

Business Law Construction on ESG Practices in the Electric Vehicle Industry: Measuring Economic Growth and Ecological Impacts

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Abstract (10 PT)

*The rapid expansion of the electric vehicle (EV) industry in Indonesia promises significant economic growth through nickel downstreaming but simultaneously poses massive ecological threats. This paper aims to analyze the juridical construction of Environmental, Social, and Governance (ESG) practices within Indonesian business law to balance economic investments with sustainable ecological protection. Employing a normative-juridical method through statutory and conceptual approaches, this study strictly examines corporate and environmental legal frameworks without sociological elements. The findings reveal a regulatory vacuum where ESG compliance remains a voluntary soft law rather than an imperative hard law for closed corporations in the EV supply chain. Existing regulations lack the integration of ecological compliance into the absolute obligations of corporate governance. Consequently, business law must be reconstructed to enforce supply chain liability, mandatory green accounting, and Extended Producer Responsibility (EPR). The conclusion emphasizes that integrating ESG as a doctrinal pillar in commercial and corporate law is a *conditio sine qua non* to ensure that the EV industry's macroeconomic growth does not compromise the environmental carrying capacity and the fundamental rights of future generations.*

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1. INTRODUCTION

The global energy transition towards the use of electric vehicles (EVs) has become the world's main agenda in efforts to mitigate climate change. This phenomenon is driven by international commitments to reduce greenhouse gas emissions generated by the fossil-based transportation sector, as part of the initiative to create a low-carbon environment and a green economy (Saniyyah, 2023). Indonesia, as the country with the world's largest nickel reserves, positions itself as a key player in the global EV battery supply chain through its downstreaming policy (Tsirwiyati, 2023).

At the macro level, this policy is viewed as a golden opportunity to accelerate national economic growth. Massive investments are flowing into the mining sector and nickel processing industry, which are expected to provide added value and create new jobs. However, behind this narrative of economic growth, fundamental issues regarding ecological sustainability frequently emerge, which are often neglected in field business practices. In both the global and national contexts, this transition is fraught with the

dynamics of political ecology, where dominant business actors often experience a conflict of interest between pursuing clean energy incentives and minimizing environmental costs (Jaenudin & Yudono, 2023).

The electric vehicle industry, frequently labeled as a "green" industry, actually possesses a significant paradox on the upstream side. The extraction process of nickel and cobalt, which serve as the primary raw materials for batteries, involves large-scale land clearing, deforestation, and potential water source pollution due to tailing waste (Saputra, 2025). This creates a contradiction between the goal of carbon emission reduction and the massive destruction of local ecosystems (Malihah, 2022).

In the context of business law, this phenomenon demands operational standards that do not merely chase profit but are also socially and environmentally responsible. This is where the concept of Environmental, Social, and Governance (ESG) becomes a crucial instrument. ESG is no longer merely a corporate branding trend; rather, it has transformed into a parameter for assessing investment risks and legal compliance for companies involved in the global supply chain (Sanjaya et al., 2025).

Business law in Indonesia currently faces the challenge of integrating ESG principles into imperative regulations. Thus far, corporate social and environmental responsibility has often been regarded as a voluntary obligation or mere philanthropy. In reality, the ecological impacts of the extractive industry for electric vehicles are permanent and require a more rigid and coercive legal construction to align with the fundamental principles of environmental protection (Chandra, 2024).

A normative review of business law instruments reveals a legal vacuum regarding specific ESG standardization for the EV industry. There is not yet an integrated audit mechanism capable of ensuring that incoming investments are truly aligned with environmental protection (Subiantoro & Maharani, 2024). The absence of this standard provides an opportunity for greenwashing practices by business actors, meaning that business ethics must be enforced through binding regulations (Rustandi & Lazuardini, 2023).

Besides environmental aspects, the social dimension within ESG is also under sharp scrutiny, particularly concerning the protection of indigenous communities. Agrarian conflicts and health impacts on communities surrounding mining areas are inseparable parts of this industry's dynamics (Tsirwiyati, 2023). Business law must be capable of providing protection for the rights of local communities and ensuring that natural resource management continues to respect the existence of indigenous peoples within the constitutional framework (Chandra, 2025).

From a governance perspective, the transparency of sustainability reports is an absolute requirement for the integrity of the EV industry. Without clean and accountable governance, the flow of green capital from international investors will be difficult to maintain. Therefore, the construction of national business law needs to be harmonized with international standards so that Indonesia's EV industry possesses sustainable competitiveness in the global market (Sanjaya et al., 2025).

This issue becomes increasingly complex when faced with the target of achieving Net Zero Emissions by 2060. The government continues to spur domestic electric vehicle production through various fiscal and non-fiscal incentives. However, these incentives must be accompanied by stricter environmental legal compliance so that the resulting economic growth does not become an ecological burden for future generations (Malihah, 2022).

Previous studies have extensively reviewed electric vehicles from the aspects of environmental administrative law and public policy. However, there are still few studies that touch upon the core of business law construction, particularly regarding the absolute corporate responsibility in the nickel supply chain for EVs (Berliandaldo & Prasetyo, 2022).

Focusing on this private-business aspect is highly relevant considering that the main actors in this industry are corporate entities (Saputra, 2025).

The scientific novelty of this article lies in the normative analysis that connects ESG obligations with corporate responsibility theory in business law. This article intends to offer thoughts on the necessity of shifting from the traditional social responsibility paradigm toward environmental risk-based legal responsibility that is integrated into business operations, without disregarding the aspects of commercial ethics (Rustandi & Lazuardini, 2023). Based on the elaboration above, this research will dissect how the construction of business law in Indonesia is capable of accommodating ESG practices within the electric vehicle industry. The ultimate goal is to find the ideal legal formula for measuring investment economic growth while remaining within the corridor of sustainable ecological impact protection.

2. METHOD

This research employs a normative legal research method, focusing on the analysis of written legal materials. The primary focus of this research is to examine the synchronization and harmonization of business law regulations with the principles of environmental economics applicable in Indonesia (Chandra, 2024). Through a statute approach, this research dissects various related positive laws concerning environmental protection and limited liability companies, which are analyzed through academic literature, to find a comprehensive legal framework governing ESG practices (Sallsabillah, 2021).

In addition to the statute approach, this research also utilizes a conceptual approach to explore business law theories related to corporate responsibility and sustainable development. The analysis is conducted prescriptively, where legal data collected through literature study is processed to provide solutions or recommendations for the problem of the norm vacuum in regulating ESG within the electric vehicle industry. This research is purely juridical-normative, setting aside sociological data, so that the arguments developed are based on established legal logic and legal doctrines.

3. RESULTS AND DISCUSSION (12 PT)

Juridical Construction of ESG Practices within the Framework of Indonesian Business Law

In the Indonesian business law system, Environmental, Social, and Governance (ESG) practices normatively take root in the concept of Corporate Social and Environmental Responsibility (TJSL). Under positive law, companies conducting business activities in the field of and/or related to natural resources are obliged to implement these practices (Sallsabillah, 2021). However, this normative provision remains highly general and requires a profound understanding of environmental legal norms so that its implementation is accurately targeted and does not merely serve to dismiss administrative duties (Chandra, 2024).

The integration of ESG into national business law still faces challenges at the reporting standardization level. Although financial legal literature notes the existence of regulations regarding sustainable finance implementation from the Financial Services Authority, this obligation empirically only targets large-scale public companies (Rustandi & Lazuardini, 2023). For closed companies, which are precisely the ones heavily involved directly in the extractive supply chain of the electric vehicle industry, the obligation for environmental governance reporting does not yet possess specific binding legal force.

Viewed from the perspective of investment law, investment norms explicitly oblige every investment entity to implement good corporate governance principles and carry out corporate social responsibility (Saniyyah, 2023). This academic construction indicates that

ESG has actually transformed into a part of legal obligation (hard law), rather than remaining a voluntary ethical choice. However, in the EV industry ecosystem that involves high technology and the risk of macro-scale environmental damage, this norm requires more specific derivative regulations at the sectoral operational level.

ESG practices in the electric vehicle industry demand comprehensive legal audits across the entire production chain. From the viewpoint of corporate law, this includes contractual relationships and joint responsibility between giant EV producers and regional nickel raw material subcontractors (Rahmawati et al., 2024). Legal construction must be able to reach the parent corporation's liability for environmental ethics violations committed by their supply network, a doctrine commonly known as supply chain liability.

The desynchronization between business law and environmental administrative law frequently culminates in the creation of escape loopholes for corporations. Environmental regulations tend to rely more heavily on *ultimum remedium* and administrative sanctions, while company rules focus intensely on the internal governance of the board of directors (Sallsabillah, 2021). Juridical innovation is required to make environmental compliance track records an absolute instrument in assessing the performance and fiduciary duty of company directors in executing corporate management based on ethics (Rustandi & Lazuardini, 2023).

The transformation of ESG practices from soft law to hard law in the electric vehicle sector is a legal necessity driven by global discourse. International market demands now require guarantees and proof of sustainability for any product to be traded across jurisdictions (Sanjaya et al., 2025). If national business law neglects to formulate strict ESG compliance standards, Indonesia's downstream EV industry will face isolation from international green financing and boycotts from strategic export markets in developed nations.

The governance aspect within the ESG framework also reaches the realms of corruption prevention and transparency optimization in the mining licensing regime. Business law must imperatively guarantee that the wave of nickel downstreaming to support EV batteries is not marred by oligopolistic or collusive practices that oppress healthy business competition (Rahmawati et al., 2024). Constructing this transparent legal certainty will thicken the ratio of investor trust while simultaneously ensuring inclusively distributed economic justice.

The social dimension in ESG obliges corporations to respect the protection of human rights, specifically the customary rights and indigenous territories that directly border mining areas. In the vortex of Indonesian business law, this protection narrative is frequently marginalized due to the dominance of sectoral regimes (Malihah, 2022). Therefore, the codification of social standard instruments based on green constitution principles is necessary to prevent the forced eviction (marginalization) of local residents around nickel exploration sites (Chandra, 2025).

Normatively, the crystallization of ESG instruments intersects closely with the precautionary principle in the discourse of environmental law. Companies are strictly prohibited from delaying preventive action under the pretext of lacking absolute scientific evidence when there is a threat of environmental damage (Sallsabillah, 2021). On this basis, the legal construction of EV business licensing must stipulate eco-social risk analysis documents not merely as a requirement to complete files, but as the foundation for the feasibility of investment operations.

Strengthening the fundamental position of ESG within the corporate legal framework will inevitably provide layered legal certainty for business actors. With clear parameters of obligation, companies possess precise risk mitigation in conducting their industrial activities, while simultaneously being protected from the threat of environmental litigation

that commonly arises retrospectively (Sanjaya et al., 2025). This capacity for legal certainty serves as an independent variable to maintain a globally competitive EV investment climate.

Beyond the sanction-based approach, the government needs to reconstruct tax law instruments and financing incentives for EV entities proven to have flawlessly realized ESG. This policy intervention is manifested in the form of corporate tax rate relaxation or exclusive customs bureaucracy lanes for green-rated corporations. This dual-function legislative strategy (stick and carrot) is considered accelerative in stimulating the massive adoption of electric motor vehicles in accordance with national climate resilience targets (Berliandaldo & Prasetio, 2022).

As a synthesis of this sub-chapter, the reconstruction of corporate and commercial law based on ESG compliance must envision the continuity of business entities across generations. Companies that disregard ESG parameters will undoubtedly record fantastic profitability in the short term, but on the flip side, are accumulating the risks of reputational destruction and class action sanctions in the future. Consequently, mainstreaming ESG formulations as a doctrinal pillar in the architecture of business law is a crucial step in engineering the future of Indonesia's circular economy.

Measuring the Balance of Economic Growth and Ecological Protection

National economic growth triggered by the electric vehicle industry magnet in Indonesia relies exclusively on the massive dredging of nickel commodities (Tsirwiyati, 2023). From the lens of environmental economic law, the aggregation of this growth must be strictly calibrated to avoid disrupting the stability of ecosystem functions, which could potentially result in irreversible damage. Even though downstream legal politics are proven to contribute a surplus to the trade balance in terms of foreign exchange, the factual ecological cost arising from water and land contamination must be calculated as a long-term economic loss depreciation (Malihah, 2022).

The philosophy of sustainable development emanates a firm prescription that the exploitation of natural capital under today's regime is absolutely forbidden from amputating the living rights of future generations. Corporate law is demanded to be responsive in internalizing the social cost of carbon and the real costs of ecological preservation into the production cost components (cost of goods sold) of business entities (Saniyyah, 2023). For too long, mining corporations have reaped asymmetrical profits through the practice of externalizing waste burdens onto the state and society, which ontologically constitutes a violation of environmental human rights.

Ecological quarantine within the EV assembly industry regime must be initiated through the tightening of environmental administrative law clauses that are fully integrated into the Online Single Submission (OSS) system. In critical review, anomalies are frequently encountered where commercial permits have been issued preceding the validity of comprehensive studies regarding sectoral environmental carrying capacity. To realize a ratio of equilibrium justice, the law must position ecological compliance requirements as a *conditio sine qua non* (an absolute prerequisite without exception) for the operational life of the corporation (Saputra, 2025).

The polluter pays principle occupies a central position that must be enforced absolutely in EV industry legal disputes. Whenever a corporate entity is legally proven to have contributed hazardous (B3) contamination within the battery cell production chain, that corporation bears the burden of compensating for total ecosystem restoration (Sallsabillah, 2021). So that this does not remain mere jurisprudential rhetoric, business law doctrines must require environmental insurance schemes and the placement of high-ratio reclamation guarantee funds in escrow accounts for the EV industry (Rahmawati et al., 2024).

Modern environmental economics presents a natural wealth valuation accounting methodology that ought to be adopted into the norms of business financial reporting. Through the integration of green accounting, business law mandates the recording of natural asset depreciation (ecosystem depletion) within public audit balance sheets. Consequently, the euphoria of economic growth claims touted by the electric vehicle sector can have their validity objectively verified, dispelling doubts about whether this industry truly creates real wealth or is merely engaging in the cannibalism of natural capital (Malihah, 2022).

The most severe test in stabilizing this equilibrium balance originates from political investment pressures that often demand the relaxation of EIA (Amdal) regulations in order to blindly pursue Foreign Direct Investment (FDI). According to normative legal postulates, the hierarchy of legislation is prohibited from bowing to the dictates of momentary capital pragmatism. Ecological protection is not a bargaining commodity, but a constitutional mandate framed through the understanding of a green constitution to guarantee the fundamental rights of citizens to a prosperous living space (Chandra, 2025).

The future survival of the electric transportation industry requires the juridical adoption of circular economy principles. Business legislation can take the helm by injecting mandatory closed-loop recycling clauses for end-of-life battery cells for EV manufacturers, aiming to prevent an explosion of hazardous waste piles in the future. The regulatory architecture of Extended Producer Responsibility (EPR) regarding the management of battery waste as Hazardous and Toxic Materials (B3) must be injected into Consumer Protection and B3 regulations so that the baton of manufacturer accountability continues to adhere until the end of the material cycle (Sri et al., 2025).

There is a domino effect born from deforestation in the upstream nickel mining sector, where damage to hydrological infrastructure triggers paralysis in subsistence economic pockets such as the agrarian and coastal maritime sectors (Tsirwiyati, 2023). The environmental law paradigm must view this causality across an ecocentric spectrum. Safeguarding the boundaries of carrying capacity at the nickel mining site is not merely to satisfy NGO demands; rather, it is a legal shield to nurture the fortress of economic resilience for indigenous communities whose living spaces directly intersect with project locations (Chandra, 2025).

The hypothesis regarding the electric vehicle transition being one hundred percent environmentally friendly must be questioned and its certainty principle tested right from the upstream material mining phase. Considering that the electricity supplied to charge smelter batteries and EV vehicles in the country is still heavily dominated by dirty electricity from coal-fired power plants, the decarbonization claims of EV corporations are prone to falling into environmental legal manipulation (Saputra, 2025). Investment law and electricity business regulations should compel the use of new and renewable energy transitions in the operation of smelting refineries to maintain ecological dignity and rationality.

The ecological-economic balance point also absolutely entails the jurisdictional contribution of monetary authorities and banking syndications. The future financial services legal framework must restrict liquidity and impose stricter working capital credit prerequisites on EV entities that fail to achieve specific ESG compliance (Sanjaya et al., 2025). This structural intervention by the banking regime is highly effective in forcing extractive corporations to reorganize their ecological operational architecture as a prerequisite for the continuity of their financing cash flows.

The climax of guarding the supremacy of environmental economic law in the EV sector relies entirely upon the integrity of law enforcement apparatus and judicial institutions. The deadlock in litigating civil cases regarding environmental exploitation by affected communities must be terminated through strengthening the legal standing for class representative lawsuits (class actions) as well as absolute corporate criminal liability

(Sallsabillah, 2021). These inclusive courthouse doors stand as a warning alarm for the capital power of the EV industry that economic supremacy will never be immune from the justice of natural and social law (Jaenudin & Yudono, 2023).

As a conclusion to this argumentative sub-chapter, measuring macroeconomic growth versus ecosystem salvation must not be interpreted as an antagonistic, anti-investment effort, but rather as an invitation to redefine the true essence of prosperity itself. Genuine economic growth, philosophically, is an escalation of collective welfare that takes place in harmony without necessitating the cannibalization of the life support system's foundation (Malihah, 2022). The restructuring of nickel and EV business law in the country must be firmly anchored to this premise, to ensure that Mother Earth remains worthy of being inherited by the future.

4. CONCLUSION

Based on the normative legal analysis outlined, it can be concluded that the current business law construction in Indonesia still leaves a normative vacuum in rigidly mandating Environmental, Social, and Governance (ESG) practices within the electric vehicle (EV) industry supply chain. The positive legal framework still positions ecological and social compliance merely as soft law and general-normative administrative obligations, having not yet transformed into hard law instruments possessing civil coercive power or business penalties for extractive corporations. To balance the euphoria of nickel downstreaming economic growth with ecological protection, corporate and investment legal instruments must absolutely be reconstructed. This juridical reconstruction is carried out by adopting the doctrine of supply chain liability, mandatory green accounting audits, the institutionalization of Extended Producer Responsibility (EPR) into consumer protection law, and the imposition of the strict liability principle on corporations from upstream to downstream. Macroeconomic growth in EV investments will only be deemed just if business law rules prescriptively establish ecological sustainability as an absolute prerequisite (*conditio sine qua non*) for the continuity of business operations.

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