

Top-Down Implementation of the Job Creation Law: Reforming Environmental Impact Assessment Policy and Implications for Environmental Governance in Indonesia

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ABSTRACT

Indonesia's Job Creation Law (Law No. 11 of 2020) represents a major reform in national environmental governance aimed at streamlining bureaucracy and accelerating investment; however, it has simultaneously raised concerns about ecological accountability and public participation. This study examines how the top-down implementation of the law has reshaped Environmental Impact Assessment (EIA) procedures and the broader structure of environmental governance. The research aims to analyze the implications of bureaucratic simplification, centralization of authority, and restricted public engagement for sustainable policymaking. Employing a qualitative descriptive-analytical approach, the study collected data from legal documents, policy briefs, and interviews with governmental and civil society actors to explore institutional dynamics across central and regional levels. Findings indicate that while risk-based licensing and the Online Single Submission (OSS) system have improved efficiency and coherence in licensing processes, they have concurrently weakened preventive oversight, diminished local autonomy, and curtailed participatory mechanisms. The centralization of decision-making has standardized procedures but reduced flexibility and contextual responsiveness, leading to governance gaps between policy design and local execution. Moreover, the narrowing of public involvement in EIA processes has eroded transparency and legitimacy, undermining the principles of democratic environmental governance. The study concludes that the effectiveness of top-down implementation remains contingent upon institutional capacity, intergovernmental coordination, and inclusivity. It recommends adopting a hybrid governance model that combines hierarchical efficiency with participatory accountability to ensure that economic reform aligns with ecological sustainability and social legitimacy in Indonesia's environmental policy landscape.

Keyword: Job Creation Law, Environmental Governance, Top-Down, Implementation

INTRODUCTION

The transformation of Indonesia's environmental governance under the Job Creation Law (Law No. 11 of 2020) has become a pivotal policy issue in the discourse on sustainable development. The law, conceived as an omnibus framework, consolidates

various sectoral regulations into a single legal instrument to promote investment efficiency (Hadi et al., 2023). However, this consolidation has sparked debate regarding its implications for environmental protection, administrative accountability, and public participation, especially as risk-based licensing and streamlined procedures may dilute meaningful engagement in environmental assessments (Glucker et al., 2013; González et al., 2023; O’Faircheallaigh, 2010). This study examines the tension between bureaucratic simplification and ecological safeguards within Indonesia’s environmental policy framework, positioning itself at the intersection of governance, policy reform, and sustainability studies, while drawing on wider insights about the promises and pitfalls of risk-based environmental regulation (Gouldson et al., 2009).

In recent years, Indonesia has faced persistent regulatory complexity and institutional fragmentation that have hindered its economic competitiveness. Overlapping regulations, convoluted licensing systems, and inconsistent local policies have constrained both domestic and foreign investment, reflecting deep institutional fragmentation within Indonesia’s administrative and environmental governance systems (Apriliyanti & Nugraha, 2025; Sahide & Giessen, 2015). To address these systemic inefficiencies, the government introduced the Job Creation Law to streamline bureaucratic procedures and attract greater investment. However, this legal reform also centralizes authority at the national level, thereby reducing local autonomy and participation in environmental decision-making, which may further reinforce centralized control and limit collaborative governance among regional actors (Wicaksono et al., 2025).

The urgency of this issue stems from Indonesia’s dual challenge: pursuing rapid economic growth while ensuring ecological resilience. The post-pandemic recovery agenda has amplified the need for job creation and investment acceleration, making deregulation politically expedient (Ulani & Aprirachman, 2025). Yet, as the environmental licensing process becomes increasingly risk-based, concerns have emerged over weakened Environmental Impact Assessment (EIA) oversight and governance capacities (Rothstein et al., 2006). This concern reflects a broader global trend in developing countries where administrative streamlining often undermines participatory environmental governance and institutional checks (Lo et al., 2020). The challenge, therefore, lies in achieving an equilibrium between investment efficiency and sustainable governance.

The reform of EIA mechanisms under the Job Creation Law exemplifies this policy dilemma. While risk-based classification theoretically increases bureaucratic efficiency, it potentially limits preventive control over environmental degradation. Activities previously subject to comprehensive environmental reviews now, in many cases, require simplified documentation as environmental approvals integrated into the OSS-RBA regime, reshaping how impact screening and scoping are undertaken (Hadi et al., 2023). This structural change has implications not only for policy effectiveness but also for public accountability and transparency, as participation has been narrowed primarily to directly affected communities under the revised framework (Basuwendro & Wahanisa, 2025; Sitompul, 2022).

Previous studies on the Job Creation Law have predominantly focused on its economic and legal dimensions, with limited attention to its administrative and governance impacts. Research on EIA reform has rarely integrated theoretical perspectives from public policy implementation studies, especially those that critique

risk-based regulation and centralised control frameworks (Gouldson et al., 2009; Rothstein et al., 2006). This article contributes to filling that gap by adopting a top-down implementation framework to analyse how centralised decision-making affects local policy enforcement and stakeholder engagement. In doing so, it situates the Job Creation Law within broader debates on state capacity, decentralisation, and the democratisation of environmental governance, as evidenced by the Indonesian case of decentralised resource management (Sekaringtias et al., 2023).

Table 1. Comparison of Environmental Governance Mechanisms Before and After the Job Creation Law (Law No. 11/2020)

Aspect	Pre-Job Creation Law Framework	Post-Job Creation Law Framework (OSS-RBA Regime)	Governance Implication
Regulatory Basis	Fragmented sectoral laws and ministerial regulations	Consolidated under omnibus structure emphasizing investment facilitation	Streamlining improves efficiency but risks oversimplification
Authority Distribution	Decentralized, with significant regional discretion in licensing	Centralized under national OSS (Online Single Submission) system	Reduces local autonomy and limits regional participation
Environmental Impact Assessment (EIA)	Comprehensive AMDAL required for most medium-to-large projects	Risk-based classification determines whether full AMDAL or simplified UKL-UPL applies	Potentially weakens preventive oversight for lower-risk categories
Public Participation	Broad-based consultation through multi-stakeholder forums	Limited to directly affected communities	Diminishes inclusivity and accountability mechanisms
Decision-Making Transparency	Subject to local disclosure requirements	Integrated digital platform, but access remains restricted	Centralized data may improve traceability but reduce transparency at local level
Institutional Coordination	Multiple ministries/agencies with overlapping mandates	Single-window mechanism under Coordinating Ministry for Economic Affairs	Enhances coordination but concentrates decision-making power

Source: Author, 2025

Theoretically, this study draws upon the top-down implementation model proposed by Edward III and further refined by (Hogwood & Gunn, 1984). This model emphasizes the role of central authorities in directing, coordinating, and supervising policy outcomes . Applying this lens allows for a critical examination of Indonesia's

bureaucratic reforms as instruments of control and efficiency rather than participatory governance (Ouyang et al., 2020). The analysis seeks to determine whether centralized structures can ensure both regulatory consistency and accountability across diverse regional contexts.

The study's originality lies in integrating governance theory with empirical evaluation of Indonesia's environmental policy reforms. By bridging public administration theory and environmental regulation, the research provides a fresh perspective on how legal frameworks translate into administrative realities. Furthermore, it highlights the contradictions between national efficiency goals and local governance needs, offering an analytical lens to assess similar reforms across Southeast Asia (Asadullah et al., 2025; Borromeo et al., 2025). Thus, the study advances both academic discourse and policy relevance in the field of sustainable governance.

The importance of addressing this issue extends beyond Indonesia's domestic context. As emerging economies pursue investment-led growth strategies, the trade-off between regulatory streamlining and environmental protection becomes increasingly pronounced. Comparative experiences from other developing nations demonstrate that excessive centralization of policy control can undermine transparency, weaken institutional accountability, and erode stakeholder trust (Ogunkan, 2022; Wu & Tham, 2023).

Insights from Vietnam and Malaysia, for instance, illustrate how rapid economic liberalization without adequate environmental safeguards often leads to governance challenges similar to those observed in Indonesia. Hence, analyzing Indonesia's experience can offer valuable lessons for balancing central authority with participatory governance in environmental policymaking across the Global South, ensuring that growth-oriented reforms remain aligned with sustainability and equity principles. From a governance standpoint, the urgency also lies in maintaining public legitimacy amid policy centralization. When communities perceive limited participation in environmental decisions, trust in state institutions tends to erode.

Consequently, the effectiveness of policy implementation becomes contingent not only on bureaucratic capacity but also on the perceived fairness of the process. Therefore, this study underscores that legitimacy, inclusivity, and transparency are indispensable components of sustainable policy reform in Indonesia's evolving governance landscape. This article positions itself as a critical examination of Indonesia's environmental governance reform under the Job Creation Law through the lens of top-down implementation theory. By combining conceptual analysis with contextual evidence, it aims to illuminate the implications of bureaucratic centralization for environmental accountability and participatory governance. The findings are expected to contribute to ongoing discussions on how states can pursue efficiency without compromising democratic values or ecological sustainability.

METHODOLOGY

This study adopts a qualitative research approach with a descriptive-analytical design to explore the top-down implementation of the Job Creation Law and its implications for environmental governance. The qualitative method was chosen to capture the complex interactions between central and local institutions in policy execution, which are not easily quantifiable. Data collection focused on textual and

contextual interpretations of legal documents, policy briefs, and environmental impact assessment (EIA) regulations.

Primary data were obtained through in-depth interviews with government officials, environmental practitioners, and civil society actors involved in the EIA process. These interviews provided insights into policy interpretation, bureaucratic challenges, and local implementation experiences. Secondary data were gathered from relevant laws, ministerial decrees, and academic studies that discuss governance reform and risk-based regulation. Document analysis focused on identifying shifts in authority, participation, and administrative accountability following the enactment of the Job Creation Law. Data analysis employed a thematic coding strategy data framework, which includes data reduction, data display, and conclusion drawing (Miles et al., 2014). This method enabled the identification of recurring themes such as centralization, efficiency, and legitimacy within environmental governance. Triangulation was applied by comparing interview findings, document reviews, and policy analyses to enhance the study's validity and reliability (Decrop, 1999).

RESULTS AND DISCUSSION

1. Bureaucratic Simplification and Investment Efficiency under the Job Creation Law

The implementation of Law No. 11 of 2020 has been perceived as a major milestone in Indonesia's regulatory reform aimed at improving the business environment and accelerating investment realization. Through the adoption of a risk-based licensing approach, bureaucratic simplification has been achieved by categorizing business activities according to their environmental and operational risks. It was observed that this transformation significantly reduced administrative barriers, especially for small and medium enterprises that previously faced long and costly licensing procedures.

It has been found that the Online Single Submission (OSS) system played a critical role in integrating licensing across sectors and ministries. The digitalization of bureaucratic processes has increased transparency and accessibility, enabling investors to monitor applications in real time. However, this efficiency has been accompanied by a potential reduction in environmental scrutiny, particularly in sectors classified as low risk, where environmental documentation is no longer mandatory.

Table 2. Relationship between Bureaucratic Simplification and Environmental Oversight

Policy Aspect	Intended Outcome	Actual Consequence	Policy Implication
Risk-based licensing	Faster investment procedures	Reduced environmental control for low-risk sectors	Need for adaptive supervision
OSS system	Integration of permits	Uneven digital literacy among regions	Institutional capacity building
Regulatory simplification	Legal clarity	Decline in public participation	Participatory mechanism redesign

Source: Author, 2025

The emphasis on speed and administrative efficiency has often overshadowed the importance of sustainability assessments. It was noted that although efficiency gains have

been substantial, the reduction of regulatory layers has simultaneously weakened multi-level checks and balances that previously ensured environmental accountability. Consequently, policy coherence between central and local governments has been compromised. Empirical observations have shown that the success of these bureaucratic reforms depends largely on institutional capacity at both central and regional levels. The variation in human resource quality and digital readiness among provinces and municipalities has created inconsistencies in implementation. This situation demonstrates that while a top-down approach ensures uniformity, it may not accommodate local capacities and contextual variations.

The risk-based classification introduced by the Job Creation Law represents an institutional shift toward technocratic governance. Although the logic of efficiency has been strengthened, the participatory and precautionary dimensions of environmental management have been diminished. In this sense, environmental sustainability has been subordinated to investment priorities, resulting in asymmetrical policy outcomes. It can therefore be concluded that bureaucratic simplification has improved investment efficiency but simultaneously produced governance fragmentation. These findings reaffirm the argument that administrative efficiency should be balanced by mechanisms ensuring ecological responsibility and public accountability.

2. Centralization and Decline of Regional Autonomy in Environmental Governance

The Job Creation Law has established a strong centralization of authority, whereby environmental decision-making is primarily controlled by the central government. This shift has been justified on the grounds of efficiency and consistency but has resulted in a diminished role for local governments in environmental policy execution. It was observed that many responsibilities previously under regional jurisdiction have now been retracted to the national level. From a top-down implementation perspective, this centralization represents a structural realignment in Indonesia's administrative hierarchy. Policy decisions have been standardized, leaving regional actors as implementers with minimal discretion. This has weakened the adaptive potential of local governance, which is crucial for addressing region-specific environmental challenges.

Research findings indicate that the withdrawal of autonomy has hindered the effectiveness of decentralized governance mechanisms established by Law No. 32 of 2009 on Environmental Protection and Management. The capacity of local governments to monitor, enforce, and adjust environmental regulations to local conditions has been limited, leading to a gap between national objectives and local realities. Moreover, this centralization process has disrupted existing institutional networks that once supported participatory and collaborative governance. The harmonization of regional and national regulations has become more difficult due to overlapping authority and unclear procedural boundaries. This situation has increased bureaucratic dependency on central directives rather than encouraging local initiative.

It has been observed that regional environmental agencies (DLH) are now constrained by limited authority to issue permits or conduct independent assessments. Their functions have been reduced to administrative verification, which undermines their strategic role as environmental gatekeepers. Consequently, local accountability mechanisms have weakened, and policy outcomes have become less context-sensitive. The implementation of this centralization can be seen as an effort to strengthen state control, yet it contradicts the spirit of participatory decentralization that Indonesia has

promoted since the Reform Era. It was therefore concluded that without a hybrid model integrating top-down oversight and bottom-up input, environmental governance will remain rigid and less responsive.

3. Public Participation and Transparency in Environmental Impact Assessment

Public participation has long been a cornerstone of democratic environmental governance. Under the Job Creation Law, participation has been redefined in a narrower sense, limited only to communities directly affected by proposed business activities. This restriction has been criticized for excluding wider civil society engagement and diminishing social oversight in environmental policymaking. It has been observed that the participatory dimension of Environmental Impact Assessment (EIA) has shifted from a deliberative process to a procedural requirement. Consultation processes are now conducted primarily for compliance rather than substantive input. As a result, public feedback has become less influential in shaping final policy outcomes.

Transparency has also been reduced, particularly regarding data accessibility and public disclosure of environmental documents. Digitalization under the OSS system has not been accompanied by open data mechanisms accessible to the general public. Consequently, the principle of public accountability embedded in previous environmental governance frameworks has weakened. From an implementation standpoint, it was identified that this change has been driven by the government's focus on policy acceleration and investment promotion.

Table 3. Comparison of Public Participation before and after the Job Creation Law

Dimension	Before the Law	After the Law	Implication
Public scope	Open to all communities	Restricted to directly affected parties	Reduced inclusivity
Data access	Public environmental documents	Limited online disclosure	Lower transparency
Consultation outcome	Influential in policy	Merely procedural	Weakened social legitimacy

Source: Author, 2025

Empirical evidence suggests that regions with active civil society organizations have expressed greater resistance to this top-down approach. It was found that the exclusion of non-affected communities from EIA discussions has led to social discontent and disputes over environmental decisions. Theoretically, this situation reflects a tension between technocratic rationality and participatory legitimacy. According to top-down theory, effective control requires centralized authority; however, sustainable governance requires trust-building and social engagement. Therefore, a balance between efficiency and inclusiveness must be maintained to ensure policy credibility.

4. Effectiveness of Top-Down Implementation in Policy Coordination

The top-down implementation framework has been utilized by the Indonesian government to ensure uniformity and control over the complex policy structure introduced by the Job Creation Law. It was observed that the application of this model allowed for accelerated decision-making processes and minimized administrative conflict across ministries. According to Edward III's implementation theory, successful

policy realization depends on communication, resources, disposition, and bureaucratic structure. The study found that communication between central and regional levels remains the most critical barrier. While directives are clearly formulated, their interpretation and execution at lower administrative tiers often diverge due to resource disparities.

Institutional resources, both human and financial, have been found insufficient in several regional offices responsible for EIA enforcement. Many local agencies lack qualified personnel and digital infrastructure, resulting in inconsistent monitoring performance. This inconsistency underscores the limitations of a purely top-down model when dealing with multilevel governance systems. The disposition of implementing actors has also affected outcomes. Officials at local levels often perceive themselves as executors of central policy rather than decision-makers. This perception reduces their sense of ownership and accountability. Consequently, innovative local practices have been replaced by mechanical compliance.

Table 4. Evaluation of Top-Down Implementation Variables (Edward III Model)

Variable	Observation	Weakness Identified	Policy Recommendation
Communication	Clear vertical flow	Weak interpretation at local level	Develop feedback channels
Resources	Adequate centrally	Insufficient locally	Capacity development programs
Disposition	Compliance-oriented	Low innovation	Incentivize local initiative
Structure	Strong hierarchy	Overlapping mandates	Clarify inter-ministerial roles

Source: Author, 2025

It was identified that the bureaucratic structure, while vertically strong, remains horizontally fragmented. Overlapping mandates among ministries responsible for environment, investment, and spatial planning have complicated coordination. This has led to regulatory ambiguity and delayed implementation. Effectiveness of top-down implementation has been mixed. While it has delivered procedural uniformity, it has failed to ensure coherent multi-actor coordination. Therefore, strengthening horizontal integration and enhancing interagency dialogue are essential steps toward policy coherence.

5. Towards a Hybrid Model for Sustainable Environmental Governance

It has been widely recognized that the sustainability of the Job Creation Law's implementation requires a paradigm shift from purely top down governance to a hybrid model that integrates bottom-up participation. Such an approach would enhance legitimacy, adaptiveness, and long-term policy resilience. In this model, the central government would continue to act as a strategic coordinator, while local governments and civil society would contribute to contextualization and oversight. This collaborative mechanism could reconcile the tensions between efficiency and participation that have characterized the implementation process thus far.

The integration of digital monitoring systems and participatory data platforms has been proposed as a strategy to bridge these governance gaps. By utilizing technology,

public feedback can be institutionalized within the EIA process without undermining administrative efficiency. Furthermore, it was suggested that hybrid governance models can increase policy responsiveness by fostering dialogue between stakeholders. Empirical lessons from decentralized regions indicate that shared authority in environmental management enhances policy innovation and compliance.

A continuous policy evaluation mechanism must also be institutionalized to assess the socio-environmental impacts of regulatory changes. The use of evidence-based assessments will enable adaptive policy adjustments and improve long-term sustainability. Finally, it is concluded that the hybrid model provides a pragmatic compromise between hierarchical control and participatory inclusion. It ensures that environmental governance remains accountable, context-sensitive, and resilient to changing socio-political conditions.

CONCLUSION

The implementation of Indonesia's Job Creation Law has been recognized as a landmark reform that reshaped the nation's regulatory and administrative landscape. Through a top-down approach emphasizing efficiency and uniformity, significant progress has been achieved in simplifying bureaucratic procedures, accelerating investment, and improving legal certainty. However, it has also been demonstrated that these achievements have come at the cost of diminished regional autonomy and weakened participatory mechanisms in environmental governance. The simplification of the Environmental Impact Assessment (EIA) process, while beneficial for business acceleration, has created new challenges in maintaining ecological integrity and ensuring inclusive decision-making. Hence, the reform has produced both administrative gains and governance trade offs that demand careful institutional recalibration.

It has been revealed through analysis that the effectiveness of top-down policy implementation under the Job Creation Law depends heavily on coordination, communication, and the institutional capacity of local agencies. Centralized control has enabled rapid decision-making but has simultaneously generated gaps between policy design and implementation at the local level. The uneven distribution of resources, weak digital literacy, and limited discretionary authority among local governments have constrained policy responsiveness. Furthermore, public participation once a cornerstone of Indonesia's environmental democracy has been procedurally restricted, leading to reduced transparency and legitimacy.

To achieve a balanced and sustainable form of governance, it is therefore concluded that Indonesia must adopt a hybrid implementation model that harmonizes the strengths of top-down efficiency with bottom-up inclusiveness. This model should institutionalize collaboration between the central government, regional authorities, and civil society through transparent digital systems, participatory monitoring, and continuous policy evaluation. In doing so, regulatory simplification can coexist with ecological stewardship and social legitimacy. The Job Creation Law, when complemented by adaptive governance instruments and inclusive participation frameworks, has the potential to serve not only as a catalyst for economic growth but also as a foundation for sustainable, equitable, and accountable environmental governance in Indonesia's future development trajectory.

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REFERENCES

- Apriliyanti, I. D., & Nugraha, D. B. (2025). Burning coal in a cleaner way: Institutional fragmentation, power dynamics, and business influence in Indonesia's biomass co-firing imaginaries. *Energy Research & Social Science*, 121, 103949. <https://doi.org/10.1016/J.ERSS.2025.103949>
- Asadullah, M. N., Jilani, A. H., Negara, S. D., & Suryadarma, D. (2025). Improving the quality of basic education in ASEAN-Emerging challenges and reforms. *International Journal of Educational Development*, 116, 103292. <https://doi.org/10.1016/J.IJEDUDEV.2025.103292>
- Basuwendro, Y., & Wahanisa, R. (2025). *The Impact of Law No. 6 of 2023 On Environmental Protection And Management*. 5, 4878–4893. <https://doi.org/10.38035/jlph.v5i6>
- Borromeo, A. S., Manaloto, A. M., & Antonio, R. (2025). Southeast-Asian landscape of antimicrobial resistance research (2014–2024): A bibliometric analysis. *Journal of Global Antimicrobial Resistance*, 45, 125–133. <https://doi.org/10.1016/J.JGAR.2025.09.004>
- Decrop, A. (1999). Triangulation in qualitative tourism research. *Tourism Management*, 20(1), 157–161. [https://doi.org/10.1016/S0261-5177\(98\)00102-2](https://doi.org/10.1016/S0261-5177(98)00102-2)
- Glucker, A. N., Driessen, P. P. J., Kolhoff, A., & Runhaar, H. A. C. (2013). Public participation in environmental impact assessment: why, who and how? *Environmental Impact Assessment Review*, 43, 104–111. <https://doi.org/10.1016/J.EIAR.2013.06.003>
- González, A., Therivel, R., Lara, A., & Lennon, M. (2023). Empowering the public in environmental assessment: Advances or enduring challenges? *Environmental Impact Assessment Review*, 101, 107142. <https://doi.org/10.1016/J.EIAR.2023.107142>
- Gouldson, A., Morton, A., & Pollard, S. J. T. (2009). Better environmental regulation - contributions from risk-based decision-making. *Science of The Total Environment*, 407(19), 5283–5288. <https://doi.org/10.1016/J.SCITOTENV.2009.06.013>
- Hadi, S. P., Hamdani, R. S., & Roziqin, A. (2023). A sustainability review on the Indonesian job creation law. *Heliyon*, 9(2), e13431. <https://doi.org/10.1016/J.HELİYON.2023.E13431>
- Hogwood, B. W., & Gunn, L. A. (1984). Policy Analysis for the Real World. In *Policy Analysis for the Real World*. Oxford University Press.
- Lo, C. W. H., Liu, N., Pang, X., & Li, P. H. Y. (2020). Unpacking the complexity of environmental regulatory governance in a globalizing world: a critical review for research agenda setting. *Journal of Environmental Policy and Planning*, 22(5), 594–607. <https://doi.org/10.1080/1523908X.2020.1767550;SUBPAGE:STRING:FULL>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). Qualitative Data Analysis: A Methods Sourcebook. In *Qualitative Data Analysis A Methods Sourcebook* (3rd ed., Vol. 47, Issue Suppl 4). SAGE Publications. <http://www.uk.sagepub.com/books/Book239534?siteId=sage-uk>
- O'Faircheallaigh, C. (2010). Public participation and environmental impact assessment: Purposes, implications, and lessons for public policy making. *Environmental Impact Assessment Review*, 30(1), 19–27. <https://doi.org/10.1016/J.EIAR.2009.05.001>

- Ogunkan, D. V. (2022). Achieving sustainable environmental governance in Nigeria: A review for policy consideration. *Urban Governance*, 2(1), 212–220. <https://doi.org/10.1016/J.UGJ.2022.04.004>
- Ouyang, J., Zhang, K., Wen, B., & Lu, Y. (2020). Top-Down and Bottom-Up Approaches to Environmental Governance in China: Evidence from the River Chief System (RCS). *International Journal of Environmental Research and Public Health*, 17(19), 7058. <https://doi.org/10.3390/IJERPH17197058>
- Rothstein, H., Irving, P., Walden, T., & Yearsley, R. (2006). The risks of risk-based regulation: Insights from the environmental policy domain. *Environment International*, 32(8), 1056–1065. <https://doi.org/10.1016/J.ENVINT.2006.06.008>
- Sahide, M. A. K., & Giessen, L. (2015). The fragmented land use administration in Indonesia – Analysing bureaucratic responsibilities influencing tropical rainforest transformation systems. *Land Use Policy*, 43, 96–110. <https://doi.org/10.1016/J.LANDUSEPOL.2014.11.005>
- Sekaringtias, A., Verrier, B., & Cronin, J. (2023). Untangling the socio-political knots: A systems view on Indonesia's inclusive energy transitions. *Energy Research & Social Science*, 95, 102911. <https://doi.org/10.1016/J.ERSS.2022.102911>
- Sitompul, A. T. (2022). Job Creation Law's Risk Towards Investment Efficiency and Business Convenience Regarding the Environment. *Administrative and Environmental Law Review*, 3(1), 1–8. <https://doi.org/10.25041/aelr.v3i1.2339>
- Ulani, S. Y., & Aprirachman, R. (2025). Post-Pandemic Economic Recovery in Indonesia: A Systematic Literature Review on Key Drivers, Challenges, and Policy Implications. *ECOBISMA (Jurnal Ekonomi, Bisnis Dan Manajemen)*, 12(2).
- Wicaksono, A., Andari, R. N., Azni, U. S., Prayoga, R. A., Putri, I. H. S., Wahyono, E., Andini, P., Nurlika, R., Nabila, N. M., Wijaya, G., Sidipurwanti, E., & Susantyo, B. (2025). Actor collaboration in the implementation of business licensing integrated with the land use framework: Indonesian case study. *Urban Governance*. <https://doi.org/10.1016/J.UGJ.2025.10.003>
- Wu, Y., & Tham, J. (2023). The impact of environmental regulation, Environment, Social and Government Performance, and technological innovation on enterprise resilience under a green recovery. *Heliyon*, 9(10), e20278. <https://doi.org/10.1016/J.HELIYON.2023.E20278>