

Assessing The Implications Of CBDR-RC Principle Implementation In Indonesia's NDC: A Review Of Climate Change Mitigation

Septika Nanda Arifia

Islamic University of Indonesia

Email : septika.arifia@students.uii.ac.id

Sri Wartini

Islamic University of Indonesia

Email : sri.wartini@uii.ac.id

Corresponding author: septika.arifia@students.uii.ac.id

Abstract: Climate change has emerged as a serious threat to both humanity and the global ecosystem, necessitating a coordinated global response. The Paris Agreement embodies these efforts by emphasizing the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC), which underscores the awareness of shared responsibility with varying capacities among nations. This principle is reflected in the Nationally Determined Contributions (NDCs), serving as tangible manifestations of each country's commitment. This research addresses two main issues: Firstly, why is the CBDR-RC principle the foundation for implementing NDCs in Indonesia? Secondly, to what extent does the implementation of NDCs in Indonesia align with the CBDR-RC principle and Indonesia's commitments in the Paris Agreement to achieve sustainable development and address climate change? This study utilizes legislative, conceptual, and historical methodologies. Findings reveal that the CBDR-RC principle forms the basis of NDC implementation in Indonesia, grounded in Indonesia's membership status in the Paris Agreement. However, practical execution falls short, revealing a disparity between idealism and reality in realizing commitments and ambitions to address climate change.

Keywords: Climate Change, CBDR-RC Principle, Indonesian NDCs

INTRODUCTION

Climate change has emerged as a serious threat to human survival and the global ecosystem. The international community has responded to this issue through the Paris Agreement, which emphasizes the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC). State parties are obliged to take concrete actions and policies to prevent global temperatures from rising beyond 2 degrees Celsius and to strive for efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels (IPCC, 2022). Through the agreed-upon "bottom-up" approach, various stakeholders participating in the Paris Agreement have the right to determine their own policies to be implemented at the national level and present these policies using the CBDR-RC principle in the form of Nationally Determined Contributions (NDC) (Alexander, 2017).

The CBDR-RC principle in NDC serves as a key foundation in reflecting awareness of shared responsibilities but differing capacities among member countries. Analyzing the implementation of CBDR-RC becomes relevant in detailing how this principle is reflected and integrated into Indonesia's government policies and actions in realizing NDC, also

acknowledging the imbalance between developing and developed countries. As articulated in Article 2(2) of the Paris Agreement: *"This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances"* (Alexander, 2017).

Based on this principle, involved members need to fulfill their commitments in adapting to climate change impacts and providing greenhouse gas emissions reductions. To ensure fair participation, the CBDR-RC principle is applied, recognizing that developed and developing countries have different responsibilities and capacities in addressing climate change issues (IEA, 2023).

The concentration of greenhouse gases mainly from fossil fuel usage has not seen optimal reduction since eight years after the Paris Agreement was adopted. Emissions from fossil fuel usage reached 38 Gt CO₂ between 1990 and 2019, with an average increase of 0.9% per year between 2010-2019. Emissions from fossil fuel usage in 2020 decreased by 7% from the total emissions in 2019 due to factors such as global economic slowdown and the pandemic. Indonesia has also not shown clear commitments or concrete steps to phase out fossil fuel usage. The year 2023 is projected to be the hottest year on record (CCCS, 2023).

The commitments of the parties to the Paris Agreement in their Nationally Determined Contributions (NDCs) appear insufficient to keep global temperatures below 1.5 degrees Celsius or even to reduce temperatures. Instead, NDCs from all countries, including Indonesia, are heading towards temperature increases of 3-4 degrees Celsius. Indonesia seems hesitant to set ambitious emission reduction targets and remains in a zone of uncertainty.

The gap between commitments in the Paris Agreement and the implementation of Indonesia's NDCs has led researchers to explore *Assessing the Implications of CBDR-RC Principle Implementation in Indonesia's NDC: A Review of Climate Change Mitigation*.

PROBLEM FORMULATION

Based on the background outlined, the problem formulation encompasses two aspects: (1) Why is the principle of Common but Differentiated Responsibility and Respective Capabilities (CBDR-RC) applied in the implementation of Nationally Determined Contributions (NDCs) in Indonesia?; (2) Does the implementation of Nationally Determined Contributions (NDCs) in Indonesia, according to the principle of Common but Differentiated Responsibility and Respective Capabilities (CBDR-RC), align with Indonesia's commitments in the Paris Agreement to Achieve Sustainable Development and Address Climate Change?

RESEARCH METHOD(S)

This study adopts a qualitative method with a literature review as the data collection method. The focus of this research is on the implementation of Nationally Determined Contributions (NDCs) in Indonesia regarding the principle of Common but Differentiated Responsibility and Respective Capabilities (CBDR-RC). This research is juridical-normative and employs four approaches: legislative analysis, comparative, conceptual, and historical analysis.

FINDINGS AND DUSCUSSION

1. Justification for the Application of the CBDR-RC Principle in Indonesia's NDCs

In 1992, the UNFCCC divided countries into two groups based on their level of development: Non-Annex I countries and Annex I countries. Annex I countries were defined as developed nations (as designated by the Organization for Economic Cooperation and Development (OECD) in 1992, as well as various countries in transition to market economies), while Non-Annex I countries originated from the least developed countries (UNFCCC, 2023).

Over the years, the distinction between these nations has fueled tensions between the developed and developing blocs. These tensions culminated in the breakdown of several pivotal UN climate agreements, notably the Copenhagen Accord, or COP 15 Copenhagen, in 2009 (Romdhane, 2023). Furthermore, developing nations have adamantly resisted embracing the quantified emission reduction targets put forth by the UNFCCC. This reluctance is rooted in their assertion that historical emissions, primarily attributed to developed nations, have not been adequately acknowledged, while developed nations insist that developing nations must shoulder their share of mitigation efforts and emission reductions. Moreover, the definitions of "developed" and "developing" remain contentious, with developed nations contending that the circumstances of 1992 are not reflective of the realities of the 2000s (Sari & Ramadhan, 2017).

In addition to the classification of country groups, the UNFCCC also underscores that involved parties should consider the principles of equality and refer to the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC) in safeguarding the global climate system (Sari & Ramadhan, 2017). The CBDR-RC principles have faced criticism from certain quarters, often from Annex I

countries, contending that they are static and should reflect present and future economic realities.

The adoption of the Paris Agreement led to a shift in the terminology from Non-Annex I and Annex I countries to developed and developing nations. Article 4, paragraph 4 of the Paris Agreement emphasizes the expectation for developed nations to spearhead the efforts in combating climate change and its financing. Article 4, paragraph 4 states: (IEA, 2023).

“Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets...”

Furthermore, through this agreement, developing countries also bear international obligations to undertake and enhance efforts in mitigating climate change, as stated in Article 4 of the Paris Agreement: (IEA, 2023).

“This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances”

Article 2 of Paris Agreement also states: (Alexander, 2017).

“This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances”

The provision highlights one of the primary objectives of the Paris Agreement in engaging all parties, both developed and developing countries, in commitments to mitigate climate change. The nuances between the UNFCCC and the Paris Agreement ("in the light of different national circumstances") also underscore the varying levels of responsibility of each country in reducing greenhouse gas (GHG) emissions and their ability to act and adapt to climate change in line with each country's capabilities.

The CBDR-RC principle also emphasizes that developed countries must play a leading role in efforts to combat climate change and its adverse impacts, taking into account their historical contributions as well as their technological advancements and financial resources. This principle is a fundamental concept within the framework of international environmental law, aiming to ensure a fair and effective global response to environmental challenges while considering the diversity of situations and capacities among different countries (Romdhane, 2023). Furthermore, upon closer examination, the Paris Agreement, as an agreement in the context of climate change and as one of the Multilateral Environmental Agreements ("MEAs"), can be categorized as a sui

generis agreement. In Oxford terminology, "sui generis" refers to something that is different from the usual, unique, and identifiable as a classification entity of its own (Adriansyah, et. al.,2023). Although often referred to as legally binding or hard law, the Paris Agreement is actually an agreement that entails some softer obligations, known as soft law (Adriansyah, et. al.,2023). Soft law, found in the Paris Agreement regarding emission reduction targets, is not directly imposed or mandated on the participating countries but rather adjusted to the circumstances of each country.

Article 4, Paragraph 19 of the Paris Agreement can be cited as an example. In this paragraph, it is states: (IEA, 2023).

“All Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.”

Article 2 of the Paris Agreement, states: (Alexander, 2017).

“This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances”

This provision states that all involved parties (states that are members of the Paris Agreement) are expected to endeavor to formulate and communicate long-term low greenhouse gas (GHG) emission development strategies. They must do so while considering Article 2 of the Paris Agreement, which emphasizes the importance of taking into account common but differentiated responsibilities and respective capabilities (CBDR-RC), along with various national circumstances. In other words, this provision underscores the need for the development of strategies that take into account differences in responsibilities, capabilities, and national situations.

The use of various terms in this Article indicates that there is no obligation for state parties to communicate their emission reduction strategies. Instead, the Article contains two terms, "should strive" and "taking into account," which imply that states are only encouraged to make efforts and consider the CBDR-RC principles in their efforts to reduce emissions. Therefore, rules that are non-binding in nature fundamentally affect the legal character of the Agreement (McNair, 2020). The flexibility of these provisions makes the Paris Agreement recognized as the most effective climate change agreement in terms of high participation, objective setting, and clear targets. Furthermore, the hybrid nature of this agreement attracts the attention of

various countries, resulting in increasing levels of participation, indicating that countries are more willing to reduce global emissions. The hybrid character of the Paris Agreement refers to a mixed nature between legally binding legal frameworks and voluntary or non-legally binding elements. This agreement is an embodiment of an inclusive approach in global efforts to address climate change.

Although the obligations contained in the Paris Agreement are binding or not, this instrument will still reflect the behavior of states through mutual agreements (Adriansyah, et. *al.*, 2023). However, the hybrid nature of the Paris Agreement is also one of the sources of challenges that must be faced. These challenges arise because such characteristics make the Paris Agreement not entirely binding and enforceable. Concerns about legal gaps in the Paris Agreement, such as differences in ambition and efforts to reduce global emissions, further, this situation could potentially prevent state parties from achieving the main goals of the Paris Agreement and may lead to non-compliance with the provisions of the Agreement (Carter, 2024). Nevertheless, the legal nature of an agreement cannot be simply overlooked. Applicable international law plays a crucial role in ensuring that all provisions in any legal form are complied with. Primarily, the term "legal gap" often refers to conditions where the law is not entirely adequate, unclear, or imperfect to be enforced. Therefore, when legal rules cannot be found as a solution to such problems, legal principles will serve as tools to fill legal gaps (Neha Jain, 2024).

The formation of international agreements is substantially influenced by several elements such as customary international law and general principles. These two elements are inseparable from the fact that they both function as sources of international law, referring to Article 38(1) of the Statute of the International Court of Justice. Furthermore, these principles also play a crucial role in the Paris Agreement. This is because these principles can be used when the law evolves both vertically and horizontally (Wolfgang Friedmann). In other words, climate change issues are highly dynamic, which continuously evolve over time. Thus, these principles can always be used when the Agreement faces the same problems, namely gaps or loopholes that can arise at any time (Adriansyah, et. *al.*, 2023).

The Paris Agreement includes various principles that serve as mechanisms to fill gaps in any rules that are not hard law. These principles are also used as the basis for the practical implementation of the Paris Agreement. One very important principle in the Paris Agreement is the principle of Common but Differentiated Responsibilities

and Respective Capabilities (CBDR-RC). Therefore, although not all provisions of the Agreement have legally binding effects, this does not diminish the legal status of the Paris Agreement, and the Paris Agreement remains recognized as a binding legal instrument. For example, the Paris Agreement does not require state parties to achieve emission reduction targets within a specific time frame. Instead, the Agreement requires state parties to communicate their efforts related to mitigation, adaptation, and financial contributions through Nationally Determined Contributions (NDCs) (Bondansky, 2024).

The CBDR-RC principle plays a crucial role in empowering state parties to adopt more ambitious measures to achieve their emission reduction targets. This happens because this principle provides flexibility for each country to determine its own measures in addressing climate change efforts tailored to the capacities of each country while still fulfilling its obligations as a state party to reduce global emissions. The reflection of international legal roles through international legal principles in encouraging state party compliance with the Paris Agreement can be observed from how state parties take a number of steps to achieve emission reduction targets stated in their NDCs. Developing countries, such as Indonesia, have actively reported their initiatives in enhanced NDCs in 2021 and 2022, emphasizing actions aimed at reducing global emissions, especially in the land-use sector (Indonesia, 2024).

The CBDR-RC principle in the Paris Agreement is a recognized approach in the context of adaptation and mitigation of climate change, especially in the implementation of the Paris Agreement. The Paris Agreement clearly assigns responsibilities to all parties on the principle of justice, namely the principle of common but differentiated responsibilities and respective capabilities or the principle of the same but different capabilities and responsibilities (Alexander, 2017). The phrase "common" in this principle emphasizes that all countries are at risk of facing similar climate change impacts, which can endanger the environment and human survival. Meanwhile, the phrase "differentiated responsibilities and respective capabilities" indicates that each country has different responsibilities and contributions according to its own capacity and capability (Philippe, 2021).

The principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) in the context of Nationally Determined Contributions (NDC) also closely linked to the concept of ecological debt owed by developed countries. Ecological debt refers to the historical responsibility of developed countries that have

long exploited natural resources and generated substantial carbon emissions, while developing countries disproportionately bear the adverse impacts of climate change (Climatenexus, 2024). The CBDR-RC principle acknowledges that developed nations have a moral and historical obligation to lead efforts in climate change mitigation and adaptation, as well as to provide financial and technological support to developing countries.

Historically, as previously mentioned, the CBDR-RC principle was first adopted in the Rio Declaration of 1992 and subsequently reinforced in the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol of 1997. However, the Kyoto Protocol had limitations as it set binding emission reduction targets only for developed countries, while developing countries did not have the same obligations. This created imbalances and dissatisfaction among developing nations, which felt the burden of climate change without having significantly contributed to its causes (Foresight, 2024).

The Paris Agreement of 2015 sought to rectify these shortcomings by implementing the CBDR-RC principle more flexibly through NDCs. Every country, both developed and developing, is required to submit its own commitments to emission reductions and climate adaptation according to its national capacity and circumstances. This approach reflects the acknowledgment of the ecological debt of developed countries and ensures that global efforts to combat climate change are more equitable and inclusive. Thus, the CBDR-RC principle in the Paris Agreement not only addresses the imbalances of the Kyoto Protocol but also strengthens global solidarity and realism in the implementation of climate policies.

Indonesia, as a developing country and a signatory to the Paris Agreement, applies the CBDR-RC principle in its NDC for several important reasons. First, Indonesia is highly vulnerable to the impacts of climate change, including rising temperatures, changing rainfall patterns, and sea level rise threatening coastal areas and biodiversity (World bank, 2023). By applying the CBDR-RC principle, Indonesia can set realistic and sustainable emission reduction targets while ensuring that adaptation efforts receive the necessary international support. Second, Indonesia is committed to contributing to global climate efforts while considering its national development needs (Kompas.Id, 2023). Through the CBDR-RC principle, Indonesia can actively participate in the global community, gaining access to funding, technology, and knowledge to support its transition to a greener and more sustainable economy. This

allows Indonesia to effectively address the challenges of climate change without compromising economic growth and societal well-being.

It is also important to note that the impact of the CBDR-RC principle on each state party can vary depending on the policy implementation and concrete measures taken by each country. Indonesia has demonstrated its serious engagement with the Paris Agreement not only by acceding to it but also by ratifying it through Law No. 16 of 2016 on the Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change. This action shows Indonesia's positive support for international agreements related to climate change, aligning with its goal to protect not only its citizens from climate change threats but also the global population at large. In implementing the Paris Agreement, Indonesia adopts ambitious aspirations by establishing significant participatory measures outlined in its NDC based on the CBDR-RC principle.

Other than that, the application of the CBDR-RC principle in Indonesia's NDC is also grounded in strong international legal foundations and various practical considerations. This principle is recognized in the UNFCCC, particularly in Article 3, paragraph 1, which asserts that protecting the climate system should be based on equity and in accordance with countries' common but differentiated responsibilities and respective capabilities. The Kyoto Protocol reinforced this principle by setting different emission reduction targets for developed and developing countries, while the Paris Agreement, through Articles 2 and 4, also acknowledges that mitigation efforts should be based on common but differentiated responsibilities and respective capabilities.

The application of the CBDR-RC principle in the context of Indonesia is highly relevant because developed countries bear greater historical responsibility for greenhouse gas emissions, having industrialized earlier and contributed more to the increased concentration of greenhouse gases in the atmosphere. This principle ensures that the burden of climate change mitigation is not disproportionately placed on developing countries like Indonesia, which have more limited economic and technological resources. Additionally, Indonesia faces complex sustainable development challenges, including poverty alleviation and economic growth. Therefore, the CBDR-RC principle allows Indonesia to integrate climate goals with its national development agenda without sacrificing economic growth and social welfare.

In its NDC, Indonesia commits to reducing emissions by 29% through its own efforts and up to 41% with international support by 2030, compared to a business-as-

usual (BAU) scenario. Besides focusing on mitigation, Indonesia's NDC emphasizes the importance of adapting to the impacts of climate change, aiming to enhance the resilience of communities and ecosystems. Indonesia also highlights the need for international support in the form of financing, technology transfer, and capacity building to achieve more ambitious climate targets. The application of the CBDR-RC principle in Indonesia's NDC ensures fairness and effectiveness in climate change mitigation and adaptation efforts, in line with national conditions and capabilities, and with the necessary support from the international community.

The CBDR-RC principle in the Paris Agreement also clearly regulates how contributions from each country, both developing and developed countries, are assessed based on differences and unique conditions for each country (baroleh, 2023). This is reflected in the formation of Nationally Determined Contributions (NDCs), which take into account these factors known only by each country. The impact of the CBDR-RC principle on developing countries like Indonesia can be seen in how this country responds to the challenges of climate change. Indonesia, as a developing country, still has an obligation to combat climate change and reduce greenhouse gas emissions, but with due regard to its different capacities and conditions compared to other countries, especially developed ones. Indonesia in this regard carries out its responsibilities in efforts to reduce carbon emissions and mitigate climate change without coercion or threat from any party. It is important to note that the impact of the CBDR-RC principle on each state party may vary depending on the implementation of policies and concrete measures taken by each country (Sandrine, 2016). In practice, Indonesia has demonstrated serious involvement in the Paris Agreement not only as a participant but also by ratifying it as regulated by Law No.16 of 2016 concerning the Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change.

This action proves that Indonesia conveys its positive support for international agreements related to climate change, in line with its goal, which is not only focused on protecting its citizens from the threats of climate change but also on the comprehensive protection of global citizens. In implementing the Paris Agreement, Indonesia adopts ambitious aspirations by setting significant participatory measures outlined in its NDC based on the CBDR-RC Principle (Baroleh, 2023).

Therefore, it can be concluded that the application of the CBDR-RC principle in Indonesia's NDC is key in efforts to address climate change. As a developing country, Indonesia has different development needs from developed countries, and the CBDR-

RC principle acknowledges this. This principle emphasizes the importance of global justice in reducing greenhouse gas emissions by taking into account historical contributions and the capacity of countries. Developed countries, which have contributed most of the emissions since the early industrial revolution, are expected to bear greater responsibility for reducing their emissions and providing financial and technological support to developing countries like Indonesia. The application of CBDR-RC also takes into (Baroleh, 2023).

2. Evaluation of the Implementation of the CBDR-RC Principle in Indonesia's NDC for Sustainable Development and Climate Change Mitigation

Indonesia, as a country that has ratified the Paris Agreement through Law Number 16 of 2016 concerning the Ratification of the Paris Agreement to The United Nations Framework Convention On Climate Change (Paris Agreement on the United Nations Framework Convention on Climate Change), reaffirms its commitment to addressing climate change through mitigation and adaptation. This commitment aligns with the objectives outlined in the Preamble of the Constitution of the Republic of Indonesia of 1945, which emphasizes the protection of all citizens and the environment. It is also articulated in Article 28H paragraph (1) of the Constitution of the Republic of Indonesia of 1945, which guarantees the right of every individual to live prosperously physically and spiritually.

Indonesia, as a country committed to the Paris Agreement, is expected to take effective measures to ensure life and sustainability. As a party to the Paris Agreement, Indonesia has set itself to contribute through Nationally Determined Contributions (NDCs) by independently determining the level of contribution it will provide. In fulfilling its commitments to the Paris Agreement, Indonesia must ensure that the steps taken are in line with national goals and aspirations. This is crucial considering the importance of consistency between adopted international law and the underlying national interests.

Table 1.
Comparison of Indonesia's NDCs

Indonesia	First NDC	NDC Updated 2021	NDC Updated 2022
Formulation of Targets in NDCs	Unconditional Target: Indonesia has pledged to unconditionally reduce greenhouse gas emissions by 29% compared to business-as-usual scenarios by the year 2030.	Unconditional Target: Indonesia has pledged to unconditionally reduce greenhouse gas emissions by 29% compared to business-as-usual scenarios by the year 2030.	Unconditional Target: The Enhanced NDC raises Indonesia's unconditional emission reduction target to 31.89%, compared to the initial 29% in the first NDC.

	Conditional Target: Indonesia has the potential to enhance its contribution, aiming for a 41% reduction in emissions by 2030, subject to the availability of international support for financial assistance, technology transfer, and capacity building.	Conditional Target: Indonesia has the potential to elevate its emission reduction commitment to 41% by 2030, provided there is adequate international support for financial assistance, technology transfer, capacity building, and development.	Conditional Target: Indonesia has the capacity to enhance its contribution to emission reduction by 43.20% by 2030, contingent upon the availability of international support in terms of financing, technology transfer and development, as well as capacity building.
Absolute emission levels: <i>Excluding: Land use, land-use change, and forestry (LULUCF)</i>	Unconditional target: 1886 MtCO ₂ e by 2030.	Unconditional target: 1.886 MtCO ₂ e by 2030.	Unconditional target: 1.886 MtCO ₂ e by 2030.
Comparison of Emissions in 1990 and 2010 excluding LULUCF: In this context, greenhouse gas emissions data will be compared to the emission levels in those years to assess the progress and efforts in emission reduction over time.	Conditional target: 1691–1789 Unconditional Target: 494% above 1990 emissions by 2030 161% above 2010 emissions by 2030 Conditional Target: 432–463% above 1990 emissions by 2030 134–147% above 2010 emissions by 2030	Conditional target: 1.724 MtCO ₂ e by 2030. Unconditional Target: 494% above 1990 emissions by 2030 161% above 2010 emissions by 2030 Conditional Target: 443% above 1990 emissions by 2030 138% above 2010 emissions by 2030	Conditional target: 1.710 MtCO ₂ e by 2030. Unconditional Target:
CAT (Climate Action Tracker) Rating	Overall Ranking*: Highly inadequate.	Conditional NDC target based on modeled domestic pathways: Highly inadequate. Unconditional NDC target based on equitable allocation: Highly inadequate.	Conditional NDC target based on modeled domestic pathways: Highly inadequate. Unconditional NDC target based on equitable allocation: Highly inadequate.
Sectoral Coverage	Economically	Economically	Economically
Distinct Targets for LULUCF	No	No	No
Gas Coverage	CO ₂ , CH ₄ , N ₂ O (Carbon Dioxide, Methane, and Nitrous Oxide)	CO ₂ , CH ₄ , N ₂ O (Carbon Dioxide, Methane, and Nitrous Oxide)	CO ₂ , CH ₄ , N ₂ O (Carbon Dioxide, Methane, and Nitrous Oxide)
Types of Targets:	Emission Reduction from BAU Referring to the planned reduction of greenhouse gas emissions from the expected levels if activities continue as usual (BAU - Business as Usual). This indicates a country's commitment to reducing emissions beyond what would occur if no mitigation actions were taken.	Emission Reduction from BAU	Emission Reduction from BAU

Adhering to the guidelines outlined in Decision 4/CMA.1 regarding target transparency	No	Yes	Yes
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Based on the comparative data presented, it is evident that Indonesia's NDC has consistently shown numerical increments over successive years. However, notwithstanding these incremental improvements, the Climate Action Tracker (CAT) maintains that Indonesia's NDC targets remain unattainable under prevailing governmental policies, which lack robust support for climate action initiatives. In the 2022 Updated NDC, Indonesia revised its unconditional target from a reduction of 29% to 32% below the Business-as-Usual (BAU) scenario, and its conditional target from a reduction of 41% to 43% below BAU, encompassing emissions from land use, land-use change, and forestry (LULUCF) (UNFCCC, 2024). Nevertheless, the relative reductions of Indonesia vis-à-vis BAU are not as ambitious in practice as they may appear in numerical terms. This discrepancy can be attributed to two primary factors: (CAT, 2024).

1. Indonesia directs its focus towards the forestry sector to fulfill a substantial portion of its emission reduction commitments, with the targets set for this sector contributing to almost 60% of the total reductions mandated by the NDC. Consequently, it is anticipated that other sectors may experience comparatively lesser reductions in emissions, despite the energy sector accounting for a larger share of emissions;
2. The business-as-usual (BAU) projections utilized in the NDC depict emission levels significantly higher than those under current policy projections. BAU reflects a scenario wherein no efforts are made to mitigate emissions, indicating that greenhouse gas emission levels would remain elevated or even escalate in the future.

CAT assesses Indonesia's policy sectors and actions regarding equitable distribution as "Highly Insufficient" within its NDC. This rating is two notches lower than previously assessed. According to CAT's analysis, there exists a misalignment between Indonesia's climate policies and commitments with the 1.5°C temperature target stipulated in the Paris Agreement. The "Highly Insufficient" classification reflects minimal action or even the absence of consistent efforts to limit global warming. CAT believes that if other nations adopt similar approaches, the impacts could exceed the 4°C warming threshold. Indonesia's zero net target within its NDC is also deemed as "Incomplete target information," as Indonesia has yet to explicitly communicate a net-zero target but is exploring scenarios that could lead to net zero by 2060 or earlier in its Long-Term Strategy (LTS) submitted to the UNFCCC in July 2021 (CAT, 2024)

Additionally, analyses and comparisons of Nationally Determined Contributions (NDCs) among the state parties and signatory nations of the Paris Agreement reveal that Indonesia's NDC is not inherently deficient. In fact, it exhibits strengths in several aspects when compared with those of other nations. However, there are areas where improvements are warranted, necessitating corrections and enhancements. Furthermore, it is crucial for Indonesia to demonstrate tangible commitment in the implementation of its policies, ensuring they transcend mere rhetoric and aspirations. This entails concrete actions and robust mechanisms to translate policy objectives into measurable outcomes. By acknowledging both its strengths and areas for improvement, Indonesia can embark on a trajectory of continuous enhancement in its climate commitments, thereby solidifying its position as a proactive participant in the global fight against climate change. Therefore, the author concludes that the implementation of Indonesia's NDC is not fully aligned with the CBDR-RC principle in the Paris Agreement. While Indonesia has submitted an NDC covering climate adaptation and mitigation measures, it needs to enhance consistency with the principles of the Paris Agreement.

Several issues to consider in the context of implementing Indonesia's NDC based on the CBDR-RC Principle include:

1. **Resource Limitations:** Indonesia, like many developing countries, faces resource constraints in implementing climate actions outlined in its NDC. This limitation can be supported by Article 4 of the Paris Agreement, which acknowledges the varying capacities of countries in implementing climate actions based on their respective circumstances. The principle of Common But Differentiated Responsibilities and Respective Capacities (CBDR-RC) recognizes that developing countries may require support to fulfill their commitments effectively. Therefore, Indonesia may argue that its resource limitations justify the need for international assistance and support to implement its NDC fully;
2. **Dependency on Carbon-Based Economy:** Indonesia's economy is heavily reliant on carbon-intensive industries such as agriculture, forestry, and mining. Transitioning away from these industries to reduce emissions poses significant challenges, especially considering the country's development needs. However, under the Paris Agreement, developed countries, historically the largest emitters, are expected to take the lead in reducing emissions and providing financial and technological support to developing countries. Article 2 emphasizes the need for global cooperation to mitigate climate change while considering different national circumstances. Indonesia could argue that its

reliance on carbon-based industries necessitates support from developed countries to transition to a low-carbon economy in line with its NDC targets;

3. **Involvement of Local Communities:** The CBDR-RC principle underscores the importance of considering the capacity and needs of local communities in climate action planning and implementation. This principle is echoed in Article 6 of the Paris Agreement, which promotes the engagement of local communities, indigenous peoples, and other stakeholders in climate actions. Indonesia may argue that involving local communities is essential for effective implementation and sustainability of climate actions, aligning with its NDC objectives. Legal frameworks related to indigenous rights and community participation in environmental decision-making could further support Indonesia's argument for inclusive climate action planning;
4. **Transparency and Accountability:** Transparency and accountability are fundamental principles under the Paris Agreement, as outlined in Articles 13 and 14, which require countries to regularly report on their emissions and progress in implementing their NDCs. Indonesia's commitment to transparency and accountability is crucial for building trust among the international community and ensuring the effectiveness of its climate actions. By adhering to these principles, Indonesia can demonstrate its commitment to fulfilling its obligations under the Paris Agreement and contributing to global efforts to address climate change. Moreover, enhancing transparency and accountability can also help attract international support and investment in Indonesia's climate initiatives. A country can be deemed to have effectively implemented the CBDR-RC principle in its NDC if it reflects the key principles of CBDR-RC and concretely integrates the following aspects: (Jolly, et. al., 2023)
5. **Equity and Equality:** The principle of Common But Differentiated Responsibilities and Respective Capacities (CBDR-RC) is deeply rooted in international environmental law, emphasizing the historical responsibility of developed countries for climate change and recognizing the differing capacities of nations to address it. This principle is enshrined in various legal instruments, including the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. Therefore, an NDC that effectively implements CBDR-RC should reflect this historical context and economic differentiation by expecting developed nations to take more ambitious emission reduction actions compared to developing countries;
6. **Financial and Technological Support:** The legal basis for financial and technological support to developing countries can be found in Article 4 of the Paris Agreement, which

emphasizes the importance of providing adequate support to enable developing nations to enhance their climate actions. Additionally, the principle of CBDR-RC underscores the obligation of developed countries to provide financial resources and technology transfer to support the mitigation and adaptation efforts of developing countries. Therefore, a robust NDC should include clear provisions outlining the financial and technological support required for implementation, aligned with the legal obligations under the Paris Agreement;

7. Transparency and Accountability: The legal basis for financial and technological support to developing countries can be found in Article 4 of the Paris Agreement, which emphasizes the importance of providing adequate support to enable developing nations to enhance their climate actions. Additionally, the principle of CBDR-RC underscores the obligation of developed countries to provide financial resources and technology transfer to support the mitigation and adaptation efforts of developing countries. Therefore, a robust NDC should include clear provisions outlining the financial and technological support required for implementation, aligned with the legal obligations under the Paris Agreement;
8. Consultation and Participation: The legal basis for consultation and participation can be found in various international legal instruments, including the UNFCCC and the Paris Agreement. These agreements recognize the importance of engaging all stakeholders, including civil society and indigenous groups, in climate action processes. Moreover, the principle of CBDR-RC emphasizes the need to consider the diverse perspectives and needs of different communities in climate policy formulation and implementation. Therefore, an NDC that aligns with CBDR-RC should involve comprehensive stakeholder consultations to ensure inclusivity and reflect the voices of all communities affected by climate change.

In the legal, expert, and academic spheres, as well as through the author's analysis, it is evident that Indonesia's execution of its NDC has made considerable strides. Nonetheless, a discernible disparity persists between its aspirations (*Das Sollen*) and realities (*Das Sein*), particularly in terms of harmonizing with the CBDR-RC principle and fulfilling commitments outlined in the Paris Agreement regarding climate change mitigation. This incongruity underscores a crucial disjunction between envisioned measures and actual outcomes, accentuating the necessity for heightened alignment between stated objectives and tangible achievements.

The Paris Agreement, as a cornerstone of international climate law, represents a transitional process in which concerted efforts are imperative, particularly owing to the intricate and interconnected nature of climate change with various facets of life. This underscores the necessity for meticulous consideration in its execution, as each nation grapples with differentiated responsibilities and capabilities in addressing climate change, as stipulated by the Common But Differentiated Responsibilities and Respective Capacities (CBDR-RC) principle. Despite the non-binding nature of the Paris Agreement, achieving the ambitious targets of global temperature reduction and carbon emissions necessitates a collective commitment from all parties, supported by well-structured and meticulously planned concepts or policies. The pivotal role of transparency and accountability in reporting progress cannot be overstated, as it ensures the integrity and credibility of the collective efforts undertaken.

Moreover, active engagement from all stakeholders, encompassing governments, private sectors, civil society, and international institutions, is indispensable in fostering a robust framework for climate action. By adhering to these principles and fostering inclusive participation, nations can enhance the coherence and efficacy of their climate policies, thereby advancing the overarching goals of the Paris Agreement. For Indonesia, a signatory to this landmark accord, fortifying the implementation of its Nationally Determined Contributions (NDCs) in accordance with the CBDR-RC principle is paramount. Moreover, enhancing transparency, accountability, and stakeholder engagement within its climate governance framework is essential to ensure alignment with international obligations and foster credibility in its climate action endeavors. Through sustained and comprehensive collective efforts, there remains optimism for mitigating the climate crisis and steering towards a more sustainable future for all.

CONCLUSION AND RECOMMENDATION

Conclusion

1. The implementation of the CBDR-RC principle in NDCs is closely related to the ecological debt of developed countries, which acknowledges the moral and historical obligations of developed nations to lead efforts in climate change mitigation and adaptation, as well as to provide support to developing countries. The Paris Agreement addresses the shortcomings of previous conventions by flexibly implementing this principle through NDCs, ensuring commitment equality and fostering a more fair and inclusive global effort. Indonesia adopts

this principle for several important reasons. Firstly, Indonesia is vulnerable to the impacts of climate change, necessitating realistic emission reduction targets and international support for adaptation. Secondly, Indonesia is committed to contributing to global efforts to address climate change while considering its national development interests and needs. Through this principle, Indonesia can actively engage in the global community and access funding, technology, and knowledge to support the transition towards a sustainable green economy without compromising economic growth and societal well-being.

2. The implementation of Indonesia's NDC has shown significant strides towards sustainable development and climate change mitigation. Through various policies such as the National Energy General Plan (RUEN) and the Climate Village Program (ProKlim), Indonesia aims to increase the use of renewable energy, reduce deforestation, and engage communities in climate action. However, evaluations from the Climate Action Tracker (CAT) indicate that despite numerical enhancements in Indonesia's NDC updates, these targets remain challenging to achieve with current governmental policies that are deemed insufficient in driving robust climate action. Therefore, the evaluation of targets within Indonesia's NDC is not stronger than before, underscoring the importance of policy improvements and stronger measures to attain ambitious climate mitigation goals.

Recommendation

1. Reforming the authority of the compliance committee by granting direct powers in information exchange, discussions on non-compliance, identification of challenges, and joint solution-seeking will enhance the effectiveness of oversight and enforcement of commitments within the Paris Agreement. Involving non-party stakeholders, such as civil society organizations and academia, will also broaden the scope of oversight and support more holistic climate policy analysis. Their engagement will enhance transparency and accountability in Paris Agreement implementation, providing independent perspectives, and strengthening monitoring of agreed commitments' implementation. By implementing these suggestions, Paris Agreement implementation can become more effective and sustainable, providing a strong foundation for global climate change mitigation efforts.
2. Indonesia must address the gap between its commitments in the Paris Agreement and the implementation of its NDC to achieve full alignment between *das sollen* and *das sein*. These challenges need to be overcome through enhanced policies, better coordination, and stronger international support to effectively meet Indonesia's climate targets. By identifying the causes of the gap, challenges, and weaknesses in each of its climate policies, Indonesia can formulate appropriate and robust strategies in its climate policies, as well as in implementing

them by bridging the gap between what is expected and what happens on the ground. These steps are crucial for realizing commitments in the NDC, providing positive impacts on environmental sustainability and societal well-being.

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