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Climate Change Law Architecture Towards Golden Indonesia 2045: Lessons Learned from Kenya, Finland, and South Africa

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Abstract

Endowed with vast natural wealth, Indonesia simultaneously faces mounting environmental threats due to the accelerating climate crisis. The adverse effects of climate change, ecological degradation, and recurring natural disasters increasingly jeopardize human security and national development goals. Within the framework of Indonesia's long-term vision to become a developed nation by 2045—popularly referred to as Golden Indonesia 2045—the urgency of establishing a Specific Climate Change Law becomes not only relevant but critical. This research explores the legal and policy discourse surrounding the formulation of a dedicated climate change law in Indonesia. Utilising a normative-doctrinal legal method, the study applies statutory, conceptual, and comparative legal approaches. Secondary data and legal materials are analysed through qualitative techniques using deductive reasoning within a syllogistic framework. The findings underscore that the enactment of a Specific Climate Change Law is a strategic necessity to reinforce Indonesia's legal capacity in confronting ecological and climatic disruptions. Such legislation is expected to strengthen institutional coordination across sectors, ensure coherence in policy formulation, and promote greater community participation in mitigation and adaptation efforts. Drawing lessons from the legislative experiences of Kenya, Finland, and South Africa, Indonesia can establish a climate law that integrates scientific, ethical, and cultural dimensions in its implementation. Moreover, this legal framework must prioritize protections for vulnerable populations—including coastal communities, subsistence farmers, and marginalized groups—who are disproportionately impacted by climate change. In doing so, the law would not only fulfill environmental objectives but also advance social justice and sustainable national development.

Keywords: Climate Justice; Climate Law; Ecological Crisis; Golden Indonesia 2045

1. Introduction

Golden Indonesia 2045 is the Indonesian government's strategic vision to transform the nation into a sovereign, advanced, and sustainable entity by 2045, coinciding with the centenary of its independence. The National Long-Term Development Plan (RPJPN) 2025-2045 delineates an ambitious strategy to attain high-income country status, reach per capita income comparable to industrialised nations, mitigate poverty and social inequality, and establish a significant presence in international relations. The vision encompasses a thorough agenda for socio-environmental change, economic resuscitation via technology and inventive progress, and governance reform. However, this vision

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contrasts sharply with the severe ecological dangers confronting Indonesia. It is presently contending with significant environmental issues, including global warming, pollution, biodiversity loss, deforestation, agricultural disputes, and the deterioration of natural functions (Gunawan, Mulyanto, et al., 2024).

This ecological crisis poses a significant threat to Indonesia's development's sustainability and its population's well-being (Salim et al., 2010; Spencer et al., 2023). The increasing frequency and severity of ecological disasters, such as floods, landslides, and forest fires, underscores the urgency of addressing these environmental issues (Thomas, 2017). The escalating disaster statistics reveal that Indonesia had 5,400 catastrophes in 2023. National Disaster Data indicates that natural catastrophes in 2023 caused a minimum of 275 fatalities, 33 unaccounted for, 5,795 injuries, and displaced 8,491,288 people. The natural catastrophe damaged 47,214 residences, 680 educational institutions, 506 religious establishments, and 105 healthcare facilities (PDSI Pusdatinkom BNPB, 2024). Putra et al., assert that the numerous catastrophes in Indonesia are collectively attributed to the significant degradation of environmental functions and standards resulting from human activities (Putra et al., 2021), such as the high level of land clearing for mining (Cazabat et al., 2023), destruction of blue carbon ecosystems and forest areas (Gunawan, Setyawati, et al., 2024), and the government's inability to enforce environmental laws and oversight functions (Djalante et al., 2017).

Significant environmental degradation, corporate disregard for laws, and insufficient governmental enforcement of environmental laws exacerbate the climatic and ecological catastrophe. Upon examining the roots of the aforementioned natural disasters, it is evident that 90% are linked to hydrometeorological phenomena, whereas scarcely 10% come from geological circumstances (Hermon, 2012). Where this hydrometeorological phenomenon is intimately tied to climate change and the natural environmental crisis (Manuel-Navarrete et al., 2007; Marengo et al., 2020). In line with this, the National Development Planning Agency (Bappenas) stated that Indonesia has the potential to experience economic losses due to climate change reaching IDR 544 trillion during the period 2020-2024, which is expected to continue to increase if adequate ecological resilience is not built (Bappenas, 2021). This scenario was earlier warned by the Intergovernmental Panel on Climate Change (IPCC) in its 2023 report, which indicated that the time to act to address climate change is increasingly narrow and complex (IPCC, 2023). Several recent findings show that the impact of the climate change crisis is already worse than previously imagined, notably for food security, water availability, health, poverty and enormous biodiversity extinction (Jafino et al., 2020).

The numerous (ecological) disasters that have occurred, as stated above, reflect the loss of equilibrium in the relationship between humans and non-humans in the natural cycle (Valera, 2018). The ecological crisis presents a substantial risk to future sustainability, and Indonesia, as a nation susceptible to the effects of climate change, faces a pivotal moment in its environmental policy. The existing environmental framework in Indonesia is established on many laws and regulations, notably Law No. 32 of 2009 concerning Environmental Protection and Management, which serves as overarching legislation. It is disjointed due to several sector-specific regulations concerning environmental protection and natural resource management. The Government has undertaken international commitments, including the Enhanced Nationally Determined Contribution to the UNFCCC, which seeks to cut greenhouse gas emissions by 31.89% by 2030, with a conditional objective of a 43.20% reduction, contingent upon international cooperation (Santoso, 2024). Indonesia has enacted regulations, including Presidential Regulation No. 98 of 2021 on the Economic Value of Carbon and Minister of Environment and Forestry Regulation No. 21 of 2022, to establish a framework for carbon pricing instruments and general regulations for carbon trading (Pejabat Pengelola Informasi dan Dokumentasi KLHK, 2021). The government has implemented legislation to expedite the shift to renewable energy and has established a sustainable finance plan to align the financial sector with a low-carbon economy.

Notwithstanding these initiatives, experts have advocated for more essential laws that can thoroughly address climate change, underscoring the necessity for a national climate policy framework to tackle the many concerns of climate justice (IPCC, 2023). This encompasses mitigation and adaptation measures and concerns for those impacted by climate change (M. Pelengkahu, 2024a). Indonesia's strategy for climate change lawsuits emphasizes the expenses associated with remediation for diminishing greenhouse gas emissions, determined by carbon market valuations, rather than on restitution for climate-related losses. In light of these developments, the necessity for a particular climate change law in Indonesia is becoming increasingly pertinent. This legislation might consolidate current regulations and obligations into a cohesive legal framework, offer explicit guidance for the nation's climate initiatives, and guarantee the incorporation of environmental sustainability into all facets of national development.

This study emphasizes the pressing nature of the climate crisis and climate emergency, which have become increasingly significant in recent years. This notion has been examined in normative terms as a potentially substantial impetus for contemporary decision-making and future policy formulation (Orlove et al., 2020). Comprehensively, the author will outline the legal arguments to encourage national climate change legislation as an effort to stimulate the vision of Golden Indonesia 2045 from the threat of ecological crisis and climate change, with the belief that the establishment of a special climate change law can serve as a legal basis for enforcing climate-related actions and holding parties accountable for the environmental impacts they cause, thus strengthening Indonesia's response to the ecological crisis and contributing to global sustainability efforts.

2. Methods

This study employs a normative-doctrinal legal research method, incorporating statutory, conceptual, and comparative approaches to analyze the necessity of enacting climate change legislation in Indonesia in pursuit of the Golden Indonesia 2045 vision. The statutory approach examines statutory and regulatory frameworks governing climate change in Indonesia, including Law No. 32 of 2009 on Environmental Protection and Management, Presidential Regulation No. 98 of 2021 on Carbon Economic Value, and various sectoral regulations related to climate change mitigation and adaptation. Additionally, this study evaluates Indonesia's legal framework in comparison with international legal instruments such as the Paris Agreement and commitments under the Nationally Determined Contributions (NDCs).

The conceptual approach explores the theoretical underpinnings of climate change law as a subset of environmental law and assesses the integration of climate justice principles within climate change policies across various jurisdictions. The analysis encompasses key legal concepts such as sustainability, intergenerational responsibility, and the interrelation between environmental governance and human rights; then the comparative approach facilitates an analysis of Indonesia's climate change legal framework vis-à-vis jurisdictions that have enacted Climate Change Acts, such as Kenya, Finland, and South Africa. The study examines variations in legislative structures, regulatory mechanisms, and policy effectiveness in addressing ecological crises induced by climate change. The comparative findings serve as the basis for proposing concrete recommendations for the establishment of an Indonesian Climate Change Act.

This study relies on secondary data sourced from literature reviews of primary legal materials (statutes, government regulations, and presidential decrees), secondary legal sources (law journals, academic articles, and policy reports), and tertiary legal sources (IPCC reports, United Nations documents, and reports from international organizations). The collected data is analyzed through a qualitative-descriptive approach, employing syllogistic and deductive reasoning to derive legal conclusions applicable to the Indonesian context.

3. Results and Discussions

3.1. Indonesia's Golden Ambition 2045 Amidst the Threat of Ecological Crisis Due to Climate Change

Climate change is creating an imbalance in distribution between the northern and southern hemispheres, across generations, and between Indigenous and technologically sophisticated traditional communities (Malhi et al., 2021). That is why climate change is one of the significant threats to global peace, creating tensions at all levels. With its vision of 'Golden Indonesia 2045', Indonesia stands on the threshold of a new era, marking a century of its independence with high hopes and aspirations. This vision envisions a future where Indonesia becomes a high-income, prosperous, and sovereign country. However, the journey towards this vision is not without challenges, especially with the increasingly real threat of climate change. Climate change has become a pressing global issue, and for Indonesia, an archipelago with rich biodiversity, the impacts could be particularly significant (M. R. Pelengkahu & Satria, 2023).

Several literature studies state that Law No. 16 of 2016 concerning the Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change (Paris Agreement Law) is believed to be the legal framework closest to climate change because it contains global climate control efforts that are used as guidelines in climate policy (Wibawa et al., 2023). However, this provision is a ratified law, where the practice generally does not have implementing regulations, and that is what happens in the law, so it can hinder the implementation of climate adaptation and mitigation and threaten the achievement of climate justice at the grassroots.

Indonesia has sectoral regulations that are closely related to the Paris Agreement Law, as stated in the Paris Agreement Law that to support the implementation of the Paris Agreement Law, it is necessary to pay attention to the following laws and regulations (UU No. 16 Tahun 2012, n.d.); Law No. 5 of 1960 on Basic Agrarian Principles; Law No. 5 of 1990 on Conservation of Biological Resources and Ecosystems; Law No. 6 of 1994 on Ratification of the United Nations Framework Convention on Climate Change; Law No. 41 of 1999 on Forestry; Law No. 22 of 2001 on Oil and Gas; Law No. 17 of 2004 on Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change; Law No. 30 of 2007 on Energy; Law No. 6 of 2007 on Spatial Planning; Law No. 18 of 2008 on Waste Management; Law No. 31 of 2009 on Meteorology, Climatology, and Geophysics; Law No. 32 of 2009 on Environmental Protection and Management; Law No. 18 of 2013 concerning Prevention and Eradication of Forest Destruction; and Law No. 3 of 2020 concerning Amendments to Law No. 4 of 2009 concerning Mineral and Coal Mining.

The Flagship Legislation of national climate action is contained in Presidential Regulation No. 98 of 2021 concerning implementing Carbon Economic Value to Achieve Nationally Determined Contribution Targets and Control of Greenhouse Gas Emissions in National Development. In addition, there are laws and regulations made by the government (executive) and sectoral ministries that are relevant to climate action, including; Government Regulation Number 33 of 2023 concerning Energy Conservation; Presidential Instruction Number 6 of 2013 on Postponement of New Permits and Improvement of Primary Natural Forest and Peatland Governance; Presidential Instruction Number 13 of 2011 on Energy and Water Saving; Ministerial Regulation Number 1 of 2012, Amending Attachment I, Attachment II, Attachment III, and Attachment IV as referred to in the Regulation of the Minister of Energy and Mineral Resources Number 15 of 2010 concerning the List of Accelerated Projects for the Development of Power Plants

Using Renewable Energy, Coal and Gas as well as Electricity Transmission; Regulation of the Minister of Forestry Number P.30/menhut-ii/2009 of 2009 concerning Procedures for Reducing Emissions from Deforestation and Forest Degradation (REDD); and, Regulation of the Minister of Environment and Forestry Number 12 of 2024 concerning the Implementation of Nationally Determined Contributions in Handling Climate Change.

Climate change is not only a phenomenon that occurs in Indonesia but a global phenomenon that urgently requires special attention at the international, national, regional, and grassroots levels. This urgent problem requires a comprehensive legal framework to regulate, manage, and combat greenhouse gas emissions. Examining the regulations and policies described above, Arfah et al., assessed that the existing regulations related to climate change still do not refer to a master regulation on climate change adaptation that has broader and longer-term power (Arfah et al., 2023). In addition, these regulations have not been integrated with every national development policy. Furthermore, such an approach is considered ineffective because existing regulations on climate change tend to strengthen the sectoral development approach. This also results in the birth of policies that are easily changed along with the changing government regime.

Moreover, these regulations are still very general and limited, so they do not comprehensively regulate the urgency of addressing the current climate and ecological crisis. Additionally, the climate and ecological crisis is further exacerbated by the sectoral laws associated with the Paris Agreement Law, as they are in conflict. Such as Law No. 3 of 2020 concerning Mineral and Coal Mining vs. Law No. 32 of 2009 concerning Environmental Protection and Management (UUPPLH) where there is still disharmony of norms and authorities in terms of natural resource management, especially related to environmental licensing, reclamation, and post-mining; Law No. 41 of 1999 concerning Forestry vs. UUPPLH, where there is misinterpretation of the definition of forest, forest management, and forest utilization licensing which can hinder the implementation of the NDC; Law No. 31 of 2009 concerning Meteorology, Climatology, and Geophysics vs. Law No. 24 of 2007 concerning Disaster Management, where there is overlapping authority in terms of early warning of disasters, especially disasters related to climate change such as drought, floods, rising sea levels; Law No. 1 of 2004 concerning State Treasury vs. Law No. 19 of 2023 concerning the 2024 State Budget, where there are differences in budgeting mechanisms for climate change mitigation and adaptation programs. The conflict and discord between climate regulations and policies are the result of the diverse priorities, objectives, and regulatory orientations of each sector in the formulation of policies, as well as the rapid changes in policy and the varying interpretations of the climate issues that have been raised.

Furthermore, according to the Executive Director of the Pikul Foundation, Pantoro Kuswardono, the government's policy in addressing climate issues is only a good framing for people affected by the climate crisis, as in Presidential Decree No. 98 of 2021 concerning the Implementation of Carbon Economic Value which makes the climate crisis a 'new currency', namely making the climate crisis a business field for state and corporate cash flow. This could happen because the release of emissions and the issue of climate change are closely correlated with problems in the economic system, which include ecological boundaries, administrative governance, and cross-border (state borders). The government's decision to participate in carbon trading is wrong and detrimental to the country (Pearse & Böhm, 2015). The government should be critical of the global political-economic map, which shows that the global economic system that has contributed to the climate crisis is the result of an economic system designed by producer countries.

In this case, the government should not only campaign on how to reduce carbon emissions (which leads to carbon business) but also pay more attention to efforts to realize justice in climate management, including meaningful public participation. With the existence of sectoral policies related to the climate and ecological crisis, whose formation has minimal participation, it is feared that they will not be able to reach all climate actions and handle the climate crisis. Therefore, higher regulation must cover all factors beyond sectoral and bureaucratic barriers. Where the regulation must be genuinely aimed at the community, national development, and preservation of the natural environment, this is because the climate and ecological crisis threaten the existence of the current and future generations to realize Golden Indonesia 2045.

3.2. Is it Possible to Protect Future Generations from the Threat of Ecological Crisis Due to Climate Change?

In the future, the world will face changes much faster than ever, mainly driven by global megatrends such as the technological revolution, demographic change, climate change, and geopolitical and geo-economic dynamics. These changes affect various aspects of life, including social, cultural, and economic, and demand rapid adaptation and innovation from individuals, communities, and countries to face challenges and take advantage of emerging opportunities. Amidst the rapid changes in the world, Indonesia faces various complex domestic challenges. Despite having great potential, the utilization of domestic resources is not yet fully optimal, sustainable, and sovereign.

Although Indonesia has recorded significant progress from previous stages of development, there is still much room for improvement in the quality of human resources, research and innovation, productivity of the productive economic sector, legal uncertainty, and environmental damage (Patunru & Resosudarmo, 2024). To achieve the Vision of Golden Indonesia 2045, Indonesia must transform its prior development paradigm. A strategy is to enact comprehensive steps to ensure that future generations may thrive safely, calmly, and prosperously under the persistent ecological crisis. In light of the inevitable risk of an ecological disaster, protecting future generations for Golden Indonesia 2045 is urgent. Protecting future generations from the ecological catastrophe caused by climate change is a complex issue requiring cooperative action from all parties.

The IPCC underscores the urgent need for decisive actions to address climate concerns (IPCC, 2023). The World Economic Forum emphasizes the significance of both individual and collective responsibility in advancing climate action, suggesting that fostering a sense of obligation to future generations may significantly bolster support for pro-environmental legislation. The divergence between theoretical frameworks and practical applications concerning the distribution of 'rights' to future generations for fair access to the Earth and its natural resources has been a topic of continuous discourse. The protection and assurance of rights for future generations to enjoy what the current generation possesses are fundamentally connected to the quest of sustainable development. The discussion pertains to sustainable development concerning the protection and granting of 'rights' to future generations.

Conceptually, sustainable development is still experiencing clashes of interpretation and principles among scholars. In principle, Turner emphasized that sustainable development refers to state policies towards optimal growth that can maintain real income levels per capita without reducing environmental assets as development capital (Turner, 1988). Meanwhile, Sen views sustainable development as a concept of 'individual freedom and capability' that determines what kind of policies will be chosen to achieve this development because the needs of society or the current generation are very different from those of future generations (Sen, 2013). In Goodland's understanding, sustainable development is a pattern of structural socio-economic transformation that optimizes the economic and social benefits of the current generation without endangering the potential for similar benefits in the future, so sustainable development implies that the utilization of natural resource wealth is carried out without eliminating, reducing, or reducing its usefulness for everyone in future generations (Goodland, 1995). Referring to this, Daly concluded that sustainable development must be able to provide a way for three things: first, that the natural resources currently being utilized are limited; second, that the earth has limited carrying capacity and functions; and third, that economic growth is not a panacea for reducing environmental quality (Rogers & Daly, 1996).

Michael Jacobs meticulously delineates the disparity among the three factors in the sustainable development equation. He asserts that, in practice, sustainable development may engender a conflict of interest between companies or industries and their dependent parties, as globally sustainable development exacerbates the disparity of interests between developed and developing nations, manifesting as a struggle to meet the needs of future generations in each country (Jacobs, 1991). Pelengkahu asserted that these conflicts necessitate a just resolution, wherein sustainable development devoid of environmental and ecological justice is a mere vacuous formula to resolve these disputes under a singular objective. Indeed, opposing interests and pressures exist, but institutional frameworks and operational mechanisms can be structured to address these discrepancies equitably. Sustainable development necessitates the political will of the government (executives) and legislators (M. Pelengkahu, 2024b).

In safeguarding the interests of future generations, Karnein delineates four challenges encountered in their representation (Karnein, 2016). First, the argument that postulates that the future generation is an entity that cannot determine or show 'who' represents itself (the problem of authorization); second, the argument that the future generation is unable to validate whether the party that 'represents' them will genuinely advocate their interests and aspirations, which can lead to an imbalance of consequences for society in the future from the policies formed (the problem of accountability); third, the aspirations and interests pursued out by the party that 'represents' must correspond to the party represented. This means that the party that 'represents' must be able to postulate every substantial thing that is needed and the best option for the future generation, which allows for bias in accurately determining the needs of the future generation (the epistemic problem). Related to this third problem, Beyleveld et al. similarly propose that the entity ‘representing’ the future generation confronts the intricate interests of that future generation, such as, in the future, the interests of protecting forests and biodiversity are no longer in line with the conditions of the future society that lives entirely in urban areas (Beyleveld et al., 2015). Ultimately, the plurality of future generations may incite conflict stemming from divergent goals and interpretations of a ‘happy life’. Consequently, the present generation finds it challenging to provide a satisfactory rationale for future generations (the problem of plurality).

Examining the problems described above, experts provide alternative solutions that can be applied. First, in responding to the authorisation problem, Karnein proposes a representation mechanism that does not use authorization procedures (representation without legitimacy) and predicts (forecasts) alternative policies that future generations can accept if they are alive today (Karnein, 2016). Rehfeld states that a representative does not always have to be 'selected' by an authoritative legislative, executive, or judicial institution to gain legitimacy. A representative can be recognized if he is a party or entity relevant to what he 'represents' (Thomassen, 2019).

The second alternative involves articulating the objective interests of future generations by delineating the imperative of prudent action to avert potential climate instability, thereby motivating collective efforts to prevent conditions that jeopardize security and life. According to McKinnon, the realization of justice for future generations can occur through three methods: 1) Mitigation: the present generation must implement a robust and unequivocal precautionary principle in developing climate change policies to reduce the potential for severe harm to future generations; 2) Adaptation: the current generation must establish funds that future generations can access for compensation if the damage inflicted upon them by climate change escalates; 3) Triage: future generations must sustain optimism for the re-establishment of a framework of justice for social cooperation in societies that are not excessively encumbered by the detrimental effects of climate change (McKinnon, 2011).

Furthermore, Beylveld et al. also proposed an alternative to overcome the problem of representing future generations: each party should focus on what the future generation 'should' have rather than tending to look at the

values or preferences of the future generation (Beyleveld et al., 2015). So, the normative choice is how to create conditions in which future generations are not violated in their fundamental human rights. When someone decides to represent the future generation, insight into its interests must be limited to fulfilling its fundamental rights. Ultimately, protecting future generations is not only a moral imperative but also a practical necessity (Sardo, 2023).

3.3. Climate Law Architecture in Several Countries: A Comparative Study and Lessons Learned for Indonesia

Developing a national climate policy necessitates systematic and thorough planning for its implementation, as the climate policy framework resides at the nexus of 'law' and 'climate change' issues. The term 'Climate Change Law' encompasses a broad interpretation, covering various aspects such as governance frameworks, norm standardization, economic, technological, and sociocultural contexts, institutional relationships, and vertical-horizontal legal intersections. Incorporating climate legislation into the national legal framework is crucial, given Indonesia's commitment to international obligations to foster social, economic, and environmental resilience to climate change and ecological catastrophes. The author will analyze the difficulties of establishing climate change legislation in Indonesia, considering 'law as the foundation for state organization and its complexities,' as well as the multifaceted impacts of climate change on the state, society, and environment.

A comprehensive climate law must be formulated meticulously and methodically, as climate change poses significant theoretical and practical implications for the scientific framework. From the standpoint of climate change law, it necessitates an expansion of the legal system's scope, affects national legal pluralism, and influences the political landscape in the vertical and horizontal production of legislative outcomes. To address the potential methodological conflict, the formulation of climate legislation must reconcile the interplay among state ideology, international law, national law, regional law, and grassroots local knowledge, which extends beyond environmental law and is closely linked to climate change issues. Despite the longstanding development of international environmental law, the goals and objectives of climate change must be explicitly defined within the legal frameworks of each country according to their jurisdiction.

The implementation of national climate pledges is scattered, convoluted, and more intricate, following the numerous legal products and climate change policies established by politicians. The variation in national climate policies arises from the conviction among regulators and politicians that addressing climate change necessitates legislative codification within a singular framework through regulatory action (Dingwerth, 2024; Ferreira, 2018). This explains that legislation accommodating climate issues does not always include the term 'climate change' in its title or provisions. Regulatory interventions involving various other legal products through the codification of laws can indeed support the objectives of climate action, but this can also undermine those objectives (Murillo, 2011; North, 1982). In practice, those who formulate regulations/policies tend to see that the regulations that are formed are ultimately intended to become guidelines for institutional silos, as Wijaya stated that the regulatory paradigm so far has tended to focus on the arrangement of laws and regulations with the state as the primary regulator (institution), where this view has many weaknesses that are not compatible with the objectives to be achieved from the arrangement of these regulations, namely creating flexible, effective and efficient regulations (Wijaya, 2021), including in the formation of climate policy.

Currently, efforts to institutionalize climate action have become a global call in response to the climate and ecological crisis over the past few decades. The formation of a particular Climate Change Law was then urged to be drafted immediately to legitimize climate action throughout the world, including in Indonesia (IPCC, 2023). Considering this, why is every country urged to form a special climate change law immediately? There are at least four fundamental reasons why special climate change legislation must be carried out urgently. First, climate change is a threat to the sustainability of a country that is cross-sectoral and continues to develop, influencing the role of national institutions, governance, law enforcement, and the country's commitment to international agreements, as well as the vision of a country in the future; socio-political configurations see climate change as a struggle to maintain claims to resources that are reflected in social polarization and economic disparities, so that 'conflict' is needed to achieve these claims (UNDP, 2004). The absence of clear guidelines regarding how to deal with climate change makes each group choose the path of 'conflict' to resolve it.

Second, the author posits that legislators are considered the most appropriate to address this conflict because they are formed functionally to internalize differences of opinion and interests, making collective decisions on behalf of society as a whole by uniting conflicting views and consensus. The current climate change uncertainty motivates policymakers to form regulations carefully and adaptively to climate uncertainty. Establishing laws and regulations can facilitate the integration of climate change into the state administration framework, constraining policy direction by aligning with the state's objective as a legal governance structure. To enable flexible regulation by the law, including establishing policy objectives and benchmarks for policy programs and assigning the state the duty of managing its government. Consequently, the formal policy framework established by legislation can significantly influence progress. Third, the significance of establishing specialized climate change legislation lies in its instrumental dimension. The legislation is fundamentally linked to its implementers' enforcement and compliance processes. To enable the incorporation of sanction mechanisms in climate action policies, such as legislation establishing violations or civil law enforcement avenues, or those arising from the doctrines of a specific legal system, whether through the provision of private or public legal remedies for breaches of legislative mandates. Legal enforcement and compliance mechanisms will enhance the capacity to fulfill the policy objectives. However, the framework of the Paris Agreement mandates

Member States to 'sustain' national contributions that emphasize domestic mitigation efforts to attain these contributions. Nonetheless, legal enforcement measures do not inherently constitute the foundation for successful national action on climate change. Consequently, when legal enforcement is crucial for implementing regulatory measures, these mechanisms must be comprehensively analyzed, particularly concerning the pertinent institutions that evolve within society and how commitments are established amidst community dissent or when long-term plans fail to align with quotidian realities.

Fourth, the climate change law provides symbolic value to legislators as dignified authority institutions (Wintgens, 2006). Laws impose and bind formally established commitments by governments and nation-states to a particular policy and set of requirements, accompanied by signs of legitimate authority that can be traced back to a State's sovereign authority. The symbolic authority of law is crucial in building respect for long-term climate change commitments when there is disagreement among societies about those commitments or when long-term plans do not reflect day-to-day realities (Lembcke, 2016). Both in fostering respect for formally correct legislation and raising awareness of climate change issues, the symbolic function of climate legislation can be very important, both internally for individuals and interests within a country and externally in sending signals to other countries about a country's commitment to climate change.

The symbolism of legislation can also be seen from its nature, whether the law is facilitative or obstructive. Laws can provide legal certainty for legal subjects regulated by the law. This is a particular advantage for business investors who want to fund emerging green projects or other decarbonization activities, thereby building momentum for the climate policy agenda. This does not mean that legislative measures provide regulatory certainty, especially concerning emerging markets where governments may be regulated by trial and error. The legislative function within the framework of a presidential state, the government and legislators are expected to be able to support and evaluate the new law to the maximum to follow up on climate action commitments and prioritize that the law is a crucial aspect in implementing the NDC contribution as stipulated in the Paris Agreement.

The aforementioned reasons can also facilitate an examination of the national regulatory framework, specifically in assessing how current legislation aligns with policy trajectories that will influence the potential for future national climate change initiatives. The intersection of climate change legislation differs throughout countries due to variations in constitutional foundations, political instability, bureaucratic capabilities, national development agendas, and legal-political frameworks. A neglected area of research involves analyzing and evaluating national climate legislation to fully understand the regulatory relationship between climate change policy and the national legal framework, explicitly identifying laws and regulations that indirectly affect climate change.

Examining the evolving climate policies globally, it was first deemed non-urgent to design the Climate Law, as climate change is a pervasive issue affecting several regions. Consequently, the challenge of climate change presently intersects with numerous sector-specific issues governed by distinct regulations; lawmakers often lack a comprehensive understanding of the regional implications of climate change, failing to align these regulations with climate change policies. Such indirect climate crossings engage scholars in the whole array of laws on climate policy and further explore the intricacies of a national legal framework. The effects on climatic outcomes will differ by nation and will not be uniform. The link or conflict between sectoral regulations, such as pollution controls, and climate policy is crucial for assessing national climate legislation. Indonesia should examine the legislative frameworks developed by other nations as a basis for future assessment and appraisal.

Consequently, the author presents instances of Climate Laws deemed complete and pertinent for consideration in Indonesia's climate law, including;

1. Kenya

The Climate Change (Amendment) Act no. 9 of 2023 (The Climate Change (Amendment) Act No. 9 0f 2023, n.d.; Climate Change Act No. 11 of 2016, 2016), Kenya adopted the Climate Act in 2016 (Climate Change Act No. 11 of 2016) which is considered the most comprehensive climate policy in all of Africa during that period (Wambua, 2019). As the First Climate Act in Africa, the Kenyan Government began to organize procedures and strategies to achieve low-carbon development and make climate change issues one of the priority agendas in the national development process. After experiencing various geo-political turmoil and global economic developments, this Act was then amended in September 2023 in response to the need for more adaptive regulations to the threat of climate change, especially the socio-economic challenges that hit millions of Kenyans throughout the period. The amendment to the 2016 Climate Act is also claimed as a form of Kenya's full commitment to the Paris Agreement commitment to mitigation and adaptation, including the regularization of emissions trading and the creation of healthy carbon. This is evident from the modification of specific clauses in the Amendment Act related to supervision and participation in the carbon market which is claimed to be able to provide effective efficiency.

The implications of the amendment to the 2016 Climate Act allow Kenya to involve every stakeholder more widely to support carbon emission reduction. Although the 2016 Climate Act has laid the foundation for Kenya’s response to climate change threats by establishing a National Climate Change Council and mandating the launch of a National Climate Change Action Plan, the Act does not emphasize the importance of carbon market regularization as an important instrument for achieving carbon emission reduction goals and the Paris commitments. Nevertheless, lessons can be learned at the normative level related to the contents adopted in the Kenyan Climate Act both before and after the amendment. Observing the Kenyan Climate Act, the purpose of the Act can be summarized as follows; that the establishment of the Kenyan Climate Act is solely to integrate climate change responses into development

planning, decision-making, and implementation by taking into account the principles of sustainable development, gender equality, public participation, and the fulfilment of access to information.

In addition, the establishment of the National Climate Act is believed to be able to build community resistance and capacity to respond to climate change and building a better ecological system. The establishment of the Climate Act can also strengthen planning and strategies for controlling climate disaster risks by public and private agencies to reduce the impact of disasters that occur. Furthermore, the Kenyan Climate Act regulates the provision of incentives for business actors and imposes obligations on every legal entity to contribute to achieving climate development by utilizing environmentally friendly technologies to create production efficiency. In terms of public participation, the Kenyan Climate Act imposes obligations on policymakers to facilitate programs for community capacity building through climate awareness efforts, consultation and representation, and the availability of access to climate information widely. Furthermore, this law regulates transparent financial resource management for each climate response program and provides a mechanism for facilitating research and development and training related to climate change issues. Where all of these national objectives are integrated into this Climate Act to be implemented at all levels and functions of government, as well as government and local governments.

The amendment 2023 imposes an obligation on carbon trading corporations to determine the anticipated environmental, economic and social benefits of the project. where each process of corporate activity must be implemented through a community development agreement, which is recorded in the National Carbon Registry. For land-based projects, the agreement must provide for an annual contribution of at least 40% of the company's total revenue, while non-land projects require 25% of total revenue. The Nigerian Climate Change Council was formed to supervise and coordinate national climate policy, tasked with offering policy advice and direction on carbon markets to both national and sub-national governments. Led by the President, with the Vice President serving as vice-chairman, it establishes an extensive national climate change coordinating framework. The Climate Change Council comprises the Cabinet Secretary for Environment and Climate Change, the Cabinet Secretary for Treasury, the Cabinet Secretary for Economic Planning, the Cabinet Secretary for Energy, Governors, representatives from private companies, representatives from civil society, representatives from indigenous peoples, and representatives from academia.

The authority of the National Climate Change Council refers to Article 6 of the Climate Change Act 2016, namely to ensure that the implementation of the National Climate Change Action Plan runs well both nationally and at the regional level. The Climate Change Council can also form the necessary policies and provide input to regional legislative councils to respond to climate change. Furthermore, the Climate Change Council is also authorized to approve or reject climate education strategies and implementation by considering gender and intergenerational equality, including providing related policy direction to national and regional governments, the general public and other stakeholders. In addition, the Climate Change Council is authorized to coordinate the review, amendment and harmonization of sectoral laws regulations and policies to achieve the objectives of the Act; manage the Climate Change Fund; and set targets for greenhouse gas emission regulation'. Furthermore, this Act allows the Climate Change Council to impose climate change obligations on private entities (Article 16), and establishes investigative, monitoring and enforcement authorities.

The Act also mandates the Cabinet Secretary to formulate the National Climate Change Action Plan, which is then updated every five years, with implementation reviews conducted every two years. In addition, the Act also allows citizens to apply to the Environment and Land Court by "alleging that a person has acted in a manner that ensures the mainstreaming of climate change control functions by the central and local governments has or may harm efforts to mitigate and adapt to the impacts of climate change" and the court can order the cessation or prevention of such action, and can "compensate victims of violations relating to climate change duties." It is stipulated that no proof of loss or injury by the applicant is required (Article 23). The Act also empowers the National Climate Change Council to assign tasks relating to climate change and the implementation of the Climate Change Action Plan to public and private bodies (Part IV). The Act also establishes the Climate Change Fund as a financing mechanism for priority climate change actions and interventions approved by the council. The Fund's income must come from (Article 25): money drawn from the Consolidated Fund under an Act of Parliament; money received by the Fund in the form of donations, grants and gifts; and money under the Act payable to the Fund'.

2. Finland

Climate Change Act no. 423 of 2022, the existing legislation, establishes climate objectives and a planning framework for Finnish climate policy and its oversight (Climate Act No. 423 of 2022, 2022). The Act aims to streamline and synchronize the planning and oversight of initiatives designed to mitigate and adapt to climate change while enhancing opportunities for Parliament and the public to engage in and shape climate policy planning. The Act pertains to state authorities in formulating and overseeing climate policy plans. The Act comprises 23 sections categorized into the subsequent chapters: 1. General provisions; 2. Planning framework; 3. Reporting and oversight; 4. Authorities and stakeholders; 5. Enforcement mechanisms.

The Act establishes a carbon neutrality objective for 2035 and incorporates additional international and EU climate targets. The planning framework established in the Act seeks to fulfil greenhouse gas reduction and monitoring obligations, improve carbon sinks, and implement strategies to adhere to regional and international accords. The planning framework comprises 1) a long-term climate strategy; 2) a national climate change adaptation plan; 3) a medium-term climate strategy; and 4) climate plans for land use sectors, including arable land, pastures,

wetlands, urban land, and other land types. The Act contains comprehensive guidance for the development of these strategies. The government will establish a scientific expert committee for four years, encompassing multiple scientific disciplines. A Sami Climate Council will be formed to assist in the development of the policy plan outlined in the Act.

3. South Africa

Climate Change Act No. 22 of 2024 (Climate Act No. 22 of 2024, 2024), The Act delineates the strategic framework of South Africa's national climate change policy and provides the primary institutional structures for climate governance at the national level. The South African government emphasizes that addressing climate change presents distinct problems for good governance and necessitates a nationally focused, coordinated, and collaborative legislative and administrative response. The Act consists of six chapters and 38 articles. Chapter 1 delineates the Definitions, Purposes, and Principles of the Act. The document has 12 principles that direct the interpretation and implementation of the Act. Decision-making must consider the particular requirements and conditions of locations and individuals most susceptible to the detrimental effects of climate change. The Act identifies explicitly workers, women (especially impoverished rural women), children, the elderly, the impoverished, the ill, and anyone with physical disabilities. Section 3 (j) implicitly alludes to the polluter pays concept by acknowledging that those accountable for the detrimental effects must bear the expenses associated with adaptation and mitigation. The execution of the Act must adhere to the national environmental management principles delineated in the National Environmental Management Act.

Chapter 2 of the Act delineates the primary institutional arrangements. Article 7, paragraph (1) mandates that public bodies engaged in functions influenced by climate change, or authorized to promote a sustainable environment, must evaluate and, if necessary, revise and align their policies to incorporate climate change considerations. It also permits organized labor, civil society, and industry to provide counsel on the state's climate change response. Articles 8 and 9 mandate the creation of a Climate Change Office to oversee climate change response initiatives. Chapter 3 delineates criteria for climate action applicable to each province and district/city. Each province and district/city, down to the sub-district level, shall conduct a climate change needs and response assessment within one year after the National Adaptation Strategy's issue, and this assessment must be evaluated and updated, if necessary, at least once every five years. Within two years of the evaluation, the mayor/regent must formulate and execute a climate change response implementation plan and evaluate it, or alter the plan as necessary, at least once every five years.

Chapter 4 examines the institutional frameworks for climate change adaptation policies. Within one year of this Act, the Minister is required to establish national adaptation objectives, indicators, and timelines to be integrated into national planning tools. Within one year of this Act, the Minister is required to formulate adaption scenarios. Within two years of this Act, the Minister is required to publish a National Adaptation Strategy and Plan, which shall be reviewed and revised as appropriate every five years. Within two years following the release of the National Adaptation Strategy and Plan, the Minister is required to formulate and execute Sector Adaptation Strategies and Plans, which will undergo evaluation and potential amendment every five years. Schedule 2 delineates the national agencies and state-owned corporations mandated to formulate Sector Adaptation Strategies and Plans, which are also obligated to report progress to the Cabinet Minister for Environment every five years. Section 20 mandates the Minister to disseminate an Adaptation Synthesis Report for the Cabinet's review.

The Act establishes a mitigation structure, albeit the aims are external to the Act. The Minister, following consultation with the Cabinet, must establish the national greenhouse gas emission trajectory (quantitative target) and publish it in the State Gazette. The emission trajectory is delineated into three phases: greenhouse gas emissions are projected to peak between 2020 and 2025, with a lower limit of 398 Megatons (Mt) CO2-eq and an upper limit of 583 Mt CO2-eq for 2020, escalating to 614 Mt CO2-eq by 2025; maintain a plateau for up to ten years post-peak, ranging from 398 Mt CO2-eq to 614 Mt CO2-eq; and subsequently, from 2036 onwards, experience a decline in absolute terms, aiming for a lower bound of 212 Mt CO2-eq and an upper bound of 428 Mt CO2-eq by 2050. The trajectory requires evaluation every five years. According to Article 22, the Minister is required to publish, within one year of the Act's enactment, the sectors and subsectors that emit greenhouse gases and are subject to sectoral emission objectives.

These sectors and subsectors shall establish quantitative and qualitative emission reduction targets for the initial five years, the subsequent five to one year, and for the 10-to-15-year period afterwards. The Minister accountable for each sector and subsector must, within one year of the issuing of the sectoral emission targets, formulate and execute policies and actions to attain these targets. Articles 23 and 24 mandate the Minister to establish and assign a carbon budget to individuals engaging in activities that produce greenhouse gas emissions exceeding a specified threshold, as decided by the Minister. Upon receiving a carbon budget, the individual is required to develop and submit a greenhouse gas mitigation plan for approval. This budget will be adequate for a minimum of three successive five-year intervals and will delineate the maximum permissible emissions for the initial five-year term. Article 25 mandates the Minister to oversee reducing or eliminating synthetic greenhouse emissions. Article 26 delineates institutional frameworks to enable the establishment of the National Greenhouse Gas Inventory and the corresponding Inventory Report. Chapter 6 of this Law empowers the Minister to establish supplementary regulations and mandates adherence to public consultation protocols during the implementation of certain sections. This chapter also encompasses punishments and law enforcement for the execution of this Law, mandating that all individuals undertake efforts to devise climate mitigation and action plans.

Examining the presence and content of Climate Laws in various aforementioned countries reveals that, despite similarities in global pledges, there are disparities in the execution of policies and legislation at the country level. Developed nations typically possess more significant resources for the study, development, and implementation of sustainable technology, whereas poor nations may have obstacles related to technological and financial capabilities. Indonesia can derive lessons from this comparison on the significance of international and interlocal collaboration, encompassing technical and financial support, and the need to tailor policies to align with the local socio-economic context. Moreover, enhancing openness and accountability in the reporting and verifying climate commitments is essential for ensuring the viability of future climate initiatives. By examining the climate legal frameworks of diverse nations, Indonesia aims to discern best practices and incorporate them to enhance its national climate legal and policy structure while ensuring effective participation in global initiatives to mitigate the effects of climate change.

The author advocates for the inclusion of essential sections in the Indonesian Climate Law, specifically; Definitions, Objectives, and Principles; provide a precise and genuine definition and interpretation of climate change, the aims of this legislation, and the foundational principles for the implementation of climate policy overall; Mitigation Planning: It encompasses objectives for diminishing greenhouse gas emissions, promoting the utilization of renewable energy, and facilitating initiatives that sequester carbon; Adaptation Planning: developing a pragmatic approach to enhancing resilience against the effects of climate change, including increasing sea levels, natural catastrophes, and alterations in weather patterns; The Financial Mechanism, encompasses a financial structure for mitigation and adaptation initiatives, incorporating both local and international funding sources. The legal framework must facilitate the advancement and dissemination of sustainable technologies; International and regional cooperation/partnerships; govern the enhancement of international and regional collaboration in combating climate change; Law Enforcement; Implement stringent penalties and legal compliance measures for transgressors of climate change laws and regulations. Furthermore, to establish a robust and comprehensive framework for climate legislation in the future, the government must enhance institutions responsible for executing and consolidating climate initiatives and guarantee substantial community participation in the equitable decision-making processes related to climate, energy, and intergenerational justice. And endeavor to establish policies and regulations that are implemented consistently and mutually reinforcing to attain a common objective.

4. Conclusion and Recommendations

The success of Golden Indonesia 2045 hinges on the nation's capacity to harmonize economic development with environmental conservation. This necessitates a paradigm shift towards sustainable practices via political ecology processes that encourage measures to save natural ecosystems, advance renewable energy, and deploy green technology. The author contends that a comprehensive shift in political ecology aligns with the objectives of Golden Indonesia 2045, which prioritizes human resource development to enhance the quality of life through education, training, and health initiatives, all of which should progress concurrently with environmental protection efforts. Realizing this objective necessitates a collaborative endeavor from all segments of society, encompassing government, the corporate sector, communities, and independent organizations.

The author concludes that the journey towards Golden Indonesia 2045 is fraught with challenges; however, through strategic planning and a commitment to sustainable development, Indonesia can fulfil its potential as a prosperous nation while safeguarding its natural heritage for future generations. Preserving and defending future generations is the present generation's moral, political, and social duty. Establishing and enacting a Special Law on Climate Change is imperative to advance Indonesia's vision for 2045 in the face of climatic and ecological issues. The law is expected to consolidate and enhance current pledges into a cohesive legal framework, offer explicit guidance for national climate initiatives, and guarantee the incorporation of environmental sustainability into all facets of national development. The author contends that by studying the climate legislation of various nations, the Government may meticulously and develop a national climate policy aimed toward Golden Indonesia 2045. Consequently, political will from legislators, community engagement, and intersectoral collaboration is essential to actualizing Indonesia's ambition.

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