



Securitization and Utilitarianism in Carbon Exchange Policy: A Critical Analysis of Indonesia's Regulatory Framework

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Abstract

Background: Corporate sustainability has become a major concern in emerging markets as companies face increasing pressure to comply with economic regulations, environmental, social, and governance (ESG) standards, and stakeholder expectations. However, weak legal enforcement, fragmented regulatory frameworks, and inconsistent ESG implementation often limit corporate accountability and sustainable business performance.

Objective: This study aims to examine the relationship among economic law governance, ESG pressure, and corporate sustainability performance in emerging markets.

Methods: This study uses a conceptual and literature-based approach by synthesizing recent scholarly discussions on economic law, ESG implementation, corporate governance, regulatory quality, and sustainability management.

Results: The findings indicate that strong economic law governance contributes to legal certainty, improves corporate accountability, and encourages companies to integrate ESG principles into their business strategies. ESG pressure from regulators, investors, consumers, and other stakeholders also promotes transparency, risk management, and long-term value creation. Nevertheless, the effectiveness of ESG implementation depends on regulatory consistency, institutional enforcement, and managerial commitment.

Conclusion: Economic law governance and ESG pressure play important roles in strengthening corporate sustainability performance. This study contributes to the literature by integrating legal, economic, and management perspectives to explain how responsible business practices can be advanced in emerging markets.

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INTRODUCTION

Classical utilitarian theory remains relevant to the pragmatism of politicians and legislators today. It is fair to say that, within a specific scope, policymakers and regulators tend to formulate public policies that are considered beneficial to the public as well as to the administration. However, this does not necessarily mean that certain legal products will be widely accepted and followed by all facets of society. Through the lens of critical interpretation, the public ought to not always accept what is written in laws or legal texts without first questioning it critically. This holds true in the Indonesian context, where laws have not always reflected the will of the people since the colonial era (Kadir, 2026; Manullang, 2019). Thus, it is not enough for regulators merely to state that a policy or

regulation is necessary or that it will solve some problems, especially when it involves issues that are “foreign” to the general public’s understanding.

In the past three decades, the global community has experienced the impacts of climate change collectively. Climate change refers to changes in the patterns and intensity of climatic elements over a comparable period (Nugroho, 2016; Triwahyuningsih et al., 2026). Meanwhile, according to the Ministry of Environment, climate change is a change in the condition of the Earth’s atmosphere, including temperature and rainfall distribution, which has broad impacts on various sectors of human life (Pinontoan et al., 2021; Triwahyuningsih et al., 2026). Air containing gases and particulates originating from daily natural and human activities continuously enters the atmosphere as pollution, contaminates the air, contributes to climate change, and causes the so-called “greenhouse effect” in the troposphere, resulting in an increase in the average temperature of the Earth’s surface, known as global warming (Khairunnisa et al., 2026; Sumampouw, 2019). The greenhouse effect is a term used to describe the Earth as having a greenhouse-like effect, whereby the Sun’s heat is trapped by the Earth’s atmosphere (Pinontoan et al., 2021; Triwahyuningsih et al., 2026).

Since the dawn of the Industrial Revolution, human activities, such as burning fossil fuels and changing land use, have altered the natural balance of greenhouse gases, increasing their concentrations in the atmosphere and intensifying the greenhouse effect. This threat has caused rising global temperatures and other changes to the climate. Efforts to address greenhouse gas emissions and climate change can be carried out through two approaches: first, by preserving the ecosystem services of marine, terrestrial, and coastal vegetation in carbon sequestration; and second, by keeping greenhouse gas emissions within the remaining carbon dioxide (CO₂) budget that has been set (Arifin et al., 2018; Rahman, 2026). There is also an existing technology known as Carbon Capture, Utilization, and Storage (CCUS), which serves as a new approach to CO₂ reduction. Many countries have regulated this alternative technology within their respective regulatory frameworks in specific sectors since 2003, including the United States, China, Australia, South Africa, and India (Goel et al., 2018; Saldana, 2026).

The relationship between state responsibility, global movements, and the prospects of national prosperity often provides justification for the adoption of policies by a regime. The global consensus embodied in the Paris Agreement includes a commitment to decarbonization toward Net Zero Emissions by 2060, as an effort to respond to the threat of climate change, which has become a global concern because it relates to the fate of the Earth and the future of humanity. Governments around the world are creating programs to protect the environment from various perspectives, one of which is carbon exchange trading to reduce greenhouse gas emissions. This system regulates carbon trading and/or records ownership of carbon units. It is argued that the amount of tonnes of CO₂ equivalent, hereafter referred to as “tCO₂e,” must be reduced as much as possible. Therefore, achieving zero emissions by 2060 is considered necessary to maintain planetary stability.

Carbon pricing also plays an important role in climate and environmental risk quantification and management, helping boards, investors, and lenders price climate and environmental risks more accurately. As more jurisdictions introduce carbon taxes or emissions trading schemes, and as carbon offsetting becomes more rigorous and consistent, resulting in higher carbon prices, the cost of carbon will become increasingly reflected in economic and financial decision-making. Accordingly, there is a need to accelerate decarbonization and the transition of the whole economy to achieve the objectives of the Paris Agreement.

As a country that participated in signing the Paris Agreement, the Government of Indonesia has conveyed its commitment in several global forums, including by implementing it through Indonesia’s domestic policies. Through the Enhanced Nationally Determined Contribution, hereafter referred to as “ENDC,” Indonesia has increased its ambition in its greenhouse gas emission reduction commitment. Initially, Indonesia’s greenhouse gas emission reduction target through its own efforts was 29%, which has now increased to 31.89% in the ENDC, while the target with international support has increased to 43.20% in the ENDC from the original 41%.

The government has also issued a package of green policy regulations to realize a sustainable economy in response to the increased targets in the ENDC. These include Law Number 16 of 2016 concerning Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change; Presidential Regulation Number 98 of 2021 concerning the Implementation of Carbon Economic Value (Nilai Ekonomi Karbon or NEK) for Achieving Nationally Determined Contribution Targets and Controlling Greenhouse Gas Emissions in National Development; and Ministry of Environment and Forestry Regulation Number 21 of 2022 concerning Procedures for the Implementation of Carbon Economic Value ([Indonesia, 2021; Undang-Undang Nomor 16 Tahun 2016 Tentang Pengesahan Paris Agreement to the United Nations Framework Convention on Climate Change, 2016](#)).

As a means of integrating Indonesia's financial sector and accommodating economic achievement within a sustainable financing ecosystem, the Government of Indonesia ratified Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector ([Indonesia, 2023](#)). In relation to the financial sector, Law Number 4 of 2023 ensures the establishment of a carbon exchange to facilitate carbon trading activities ([Indonesia, 2023](#)). Accordingly, the Financial Services Authority, hereafter referred to as "OJK," issued Financial Services Authority Regulation Number 14 of 2023 concerning Carbon Trading through the Carbon Exchange.

This research specifically focuses on carbon trading through Indonesia's carbon exchange policy and its implementation as stipulated in POJK 14/2023. In addition, the litmus test in the author's prospective research concerns the aspect of anticipatory supervision of existing and potential problems that may arise in relation to carbon trading through carbon exchanges. The portrait of environmental regulation in Indonesia, which often appears commercialistic and sectoral in its legal policy ([Butar & Syafitri, 2025; Fadli et al., 2016](#)), especially now with the introduction of the carbon exchange, raises the question of whether the benefit for the greatest number of people is truly accommodated and why policymakers are able to regulate it in such a manner.

METHOD

The method used in this research was the doctrinal research method. According to Mark van Hoecke, doctrinal research is legal research that explains the author's normative position on existing values and seeks to identify better law. This research used literature study as its legal material collection technique. This study employed this legal material collection tool to analyze the problem under examination ([Soekanto, 2020; Sukmawan & Damayanti, 2025](#)). The writing used a combination of primary and secondary legal materials, namely laws and regulations, decisions, and literature studies on related concepts and doctrines that have developed in legal science. The findings of the legal writing were presented qualitatively in the form of a descriptive narrative.

When analyzing information in this study, the researchers employed qualitative juridical data analysis techniques. The analytical procedure followed three stages: first, legal material identification and classification, in which primary legal sources, including statutes, regulations, and policy documents, as well as secondary sources, including scholarly literature and policy reports, were systematically categorized according to their relevance to carbon exchange governance; second, legal interpretation, in which the identified materials were analyzed through legal hermeneutics to extract normative meanings, legislative intent, and regulatory rationale; and third, legal reasoning and synthesis, in which the interpreted findings were evaluated against the utilitarian framework, by assessing public benefit maximization, and the securitization framework, by examining threat-construction narratives, to derive conclusions regarding the legitimacy and effectiveness of the carbon exchange policy.

Regarding research data and information, the researchers used a combination of primary and secondary legal materials, namely laws and regulations, decisions, and literature studies on related concepts and doctrines that have developed in legal science. Data collection primarily relied on documentary analysis of secondary legal materials. Supplementary interviews with institutional representatives and subject-matter experts were conducted to verify and contextualize the documentary findings, functioning as a triangulation mechanism rather than as a primary data source within the doctrinal research design (Soekanto, 2020; Sukmawan & Damayanti, 2025).

RESULTS AND DISCUSSION

Results

Research Outcome and Discussion on the Utilization of the Implementation of Carbon Exchange Policy

The implementation of the carbon exchange policy through POJK 14/2023 should be scrutinized from its conception to understand its purpose and effectiveness, particularly whether this regulation provides benefits to the public. As Bentham (2006) stated, the goodness of laws depends on their coherence with public expectations; therefore, legislators must become accustomed to these ever-changing expectations so that they can be properly addressed while still considering legislative principles, whereby public good should serve as the purpose of legislation and generate public benefits (Bentham, 2006; Sverdlik, 2025). Based on this reasoning, public utility must serve as the logical foundation. Hence, what is produced in carbon market policy must reflect public benefits.

Although the implementation of POJK 14/2023 is still relatively new, as only two years have passed since the launch of the carbon exchange, the outcomes of its implementation can still be assessed and considered reasonably acceptable as long as the indicators are measurable. Understanding the effectiveness of policy implementation requires comparing what ought to be (*das sollen*) with what actually is (*das sein*). One indicator for assessing whether laws or regulations are effective is their adaptability, meaning their ability to be adjusted to actual conditions and/or material facts while considering various possibilities that may occur, thereby making them rational to implement (Ali, 2010; Indah et al., 2025).

Purpose of the Regulation and Current Achievement

POJK 14/2023 was enacted to fulfill the mandate of Article 26, paragraph (1), of Law Number 4 of 2023, as stated in the consideration section of the regulation (Indonesia, 2023). The rationale for the carbon exchange, as described in the explanatory provisions of Law Number 4 of 2023, is to promote the principle of “same activity, same risk, and same regulation” by broadening access and competition through interoperable market infrastructure (Indonesia, 2023). Therefore, as the regulation governing technical implementation, POJK 14/2023 should adhere to this rationale at the implementation level.

Furthermore, the explanatory provisions of POJK 14/2023 refer to the regulation as a means of following up on Indonesia’s commitment to reducing carbon emissions through carbon economic value. The provisions also recite the relevant legal framework and highlight that the regulation was designed to support carbon trading. Lastly, the regulator expects POJK 14/2023 to serve as a guideline and reference for carbon trading through the carbon exchange by operators under the supervision of OJK and related institutions.

In addition, POJK 14/2023 also accommodates the principle of “same activity, same risk, and same regulation” from Law Number 4 of 2023 in Article 27 of POJK 14/2023, which concerns the terms and procedures for carbon exchange operators and implies that they must comply with the principles of openness, access, and opportunity. On the other hand, Article 3 of POJK 14/2023 states that a Carbon Unit is an *Efek* (Security), which makes the carbon exchange treated similarly to a stock exchange, even though a Carbon Unit has its own definition under that regulation (Indonesia, 2023).

Although aligned with Law Number 4 of 2023, it is also worth noting that POJK 14/2023 uses Law Number 8 of 1995 concerning the Capital Market as one of its legal considerations (Badan Pemeriksa Keuangan RI, 1995; Indonesia, 2023; Undang-Undang Nomor 8 Tahun 1995

Tentang Pasar Modal, 1995; Kumala et al., 2025). This results in two implications: first, the intended purpose of the carbon exchange should be in line with the consideration clause of Law Number 8 of 1995 (Badan Pemeriksa Keuangan RI, 1995; Undang-Undang Nomor 8 Tahun 1995 Tentang Pasar Modal, 1995; Kumala et al., 2025), namely to serve as a source of funding for business entities and as an investment space for society; and second, OJK, as the policymaker, is able to interpret carbon trading as equivalent to an *Efek* that can be delisted and traded internationally. From this point, the economic purpose of POJK 14/2023, in the form of a financial instrument to address carbon economic value, becomes very clear.

The IDX Carbon Exchange is the authorized operator of the carbon exchange in Indonesia and is supervised by OJK to ensure that carbon trading activities are conducted in accordance with the guidance provided under POJK 14/2023. IDX Carbon operates carbon trading through four mechanisms: Auction, Regular Trading, Negotiated Trading, and Marketplace. The system used by the operator must also be registered with the *Sistem Registri Nasional Pengendalian Perubahan Iklim* (SRN-PPI) to comply with the mandates of the laws and regulations under POJK 14/2023. Further regulation concerning carbon exchange operators is stipulated in the Financial Services Authority Circular Letter regarding the Implementation of the Carbon Exchange, Number 12/SEOJK.04/2023.

By the end of April 2026 (Carbon, 2026), the total amount of Available Carbon Units was 3,143,729 tCO₂e. The total value of the traded 163,344 tCO₂e was IDR 6,747,337,800, generated from a total of 44 trade frequencies during 76 trading days, with 155 participants. In terms of listed projects, there were ten projects, nine of which were owned by state-owned companies. Six of those nine projects allowed foreign buyers to participate. However, no international trading had occurred so far. All listed projects were in the energy sector, specifically electricity and gas, and were categorized either as technology-based (IDTBS) or technology-based renewable energy (IDTBS-RE).

By comparison, the European Union Emissions Trading System (EU ETS), the largest carbon market globally, traded approximately 8.1 billion allowances valued at EUR 751 billion in 2023 (Partnership, 2024), while China's national ETS has covered over 4.5 billion tCO₂e from its power sector since its 2021 launch (Asia, 2022; Group, 2020). South Korea's K-ETS has facilitated over 600 million tCO₂e in cumulative trading since 2015. These comparative figures underscore the nascent stage of Indonesia's carbon exchange, which remains significantly smaller in both volume and value.

Service User in the Carbon Exchange

Service Users in the Carbon Exchange, or *Pengguna Jasa Bursa Karbon* (hereafter referred to as "PJBK"), must currently be legal entities, as stipulated in POJK 14/2023. POJK 14/2023 contains provisions concerning the carbon exchange, including general provisions for the implementation of carbon exchange activities, tradable carbon units, carbon units in the form of securities, carbon exchange organizers, and licensing requirements and procedures for carbon exchanges in Indonesia. Moreover, POJK 14/2023 also provides general rules regarding the organization of international carbon exchange activities.

The issuance of POJK 14/2023 is expected to serve as a legal basis and guideline for any party seeking to apply to the OJK for a business license as a carbon exchange organizer. These guidelines cover the documentation required for business licensing, procedures for applying for a business license as a carbon exchange organizer, and the operational business activities of carbon exchange organizers.

Based on the inaugural trading on the IDX carbon market on September 26, 2023, and the launch of IDXCarbon on September 12, 2023, apart from BUMN (state-owned enterprises), only a limited number of other businesses contributing to greenhouse gas emissions have participated. On the other hand, many of the participants were banks or entities from the financial sector. (See Picture 1 for reference.)

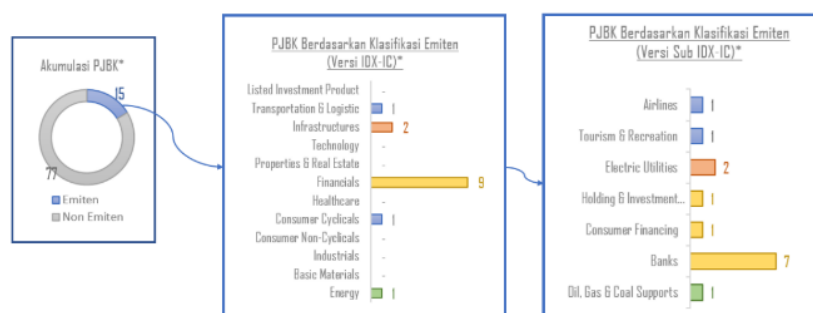


Figure 1. Statistik Pengguna Jasa Busa Karbon
Source : OJK (OJK, 2024)

Ideally, carbon trading is intended to facilitate the buying and selling of credits for the release of carbon dioxide or other greenhouse gases, which forms the background for the issuance of POJK 14/2023. It is intended to be followed by business actors committed to achieving net-zero emissions and concerned with environmental protection, social justice, and governance. However, banks are not directly responsible for significant greenhouse gas emissions, and their participation in carbon markets raises questions about alignment with the market's purpose, as documented in studies examining financial sector involvement in emissions trading (Monast et al., 2009; Thompson, 2023). Moreover, transparency and oversight of the use of Greenhouse Gas Emission Offsets need to be clearly regulated. As stipulated in Article 1(19) of Presidential Regulation No. 98 of 2021, Greenhouse Gas Emission Offsets are normatively defined as reductions in greenhouse gas emissions made by businesses and/or activities to compensate for emissions generated elsewhere (Indonesia, 2021). Businesses that can reduce emissions may sell carbon credits to companies that exceed emission limits.

In addition to its business mission as an alternative institution for business actors seeking capital, the capital market has a special mission or ideal to be achieved by capital market institutions in Indonesia, namely: 1) to mobilize public funds as a source of financing for the business sector in particular and national development in general; 2) to distribute the benefits of development to the investor community and as many Indonesians as possible; and 3) to create business opportunities for medium and small companies to raise capital through a parallel market and to create new employment opportunities.

OJK has the authority to supervise PJBK, as stipulated in Article 26 paragraph (2) letter c of POJK 14/2023. However, there is no further or clear explanation of how and what aspects are to be supervised. Article 7 paragraph (4), Article 24, Article 25, and Article 31 of POJK 14/2023 grant the carbon exchange operator authority over the management and direct supervision of PJBK, from the due diligence stage to the reporting process submitted to OJK.

There are also challenges on the technical side, particularly regarding the lack of supporting regulations for the implementation of this carbon exchange policy in attracting domestic buyers into the carbon exchange ecosystem through the regulation of Forest Development Business Licensing (*Perizinan Berusaha Pengusahaan Hutan*) (Christiawan, 2025). With the availability of and easier access to this license, supported by regulators, more domestic competitors, whether new or existing and from the public or private sector, can be involved in the market. This would allow the carbon exchange not to be dominated by only a few business sectors or by international actors.

Concern on ESG and Greenwashing Practice

Following the 2008 global financial crisis, sustainable investment and good governance have increasingly been recognized as critical components in mitigating long-term risks and maintaining a company's reputation. The topic of CSR (Corporate Social Responsibility) has received increased attention and subsequently evolved into the concept of Environmental, Social, and Governance (hereafter referred to as "ESG"), which offers a more structured and integrated approach to business and investment practices. This shift was triggered by increasing stakeholder demand for more comprehensive information on a company's environmental, social, and

governance impacts. In the Indonesian financial legal framework, ESG implementation is encouraged through Sustainable Finance (*Keuangan Berkelanjutan*), as stipulated in point 35 of Article 1 of Law Number 4 of 2023 (Indonesia, 2023).

ESG refers to the criteria used by investors and other stakeholders to assess a company's sustainable performance across three main aspects. The environmental aspect assesses how a company manages its impact on the environment, including policies and practices related to environmental management, greenhouse gas emissions, natural resource conservation, and energy efficiency. The social aspect assesses the company's relationships with employees, consumers, communities, and diverse stakeholder groups. This aspect also covers issues such as human rights, employment, and community involvement. The governance aspect assesses the company's structure, ethics, transparency, and accountability to shareholders and other stakeholders. This factor involves management policies, ownership structure, board composition, and corruption-related issues.

As ESG reporting by businesses and companies is increasingly considered crucial for enhancing corporate reputation, these companies are increasingly attempting to report activities that support sustainable development. The growing number of claims about corporate CSR activities presents additional challenges for stakeholders in distinguishing between genuinely positive business performance and practices that merely appear to support sustainable development. This practice, known as "greenwashing", aims to create positive perceptions among stakeholders regarding a company's CSR practices, even though the company's commitment to sustainability and the environment may be minimal or nonexistent. Theoretically, greenwashing practices attract the attention of consumers who are increasingly concerned about environmental issues and sustainable development, allowing companies to obtain financial benefits or enhance their reputation through misleading means. Examples of greenwashing practices include unsubstantiated claims, in which business actors or companies make incorrect or unverifiable statements about "environmentally friendly" products or practices without valid and adequate supporting data; the use of misleading labels or logos, in which labels or logos imitate official environmental labels or certifications, despite the absence of certification or involvement from a trusted third party; selective emphasis on certain aspects, in which business actors or companies highlight particular sustainability aspects from an operational perspective while ignoring more significant environmental issues; the concealment or disregard of negative impacts, in which business actors or companies attempt to hide or ignore significant negative environmental impacts arising from their operational activities; and diversionary practices, in which businesses or companies use marketing campaigns that highlight environmental issues to divert attention from their primary unsustainable practices or behavior (Geraldina, 2023).

It is important to note that, even in the context of equity through CSR, including ESG, the greatest benefit for the greatest number of people must remain the priority and ultimate goal of any underlying policy (Christiawan, 2021; Permatasari et al., 2025). Thus, questionable practices in carbon trading raise serious concerns regarding the integrity of the *Penyelenggara Bursa Karbon* (PBK), particularly because OJK leaves part of the supervision of carbon exchange activities to the carbon exchange operator.

To focus management's efforts on key priorities and drive desired outcomes, remuneration and incentive plans have proven to be effective methods and tools. Organizations, including financial institutions, seek to transition to net zero, and linking rewards to climate-related and broader environmental and sustainability targets can help embed these targets within firms' strategies and cultures. According to a Climate Disclosure Project (CDP) report, half of Europe's largest firms now link executive pay to climate change. A number of major financial institutions also link, or are planning to link, executive remuneration to ESG criteria or ESG indexes (Thompson, 2023).

The year-on-year increase indicates that companies in Indonesia have begun to recognize their social, environmental, and governance responsibilities. Based on the average ESG score, each year there are additional companies that implement ESG pillars in their business activities, as described in the table below (Ekawati et al., 2023).

Table 1

Companies that have ESG score in Indonesia based on Thomson Reuters or Refinitiv database during 2016-2020

Description	Number of Companies					Number of Observation in 5 Years
	2016	2017	2018	2019	2020	
BEI listed companies with ESG data	38	41	42	45	49	215

Table 2

Description of ESG scores at companies in Indonesia (in %)

Year	N	Minimum	Maximum	Mean	Standard Deviation
2016	39	8,22	77,11	44,97	19,43
2017	41	10,7	84,91	47,57	19,76
2018	42	13,47	83,54	48,16	20,37
2019	45	15,18	81,68	49,61	20,26
2020	49	11,51	87,60	50,12	20,68

While the empirical data from Tables 1 and 2 above suggest that companies with high ESG scores increasingly strive to provide informative, high-quality earnings reports, this relationship requires clearer contextualization. Efforts to improve the informativeness and quality of earnings through income smoothing, which may be useful for investors in predicting future profits, can support companies in gaining access to external funding from both capital markets and financial markets. The role of regulators in encouraging companies in environmentally sensitive industries, such as the industrial, utilities, basic materials, and oil and gas sectors, to be more attentive to environmental and social factors has prompted them to provide more transparent, relevant, and valuable information (Ekawati et al., 2023).

There are many practices abroad in which business actors take advantage of greenhouse gas emissions offset trading facilities to meet their emissions quotas while maintaining an image as environmentally friendly companies or organizations in the eyes of consumers, even when this is not actually the case; this practice is commonly referred to as greenwashing. Some companies in Indonesia and ASEAN engage in greenwashing because they are driven by movements that provide capital to businesses capable of applying assessment principles through ESG indices within their companies or organizations. In Indonesia, the industrial and energy sectors are among the most prevalent sectors associated with this greenwashing practice (Geraldina, 2023).

Accordingly, the research findings indicate that Indonesia's carbon exchange policy has not yet been proven to benefit the greatest number of people under classical utilitarian theory, because the banking sector dominates the market and there is no sufficient supporting regulation for its implementation compared with other PJBK. Business actors that are committed to achieving net-zero emissions and that are concerned with ESG may make this policy exclusive to established players, similar to conventional stock-market commodities. Moreover, the lack of clear direct supervision of PJBK by OJK may create opportunities for undesirable practices, such as greenwashing, which contradict the intended purpose of the regulation.

Discussion

Research Outcome and Discussion on the Securitization of the Climate Change Narrative

Since its fourth amendment, the Indonesian Constitution has adopted sustainable development and pro-environmental human rights principles in Article 25A, Article 28H section (1), and Article 33 section (4), making it a "green constitution" that must be acknowledged and implemented in national practice. This is made possible through formal constitutionalization, namely the mechanism of constitutional amendment through future national practice (*Verfassungswandlung*) without formally changing the Constitution through a procedural amendment process (*Verfassungsänderung*) (Asshiddiqie, 2009; Junaidi, 2024).

In the lawmaking process, among the three ideas of law (justice (*Gerechtigkeit*), utility (*Zweckmäßigkeit*), and legal certainty (*Rechtssicherheit*)) justice has always been prioritized, as Gustav Radbruch famously conceptualized. Although these three ideas may appear to conflict with one another, they should be implemented in a balanced manner. Justice reflects fairness by

requiring certain norms to be written into legal texts as a manifestation of legal certainty, which addresses what society expects as a form of utility or benefit. Specifically, utility or benefit, which is described as a means of achieving happiness, insists that the law must ensure the realization of what is expected by society, not merely what is expected by a particular group (Junaidi, 2024).

Legislation is a legal product produced by a legitimate institution in creating regulations. Legislation, or the creation of laws and regulations, must be carried out appropriately, including by legislative institutions. This accuracy refers not only to the content of the regulations but also to the affirmation of the institutions that create them, ensuring that the regulations meet the expectations of the public interest (Junaidi, 2024). At the implementation level, government policy (*beleidsregel*) appears in the form of regulations that serve as a discretionary exercise of governmental authority, maintaining the business process from rational to technical dimensions, from government regulations to institutional or commission regulations (Putra, 2024).

Public policy provides alternative solutions to address public issues, while law is the medium through which public policy is “legalized.” In this context, public policy supplements law with substance and capacity. With this understanding, law can be considered the solidification of public policy, where consensus from political discourse is legislated into a formal legal text to make it enforceable beyond the consensus formed in public policy. This describes the relationship between law and public policy (Muchsin & Putra, 2002; Suriani et al., 2025).

The business sector sees a more promising future regarding climate issues. It recognizes the trend of reduced dependence on fossil fuels while developing countries continue to demonstrate economic growth. Moreover, after the Paris Agreement, governments around the world began to act. Capitalists, supported by existential-crisis narratives advanced by scientists and environmentalists, see themselves as a force capable of pushing that action further through the economic system for decades to come, or what is commonly called green finance (Rathi, 2024).

Within the framework of green finance, households, firms, and financial institutions need to be incentivized to reduce their carbon use and invest in and use alternatives. Supporting the transition of the whole economy requires the cost of carbon, emitted as greenhouse gases such as CO₂ and currently assigned an economic value, to be given a price (Thompson, 2023). Thus, the utilitarian nature of economic incentives (that is, the pursuit of beneficial outcomes) is created for households, firms, and society to reduce carbon use and invest in alternatives.

Indonesian take on the Climate Change Narrative

Since the Stockholm Declaration of 1972 and the Rio Declaration of 1992 (Achmad Choludin, 2025; Wilsa, 2020), the concept of sustainable development has long been a subject of discussion in environmental governance and within the broader framework of international environmental law. Indonesia subsequently enacted Law Number 6 of 1994 concerning the Ratification of the United Nations Framework Convention on Climate Change as part of its collective responsibility in the climate change discourse and its willingness to reduce greenhouse gas emissions (Undang-Undang Nomor 6 Tahun 1994 Tentang Pengesahan United Nations Framework Convention on Climate Change, 1994; Tri Ayu Deria, 2022).

Years later, sustainable development was regarded as a necessity under the 2015 Paris Agreement, which was also adopted by Indonesia’s environmental legal framework and policymakers at the time (Hermawan, 2021). With the conception that international law is a source of law and one of the references for moral principles (Hart, 2009), all outputs of national policies related to the environment, including their implementing regulations, must be guided by, or at least aligned with, sustainable development in the context of environmental utilization and environmental legal management systems in Indonesia (Amalia et al., 2025; Silalahi & Kristianto, 2015).

A legal policy oriented toward ecologically holistic environmental management, rather than merely toward the principles of the rule of law and democracy, has become a necessity alongside the emergence of various environmental problems (Akib, 2012; Mafazi, 2024; Putri et al., 2026). Various legal products related to the environment include Law Number 5 of 1967 concerning Basic Provisions on Forestry and Law Number 11 of 1967 concerning Basic Provisions

on Mining. Subsequently, Law Number 4 of 1982 concerning Basic Provisions on Environmental Management, also known as the 1982 Environmental Law, became the first formal legal source elaborating the environmental mandate of the 1945 Constitution. This law was the first national legal instrument to regulate environmental issues broadly and integratively within a single statute. The legal policy behind the issuance of the Environmental Law was essentially intended to regulate environmental management based on an integrated and comprehensive national policy.

Based on the foregoing description of existing legal politics and environmental policies, several inferences may be drawn regarding the portrait of environmental policy in Indonesia to understand Indonesian environmental law more comprehensively ([Bram, 2014](#); [Handoyo, 2025](#)). First, environmental legislation tends to be incidental, meaning that the enactment of environmental laws is often reactive to particular events or incidents. Second, it is also considered commercial, as the formation of laws and regulations is not always aimed at protecting environmental quality, carrying capacity, and supporting capacity so that these functions remain high or, at least, do not decline significantly. Third, it is partial, as legal policy in the environmental field often treats environmental problems as isolated regulatory issues, as if they were unrelated to other matters, through an unsystematic regulatory method that lacks interaction, interdependence, interconnection, and interrelation among environmental issues.

Environmental legislation is also sectoral or departmental, whereby its sectoral or departmental character is closely related to its partial nature, and the practical implementation of activities remains centered on each sector or department. Another characteristic is its shortcut-oriented nature, where, in practice, certain forms of regulation that should substantially require a higher level of legal regulation are instead governed through lower-level instruments. As a result, environmental legislation has not always been comprehensive, cohesive, and consistent.

The Kyoto Protocol, which was adopted in 1997 and entered into force in 2005, serves as one of the foundational international frameworks for countries worldwide to mitigate the rate of global warming and climate change. Responses to climate change that have been and are currently being implemented generally involve two broad actions. The first is adaptation, which addresses the consequences or impacts of climate change. The second is mitigation, which addresses the causes of climate change.

Climate change adaptation is an effort to address the impacts of climate change by reducing negative consequences and obtaining possible positive benefits. In other words, adaptation refers to changes undertaken under the assumption that climate change is inevitable and occurring globally. Mitigation measures, by contrast, address the causes of climate change through activities that reduce emissions or increase the absorption of greenhouse gases from various emission sources. Another definition of mitigation is an effort to avoid unmanageable events. In this context, changes are made at the source of global warming.

In 2020, the government enacted Law Number 11 of 2020 concerning Job Creation, which was later amended by Law Number 6 of 2023 concerning the Stipulation of Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation into Law, hereinafter referred to as the Job Creation Law. Regarding environmental protection and management, the Job Creation Law, along with its derivative regulations, emphasizes a risk-based approach to environmental licensing ([Raya & Fuady, 2022](#)). From this point, the topics and terms of global warming, climate change, renewable energy, and environmental sustainability have often been used and promoted interchangeably as bases for legal reasoning, whether in consideration clauses or explanatory provisions.

In 2023, Law Number 4 of 2023, which is considered the omnibus law for the financial sector, was ratified ([Indonesia, 2023](#)). Revisiting the purpose of Law Number 4 of 2023, as

mentioned in Chapter One of this research, the law seeks to encourage the principle of “same activity, same risk, and same regulation” by broadening access and competition through market infrastructure that can operate interoperably (Indonesia, 2023). Therefore, as the regulation governing technical matters, the carbon exchange may be positioned as part of financial market infrastructure within the realm of the capital market under the supervision of the Financial Services Authority, or *Otoritas Jasa Keuangan* (OJK).

The Making of Carbon Exchange Policy

After establishing the climate change narrative as a “threat” to justify related policymaking, the issue was then incorporated into the financial sector. On the basis of Article 26 paragraph (1) of Law Number 4 of 2023, OJK, as the appointed and sole authority responsible for supervising Indonesian financial services, issued POJK 14/2023 in August 2023 (Indonesia, 2023).

Pursuant to Article 26 paragraph (2) of Law Number 4 of 2023, OJK consulted with the Ministry of Environment and Forestry (*Kementerian Lingkungan Hidup dan Kehutanan*, KLHK) regarding cooperation in the implementation of Carbon Economic Value, particularly through the Carbon Exchange, beginning in July 2023, and finalized the drafting of the MoU in September 2023 (Indonesia, 2023). OJK also plays a role in regulating the technical and operational aspects of the carbon exchange, such as the standardization of Carbon Units through SE-00001/BEI.PB2/01-2025.

Regarding carbon exchange operators, POJK 14/2023 also stipulates the relevant requirements. As the licensed party, IDX Carbon is the official carbon exchange operator in Indonesia, operated by the Indonesia Stock Exchange (*Bursa Efek Indonesia*, BEI) and supervised by OJK. IDX Carbon was launched in September 2023. The summary timeline can be seen in the table below.

Table 3

Timeline of Carbon Exchange Policy in Indonesia

No.	Time	Event
1.	12 January 2023	Ratification of Law Number Number 4 of 2023
2.	19 July 2023	OJK and KLHK Agreed on the cooperation expansion and coordination in the implementation of Carbon Economic Value, especially Carbon Exchange
3.	2 August 2023	Ratification of POJK 14/2023
4.	6 September 2023	Stipulation SEOJK Number 12 of 2023
5.	16 September 2023	MoU OJK with KLHK
6.	18 September 2023	Issuance of IDX Carbon license <i>Usaha Penyelenggara Bursa Karbon</i>
7.	26 September 2023	Launching of Carbon Exchange

In its official press release, IDX Carbon stated its commitment to supporting net-zero emissions by 2060 or sooner (Carbon, 2023). Therefore, the carbon exchange should also be viewed from a long-term perspective. Considering the national target to reduce greenhouse gas emissions by 31.89% through domestic efforts and by 43.20% with international support by the end of 2030, which is now less than four years away, this commitment appears reasonable. The energy sector itself has already surpassed the target by reducing 127,670,000 tCO₂e in 2024 (Mineral, 2024).

Based on the empirical data and historical legislative developments explained above, and by applying securitization theory, a reasonable inference can be drawn that the securitization of the climate change narrative and the carbon trading initiative under the economic value of carbon have been used as supporting claims by Indonesian policymakers to rationalize the country’s climate change legal framework and carbon exchange policy through POJK 14/2023. This effort was made possible by positioning climate change and global warming as perceived “threats” at both the national and international levels.

In the context of carbon exchange policy, POJK 14/2023 and related laws provide the legal framework for carbon trading in the financial sector. With continuous oversight from OJK,

financial regulation should not be perceived merely as a compliance checklist or as a financial instrument that only accommodates the interests of certain parties that already dominate the market.

CONCLUSION

The implementation and utilization of the carbon exchange in Indonesia still face significant challenges, particularly when viewed against the broader pattern of environment-related regulation in Indonesia, which tends to be commercially oriented, sectoral, and fragmented in its legal-policy orientation. This study concludes that Indonesia's carbon exchange policy has not yet demonstrated sufficient benefits for the majority of the public when assessed through classical utilitarianism. This conclusion is supported by several indicators: market participation remains dominated by the banking and financial sectors; participation by business actors directly committed to emission reduction and ESG objectives remains limited; supporting regulations are still insufficient to expand local Carbon Exchange Service Users (*Pengguna Jasa Bursa Karbon* or PJBK); and supervisory mechanisms over PJBK remain unclear. These conditions risk positioning the carbon exchange as an exclusive financial instrument similar to ordinary market commodities, rather than as an inclusive mechanism for environmental protection and public benefit.

This study also finds that the securitization of the climate change narrative after the Paris Agreement, together with the development of carbon trading under the carbon economic value framework, has been used as a supporting justification by Indonesian policymakers to rationalize the establishment of climate-related legal frameworks and carbon exchange policy through POJK 14/2023. Climate change and global warming are constructed as perceived threats that legitimize regulatory intervention in the financial sector. Theoretically, this study demonstrates the relevance of securitization theory beyond its traditional domain of international security. From a policy perspective, Indonesia's carbon exchange framework needs to be strengthened by expanding market access for non-financial actors, improving direct supervision to prevent greenwashing, and developing transparent reporting standards aligned with the objectives of the Paris Agreement.

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AUTHOR CONTRIBUTION STATEMENT

Marino Paat served as the sole author of this article and was responsible for the entire research process, including conceptualization, legal issue identification, literature review, collection and analysis of primary and secondary legal materials, interpretation of Indonesia's carbon exchange regulatory framework, and manuscript preparation. The author also developed the analytical framework based on securitization theory and utilitarianism, formulated the discussion and conclusion, revised the manuscript, and approved the final version for publication.

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