

Sustainable Development and Climate Resilience 2050: Evaluating Indonesia's Environmental Legal Landscape

Ampuan Situmeang,¹ Ninne Zahara Silviani²

Universitas Internasional Batam, Indonesia

Email: ampuan.situmeang@uib.ac.id

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Abstract: Climate change poses significant threats to the continuity and resilience of the existing environment. Through the Climate Resilience 2050 agenda, all countries are expected to contribute to mitigating and limiting the effects of climate change, while reducing activities that have the potential to damage the Earth's atmosphere. As a country endowed with rich environmental diversity, Indonesia must address these challenges and participate in global efforts to ensure a sustainable and livable environment for the future. This study uses normative legal research methods to analyze Indonesia's legal readiness in the framework of making policies that can increase Climate Resilience 2050. Using a statutory and regulatory approach, this study finds that Indonesia has legal readiness in terms of basic norms to support policies that increase climate resilience, however, still has a normative void to support the implementation of climate resilience-oriented policies because the regulations regarding the application of basic environmental law norms are overly skewed towards facilitating business activities.

Introduction

Indonesia, as one of the largest countries in Southeast Asia, plays a crucial role in the global agenda to mitigate and limit the impacts of climate change. Its rich natural resources underscore Indonesia's relevance in global efforts to slow down and mitigate the effects of climate change worldwide. The country's natural wealth plays a significant role in climate change as it is home to diverse flora and fauna whose existence depends heavily on the preservation of Indonesia's ecosystems. Another reason why efforts to mitigate and limit the impacts of climate change need to be continuously enhanced in Indonesia is the rampant negative activities affecting its environmental sustainability. As quoted by Greenpeace, "Indonesia's forests are a treasure trove of extraordinary wildlife. The country is home to 10 to 15 percent of the world's known plants, mammals, and birds. However, in the past half-century, more than 74 million hectares of Indonesian rainforest—the size of Germany—have been logged, burned, or degraded" (Greenpeace USA, 2018). Protecting the sustainability of Indonesia's environment directly relates to the survival of its flora and fauna, influencing the biodiversity levels of the Southeast Asian region. The urgency in Indonesia is further heightened by the significant

meaning of its natural wealth, which spans the entire territory of the Republic of Indonesia.

The most crucial background to the importance of efforts to slow down and limit the impacts of climate change in Indonesia lies in Indonesia's vulnerability to various climate change effects (Pardede, 2022). Geographically, being an archipelagic nation, Indonesia is exposed to various impacts caused by climate change (Nurikah et al., 2019). The effects of extreme weather events vary from one location to another. Areas highly vulnerable to climate change will experience more significant impacts than those less vulnerable (Priyanta, 2017). The diversity of Indonesia's natural resources is greatly influenced by its geographical conditions as an archipelago, which are classified into key locations in disaster risk analysis (Estiningtyas et al., 2021). Common global climate impacts such as extreme weather and sea-level rise have dangerous consequences for community survival, particularly those living near coastlines. Additionally, Other factors also contribute to Indonesia's vulnerability to global warming, often influenced by cultural elements and their effects on resilience progress, subsequently leading to how vulnerable communities build their resilience (Djalante et al., 2017). Indonesia's unique position as a nation rich in natural resources, yet vulnerable to the adverse effects of climate change, underscores the critical importance of strengthening efforts to mitigate these impacts. It is imperative for Indonesia to take decisive action, both domestically and in collaboration with the global community, to safeguard its environment and ensure the well-being of its people amidst the challenges posed by climate change.

Efforts to combat climate change represent a noble mission to ensure the future of Earth and provide a decent living environment for future generations (Handayani, 2019). However, regrettably, this noble mission is often obstructed by various factors that also play significant roles in human life, such as social, economic, and cultural factors. These factors play a crucial role in the survival of everyone, ultimately leading to social phenomena that inherently hinder global efforts against climate change. These factors are exacerbated by the situation in Indonesia, a country with diverse cultural and social values, constrained by various economic backgrounds. This situation highlights the importance of derivative elements of values, such as population levels and economic development, which are the main determinants of further changes in energy and land use (van Vuuren et al., 2017).

Therefore, it is important to uphold the rule of law in all societal activities directly or indirectly related to the environment (Laily, 2022). The rule of law, as an important concept in a country's legal enforcement system, is necessary as a driver of legal compliance culture and can also be used as an indicator of the development of a country's legal culture (Koval et al., 2021). As an integral part of culture, legal culture directly and indirectly influences the formation of awareness and activities in various areas of life. Most of our societal issues encountered during the transition to a market economy, are related to the need to improve legal culture in general (Koval et al., 2021). Despite differing visions, a deep understanding of legal rules related to human rights, norms of cooperation, and peaceful coexistence has influenced the

development of many aspects considered as public international law, including international environmental law, in the post-war era (Carlarne, 2021).

The rule of law, as a driving force for social order in society, must be supported by adequate legal frameworks (Said & Nurhayati, 2020). Adequate legal frameworks can facilitate the development of various sectors of community life, ensuring the protection of rights and the fulfillment of obligations of every citizen. This is particularly crucial in the context of Environmental Protection and Management, given the critical position of efforts to slow down and limit the impacts of climate change that can significantly threaten the lives of the general population (Hakim, 2020).

The Climate Resilience 2050 Agenda is a crucial initiative in combating climate change worldwide. Its implementation will directly impact how the effects of climate change will alter the globe in the next generation. This long-term agenda focuses on how a system can adapt to climate change. Through this adaptive capacity, countries participating in driving the Climate Resilience 2050 agenda are expected to develop a framework for efforts to mitigate and limit the impacts of climate change flexibly, in accordance with the unique climate impacts in each region worldwide. Indonesia, as one of the countries actively involved in advancing this agenda, must have adequate legal frameworks to ensure the implementation of various government efforts to enhance climate resilience amidst various social, cultural, and economic pressures within society. Indonesia's legal preparedness needs to be analyzed, considering that the primary legal basis within Indonesia's environmental legal framework, Law Number 32 of 2009 Concerning Environmental Protection and Management (Environmental Protection and Management Law), is outdated, and Indonesia itself is often criticized for its environmental issues by the international community.

Method

This research aims to analyze Indonesia's readiness in the legal domain to address climate change, with a focus on the Climate Resilience 2050 agenda. To analyze this, the research employs the normative legal research method as a lens to examine the environmental legal framework in Indonesia and its implementation within society. The normative legal research method involves analyzing legal principles and norms to evaluate their consistency and applicability within a legal system (Disemadi, 2022). It focuses on understanding and interpreting existing laws and regulations to guide decision-making (D. Tan, 2021). Through the lens of legislation, this study analyzes the regulations concerning the environment in Indonesia, as a crucial factor in the effort to combat climate change threatening human civilization. Secondary data is utilized in this research, employing a literature review technique for data collection. The secondary data consists of legal materials or legislation applicable in Indonesia, specifically Law No. 32 of 2009 concerning Environmental Protection and Management, and Government Regulation No. 22 of 2021 concerning the Implementation of Environmental Protection and Management. The data analysis technique employed is qualitative descriptive analysis.

Results and Discussions

The Development of Climate Resilience Concept and Essential Elements of Policy Planning

Scientific evidence abounds, demonstrating that the Earth's climate is indeed changing, with human activity being the primary driver accelerating climate change over the past century. Regardless of how successful humanity is in mitigating the root causes of this planetary warming, society will face significant impacts—from more frequent and extreme weather events, to ocean warming and acidification, prolonged periods of drought and extreme temperatures, and other hazardous outcomes stemming from various climate change phenomena. The ability to prepare for, recover from, and adapt to these impacts is what is referred to as “climate resilience.” Resilience is a term increasingly common in the discourse of climate change. Extreme weather events have shown that resilience is a crucial component of any comprehensive climate action program because climate change is a global and local issue. Resilience addresses the complexity and interconnected dynamics of systems, building resilient communities and organizations to confront the risks of climate change (Priyanta, 2017). Climate resilience planning enhances accountability and transparency as administrators report and address climate change threats in climate action plans. Public administrators are responsible for seeking holistic and innovative solutions to sustain and enhance organizational assets, the environment, and human resources (Alibašić, 2022). The concept of resilience can also be linked to its basic definition, as found in the Indonesian Dictionary, which defines it as “the ability of a system or community exposed to hazards to resist, absorb, accommodate, adapt, transform, and recover from the effects of hazards efficiently and in a timely manner, achieved through the preservation and restoration of essential functions and structures with risk management” (Badan Pengembangan dan Pembinaan Bahasa, n.d.).

The widespread causes and impacts of climate change indeed affect everyone on Earth, necessitating systematic and comprehensive anticipation and response to climate change, which, in the context of “resilience,” must encompass all forms of appropriate planning at the asset, environmental, or individual levels (Alibašić, 2022). Coordinated joint efforts are required because policy implementation may potentially disrupt the interests of certain individuals, especially those who have depended on activities that have negative impacts on environmental sustainability. The good news is that addressing these risks can not only protect people and property but also generate economic activity that will create domestic jobs, and foster prosperity.

Drafting policies and strategies to enhance climate resilience must revert to the core issue, which is climate change. Climate change poses a threat to human civilization (Ekardt, 2022). Various human activities that adversely affect environmental sustainability deplete the ozone layer and increase the concentration of greenhouse gases in the atmosphere, subsequently impacting the temperature changes across atmospheric layers. Exceeding the Earth's natural capacity to neutralize greenhouse gas concentrations directly affects the Earth's surface temperature. Therefore, climate change can be described

as alterations in climate directly or indirectly resulting from human activities, leading to changes in the Earth's atmospheric composition and consequent alterations in natural climate variability observable over specific periods (Arifin, 2015). Indonesia ranks among the largest global greenhouse gas emitters, driven significantly by forestry and land use activities. Other activities exacerbating greenhouse gas issues include land use changes, energy inefficiency, air pollution from various industrial activities, fossil fuel usage in transportation and waste processing, and the use of ozone-unfriendly materials in electronic appliances such as air conditioners and refrigerators.

Climate resilience emerges as a pivotal concept in responding to climate change driven by aforementioned factors. Anchored in preventative measures and disaster impact mitigation resulting from global climate change, climate resilience is a crucial element in the broader picture of combating climate change, necessitating effective collaboration between the government and society. Climate resilience strategies aim to address short-term and long-term climate issues (Marajh & He, 2022).

Another critical factor within the policy framework leading to climate resilience is climate change impact mitigation. Climate change impact mitigation stems from the concept of mitigating climate change itself. Mitigating climate change involves enhancing resilience across various sectors to slow down or curb greenhouse gas emissions through optimizing various activities negatively impacting the environment, such as waste processing and management (Setyawati et al., 2020). The realization of regions with climate resilience requires successful reduction of greenhouse gas emissions, which must consistently receive support from relevant systems or infrastructure and involve social agents or stakeholders and local institutions (Setyawati et al., 2020). All of these aspects undoubtedly require legal certainty so that all elements of society can be bound by policies related to the survival and welfare of the public.

Unlike climate change mitigation, climate change impact mitigation focuses on efforts to create systems that can facilitate communities to adapt to the impacts caused by climate change (Sturges & Gorse, 2022). Scientific evidence confirms that climate change is already occurring and the impacts of climate change are already visible in the lives of communities worldwide. The smooth implementation of climate change impact mitigation fundamentally cannot be separated from climate change mitigation, as both prioritize changes for the future development focusing on Sustainable Development Goals (SDGs) (W. Tan & Irawan, 2021). Climate change impacts are not only disasters and climate changes, but also adaptations that various elements of society must make as a result of climate change itself, such as changes in the processes of agricultural activities, marine activities, and others. Similarly to climate change mitigation, climate change impact mitigation as part of the policy framework that can enhance climate resilience also heavily depends on how environmental laws can be enforced. Issues such as society's non-compliance with environmental laws, or even larger-scale environmental crimes committed by corporations, fundamentally hinder all forms of development related to the efforts to form communities and regions that have sufficient climate resilience in facing climate change. Existing laws must accommodate

diverse normative needs to support policies aimed at enhancing climate resilience.

Climate Resilience in the Perspective of Environmental Law in Indonesia

Environmental law in Indonesia is anchored to the 1945 Constitution of the Republic of Indonesia and Law No. 32 of 2009 concerning Environmental Protection and Management (Environmental Protection and Management Law). Environmental protection to ensure the sustainability of nature is in line with the fundamental regulations found in the 1945 Constitution, particularly Article 28H paragraph (1), which states, “every person has the right to live prosperously both materially and spiritually, to reside, and to obtain a good and healthy environment as well as the right to obtain health services.” This fundamental regulation is then linked to the legal framework found in Article 33 paragraph (3) of the 1945 Constitution, which states, “the earth and water and the natural wealth contained therein shall be controlled by the State and shall be used to the greatest extent possible for the welfare of the people.” It is mentioned that every person has the right to a good and healthy environment, which means the government's responsibility to preserve the environment is crucial for supporting people's lives and ensuring prosperity (Laurensius Arliman S, 2018).

In contrast to the 1945 Constitution, the Environmental Protection and Management Law is the primary legislation that regulates environmental protection and management. This legislation separates “protection” from “management” because they have different essences. Protection refers to how the environment can be conserved or preserved to prevent damage. Meanwhile, management refers to how the environment can be utilized with principles of efficiency and responsible utilization. These two elements of environmental law are interconnected and cannot be separated because fundamentally, a sustained environment is needed to provide suitable living spaces for every human being and is also necessary for every human being to sustain their lives through certain activities within that environment.

It is important to first understand the threats and vulnerabilities of certain events or phenomena, as well as the possibilities and consequences of their impacts. When people live in coastal areas or low-lying islands, sea-level rise and tidal floods may be their biggest concerns—it is important to withstand excessive water. But in some places like the western United States and particularly acute in Cape Town, South Africa, this is an opposite issue—people must withstand water shortages. Planning required to recover from climate change impacts—climate resilience—demands a comprehensive understanding of climate risks.

Another critical aspect of resilience is the relativity of perspectives among societal elements with specific interests. Individuals and institutions may be more concerned about one risk or impact over another, depending on how vulnerability affects them directly or indirectly. The risk of losing power for a short period, for example, may be less concerning in temperate climates compared to if that power is needed to withstand heatwaves. Similarly, if electrical medical equipment is routinely needed, the loss of electricity—even for a short period—can be very disruptive. If the power goes out for a few

minutes while working on a laptop, the disruption is more of an inconvenience than truly disruptive. If stuck in a hot elevator or in a subway train in a tunnel, the consequences of a brief blackout can last long and have a significant impact. If someone can easily recover from such an event, they are usually considered resilient to that event.

Through Article 1 number 1, the Environmental Protection and Management Law defines the environment as “a spatial unit comprising all objects, forces, conditions, and living creatures, including humans and their behavior, which affect the environment itself, the continuity of life, and the well-being of humans and other living creatures.” The normative construction found in this article is very adequate as it already encompasses various elements related to various efforts that can be made by the government to improve Climate Resilience. In the legal construction found in Article 1 number 1, it is important to emphasize “humans and their behavior” because it is a crucial point of “protection” as one of the two important parts of the regulatory framework of the Environmental Protection and Management Law. Moreover, this construction of meaning can also be linked to the mention of “conditions” and “human well-being,” which are very important in the context of climate resilience as they are one of the main goals of climate resilience aims to enable systems to adapt to climate change impacts, thereby safeguarding societal well-being and ensuring vital factors that support community life.

The meaning construction found in Article 1 number 1 already covers all the important points of climate resilience because it can identify all the points that affect the complexity of efforts to improve climate resilience. Through this regulation, it is well understood that all efforts related to ongoing issues cannot be resolved without strong commitment from the government and also the participation of society. For instance, in environmental conservation efforts, there are often confronted with economic interests. The rampant opening of new land and illegal logging are still occurring. Not to mention the problem of waste management that still occurs. It is very easy to find piles of garbage throughout the day. This waste problem is the mandatory responsibility of the government that must be handled properly (Kadji, 2022).

Climate change as the core issue within the framework of efforts to enhance climate resilience is also defined by the Environmental Protection and Management Law, through Article 1 number 19, which states “climate change is the alteration of climate caused directly or indirectly by human activities resulting in changes in the global atmospheric composition and also in the form of changes in observed natural climate variability over comparable time periods”. Furthermore, the objectives of environmental protection and management are also in line with what is described in Article 3 of the Environmental Protection and Management Law which states “the objectives of environmental protection and management are: to protect the territory of the Unitary State of the Republic of Indonesia from pollution and/or environmental damage; to ensure the safety, health, and livelihood of humans; to ensure the continuity of living organisms and the sustainability of ecosystems; to maintain the functions of the environment; to achieve harmony, compatibility, and balance of the environment; to ensure the fulfillment of justice for present and future generations; to ensure the fulfillment and

protection of the right to the environment as part of human rights; to control the wise use of natural resources; striving for sustainable development; and to anticipate global environmental issues”.

The objectives mentioned above are fundamentally aligned with the goal of enhancing climate resilience, both emphasizing the importance of ensuring the well-being of humans who require adequate environment for future generations. In accordance with all scopes as described in Article 4 of the Environmental Protection and Management Law, namely “a. planning; b. utilization; c. control; d. maintenance; e. supervision; and f. law enforcement”, the Environmental Protection and Management Law can be used as normative support for all forms of conceptual framework, policy planning, and policy implementation aimed at enhancing climate resilience in Indonesia. Not only that, the planning stages can also be fully adjusted with the provisions contained in Article 5 of the Environmental Protection and Management Law, which states “Environmental protection and management planning is carried out through stages: Environmental inventory; Determination of ecoregion areas; and Preparation of Environmental Protection and Management Plans”.

An integral part of enhancing climate resilience is the identification of potentials and challenges present in specific areas. Climate resilience as a form of policy theoretically performs better when carried out through a decentralized framework (Pang et al., 2021). Decentralization, particularly in Indonesia, poses a significant challenge to the success of various efforts to enhance climate resilience (Sibarani, 2017). The principle of decentralization is crucial in enhancing climate resilience in Indonesia which has diverse environmental characteristics. To identify these characteristics, accurate data collection is necessary, which can describe the important elements that will be focal points of policies to enhance climate resilience. This is in line with the provisions in Article 7 paragraph (2) of the Environmental Protection and Management Law, which states “(2) Determination of ecoregion areas as referred to in paragraph (1) is carried out by considering similarities: characteristics of natural topography; river basins; climate; flora and fauna; socio-cultural aspects; economy; community institutions; and results of environmental inventory.”

It is essential to underline that the arrangement in Article 7 paragraph (2) regulates the determination of eco-region gifts, which, based on Article 1 number 29, are defined as “geographic regions with similar climate, soil, water, flora, and native fauna characteristics, as well as human-nature interaction patterns that depict the integrity of natural systems and the environment.” However, the provision of Article 7 paragraph (2) can be utilized as a method to determine the characteristics of regions to enhance their climate resilience through specific, decentralized policies, which must align with various elements composing these characteristics, thus making the environmental landscape of the area unique.

Subsequently, the conceptualization and drafting of policy plans to enhance climate resilience can be incorporated into the Environmental Protection and Management Plan, defined in Article 1 number 4 as “a written plan containing the potentials, environmental issues, as well as protection and management efforts within a specified period.” The Environmental Protection

and Management Law also provide normative space for the formation of Environmental Protection and Management Plans, including policies to enhance climate resilience, which are decentralized, as mentioned in Article 9 paragraph (1) “Environmental Protection and Management Plans as referred to in Article 5 letter c consist of: national Environmental Protection and Management Plans; provincial Environmental Protection and Management Plans; and Environmental Protection and Management Plans of district/city levels.” Policies to enhance climate resilience can be implemented at the three levels mentioned in the provisions above, with the national level serving as the primary reference basis.

The regulation concerning policies to enhance climate resilience that utilize the principle of decentralization also does not conflict with the norms found in the Environmental Protection and Management Law, particularly those related to Environmental Protection and Management Plans. One crucial element in the effective implementation of policies to enhance climate resilience is a community willing to participate for the common good. Therefore, the regulation and planning of policies to enhance climate resilience must always consider the values that grow and develop within the community because fundamentally there needs to be continuity between the government, both central and local, and the community that interacts daily in the related environment that will enhance its climate resilience. The importance of this is underscored in the regulation governing the Environmental Protection and Management Plan, namely in Article 10 paragraph (2) which states “(2) The drafting of Environmental Protection and Management Plans as referred to in paragraph (1) shall consider the diversity of characters and ecological functions; population distribution; distribution of potential natural resources; local wisdom; community aspirations; and climate change.”

The regulations concerning the drafting of Environmental Protection and Management Plans indicate that essentially nature cannot be separated from humans as its stewards, who cannot be detached from the source of local wisdom (Sinapoy, 2018). Therefore, every policy aimed at protecting the purity and sustainability of the environment must also consider humans as one of the essential elements of policy-making, particularly concerning efforts to enhance climate resilience.

The Legal Implications of the Climate Resilience Vision 2050

Creating buildings, systems, and communities that are more resilient to shocks and pressures requires a solid understanding of risk concepts and a good risk management framework. Conceptually, risk can be seen as a function of two key variables: threats and vulnerabilities. While these terms are often used interchangeably, they denote specific and distinct meanings. Threats refer to actions that can negatively impact assets or systems, while vulnerabilities represent the potential damage level to assets. Thus, risk is a function of threat multiplied by vulnerability. The likelihood of threats and the impact of vulnerabilities are integral parts of this equation. Additionally, the components of vulnerability—sensitivity, exposure, and the capacity to adapt—are crucial for assessing resilience.

Before delving into the legal implications of the Climate Resilience 2050 agenda, an international agenda responding to climate change, an analysis of Indonesia's national vision related to climate change is necessary. National interests are inseparable from a country's legal policies, particularly those concerning responses to rapidly occurring climate changes (Alves et al., 2020). The One Hundred Years Indonesia Vision (Indonesia Vision 2045) has placed human resource development as its foremost pillar alongside advancements in science and technology. The aim is to enhance the quality of human resources through improved education, robust cultural values, better health and living standards, increased productivity, advanced science and technology capacities, and broader job opportunities. This vision cannot be divorced from the importance of sustainability and the availability of an adequate environment to achieve the envisioned development across all sectors.

The primary keywords of the climate resilience agenda are adaptation. Policy development geared towards adaptation utilizes a phased process, starting from goal identification to problem potential analysis and actions tailored for specific timeframes. The resultant policies form a framework for reducing a region's vulnerability to various climate change impacts, while also realizing opportunities for it to become climate resilient.

Climate resilience, as directed by the Paris Agreement, is translated into economic, social, and environmental resilience with the principle of leaving no one behind. Implementing climate resilience must emphasize justice and sustainability principles, requiring a transformative process. Strategies towards climate resilience are pursued through investments, human resource capacities linked to green job opportunities contributing to environmental sustainability, and land and seascape management. Consequently, through climate resilience strategies, development plans become more responsive to climate change by incorporating critical aspects such as climate risk codes, climate resources, and climate zones.

The climate resilience strategy also emphasizes the concept of spatial allocation and utilization, where protection and utilization are based on capacity and needs. Furthermore, adaptation actions, as an integral part of climate resilience, must emphasize the importance of policies that can reduce greenhouse gas emissions as a mitigation effort against the impacts of climate change, which are already underway. This focus should be on adaptation in six key areas (water, food, energy, environmental health, ecosystems, disasters) in line with the Nationally Determined Contribution (NDC) Adaptation Strategy. NDC is a Climate Action plan aimed at reducing emissions and adapting to the impacts of climate change, wherein countries set targets to reduce greenhouse gas emissions that cause climate change and to adapt to climate impacts. The plan specifies how to achieve these targets and outlines a system for monitoring and verifying system to track progress (United Nations, n.d.).

The regulations in the Environmental Protection and Management Law only address the basics and objectives of environmental protection and management, as well as the formulation of policies related to these aspects. Further regulations regarding environmental protection and management are outlined in Government Regulation Number 22 of 2021 concerning The Implementation of Environmental Protection and Management.

Policies aimed at enhancing climate resilience are intended to shape a multidimensional system that can assist communities in adapting to various climate change impacts. This multidimensional approach means that policy frameworks should not only focus on protecting the environment from human activities with negative impacts but also on protecting the environment from the impacts of climate change, such as extreme weather, natural disasters, temperature increases, rising sea levels, and other harmful effects that affect life-supporting sectors. All climate resilience policies should be geared towards the resilience of life-supporting sectors (Arif Haryana, 2022). Sectors such as the economy, health, energy, and food are greatly influenced by policies on food security, waste management, product and energy use, disaster impact mitigation, and economic impact mitigation.

The regulations in the Implementation of Environmental Protection and Management Government Regulation primarily aim to facilitate business activities while ensuring that these activities do not harm the environment. Filling the normative gap regarding the impacts of climate change is necessary, especially considering Indonesia's commitment to achieving the 2045 Vision and the Climate Resilience 2050 agenda, which directly affects the sustainability and suitability of the environment for future use. Indonesia needs a legal framework specifically designed to ensure the implementation of the NDC, which is the country's commitment to supporting the SDGs and enhancing climate resilience (Sulistiawati, 2020).

The urgency of filling this normative gap is further heightened by Indonesia's vulnerable geographical position to diverse climate change impacts. The impacts of climate change vary greatly due to the high diversity of natural resources and environmental landscapes in Indonesia. Regional divisions that regulate climate resilience policies tailored to the natural characteristics of each area are essential and should receive support (Estiningtyas et al., 2021). The construction of normative frameworks is crucial to ensuring implementation and fostering cooperation between the government and local communities, while also considering social and economic factors.

Conclusion

Indonesia, as a country rich in natural resources and diverse environmental ecosystems, holds a crucial position in the Climate Resilience 2050 agenda. The government and society must collaborate to ensure the implementation of various policies that can enhance climate resilience across all regions of the Republic of Indonesia, as part of Indonesia's participation in efforts to mitigate and limit the impacts of climate change affecting the entire world. The rule of law is essential in ensuring legal awareness and social order, directly influencing how a policy, in this case, policies to enhance climate resilience, will be executed. Findings from the normative analysis of this research indicate that Indonesia already has a fairly solid legal foundation through the Environmental Protection and Management Law, which conceptually can facilitate various dimensions summarized in the concept of climate resilience. However, the implementation of existing policies still lacks adequate support from Indonesia's environmental legal framework, as seen in the Government Regulation on Environmental Protection and Management,

which still leans too much towards business orientation and environmental protection from all negative impacts of business activities. As Indonesia actively supports the SDGs, it necessitates a new legal framework that effectively applies the norms of the Environmental Protection and Management Law. This framework should enhance the resilience of sectors crucial to community livelihoods against global and local climate change impacts.

References

- Alibašić, H. (2022). The Administrative and Ethical Considerations of Climate Resilience: The Politics and Consequences of Climate Change. *Public Integrity*, 24(1), 33–50. <https://doi.org/10.1080/10999922.2020.1838142>
- Alves, F., Leal Filho, W., Casaleiro, P., Nagy, G. J., Diaz, H., Al-Amin, A. Q., de Andrade Guerra, J. B. S. O., Hurlbert, M., Farooq, H., Klavins, M., Saroar, M., Lorencova, E. K., Suresh, J., Soares, A., Morgado, F., O'Hare, P., Wolf, F., & Azeiteiro, U. M. (2020). Climate change policies and agendas: Facing implementation challenges and guiding responses. *Environmental Science and Policy*, 104(1), 190–198. <https://doi.org/10.1016/j.envsci.2019.12.001>
- Arif Haryana. (2022). Impact Analysis of Strategic Policy of Natural Resources and Environment in the Indonesian Long-term Development Plan of 2005–2025. *The Journal of Indonesia Sustainable Development Planning*, 3(2 SE-Policy Paper), 136–148. <https://doi.org/10.46456/jisdep.v3i2.300>
- Arifin, S. (2015). Peranan Dan Fungsi Hukum Lingkungan Mengantisipasi Dampak Perubahan Iklim Pada Sumberdaya Pesisir Sumatera Utara. *Jurnal Hukum Samudra Keadilan*, 10(2), 168–176.
- Badan Pengembangan dan Pembinaan Bahasa. (n.d.). *Hasil Pencarian - KBBI Daring*. Kementerian Pendidikan, Kebudayaan, Riset, Dan Teknologi.
- Carlarne, C. P. (2021). Climate Change, Human Rights, and the Rule of Law. *UCLA Journal of International Law and Foreign Affairs*, 25(1), 11–40. <https://doi.org/10.2139/ssrn.3761842>
- Disemadi, H. S. (2022). Lenses of Legal Research: A Descriptive Essay on Legal Research Methodologies. *Journal of Judicial Review*, 24(2), 289–304.
- Djalante, R., Garschagen, M., Thomalla, F., & Shaw, R. (2017). *Introduction: Disaster Risk Reduction in Indonesia: Progress, Challenges, and Issues* (pp. 1–17). https://doi.org/10.1007/978-3-319-54466-3_1
- Ekardt, F. (2022). Freedom, Human Rights, Paris Agreement, and Climate Change: The German Landmark Ruling on Climate Litigation. *Environment*, 64(2), 4–10. <https://doi.org/10.1080/00139157.2022.2021791>
- Estiningtyas, W., Syahbuddin, H., Harmanto, Pramudia, A., & Dermoredjo, S. K. (2021). Analysis of key locations as indicators for extreme climate impacts in supporting climate change adaptation in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 724(1). <https://doi.org/10.1088/1755-1315/724/1/012042>
- Greenpeace USA. (2018, September). *Greenpeace Investigation Exposes How World's Biggest Brands are Still Linked to Rainforest Destruction in*

Indonesia.

- Hakim, E. R. (2020). Penegakan Hukum Lingkungan Indonesia dalam Aspek Kepidanaan. *Media Keadilan: Jurnal Ilmu Hukum*, 11(1), 43–54. <https://doi.org/10.31764/jmk.v1i1.1615>
- Handayani, I. G. A. K. R. (2019). Penegakan Hukum Kehutanan dalam Rangka Antisipasi Dampak Climate Change di Indonesia. *Mimbar Hukum-Fakultas Hukum Universitas Gadjah Mada*, 21(2), 371–379. <https://doi.org/10.22146/jmh.16263>
- Kadji, J. (2022). Problems in the Implementation of Decentralization Policies in the Flagship Program “Nafas Cita” in Gorontalo Regency. *Tamaddun Journal of Islamic Studies*, 1(2), 130–153. <https://doi.org/10.55657/tajis.v1i2.49>
- Koval, D., Sovhira, S., Masliuk, R., & Mykolaiko, V. (2021). Hierarchy of the concepts of “culture” and “legal culture.” *LAPLAGE EM REVISTA*, 7(3), 126–135. <https://doi.org/10.24115/S2446-62202021731275p.126-135>
- Laily, F. N. (2022). Penegakan Hukum Lingkungan Sebagai Upaya Mengatasi Permasalahan Lingkungan Hidup Di Indonesia. *Wacana Paramarta: Jurnal Ilmu Hukum*, 21(2), 17–26. <https://doi.org/10.32816/paramarta.v21i2.184>
- Laurensius Arliman S. (2018). Eksistensi Hukum Lingkungan Dalam Membangun Lingkungan Sehat di Indonesia. *Jurnal Ilmu Hukum*, 5(1), 761 – 770. <https://doi.org/10.5281/zenodo.1683714>
- Marajh, L., & He, Y. (2022). Temperature Variation and Climate Resilience Action within a Changing Landscape. *Remote Sensing*, 14(3), 701–717. <https://doi.org/10.3390/rs14030701>
- Nurikah, Nurikah, & Cahyani, F. (2019). Forest Utilization Policy in Indonesia in Improving Environmental Carrying Capacity. *Proceedings of the International Conference of Democratisation in Southeast Asia (ICDeSA 2019)*, 80–82. <https://doi.org/10.2991/icdesa-19.2019.17>
- Pang, P., Guo, Z., & Wang, Y. C. (2021). Assessing urban-rural climate resilience of metropolitan Yangon, Myanmar. *Singapore Journal of Tropical Geography*, 42(3), 451–468. <https://doi.org/10.1111/sjtg.12383>
- Pardede, L. M. R. C. (2022). Peran Hukum Internasional Dalam Menekan Pengaruh Emisi Sektor Penerbangan Terhadap Laju Perubahan Iklim. *BELLI AC PACIS*, 7(2), 84–90. <https://doi.org/10.20961/belli.v7i2.59997>
- Priyanta, M. (2017). Intergrated Environmental Law System Strategies to Adapt Climate Change Impact From Energy Resilience in Indonesia. *Jurnal Dinamika Hukum*, 17(3), 296–307. <https://doi.org/10.20884/1.jdh.2017.17.3.932>
- Said, M. Y., & Nurhayati, Y. (2020). Paradigma Filsafat Etika Lingkungan Dalam Menentukan Arah Politik Hukum Lingkungan. *Al-Adl: Jurnal Hukum*, 12(1), 39–60. <https://doi.org/10.31602/al-adl.v12i1.2598>
- Setyawati, E. Y., Budiastuti, Mt. S., Wijaya, M., & Setyono, P. (2020). Waste management in integrated waste management facility (TPST) of Piyungan to achieve climate resilience through local institutions. *IOP Conference Series: Earth and Environmental Science*, 423(1), 1–6. <https://doi.org/10.1088/1755-1315/423/1/012018>
- Sibarani, R. (2017). Tantangan Tata Kelola Kebijakan Perubahan Iklim di

- Indonesia (Studi Kasus: Komparasi Antara Penerapan Desentralisasi dan Multi-Level Governance). *Jurnal Hukum Lingkungan Indonesia*, 4(1), 61–86. <https://doi.org/10.38011/jhli.v4i1.50>
- Sinapoy, M. S. (2018). Kearifan Lokal Masyarakat Adat Suku Moronene dalam Perlindungan dan Pengelolaan Lingkungan Hidup. *Halu Oleo Law Review*, 2(2), 513–542. <https://doi.org/10.33561/holrev.v2i2.4513>
- Sturges, J., & Gorse, C. (2022). The Problems of Achieving Social Sustainability: A Cultural Shift. In *Climate Emergency – Managing, Building, and Delivering the Sustainable Development Goals* (pp. 3–12). https://doi.org/10.1007/978-3-030-79450-7_1
- Sulistiawati, L. Y. (2020). Indonesia's climate change national determined contributions, a farfetch dream or possible reality? *IOP Conference Series: Earth and Environmental Science*, 423(1), 1–7. <https://doi.org/10.1088/1755-1315/423/1/012022>
- Tan, D. (2021). Metode Penelitian Hukum: Mengupas Dan Mengulas Metodologi Dalam Menyelenggarakan Penelitian Hukum. *Nusantara: Jurnal Ilmu Pengetahuan Sosial*, 8(8), 2463–2478. <https://doi.org/10.31604/jips.v8i8.2021.2463-2478>
- Tan, W., & Irawan, I. (2021). Kontekstualisasi Peraturan Daerah Kota Batam Terkait Pencemaran Lingkungan Perspektif Sustainable Development Goals (SDGs). *Maleo Law Journal*, 5(2), 30–37.
- United Nations. (n.d.). *All About the NDCs*. United Nations.
- van Vuuren, D. P., Riahi, K., Calvin, K., Dellink, R., Emmerling, J., Fujimori, S., KC, S., Kriegler, E., & O'Neill, B. (2017). The Shared Socio-economic Pathways: Trajectories for human development and global environmental change. *Global Environmental Change*, 42, 148–152. <https://doi.org/10.1016/j.gloenvcha.2016.10.009>