palm Oil Industry. *Journal Research of Social Science, Economics & Management*, 5(4).
- Ballabio, G. M. (2024). Impact Of Sustainability Reporting in The World of Finance.
- Boiral, O., Brotherton, M. C., & Talbot, D. (2024). What You See Is What You Get? Building Confidence in ESG Disclosures For Sustainable Finance Through External Assurance. *Business Ethics, the Environment & Responsibility*, 33(4), 617-632.
- Chen, P., & Dagestani, A. A. (2023). Greenwashing Behavior and Firm Value—From the Perspective of Board Characteristics. *Corporate Social Responsibility and Environmental Management*, 30(5), 2330-2343.
- Colchester, M., Chao, S., Dallinger, J., Toh, S. M., & Ramirez, M. A. (2019). Respecting rights, delivering development: Palm oil and indigenous peoples in Southeast Asia. *Forest Peoples Programme*.
- Dempere, J., Alamash, E., & Mattos, P. (2024). Unveiling the truth: greenwashing in sustainable finance. *Frontiers in Sustainability*, 5, 1362051. <https://doi.org/10.3389/frsus.2024.1362051>
- Environmental Investigation Agency. (2023). Reports - EIA. eia-international.org/about-us/reports/
- Feghali, K., Najem, R., & Metcalfe, B. D. (2025). Greenwashing in the era of sustainability: A systematic literature review. *Corporate Governance and Sustainability Review*, 9(1), 18–31.
- Feng, L., Leong, C. M., & Ali, M. (2025). ESG investments, corporate reputation and market value: a comprehensive review and future research agenda. *Management & Sustainability: An Arab Review*.
- Fern. (2023). The truth behind sustainable palm oil claims. <https://www.fern.org/publications>
- Greenpeace. (2022). Destruction: Certified. <https://www.greenpeace.org>
- Greenpeace. (2025, May 7). Greenpeace Malaysia. <https://www.greenpeace.org/malaysia/press/51472/greenpeace-malaysia-calls-for-data-transparency-in-national-budget-not-greenwashing/>
- Hu, P., Li, X., Wang, Y., & Wang, D. D. (2024). Peeking into corporate greenwashing through the readability of ESG disclosures. *Sustainability*, 16(6). <https://doi.org/10.3390/su16062571>
- Huang, D. Z. X. (2022). Environmental, social and governance factors and assessing firm value: Valuation, signalling and stakeholder perspectives. *Accounting & Finance*, 62, 1983-2010.
- Janik, A., & Ryszko, A. (2025). Greenwashing in Sustainability Reporting: A Systematic Literature Review of Strategic Typologies and Content-Analysis-Based Measurement Approaches. *Sustainability*, 18(1), 17.
- Kishan, K., & Azhar, Z. (2025). Greenwashing in sustainability reporting: evidence from Malaysia. *Journal of Financial Reporting and Accounting*.
- KPMG. (2022). Transparency Report 2022- Malaysia - KPMG Malaysia. KPMG. <https://kpmg.com/my/en/home/insights/2023/04/transparency-report-2022.html>
- La Rosa, F., & Bernini, F. (2022). ESG controversies and the cost of equity capital of European listed companies: the moderating effects of ESG performance and market securities regulation. *International Journal of Accounting & Information Management*, 30(5), 641-663.

- Ledeboer, P., & Kil, J. (2023). The effects of a company's greenwashing practices on stock liquidity & stock price volatility: Evidence from the S&P 500. Erasmus University, *Erasmus School of Economics*.
- Li, W., Li, W., Seppänen, V., & Koivumäki, T. (2023). Effects Of Greenwashing on Financial Performance: Moderation Through Local Environmental Regulation and Media Coverage. *Business Strategy and The Environment*, 32(1), 820-841.
- Meijaard, E., Garcia-Ulloa, J., Sheil, D., Wich, S. A., Carlson, K. M., Juffe-Bignoli, D., & Brooks, T. M. (2020). Oil palm and biodiversity: A situation analysis by the IUCN Oil Palm Task Force. *International Union for Conservation of Nature (IUCN)*.
- Moolkham, M. (2025). Set ESG ratings and firm value: The new sustainability performance assessment tool in Thailand. *PLoS one*, 20(2), e0315935.
- MPOB. (2024). Overview Of the Malaysian Oil Palm Industry In 2024 Foreword. <https://bepi.mpob.gov.my/images/overview/Overview2024.pdf>
- MPOC. (2025, May 16). Annual Report 2024. [Mpoc.org.my](https://www.mpoc.org.my/annual-report-2024/). <https://www.mpoc.org.my/annual-report-2024/>
- Radi Mugisana, E. N. S., & Sari, L. A. N. (2025). Greenwashing in ESG disclosure: A systematic literature review through theoretical and bibliometric analysis. *Jurnal Ilmiah Wahana Akuntansi*. <https://doi.org/10.21009/wahana.20.0212>
- Ruan, L., Li, J., & Huang, S. (2025). ESG rating adjustment and capital market pricing efficiency: Evidence from China. *International Review of Economics & Finance*, 103845–103845. <https://doi.org/10.1016/j.iref.2025.103845>
- Selangor Journal. (2025, May 5). Palm oil exports reach RM114 bln in 2024. *Selangor Journal*. <https://selangorjournal.my/2025/05/palm-oil-exports-reach-rm114-bln-in-2024/>
- Shad, M. K., Lai, F. W., Shamim, A., & McShane, M. (2020). The efficacy of sustainability reporting towards cost of debt and equity reduction. *Environmental Science and Pollution Research*, 27(18), 22511-22522.
- Shen, L., Zhang, W., & Ma, D. (2025). ESG practices and financing constraints of Chinese high-carbon enterprises under carbon reduction pressure: The role of credit financing and corporate reputation. *Economic Modelling*, 107252.
- Silvan, A., Zulfikar, R., Uzliawati, L., & Januarsih, Y. (2026). Trends and Gaps in the Literature about Green Washing in Asia. *Journal of Economics, Finance and Accounting Studies*, 8(3), 01-11.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy Of Management Review*, 20(3), 571-610.
- Suraj, N., Nayak, M., Kumar, K., Bhadeshiya, H., Kulal, A., & Divyashree, M. S. (2025). Carbon Management Accounting an Evolving Approach to Enhance Transparency and Accountability in Accounting and Reporting Practices. *Journal of Accounting & Organizational Change*, 21(3), 535-566.
- Xu, M., Tse, Y. K., Geng, R., Liu, Z., & Potter, A. (2025). Greenwashing and market value of firms: An empirical study. *International Journal of Production Economics*, 284, 109606.
- Yale Center for Environmental Law & Policy. (2022, June 16). Environmental Performance Index Is Released with New Climate and Air Quality Metrics. <https://envirocenter.yale.edu/posts/2022-06-16-2022-environmental-performance-index-is-released-with-new-climate-and-air-quality>

- Yu, J., Qiu, Q., & Qiao, Y. (2025). Managerial decision horizon and corporate greenwashing: Evidence from China. *Business Ethics, the Environment & Responsibility*, 34(4), 1662-1683.
- Zhou, Y., & Chen, L. (2024). Public attention and “Environmental Disclosure Greenwashing”: Pressure from oversight or incentive from legitimacy. *China Finance Review International*.