



## Public Information Disclosure Policy in Climate Change Adaptation: A Comparative Study of Indonesia and South Korea

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### ABSTRACT

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The principle of transparency in information disclosure plays a crucial role in global climate governance, as it seeks to enhance accountability and improve the effectiveness of climate change mitigation efforts. The disclosure of public information regarding climate change policies, such as Nationally Determined Contributions (NDC) documents, plays a vital role in facilitating the engagement of the public and various stakeholders. In Indonesia, the accessibility of NDC documents remains a significant challenge, impacting the public's comprehension of government policies related to climate change mitigation. In comparison, South Korea, the first nation in Asia to implement a Right to Information Act in 1996, has demonstrated a more robust dedication to transparency and the disclosure of NDC documents. This study examines the management of information disclosure in the NDC policies of Indonesia and South Korea, focusing on its implications for public participation and the attainment of emission reduction targets. The findings indicate that although both nations demonstrate a robust dedication to addressing climate change, Indonesia must enhance its engagement with communities and the private sector by improving access to information, fostering broader public participation, and aligning NDC policies with national and regional development strategies. A transparent and inclusive approach can enhance the effectiveness of climate change policies, thereby accelerating the attainment of mitigation and adaptation targets related to climate change.

## 1. INTRODUCTION

Transparency, serving as a method of information disclosure, has become a widely acknowledged standard and practice in the context of global climate governance. The release of climate-related information is a tool for tracking and encouraging mitigation efforts by different stakeholders, thus improving accountability in theory. This relates to the choices made by private entities concerning the transparency of their performance and the responsibilities of public policymakers in ensuring the efficacy and breadth of climate governance outcomes. In various global climate governance frameworks involving both public and private sectors, the requirement for transparency concerning mitigation actions is intrinsically connected to the goal of democratization. This highlights the significance of comprehensive communication regarding policy responses to climate change, reaching beyond the boundaries of liberal democracies. The call for transparency within the private sector primarily originates from environmental non-governmental organizations (NGOs) and groups of active investors. Within the United Nations

Framework Convention on Climate Change (UNFCCC) framework, transparency is crucial to the broader discourse surrounding historical accountability for climate change. Improving the clarity of climate governance is fundamentally connected to the political dynamics and normative debates regarding the responsibilities of transparency, the entities accountable for it, and the intended goals. This ensures that transparency transforms into a dynamic space for political contention [1].

The availability of public information is crucial, as the entitlement to access such information is a fundamental human right that may be restricted under specific conditions [2]. In Indonesia, Article 1 of Law No. 39 of 1999 on Human Rights defines Human Rights as a set of rights inherent to the nature and existence of human beings as creations of God Almighty [3-5]. These rights are considered essential entitlements that necessitate respect, maintenance, and safeguarding by the state, legal systems, government, and individuals, all directed toward preserving human dignity and honor. Derogable rights are human rights that can be restricted in their application during a publicly declared emergency that threatens the

survival of the nation [6, 7]. Non-derogable rights are human rights that persist unchanged, irrespective of the circumstances [8, 9].

Furthermore, Article 28I paragraph (1) of the 1945 Constitution of the Republic of Indonesia; Article 37 of the People's Consultative Assembly Decree No. XVII/MPR/1998; and Article 4 of Law No. 39 of 1999 specify seven non-derogable rights. The rights encompass the right to life, the prohibition against torture, the freedom of thought and conscience, the right to practice religion, the prohibition of enslavement, legal recognition as a person, and protection against prosecution based on retroactive laws [10, 11].

Public participation is acknowledged as an essential component in environmental decision-making, especially concerning the formulation and execution of climate policies and adaptation strategies. This initiative is motivated by the necessity to improve public acceptance of diverse projects, facilitate a more democratic decision-making process, and aid society in comprehending scientific facts, which ultimately results in more informed and progressive decisions [12-14]. In this context, regulations regarding public information disclosure are essential for safeguarding citizens' rights related to policy planning, government programs, and decision-making processes [15]. Moreover, these regulations promote extensive public involvement in the development of policies, guaranteeing that governmental strategies and action plans aimed at tackling climate change demonstrate a robust dedication to the right to public information as established in the Constitution.

Experts such as Sareh Vosooghi and Alejandro Caparrós [16] agree that the issues of information disclosure and climate change present significant topics for international discussion. In support of this perspective, Ann Florini and Saleena Saleem [17] observed that: "assesses the effectiveness of public information disclosure mechanisms as tools of energy governance by analyzing the motivations and intended outcomes of various disclosure-based initiatives within the energy sector." Indonesia stands alongside other Asian countries, such as South Korea, Japan, and Thailand, in adopting public information disclosure frameworks via legislative actions.

In 1996, South Korea emerged as the pioneering nation in Asia to enact a Right to Information Act. Moreover, Munzaer [18] highlighted that Indonesia is positioned as the fifth country in Asia to enact particular regulations concerning public information disclosure, as outlined by Law No. 14 of 2008. The enforcement of this law commenced on May 1, 2010, by the directives specified in Article 28F of the 1945 Constitution of the Republic of Indonesia. In light of this context, it is crucial for Indonesia and South Korea to focus on the protection of public information disclosure, especially regarding the Nationally Determined Contributions (NDC) in the context of global climate change. On April 22, 2016, Indonesia and South Korea formalized their commitment to combating climate change by signing the Paris Agreement, marking a pivotal moment in their environmental policy initiatives [19].

Indonesia ratified the Paris Agreement on October 31, 2016, as specified in Law Number 16 of 2016, which addresses the ratification of the Paris Agreement under the United Nations Framework Convention on Climate Change. Article 3 of the Paris Agreement requires countries that ratify it under the United Nations Framework Convention on Climate Change to submit NDC documents. These documents are mandated to

include updates to strategies every five years. In 2019, YouGov, a data analytics firm in the UK, found that Indonesians have the least propensity to believe in artificial climate change. The research included 1,001 participants, indicating that 18% (around 180 individuals) did not accept that human activity caused climate change. A 2021 survey conducted by Dialogue Development Asia and Communication for Change Consultancy included 3,490 Indonesians from 34 provinces, with plans to expand to 38 provinces in 2024. The data indicated that 88% of participants acknowledged the concept of climate change; however, merely 44% could effectively express and understand its consequences [20].

Reflecting on the survey results, it is clear that the effectiveness and existence of Law No. 16 of 2016 is ineffective. The principle of legal fiction does not apply in this context, as it involves a scenario where community awareness of the law's enactment is essential [21, 22]. The findings reveal that the public lacked awareness regarding implementing Law No. 16 of 2016 and the associated NDC Document, leading to diverse viewpoints on climate change. The revelation of details about policies and governmental matters and enhancing work action plans to tackle climate change is crucial. The public must have the opportunity to access information about the various Action Plans and policies that have been implemented, are currently underway, and will be developed in response to climate change adaptation. The government's primary duty is to provide services to the community [2]. Ryaas Rasyid [23] expressed that the government's role is not for its benefit; instead, it aims to provide services to the community and create an environment that allows individuals to develop their skills and creativity to pursue common goals.

The Action Plan (NDC Document) is the essential study material, establishing a basis for pinpointing issues and formulating solutions. The Action Plan (NDC Document) poses challenges due to its limited accessibility to the public, leading to a general unfamiliarity with the Government's various initiatives to tackle climate change. On the other hand, it functions as a remedy when the document is publicly available and readily accessible, encouraging extensive public involvement in the development and execution of the Action Plan (NDC Document).

Prior research supporting the present study encompasses the publication "*Information Disclosure in Global Energy Governance*" by Ann Florini and Saleena Saleem [17], released in 2011. The research focused on assessing the effectiveness of information disclosure in the context of energy governance. This study analyzes a policy's effectiveness, precisely the public information disclosure policy, and its correlation with climate change adaptation initiatives. This study examines Indonesia and South Korea, in contrast to previous research conducted in Singapore. The previous study, "*Climate Change Disinformation and How to Combat It*," was written by Stephan Lewandowsky in 2021 [24]. The research focuses on the field of communication science. The study highlights the importance of clear communication with the public about climate change to reduce the dissemination of misinformation on the subject.

This study sets itself apart from earlier research by concentrating solely on legal studies, employing an integrative approach that highlights the importance of interdisciplinary legal research. The results of previous research provide a basis for the present study. This study emphasizes a distinctive

element that has not been extensively explored by researchers, providing a novel viewpoint on the topic.

## 2. FULFILMENT OF THE RIGHT TO PUBLIC INFORMATION AS PART OF EFFORTS TO FULFIL HUMAN RIGHTS

The concept of the emergence of the rule of law arises from the fundamental human necessity within a nation for structure to attain shared objectives. The successful realization of this goal hinges on establishing transparent and equitable arrangements within the state system. The rule of law can be understood as a governance framework grounded in equitable laws, as outlined in a constitution. This system mandates that all individuals, including both the governing and the governed, are equally bound by the same law, without any exceptions [25].

The rule of law originated with Plato, who introduced the concept of *nomoi*, highlighting that an adequate state should fundamentally rely on the rule of law. Aristotle further elaborated on Plato's concept, asserting that an ideal state should be characterized by governance through a constitution and adherence to the rule of law. The notion of the rule of law, despite its earlier decline, resurfaced in the 19th century, influenced by the intellectual contributions of Continental European jurists who articulated the concept of *rechtsstaat* [25].

Friedrich Julius Stahl is a key figure in the development of the *rechtsstaat* concept, positing that the rule of law comprises four fundamental elements. The rule of law must initially acknowledge and safeguard human rights (*grondrechten*). Secondly, to guarantee these rights, the governmental framework must implement the principle of separation of powers as outlined in the theory of *Trias Politica* (*scheiding van machten*). Third, the government must consistently adhere to legal principles or lawful governance in executing its responsibilities. Fourth, it is essential to establish a state administrative court (*administratief rechtspraak*) to serve as a control mechanism for government policies [26, 27]. The four elements serve as the fundamental components for establishing a just and democratic rule of law, with the rule of law acting as the primary foundation for governance.

According to Article 1, paragraph (3) of the 1945 Constitution of the Republic of Indonesia, Indonesia is defined as a state of law [28]. This indicates that all governmental functions are regulated by legal frameworks rather than by mere authority. The law serves as the fundamental basis for governance and social interactions, ensuring that policies, actions, and decisions align with principles of justice while preventing and addressing violations of legal standards. The essence of the rule of law lies in its commitment to ensuring and safeguarding human rights. The safeguarding of human rights constitutes an essential element of the rule of law; without this safeguarding, the rule of law would effectively lose its significance [29].

The principle of the rule of law is intricately connected to safeguarding human rights. The proper guarantee and protection of these rights will foster an environment that supports the functioning of society, nation, and state, thereby facilitating the achievement of the state's objectives. Indonesia has consistently shown its dedication to maintaining the rule of law since its founding, as evidenced by the Preamble, provisions, and fundamental principles outlined in the 1945

Constitution. The Constitution acknowledges and safeguards human rights, affirming that Indonesia operates as a state governed by the rule of law. The acknowledgment of the concept of the rule of law logically follows this commitment [30].

The principle of the rule of law is intrinsically linked to the concept of human rights protection [31]. The absence of human rights protection undermines the meaning and legitimacy of the rule of law. On the other hand, safeguarding human rights without the rule of law may result in a form of tyranny, potentially resulting in the infringement of these rights, deliberately or inadvertently. In a legal framework, safeguarding human rights necessitates that the state acknowledge its duty to ensure that every individual possesses fundamental rights guaranteed and upheld by law. The presence of robust and efficient legislation is crucial in safeguarding human rights, thereby facilitating the practical application of the rule of law within the state's functioning [32].

The evolution of human rights illustrates that the notion emerged as a response to absolute or authoritarian power, which resulted in arbitrariness. This condition prompts individuals facing oppression of their human rights to advocate for their existence as dignified beings. The development of human rights can be traced back to John Locke's formulation of natural rights, which are intrinsic to every individual, specifically the rights to life, freedom, and property [33-35]. The progression of human rights in the Western world can be delineated through three significant events: the Magna Carta, the American Revolution, and the French Revolution [36].

This concept closely associates information disclosure, or the right to information, with the fulfillment of human rights. The state's provision of the right to information fosters transparency and enhances public engagement in governance. In the absence of assured information disclosure, the value of public participation is considerably diminished. The principle of openness enhances public services, boosts transparency, and fortifies accountability, which is essential for achieving genuine democracy and safeguarding human rights.

Article 19 of the Universal Declaration of Human Rights asserts that everyone is entitled to the freedom of opinion and expression [37]. This right encompasses maintaining personal opinions without external interference and pursuing, obtaining, and sharing information across various media channels without governmental limitations. The recognition of the right to freedom of information has been established as a fundamental aspect of human rights since the inception of the first generation. The United Nations, via Resolution 59 (1) of 1946, established that freedom of information is a foundational right that underpins all other freedoms the international organization advocates [38, 39]. A UN report highlighted the significance of freedom of information as a crucial right, asserting that without access to information, the effectiveness of individual freedoms is compromised. A robust democracy necessitates transparency in information sharing; therefore, any efforts to limit access to information warrant careful consideration [40, 41].

The principle is evident in Article 28F of the 1945 Constitution of the Republic of Indonesia, which asserts that every individual possesses the right to communicate and access information for personal and social development. This right encompasses pursuing, acquiring, holding, and retaining information via multiple accessible avenues. Since 2008,

Indonesia has initiated a significant transformation in information disclosure by implementing Law No. 14 of 2008 on Public Information Disclosure. This law serves as a crucial mechanism for the public to oversee and influence the policies and actions implemented by public entities, particularly governmental bodies [42]. In a democratic framework, it is essential that state power remains accountable to the public, serving as a fundamental assurance of human rights. Consequently, the acquisition of information, or information disclosure, constitutes a facet of human rights that can be considered derogable rights, subject to limitations under specific conditions in alignment with established legal principles.

The UN has acknowledged the right to information as a fundamental right that embodies the concept of freedom since its establishment. This was incorporated in paragraph (1) of UN Resolution Number 50 in 1946. During that period, the right to freedom of information was viewed as an essential component of natural rights intrinsic to human beings from birth, including the right to life, the right to liberty, and the right to property. This concept was evident in multiple human rights declarations and recognitions during that period.

The Universal Declaration of Human Rights, adopted by the United Nations on December 10, 1948, significantly transformed the landscape of human rights globally, particularly in how these rights are categorized. The Declaration categorizes the right to freedom of information as a human right within the second tier, identifying it as a derogable right. This classification developed alongside the increasing recognition that the state can impose restrictions on the practical application of freedom of information. The European Convention outlines that the right to freedom of information can be restricted under specific circumstances, especially when it conflicts with public interest or national security considerations. Nonetheless, the fundamental principle is that disclosing information is the cornerstone for a robust democracy and the practical safeguarding of human rights.

### **3. INDONESIA'S POLITICAL POLICY ON CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT**

The relationship between sustainable development policy and legal development necessitates creating progressive legal instruments to fulfill development objectives. This approach also emphasizes the importance of environmental protection and management to secure sustainability for future generations. Examining this law reveals significant insights into the evolution of environmental legislation in Indonesia, particularly the specific regulations governing environmental policy and governance. Mahfud MD [43] explains that legal politics, often called "legal policy," represents the framework of formal law that will be implemented through new legislation or the replacement of existing laws to fulfill state objectives. Additionally, Maulidyna [44] emphasized the significance of examining legal politics to guarantee that national legal development aligns with constitutional intentions, particularly regarding the execution of development and the safeguarding of the environment, grounded in global environmental law concepts and principles.

The evolution and examination of environmental law politics since 1980 have increasingly centered on the concept of sustainable development. This term was initially presented

in the World Conservation Strategy by the International Union for the Conservation of Nature and was subsequently popularized by Lester R. Brown in his work, *Building a Sustainable Society*, as well as in the Brundtland Report, *Our Common Future*, published in 1987 [45]. The political policy framework concerning environment and development in Indonesia is explicitly defined in Article 33, paragraph (4) of the 1945 Constitution of the Republic of Indonesia. According to Article 33 paragraph (4) of the 1945 Constitution, the notion of sustainable development is referred to as "environmentally sustainable development." Indonesia has initiated a significant shift in its development policy, strongly emphasizing environmental considerations. This approach indicates that development is now viewed not solely through the lens of economic and human interests but also incorporates environmental factors into the decision-making process [44].

The introduction of the concept and political framework surrounding environmentally sustainable development originated with Law No. 23 of 1997 on Environmental Management, which was subsequently reinforced in the Constitution, thereby enhancing the state's commitment. Consequently, when developing legal instruments related to this matter, it is essential to consider the aspects of environmental interests that are fundamental to the concept of environmentally sustainable development in Indonesia. The advancement of legal instruments concerning the environment is evident in the enactment of Law No. 32 of 2009 on Environmental Protection and Management. This law serves as a responsive legal framework, effectively integrating state administrative, civil, and criminal legal approaches to provide comprehensive environmental legal protection. In its development, the government's legal policy was strategically aimed at expediting the national economic development process. A range of policy options has been established to catalyze economic development, particularly by streamlining bureaucratic processes to enhance investment opportunities in Indonesia [46, 47].

The implementation of the Job Creation Law has been analyzed in numerous studies and critiques, which suggest that it has overlooked the fundamental principle of environmental protection. The significant decline in the regulation and implementation of ecologically sustainable development principles within various development policies introduced by the Joko Widodo administration is evident [44]. Indonesia's climate change policies reflect the nation's dedication to contributing to international initiatives to tackle the climate crisis. Indonesia has implemented significant policies to tackle climate change, notably the Paris Agreement and the NDC Commitment. In 2016, Indonesia ratified the Paris Agreement, positioning itself among the countries committed to this global initiative. Indonesia's NDC outlines a target to decrease greenhouse gas emissions by 29% on its own, with the potential to reach a 41% reduction through international support by 2030. Furthermore, Indonesia has established a goal to reach net zero emissions by 2060 or earlier. This entails a shift towards clean energy, ceasing the development of new coal-fired power plants, and enhancing renewable energy capacity.

The National Master Plan and Strategy encompasses various policies, including the National Strategic Plan, which emphasizes environmental management, forest conservation, and emission reduction within the energy sector. Additionally, the National General Energy Plan aims for new and renewable energy to contribute 23% by 2025. Furthermore, Indonesia has

implemented the Forest and Other Land Use Net Sink 2030 policy, which is designed to ensure that the forestry sector absorbs more carbon than it emits. Presidential Regulation No. 98 of 2021 has been enacted, outlining the procedures for implementing carbon economic value to facilitate emission reductions. This includes frameworks for carbon trading, carbon taxes, and offset mechanisms.

The government has initiated reforestation and ecosystem protection efforts through programs like the National Movement for Forest and Land Rehabilitation, which focuses on replanting deforested regions. Mangrove conservation initiatives are a significant focus, with Indonesia setting ambitious goals for rehabilitating mangrove forests to safeguard coastal regions and enhance carbon sequestration. Indonesia engages in international collaboration by receiving support from various organizations, including United Nations Development Programme (UNDP) and the World Bank, for its mitigation and adaptation programs. Furthermore, collaboration in climate change financing is executed via the Reducing Emissions from Deforestation and Forest Degradation (REDD+) mechanism.

These policies indicate that Indonesia is undertaking significant measures to address the effects of climate change. Nonetheless, challenges persist in the implementation process, including issues related to funding capacity, law enforcement, and the need for effective inter-agency collaboration, which continue to hinder the attainment of sustainable development goals that align with environmental protection.

Legal effectiveness serves as a strategy for problem formulation, evaluating how closely legal reality aligns with legal ideals. This situation illustrates a distinction between the theoretical framework of law and its practical application, highlighting the interplay between documented legal principles and their execution in actual circumstances. Soerjono Soekanto posits that the rule of law succeeds when it effectively governs community behavior in alignment with established objectives. In his theory "Effectiveness of Law," Anthony Allott [48] underscores that the law seeks to influence and govern individual behavior by establishing robust legal institutions and processes. Measuring the effectiveness of law presents significant challenges. A significant challenge lies in the ambiguity of legal objectives, which frequently lack explicit articulation by lawmakers. Laws evolve and are shaped by various social, political, and economic influences in their application. Furthermore, in certain societies, unwritten customary law frequently holds significant influence, complicating the assessment of its effectiveness in written law.

Four primary factors significantly impact the effectiveness of law within society. The legal rules must apply in a juridical, sociological, and philosophical context to ensure proper functioning. Legal rules applicable solely within a juridical framework may become obsolete, whereas those that possess only sociological validity may risk transforming into coercive regulations. Secondly, law enforcement officials play a crucial role in implementing legal statutes. Professional law enforcers with integrity can enhance the effectiveness of legal systems, whereas inadequate enforcement may obstruct the law's intended function.

Additionally, supporting facilities play a significant role in enhancing legal effectiveness, encompassing aspects such as legal infrastructure, technology, and sufficient resources. The legal culture within a society significantly impacts the effectiveness of its legal system. The extent to which the

public adheres to the law serves as a critical measure in assessing the practical effectiveness of a rule in daily life. Taking these four factors into account allows for a more refined approach to enhancing legal effectiveness in order to meet the anticipated objectives.

#### **4. DYNAMICS OF GLOBAL ACTION PLANS (NDC DOCUMENTS) AND EXISTING CONDITIONS OF ACTION PLANS (NDC DOCUMENTS) OF INDONESIA AND SOUTH KOREA AS EFFORTS TO DEAL WITH GLOBAL CLIMATE CHANGE**

A NDC represents a commitment by a State Party that has ratified the Paris Agreement, aimed at contributing to the reduction of greenhouse gas (GHG) emissions within the framework of the Paris Agreement. State Parties may also incorporate their initiatives to enhance resilience to climate change's effects within their NDCs. Conversations regarding the formulation of the NDCs commenced prior to the ratification of the Paris Agreement by all States Parties involved in the Convention on Climate Change, as established under the United Nations Framework Convention on Climate Change (UNFCCC) [49].

Decisions ratified by States Parties suggest that the discourse surrounding commitments to reduce greenhouse gas emissions, aimed at preventing a rise in global average temperatures, is intrinsically linked to the measures implemented prior to 2021, often referred to as "before 2020." exist. The pertinent actions aimed at decreasing greenhouse gas emissions prior to 2020 extend beyond the specific measures outlined in Decision 1/CP.13 or the Bali Action Plan established in 2007 under the Convention. Measures aimed at reducing greenhouse gas emissions, as outlined in the Kyoto Protocol, especially for the second commitment period, hold significant importance [50].

Multiple initiatives aimed at decreasing GHG emissions were undertaken by State Parties prior to 2021, including the Bali Action Plan, which was established in 2007 during the COP-13 Meeting in Bali, Indonesia. The Bali Action Plan stems from an agreement reached at the United Nations Conference on Climate Change (UNCCC), focusing on mitigating the effects of climate change. The 2011 meeting of States Parties in Durban sought to encourage developed countries to enhance their greenhouse gas emission reduction targets in alignment with their economic sectors comprehensively. This action is necessary for developed countries to achieve a reduction in anthropogenic emissions of gases not covered by the Montreal Protocol, as outlined in the fourth IPCC Report. During the COP18 Meeting in Doha in 2012, Parties emphasized the need for enhanced efforts by developed nations concerning GHG emission reductions within the Convention and the Kyoto Protocol framework. At the COP19 Meeting in Warsaw in 2013, Parties reached a consensus to begin domestic preparations, particularly in assessing the role of GHG emission reductions in the forthcoming Protocol's implementation. During that period, the new Protocol under preparation was anticipated to be legally binding under the Convention, applicable to all Parties, as agreed upon at COP21 in December 2015. It was expected to become legally enforceable upon its implementation in 2021. The contributions to GHG emission reduction are designed as NDC. The COP20 meeting in Lima in 2014 encouraged all Parties to the UNFCCC to incorporate

adaptation components into their INDCs. During COP20 in Lima, the Parties agreed on the specific information to be incorporated into their Intended Nationally Determined Contributions (INDCs). The information aims to enhance clarity, promote transparency, and elucidate the State Party's contribution. It also references the COP 21 Meeting in Paris in 2015, where a consensus was achieved among all UNFCCC Parties, culminating in the Paris Agreement and its associated decision, Decision 1/CP.21.

Decision 1/CP.21 outlines the current status of INDCs following the implementation of the Paris Agreement. According to Paragraph 22 of Decision 1/CP.21, a Party that has submitted an INDC before ratification may have that INDC considered in the NDC unless the Party opts for a different approach. In the absence of such action, the Party is anticipated to present it concurrently with the submission of the instrument of ratification for the Paris Agreement. The subsequent section concerning the transformation of INDCs into NDCs is found in paragraphs 23 and 24: It requests that Parties whose INDC, as outlined in decision 1/CP.20, includes a time frame extending to 2025, communicate a new NDC by 2020 and continue to do so every five years thereafter, by Article 4, paragraph 9, of the Agreement. Additionally, it is requested that those Parties whose INDCs, in accordance with decision 1/CP.20, include a time frame extending to 2030, communicate or update these contributions by 2020 and continue to do so every five years thereafter, as stipulated in Article 4, paragraph 9, of the Agreement.

The State Parties will update the provisions of the NDC every five years. State Parties are required to submit specific information through the NDC, which encompasses: Quantitative data regarding reference points, including the base year; time frame or implementation period; Scope and coverage; Planning processes; Assumptions; Methodological approaches for estimating and accounting for anthropogenic greenhouse gas emissions and removals; An explanation of how the State Party perceives its proposed NDC as fair and ambitious in relation to national conditions; and An outline of how the NDC aligns with the objectives of the Convention as articulated in Article 2 of the Convention on Climate Change [51].

Upon closer examination, the essential information presented aligns closely with the commitments made by the State Party during the preparation of the INDC. This includes quantitative details regarding the reference point (such as the base year utilized), the time frame and implementation period, the scope and boundaries, the planning process, the assumptions applied; the methodological framework employed for determining and calculating anthropogenic GHG emissions, and removals; the State Party's evaluation of the fairness and ambition of the communicated INDC about national circumstances; and how the State Party's INDC contributes to the objectives outlined in Article 2 of the Convention on Climate Change.

Article 3 of the Paris Agreement emphasizes the obligation of States Parties to ensure that their NDCs effectively address the challenges posed by climate change on Earth. Consequently, the involvement and initiatives of member states need to be substantial in fulfilling the goals outlined in Article 2 of the Paris Agreement. The Paris Agreement aims to limit the rise in global average temperature to well below 2°C, with a target of keeping it under 1.5°C relative to pre-industrial levels. Additionally, the third paragraph of Article 4 of the Paris Agreement stipulates that the submitted NDCs

must reflect the highest possible ambition while considering each country's specific circumstances. NDCs must be submitted every five years as stipulated in Decision 1/CP.21 and other resolutions established by the CMA (Conference of the Parties serving as the meeting of the Parties to the Paris Agreement), utilizing the information derived from the global stocktake outlined in Article 14 of the Paris Agreement [52].

**Indonesia Confronting Global Climate Change.** Indonesia has made multiple updates to its NDC, transitioning from the INDC to the Enhanced Nationally Determined Contributions (ENDC), which were submitted to the UNFCCC in September 2022. Indonesia incorporated an adaptation component from the outset of its INDC format alongside its GHG emission reduction or mitigation component. Indonesia demonstrates a strong commitment to addressing the impacts of climate change. The implementation process consists of multiple stages, one of which involves ratifying the Paris Agreement as outlined in Law No. 16 of 2016, which pertains to the ratification of the Paris Agreement under the United Nations Framework Convention on Climate Change.

The Paris Agreement obligates State Parties to maintain global warming below 2°C (two degrees centigrade). Many companies and organizations in Indonesia recognize the critical need to mitigate greenhouse gas (GHG) emissions. Efforts to reduce GHG emissions are implemented through various mechanisms, including the utilization of emission trading schemes and GHG emission offsets. Both methods can be executed via carbon exchanges or through direct trading mechanisms. Emission trading is a transactional mechanism involving business entities exceeding the established greenhouse gas emission limits. GHG emission offsets represent reductions in greenhouse gas emissions achieved by businesses or activities intended to counterbalance emissions produced in other areas.

The GHG reduction mechanism can be implemented by examining various factors, including developing a strategic document to identify, analyze, and plan mitigation actions to address potential environmental risks the company encounters. The document in question is called the Draft Mitigation Action Document. It is incorporated within the Minister of Environment and Forestry Regulation No. 21 of 2022, which outlines the Procedures for Implementing Carbon Economic Value (Permen LHK No. 21 of 2022).

Indonesia's NDC targets and commitments encompass emission reduction initiatives. Indonesia aims to decrease greenhouse gas emissions by 29% on its own and by 41% with international assistance by 2030, concentrating on priority sectors. Indonesia's ongoing development and investment initiatives are concentrated on forestry and land use (FOLU), energy, waste management, agriculture, and industrial process and product use (IPPU), alongside the formulation of mitigation strategies. FOLU Net Sink 2030 outlines Indonesia's objective for the forestry sector to achieve net carbon absorption. Additionally, the development of new and renewable energy aims for a contribution of 23% by 2025. Furthermore, ecosystem restoration efforts include the rehabilitation of 600 thousand hectares of peatlands and 2 million hectares of mangrove forests [53].

The Government of Indonesia has implemented several plans concerning climate adaptation, which encompass enhancing community resilience against the impacts of climate change, managing water resources to mitigate floods and droughts, and developing adaptive agriculture programs to ensure food security. Indonesia can explore a cooperation

scheme stemming from the G20 outcomes in 2022. In this context, Indonesia and the International Partners Group (IPG) countries reached an agreement focused on collaboration for a just energy transition, known as the Just Energy Transition Partnership (JETP). Various elements of the JETP have the potential to assist Indonesia in decreasing its GHG emissions within the energy sector, particularly power plants that continue to rely on fossil fuels. The Joint Statement reached between Indonesia and IPG countries outlines that, within the context of this JETP, Indonesia must formulate a detailed investment plan. This plan should encompass JETP investments and policy strategies, specifically focusing on the electricity sector, which includes both on-grid and off-grid systems and captive power systems for industrial use.

Indonesia is in the process of finalizing its second NDC. The updated commitments in the second NDC will focus on meeting unconditional and conditional GHG emission reduction targets from 2031 to 2035, consistent with the 1.5°C scenario. Indonesia will update the transparency framework in the second NDC document, encompassing the National Registry System and the measurement, reporting, and verification (MRV) processes [54]. This action is taken to guarantee the attainment of NDC targets and to facilitate the implementation of the Value of Carbon Economy, thereby supporting a verified NDC and contributing to global initiatives aimed at limiting temperature increase to 1.5°C. The energy transition is a significant issue highlighted in this NDC, particularly regarding the proposed early retirement of coal-based power plants. One of the largest emitters globally, Indonesia operates numerous coal-based power plants that significantly contribute to carbon emissions.

In its second NDC, the Indonesian government outlined strategies to expedite the clean energy transition, including the early retirement of outdated technology-based power plants that exhibit lower efficiency. This aligns with international agreements like the Just Energy Transition Partnership (JETP), which facilitates Indonesia's access to international funding to expedite the early retirement of power plants. It involves the development of renewable energy through increased investments in sources such as solar, wind, and geothermal, targeting a renewable energy mix of up to 23% by 2025. It also includes establishing an energy transition scheme utilizing carbon financing instruments, including carbon tax and trading, while integrating renewable energy power plants into the national electricity grid. Furthermore, the Government of Indonesia is dedicated to alleviating the economic impact on coal sector workers by offering training and generating new employment opportunities in the clean energy sector.

South Korea's NDC represents the country's commitment under the Paris Agreement to lower greenhouse gas emissions and contribute to global initiatives aimed at restricting the increase in global temperature to 1.5°C. South Korea, recognized as one of Asia's largest developed economies, has revised its NDC to set a more ambitious goal of reaching net-zero emissions by 2050. South Korea's NDC prominently features a commitment to reducing greenhouse gas emissions, with the latest update in 2021 specifying a target of a 40% reduction from 2018 levels by the year 2030. This target represents an escalation from the prior commitment, which aimed for a reduction of 24.4%. The South Korean government identifies energy as a critical sector, leading to plans to reduce reliance on coal as the primary energy source. This strategy involves enhancing the integration of renewable energy sources, including solar and wind power. South Korea

is intensifying its efforts to implement electric vehicles (EVs) and hydrogen vehicles within the transport sector [55].

Additionally, in the industrial sector, South Korea promotes technologies to enhance energy efficiency, reduce emissions within manufacturing, and establish improved energy efficiency standards for new constructions and retrofitting existing buildings [56]. The South Korean Government is enhancing reforestation efforts and promoting low-carbon agricultural practices in agriculture and forestry. Greenhouse gas emissions reduction is achieved through a strategic focus on technology and innovation, specifically through Carbon Capture, Utilisation, and Storage (CCUS), which involves substantial investments in the development of systems for capturing and storing carbon. South Korea is advancing the development of a hydrogen economy, positioning hydrogen as the clean energy solution for the future. The South Korean government allocates substantial funding for the green transition via the Green New Deal, an integral component of the Korean New Deal initiated in 2020 [57].

Furthermore, it implements a domestic carbon trading system (ETS) to manage emissions within the industrial and energy sectors. The action plan outlines several significant challenges for South Korea. Firstly, there is a notable reliance on coal, as the country continues to depend heavily on coal-based power plants despite its energy transition initiatives. Secondly, geographical limitations hinder the large-scale development of renewable energy sources, particularly wind and solar. Lastly, significant industries, including steel and petrochemicals, encounter obstacles in emission reduction efforts while striving to maintain their competitive edge. As a G20 member, South Korea holds a significant position in spearheading global emission reduction initiatives, particularly within the Asian context. Given its ambitious NDC targets and the implementation of innovative green policies, South Korea is poised to serve as a benchmark for a thriving clean energy transition globally.

## **5. CORRELATION BETWEEN PUBLIC INFORMATION DISCLOSURE AND OPTIMISATION OF ACTION PLAN OBJECTIVES (NDC DOCUMENTS) OF INDONESIA AND SOUTH KOREA AGAINST GLOBAL CLIMATE CHANGE**

Information consists of data or facts that have undergone processing, resulting in meaning and value for the recipient. Information functions to facilitate decision-making, enhance understanding, or communicate specific messages to individuals or groups. In the broader framework, information is crucial across multiple domains, including education, business, technology, government, and communication. Article 1 point 1 of Law Number 14 of 2008 on Public Information Disclosure defines information as encompassing statements, ideas, and signs that convey values, meanings, and messages. This includes data, facts, and explanations that can be perceived through sight, sound, and reading, and are presented in various formats and packages, reflecting advancements in information and communication technology, whether electronically or non-electronically [58, 59].

Article 2 number 1 of Korea Act No. 5242 of 1996 Concerning Disclosure of Information by Public Agencies defines 'information' as the items prepared or acquired and overseen by public agencies during the execution of their responsibilities, which are documented in various formats,

including documents, drawings, pictures, and films. Tapes, slides, and media that undergo processing by computers, among other devices. Information can be classified into three primary categories based on its characteristics. The first is public information, which is accessible to all individuals without any restrictions. Instances include government annual reports and national statistics; private information refers to confidential data that should be accessed exclusively by designated individuals. Instances include health data and identity numbers. Confidential information refers to legally protected data that must remain undisclosed to the public. Instances include classified information and proprietary corporate information [60].

In principle, all public information is accessible, except in cases where disclosure is specifically exempted. Exceptions to the disclosure of public information are grounded in legal stipulations that dictate when public information may not be disclosed or classified as exempt. This determination is made through a consequence and public interest assessment. Suryanto defines public information as data consisting of historical records that are documented and stored without the immediate intention of retrieval for decision-making. It also includes contextual and valuable data, which is then communicated to recipients for decision-making [61].

According to Article 1 point 2 of Law Number 14 of 2008 regarding Public Information Disclosure, public information encompasses data generated, stored, managed, transmitted, and received by a public entity. This information pertains to the administration and operation of the state and other public entities in alignment with this Law and additional information relevant to the public interest. Public bodies must announce and provide three distinct types of information: first, information that must be disseminated periodically; second, information that needs to be announced immediately; and third, information that must be accessible at all times. The principle established by the Public Information Disclosure Act, as articulated in Article 2 paragraph (1), asserts that all public information is available and accessible to every user of such information. Article 2 paragraph (2), in conjunction with Article 17 of the Public Information Disclosure Act, delineates the categories of public information that are exempt from public access and are subject to restrictions [59].

The stipulations outlined in Article 2 of the Public Information Disclosure Act align with the principle of maximum disclosure, mandating that all public information be made accessible to the public, with restrictions applying only in very specific circumstances. This provision aligns with Article 3 (Principle of Information Disclosure) of Korea Act No. 5242 of 1996, which stipulates that “The public agency shall make available to the public the information possessed and managed by the same public agency pursuant to the provisions of this Act.” Additionally, Article 4 of Korea Act Number 5242 of 1996 Regarding the Disclosure of Information by Public Agencies specifies that (1) This Act applies to the disclosure of information unless otherwise stipulated by other Acts. (2) About its formal responsibilities. The local government has the potential to develop a Municipal Ordinance that addresses the disclosure of information by the relevant Acts and subordinate statutes. (3) This Act does not extend to information generated or gathered to analyze data pertinent to national security by the institutions responsible for the information and confidential services associated with national security and security issues [62, 63].

The Public Information Disclosure Act stipulates that every

public agency is required to regularly publish information—at least every six months—including details about the institution, its activities, performance, financial reports, and other data mandated by law (Article 9). Additionally, Article 10 obliges public bodies to promptly disclose information that may affect the welfare of many people or public order, ensuring that it is accessible and conveyed in clear, understandable language. Article 11 further requires public bodies to make available, at any time, a comprehensive list of all public information under their control (except exempted information), including decisions and their underlying considerations, all current policies and supporting documents, project work plans and annual budgets, agreements with third parties, public statements by officials, procedures related to public services, and reports on access to public information. However, Article 17 outlines specific exemptions, such as information that could hinder law enforcement, compromise intellectual property rights or fair business competition, endanger national defense or security, expose natural resources, harm economic resilience or foreign relations, reveal private legal documents or personal secrets, or involve confidential internal communication—unless otherwise decided by the Information Commission or a court of law [64, 65].

Based on the provisions of Article 1 point 2 of the Public Information Disclosure Act and Article 3 of Korea Act No. 5242 of 1996, it is clear that the NDC is included in the category of public information. This is because the government manages the NDC document information or state public institutions in which it is an effort to carry out government functions, mainly because this document relates to the government's commitment and policies in dealing with global climate change. Based on this, the NDC document is closely related to the public interest. Referring to Articles 9, 10, 11, and 17 of the Public Information Disclosure Act, the NDC document is included in public information that must be available at all times. Article 9 of Law No. 14 of 2008 on Public Information Disclosure states that information relating to policies, programs, and activities that impact the environment, as well as reports on their implementation, must be available and accessible to the public.

Several reasons justify the classification of NDC documents as Information that Must Be Available at All Times. Firstly, these documents pertain to environmental matters. Under the Public Information Disclosure Act, information concerning the environment, including climate change mitigation, must be accessible to the public. Secondly, the transparency of NDC documents is crucial for public oversight, enabling citizens to monitor governmental commitments to climate change and to verify the effective implementation of related programs. Lastly, the international significance of the NDC documents is underscored by their role within the Paris Agreement, positioning them as a domestic obligation and an official report to the global community.

The NDC is classified as public information, as it is not designated as confidential by law and does not pose a risk to public interest. Instead, the NDC document outlines policy action plans to reduce carbon gas emissions, which are inherently tied to the public interest. In both Indonesia and South Korea, the NDC document is mandated to be publicly accessible, reflecting the countries' commitments under the Paris Agreement. This document encapsulates the governments' pledges to reduce greenhouse gas emissions and promote sustainable development, directly influencing societal, economic, and environmental outcomes.

Public policy and environmental documents must be available based on Law No. 14 of 2008 on Public Information Disclosure. As part of the Paris Agreement, countries must transparently submit NDC documents to the domestic public and the international community. Furthermore, the publication of NDC documents allows the public to monitor the implementation of government commitments and ensure that climate policies are implemented consistently. In detail, due to the status of NDC documents as public information, there is an obligation to publish and make available NDC documents. The government is obliged to make the NDC document available to the public through official platforms such as the websites of relevant ministries (e.g. Ministry of Environment and Forestry). The information must be provided in a clear, accessible manner and include relevant data (e.g., emission reduction targets, priority sectors, and supporting strategies) and the right of the public to access and understand the NDC document. The public can request information related to the NDC document if it is not publicly available. This supports public awareness of climate change issues and encourages active participation in mitigation and adaptation programs and oversight by the public and independent institutions. The status of NDC documents as public information allows the public, NGOs, and academics to monitor whether NDC targets are being achieved. This oversight helps prevent data manipulation and effectively implements mitigation and adaptation measures. Potential for criticism and prosecution. If NDC implementation does not meet targets or is not transparent, governments may face criticism from the public and the international community. Incomplete or inaccurate information in NDC documents can reduce the government's credibility in the eyes of the public and increase international accountability. The publication of NDC documents strengthens the country's diplomatic position in international forums. However, failure to fulfill commitments can negatively impact the country's reputation.

Challenges associated with the disclosure of NDC documents encompass the complexity of technical data, which may pose comprehension difficulties for the general public. Implementing these documents typically involves multiple stakeholders, thereby complicating the monitoring process. In light of this, several efforts are warranted: Firstly, conducting socialization initiatives where the Government provides a simplified summary of the NDC document to enhance public understanding; Secondly, developing an open platform by establishing an online dashboard that tracks the progress of the NDC document targets in real-time; Lastly, fostering collaboration by engaging the community, private sector, academics, and media to support the attainment of NDC document targets. This collaboration can be facilitated by developing the Penta helix concept to realize the objectives outlined in the NDC document.

Information disclosure is crucial for optimizing the achievement of the NDC document's goals, particularly regarding adaptation to global climate change. Transparency in information delivery facilitates understanding, support, and active participation from the public, private sector, and other stakeholders in the NDC's implementation. Adequate information disclosure enables the government to develop climate adaptation policies that are inclusive, data-driven, and capable of mitigating the risks associated with climate change

impacts on communities and ecosystems. Furthermore, it creates opportunities for access and guarantees that NDC documents, strategies, and target achievements are presented clearly and openly to the public. This transparency allows for monitoring of NDC implementation progress and holds the government accountable for the established targets.

Transparency in implementing NDC documents mitigates the potential for data manipulation or delays, as public scrutiny allows for identifying irregularities. The disclosure of information enhances public engagement in monitoring the NDC's execution. By making the contents of the NDC document accessible, including emission reduction targets and climate adaptation strategies, the public is empowered to support relevant policies, such as adopting low-carbon lifestyles, utilizing renewable energy, and improving waste management practices. This collective involvement fosters a synergistic effect that propels the achievement of NDC objectives. Furthermore, information disclosure bolsters collaboration across multiple sectors by clarifying the roles and anticipated contributions of the private sector, local governments, NGOs, and academic institutions.

Open information enables various sectors to comprehend their potential contributions to the NDC through investments in green technology, research initiatives, or community service programs. Collaborative efforts across sectors facilitate the distribution of responsibilities associated with implementing the NDC document, thereby enhancing the likelihood of its success. Additionally, the disclosure of public information enhances the effectiveness of data-driven monitoring and evaluation processes. Access to relevant data and reports concerning the NDC's implementation—such as greenhouse gas emissions, energy consumption, and the effectiveness of adaptation programs—becomes available. With transparent information, independent monitoring by the public, scholars, and NGOs is significantly improved. Evaluations grounded in data enable the government to pinpoint deficiencies and formulate timely strategies for improvement.

Information disclosure will ensure that NDC documents and implementation reports are accessible to the international community and the domestic public. This transparency enhances public trust in governmental efforts to address climate change. On an international level, transparency bolsters a country's credibility in global forums, such as the UNFCCC. It improves the likelihood of securing financial and technical support from donors or international organizations. Furthermore, information disclosure enables the public and private sectors to access relevant information regarding technology and best practices for implementing NDC documents. The sharing of information on low-carbon technologies, energy efficiency, and innovative solutions can expedite the implementation of the NDC document.

Collaborative innovations can enhance the government's efficiency in meeting its objectives. Accessible public information, particularly regarding NDC documents, clarifies the impacts of climate change and highlights the significance of individual contributions. Public education is crucial in fostering awareness about emission reduction and climate adaptation. This heightened awareness promotes behaviors that align with attaining NDC goals, including energy conservation, sustainable transportation options, and advocacy for green policies.

## **6. RECONSTRUCTING INDONESIA'S ACTION PLAN (NDC DOCUMENT) AS A PUBLIC INFORMATION AND ADAPTIVE EFFORT TO GLOBAL CLIMATE CHANGE**

According to the analysis presented in the preceding subchapter, both Indonesia and South Korea regard the NDC document as a public record that should always be disclosed. Nonetheless, the issue in Indonesia concerning the suboptimal attainment of the targets outlined in the NDC document arises from the inadequate and inefficient communication of the information within the NDC document to external stakeholders, including the community and the private sector. This necessitates a reconceptualization of Indonesia's Action Plan (NDC document) as a form of public information and a response to the evolving challenges of global climate change. The Action Plan or NDC document should embody a thorough, transparent, and inclusive approach grounded in data, ensuring accessibility for all segments of society. Given Indonesia's significant vulnerability to climate change impacts, this concept must prioritize measures that facilitate active participation from all societal elements, including government, private sector, civil society organizations, and local communities, in tackling climate change challenges.

The essential components of that idealized conception are outlined as follows: The transparency and availability of information. The NDC ought to be disseminated to ensure accessibility for all stakeholders, encompassing governments, communities, the private sector, and the international community. All data, action plans, and targets outlined in the NDC must be transparently available, comprehensible, and accessible to various stakeholders. The approach involves utilizing an open digital platform to distribute information regarding the NDC document, ensuring accessibility for all individuals, including via government websites and specialized applications. Providing documents in diverse formats, including text, infographics, and videos, facilitates comprehension for individuals with varying literacy levels and internet accessibility. Translating NDC documents into multiple local languages to expand audience reach. This concept offers several advantages: it facilitates information disclosure, allows the public to better understand government actions to mitigate climate change impacts, and creates avenues for community engagement and collaboration in assessing and developing climate change policies.

Clarity in the processes of planning and execution. The preparation of the NDC document must incorporate transparent public consultations that engage diverse stakeholders, such as civil society, academia, the private sector, media representatives, and vulnerable populations. The process must be transparent, ensuring that all perspectives are acknowledged and incorporated into planning adaptation and mitigation policies. A viable strategy involves conducting public consultations and facilitating open discussions prior to the finalization of the NDC document. A report will be published detailing the consultation results, including the inputs received and how these inputs are converted into actionable policies for implementation. An online forum will facilitate discussions regarding NDC plans and their implementation, engaging the broader community. This approach effectively minimizes potential errors or discrepancies between policies and the community's actual needs. It also enhances active community involvement in policy-making, fostering a sense of ownership regarding

climate change adaptation policies.

Responsibility in the assessment and evaluation process. NDC documents must incorporate precise monitoring and reporting mechanisms related to attaining climate change mitigation and adaptation targets. It is essential to publish progress reports publicly to verify that the actions taken align with the established commitments. Potential strategies encompass the establishment of a transparent and data-centric MRV (Measurement, Reporting, and Verification) system to track progress toward the NDC; the issuance of public annual reports detailing achievements, encountered challenges, and corrective actions taken; and the integration of technology for real-time data access, enabling the public and relevant stakeholders to oversee the execution of adaptation and mitigation programs. This approach will facilitate evaluating and adjusting each step taken to address climate change as circumstances evolve, thereby enhancing government accountability and reinforcing public trust in the enacted policies.

Engagement and involvement of communities are essential. The action plans outlined in the NDC document must consider the varied composition of Indonesian society, particularly the vulnerable groups disproportionately impacted by climate change, including indigenous peoples, fishers, farmers, and those residing in coastal regions. Involving them in the process of drafting and implementing the NDC document enhances the relevance and effectiveness of the policies. Strategic steps that can be implemented encompass participatory policy-making, involving local communities in establishing climate change adaptation and mitigation priorities. Additionally, providing training and education can enhance the capacity of communities to address climate change at the local level. Specialized support for vulnerable groups can further bolster their adaptive capacity. It is also essential that adaptation policies take into account the local social, economic, and cultural context, including aspects like cropping patterns, natural resource management, and alternative livelihood strategies. This approach enhances community preparedness for climate change impacts and fosters active participation in adaptation efforts, leading to more effective adaptation policies grounded in locally relevant knowledge.

Collaboration and partnerships at both national and international levels. Indonesia's NDC should encompass partnerships with other nations, the private sector, and international organizations, which can offer essential technical, financial, and knowledge support for executing climate change action plans. International partnerships can be established to secure the necessary technical assistance and funding for climate change adaptation and mitigation programs. A further initiative involves dialogues among nations to exchange experiences and knowledge about effective local adaptation solutions. This approach aims to foster collaboration between the public and private sectors for the implementation of green technologies and innovative strategies in climate change mitigation and adaptation. These steps will allow Indonesia to secure international climate funds essential for supporting adaptation and mitigation programs. Additionally, this approach will facilitate acquiring advanced technology and expertise from other nations, thereby expediting attaining NDC objectives.

The NDC document is founded on the principles of ongoing education and counseling. All segments of society need to address climate change, necessitating ongoing education about climate change and the significance of adaptation strategies.

The information presented should be pertinent, precise, and valuable for the community. To facilitate this, it is essential to incorporate the content of the NDC document into the national education curriculum. Public campaigns utilizing mass media and local communities aim to disseminate the significance of climate action. This includes the implementation of climate education initiatives in schools, universities, and local communities to enhance awareness regarding the effects of climate change and strategies for adaptation. Additionally, providing educational materials in engaging formats, such as videos, infographics, or interactive games, encourages active participation in climate change adaptation efforts. These initiatives will enhance public understanding of the measures that can be implemented to mitigate climate change risks and foster behavioral changes that promote environmental sustainability and reduce the impacts of climate change.

Incorporating NDC documents into both national and local policy frameworks. An NDC document should be systematically integrated with the National Medium-Term Development Plan and Regional Medium-Term Development Plan for optimal coherence and alignment. This approach will guarantee that climate action is embedded within national and regional development frameworks, fostering alignment between central and regional policies to meet the objectives outlined in the NDC document. It is essential to ensure that NDC targets are synchronized with regional development programs and to establish technical guidelines that will assist local governments in executing adaptation actions in line with NDC documents. The effectiveness of the law, precisely the environmental policy outlined in the NDC document, is influenced by several factors, including the substance of the law or policy, the roles of lawmakers and law enforcers, the existing infrastructure, and community dynamics [66].

For the NDC document to operate effectively, its rules need to be organized in a philosophical, legal, and sociological manner. The development of NDC documents should engage participants beyond the government, which should not be the sole entity responsible for their creation or preparation. Ensuring that civil society, the private sector, and the media are actively involved in preparing NDC documents is essential. Law enforcement encompasses a wide range of responsibilities, as it involves both those who are directly involved in enforcing the law and those who play an indirect role in the process. Law or policy enforcers need to exhibit high integrity when executing or implementing the policies outlined in the NDC document. Facilities significantly contribute to the effectiveness of law operations within society. Resources, infrastructure, and financial support are crucial for achieving the effectiveness of legal application within society [67].

An effective law necessitates well-defined and equitable regulations, robust system support, and sufficient resources for successful implementation. The interplay of resources, infrastructure, and funding significantly influences the effectiveness of law enforcement. Without sufficient resources and infrastructure, it can obstruct the legal process despite well-defined legal regulations. On the other hand, when coupled with insufficient funding, adequate facilities will impede the quality of legal services and the enforcement of regulations. Community factors, particularly those associated with legal culture, play a crucial role in enhancing the effectiveness of law's operation within society. The influence of societal dynamics and the prevailing legal culture is crucial in determining the efficacy of law enforcement and

application. The effectiveness of a legal system and the robustness of law enforcement agencies are critical components in applying the law. However, the community's comprehension, respect for, and adherence to these laws significantly influence the successful enforcement of legal statutes. The legal culture within society significantly influences the establishment of a conducive atmosphere for legal adherence and the overall fortification of the legal system [68].

## 7. CONCLUSIONS

The findings from the research and prior discussion indicate that Indonesia and South Korea have demonstrated a robust commitment to addressing climate change, as evidenced by their updated National Action Plans (NDCs). Indonesia prioritizes the reduction of greenhouse gas emissions across the forestry, energy, and agriculture sectors while also enhancing community resilience through climate adaptation strategies. In contrast, South Korea has set a more ambitious goal of achieving net-zero emissions by 2050, emphasizing a shift towards renewable energy sources. Both countries aim to synchronize their policies with the global objectives outlined in the Paris Agreement, focusing on restricting the increase in global temperatures and expediting actions for climate change mitigation. Furthermore, the role of public disclosure in both countries is significant in pursuing NDC goals. NDC documents must be published by regulations, allowing the public, private sector and other stakeholders to track policy implementation, enhance government accountability, and reinforce oversight of emission reduction targets. This transparency fosters active public engagement in endorsing climate change adaptation policies, including adopting low-carbon lifestyles and utilizing renewable energy sources. In Indonesia, pursuing NDC targets remains difficult, primarily due to insufficient engagement from the community and the private sector. Consequently, an approach that emphasizes inclusivity and transparency, characterized by information disclosure, accountability, and national and international collaboration, is essential for enhancing the effectiveness of climate change policies.

Based on these findings, a series of recommendations have been put forward to enhance the climate change policy in Indonesia. The government needs to enhance the engagement of communities, the private sector, and the media in the planning and executing the NDC by utilizing more extensive public consultation platforms, training initiatives, and awareness campaigns. Furthermore, enhancing the accessibility of NDC documents is essential. This can be achieved by offering simplified versions that are easy to comprehend, incorporating local languages, and utilizing engaging formats. Expanding international collaboration in technology, funding, and knowledge is essential for accelerating the implementation of policies.

Furthermore, implementing transparent monitoring and evaluation systems like MRV ensures accountability in meeting emission targets. Moreover, the alignment of the NDC document with the National Medium-Term Development Plan and Regional Development Plans will facilitate the incorporation of climate change initiatives into the core framework of national and regional development strategies. Implementing these steps can enhance the effectiveness of climate change policies in Indonesia, facilitate

quicker achievement of NDC targets, and bolster active participation from diverse stakeholders.

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