

The Role of Indonesia in Leading Efforts to Mitigate Climate Change in ASEAN in 2023

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Abstract

This research investigates Indonesia's pivotal role in spearheading initiatives aimed at addressing climate change in the ASEAN region through 2023. Using qualitative research methods, including document analysis, and literature review, this research explores the various strategies, policies, and actions undertaken by Indonesia to combat climate change on a regional scale. The findings highlight Indonesia's proactive stance, leadership efforts, and collaborative engagement within ASEAN to mitigate the impacts of climate change. By analysing Indonesia's contributions and challenges in leading climate change mitigation efforts, this study provides valuable insights for policymakers, stakeholders, and researchers involved in environmental governance and climate action in the ASEAN community.

Keywords: *Indonesia, ASEAN, climate change, mitigation efforts, regional leadership*

Introduction

Southeast Asia is one of the most vulnerable regions to climate change. According to a study by the World Economic Forum, climate change in Southeast Asia has resulted in coastal lines receding in coastal areas where 450 million people reside, with its impacts exacerbated by tectonic shifts and groundwater extraction effects. If left unchecked, climate change not only entails irreversible environmental effects but also severely impacts the economy. The Asian Development Bank (ADB) estimates that Southeast Asia could suffer greater losses compared to other regions globally, potentially eroding up to 11% of the region's Gross Domestic Product by the end of this century, affecting key sectors such as agriculture, tourism, and fisheries,

along with human health and labor productivity (Choi, I., Kwak, S., Cheong, J., Lee, J. M., Park, N., Kim, M. L., Lee, J., & Cho, W. D., 2021).

As a regional leader, Indonesia is poised to shape the climate agenda of ASEAN, foster intergovernmental collaboration, and spearhead tangible initiatives to address the challenges posed by climate change. In 2023, Indonesia assumed the Chairmanship of ASEAN, presenting a significant opportunity to exert a central role in the mitigation of climate change within the Southeast Asian region. One of Indonesia's primary objectives as the Chair of ASEAN is to lead endeavors aimed at mitigating climate change in the Southeast Asian region. Indonesia has implemented fiscal policies to bolster climate action, including the provision of tax incentives, tax holidays, and other

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supportive measures (Velasco, 2023). However, the climate crisis has the potential to affect the economic growth of countries in Southeast Asia, including Indonesia. Factors such as declining GDP, losses in specific economic sectors, and long-term impacts on development may warrant research attention (Kimura, S., Anbumozhi, V., Kalirajan, K., & Yao, X., 2022).

One sector impacted by climate change is energy. Southeast Asia stands as one of the largest energy markets globally, with energy demand continually escalating alongside rapid economic and population growth. According to the International Energy Agency (IEA) report in 2022, energy demand in Southeast Asia has averaged approximately 3% per year over the past two decades and is projected to continue until 2030 (Oanh, N. T. K., & Huy, L. N., 2024). However, the majority of energy used in this region still originates from fossil resources, such as oil, gas, and coal. The utilization of these fossil resources not only significantly contributes to greenhouse gas emissions but also renders the region vulnerable to fluctuations in energy prices and supply. Therefore, countries in Southeast Asia need to strengthen their commitment to adopting renewable energy sources and reducing dependence on fossil resources.

At the 2015 United Nations Climate Conference in Paris, Indonesia committed to reducing greenhouse gas emissions by 29% by the year 2030 through domestic efforts and up to 41% with international assistance. National policies such as renewable energy targets and deforestation reduction efforts also represent

significant steps in supporting global endeavors to address climate change.

However, in Indonesia's role as a leader of ASEAN on climate change issues, several challenges need to be addressed. Disparities in economic development and infrastructure across ASEAN member states may influence agreements and the implementation of joint climate policies. Additionally, political, diplomatic, and administrative challenges may also affect Indonesia's capacity to lead ASEAN member states forward in climate change mitigation efforts.

This research aims to investigate Indonesia's role as the chair of ASEAN in leading efforts to mitigate climate change in the Southeast Asian region. The research will focus on the policies and initiatives undertaken by Indonesia, collaboration with ASEAN member states, and efforts to achieve greenhouse gas emission reduction targets. Additionally, this study will examine how climate ambitions in ASEAN, particularly under Indonesia's leadership, have the potential to influence the development of the manufacturing industry in the region. By exploring this topic, it is hoped that this research will provide valuable insights into climate change mitigation efforts in the Southeast Asian region.

Drawing from the preceding discourse, the formulated research inquiry is as follows: How does Indonesia's role as the chair of ASEAN manifest in spearheading climate change mitigation efforts across the Southeast Asian region, considering its policies and initiatives, collaboration with fellow ASEAN member states, and endeavors

towards achieving greenhouse gas emission reduction targets?

Research Methods

The research employs a qualitative approach, aiming to offer descriptive-explanatory insights into the subject matter. Data collection involves sourcing secondary data from literature, previous research, and other relevant materials. The technique utilized for data collection is library research, which entails gathering information from diverse sources such as books, journals, and the internet. Data processing involves organizing, summarizing, and systematizing collected data, following the guidelines of Miles and Huberman. Analysis comprises data reduction, display, and conclusion, facilitating a comprehensive understanding of the research findings.

Results and Discussion

The discussion of this research will be analyzed using the theory of state roles in the study of international relations, which is a concept explaining that states play a crucial role in shaping and influencing international relations. This theory assumes that states are the primary actors in the international system and have national interests that need to be safeguarded. The following are some key points related to the theory of state roles in the study of international relations (Harnisch, 2011):

- a) States have a significant role in formulating foreign policies and influencing international relations. State foreign policies can be influenced by factors

such as national interests, ideologies, and internal factors like politics and economics.

- b) States also play a role in maintaining international peace and security. They can collaborate in various international forums to achieve this goal, such as the United Nations and ASEAN.
- c) States can also play a role in global issues such as climate change. They can cooperate in addressing these issues through international cooperation and sustainable policymaking.
- d) The theory of state roles also assumes that states have national interests that need to be safeguarded. These national interests may vary between states and can influence foreign policies and international relations.
- e) States can also play a role in addressing issues such as plagiarism and academic misconduct. They can establish regulations and policies governing ethics and academic standards to prevent actions of plagiarism and academic misconduct.

In the context of the research "The Role of Indonesia in Leading Efforts to Mitigate Climate Change in ASEAN in 2023," the theory of state roles can be used to explain how Indonesia, as a state, plays a crucial role in leading efforts to mitigate climate change in the Southeast Asian region. As the chair of ASEAN, Indonesia can influence the policies and initiatives undertaken by ASEAN member states in addressing climate change issues.

Additionally, Indonesia can also play a role in maintaining international peace and security through international cooperation in addressing climate change issues.

Southeast Asia faces significant challenges due to climate change. Indonesia, as the 2023 Chair of ASEAN, played a crucial role in spearheading regional efforts towards mitigating these challenges. This report examines how Indonesia utilized its leadership position to advance climate action across ASEAN, considering its domestic policies, regional initiatives, collaboration with member states, and progress towards greenhouse gas (GHG) emission reduction targets.

Indonesia's Domestic Policies and Initiatives

Indonesia, a major archipelagic nation, is vulnerable to rising sea levels, extreme weather events, and deforestation. Recognizing this, Indonesia has implemented several domestic policies and initiatives:

- a) Nationally Determined Contribution (NDC), Indonesia's updated NDC (2020) outlines a more ambitious target of reducing GHG emissions by 29-41% by 2030 (compared to a business-as-usual scenario) with international support (UN ESCAP, 2020).
- b) Focus on Renewable Energy, the government aims to achieve a 23% renewable energy mix by 2025 and is promoting policies like feed-in tariffs and geothermal development (Setiawan, A. D.,

Dewi, M. P., Jafino, B. A., & Hidayatno, A., 2022).

- c) Forestry Protection, Indonesia has committed to reducing deforestation and promoting sustainable forest management to conserve carbon sinks (Basuki, I., Adinugroho, W. C., Nugroho, A. U., Syaugi, A., Tryanto, D. H., Krisnawati, H., ... & Novita, N, 2022).

Regional Initiatives and Collaboration

Indonesia's leadership in ASEAN manifested through several regional initiatives:

- a) ASEAN Joint Statement on Climate Change (COP28), Indonesia spearheaded a joint statement at the 28th Conference of the Parties (COP28) urging ambitious climate action and emphasizing the need for financial and technological support from developed countries (Ozdemir, I., Yngson, D. S. M. P., Israel, D., Otundo, J., Beasnael, N., Ceesay, A., & Zaman, A., 2023).
- b) Regional Electric Vehicle Ecosystem, Indonesia collaborated with other ASEAN members to promote the development and adoption of electric vehicles in the region (Purtanto, A. J., Suehiro, S., Okamura, T., Takemura, K., Iwai, M., Matsumoto, A., & Katayama, K., 2023).
- c) Fostering Partnerships, Indonesia actively sought partnerships with developed countries like the G7 to access

resources and expertise for climate action through initiatives like the Just Energy Transition Partnerships (JETP) (Barbier, 2023).

Collaboration with Fellow ASEAN Member States

Indonesia facilitated collaboration with member states through various means:

- a) Capacity Building, Indonesia provided training and knowledge-sharing programs to enhance the capacity of other ASEAN countries in areas like climate change adaptation and mitigation strategies (Salazar, V., 2023).
- b) Regional Dialogue, Indonesia promoted regional dialogue through platforms like the ASEAN Climate Change Center (ACCC) to foster cooperation and policy alignment among member states (Ting, C., & Yongkun, L., 2023).
- c) Continued Collaboration, Indonesia's chairmanship has laid the groundwork for further regional cooperation on climate change. Continued collaboration among ASEAN member states and international partners is vital to achieve ambitious emissions reduction targets (Adiputri, R. D., 2023).

Progress on Green House Gas Emission Reduction Targets

Despite Indonesia's leadership efforts, achieving regional emission

reduction targets remains challenging. Here's why:

- a) Coal Reliance, Indonesia heavily relies on coal for energy generation, hindering progress towards cleaner energy sources (Kurniawan, R., Trencher, G. P., Edianto, A. S., Setiawan, I. E., & Matsubae, K., 2020).
- b) Deforestation Rates, While deforestation rates have decreased, illegal logging and land-use change remain significant concerns (Trisasongko, B. H., 2024).
- c) Infrastructure Development, Rapid infrastructure development can lead to increased emissions if not accompanied by sustainable practices (Kalalinggi, R., Hisdar, M., Sarmiasih, M., & Wijaya, A. K., 2023).

Challenges and Considerations

ASEAN member states have different economic development stages and capacities for implementing climate mitigation strategies. This can hinder collective progress. Many ASEAN economies heavily rely on fossil fuels, making a rapid transition challenging (Nepal, R., Phoumin, H., & Khatri, A. (2021).

Balancing economic growth with climate action is crucial. While Indonesia has shown leadership, measuring the concrete impact of its initiatives on regional Green House Gas Emission reduction remains challenging due to limited data on member state actions (Yang, F., & Li, C., 2024).

Conclusion

Indonesia's chairmanship of ASEAN played a significant role in promoting regional climate action. Domestic policies, regional initiatives, and collaboration with member states showcased Indonesia's commitment to tackling climate change. However, achieving ambitious emission reduction targets requires sustained efforts from all ASEAN member states, coupled with international support in terms of finance and technology transfer.

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References

- Adiputri, R. D. (2023). Climate Change, Peace, and Language Usage in the United Nations Reports within the ASEAN Style of Multilateralism. *Indonesian Journal of Social Research*, 5(3).
- Barbier, E. B. (2023). Greening the G7 Economies Through a More Inclusive Climate Club. *Available at SSRN 4695522*.
- Basuki, I., Adinugroho, W. C., Nugroho, A. U., Syaugi, A., Tryanto, D. H., Krisnawati, H., ... & Novita, N. (2022). Reforestation Opportunities in Indonesia: Mitigating Climate Change and Achieving Sustainable Development Goals. *Forests*, 13(3), 447.
- Choi, I., Kwak, S., Cheong, J., Lee, J. M., Park, N., Kim, M. L., Lee, J., & Cho, W. D. (2021). 인도태평양 전략과 신남방정책의 협력 방향 (Exploring Convergence between the New Southern Policy and U.S. Indo-Pacific Strategy: From Korea's Perspective). *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3911063>
- ESCAP, U. (2020). Energy transition pathways for the 2030 agenda: SDG7 roadmap for Indonesia.
- Harnisch, S. (2011). *Role theory in international relations* (pp. 7-15). C. Frank, & H. W. Maull (Eds.). London: Routledge.
- Kalalinggi, R., Hisdar, M., Sarmiasih, M., & Wijaya, A. K. (2023). Forecasting the development of IKN (new national capital) in sustainable development, Indonesia. *Journal of Governance and Public Policy*, 10(1), 48-59.

- Kimura, S., Anbumozhi, V., Kalirajan, K., & Yao, X. (2022). *Rethinking Asia's Low-Carbon Growth in the Post-Covid World: Towards a Net-Zero Economy*. Economic Research Institute for ASEAN and East Asia (ERIA).
- Kurniawan, R., Trencher, G. P., Edianto, A. S., Setiawan, I. E., & Matsubae, K. (2020). Understanding the multi-faceted drivers of increasing coal consumption in Indonesia. *Energies*, 13(14), 3660.
- Nepal, R., Phoumin, H., & Khatri, A. (2021). Green technological development and deployment in the association of southeast Asian economies (ASEAN)—at crossroads or roundabout?. *Sustainability*, 13(2), 758.
- Oanh, N. T. K., & Huy, L. N. (2024). Atmospheric Emissions from Electricity Generation in Southeast Asia: Development Trend and Policy Responses. *Current Pollution Reports*, 1-16.
- Ozdemir, I., Yngson, D. S. M. P., Israel, D., Otundo, J., Beasnael, N., Ceesay, A., & Zaman, A. (2023). COP28.
- Purtanto, A. J., Suehiro, S., Okamura, T., Takemura, K., Iwai, M., Matsumoto, A., & Katayama, K. (2023). *Study on Policies and Infrastructure Development for the Wider Penetration of Electrified Vehicles in ASEAN Countries*. N. Doi (Ed.). Jakarta, Indonesia: Economic Research Institute for ASEAN and East Asia.
- Salazar, V. (2023). From Practices to Praxis: ASEAN's Transnational Climate Governance Networks as Communities of Practice. *Journal of Current Southeast Asian Affairs*, 42(2), 190-215.
- Setiawan, A. D., Dewi, M. P., Jafino, B. A., & Hidayatno, A. (2022). Evaluating feed-in tariff policies on enhancing geothermal development in Indonesia. *Energy Policy*, 168, 113164.
- Ting, C., & Yongkun, L. (2023). Why can ASEAN Promote Sustainable Development Cooperation?. *Revista Brasileira de Política Internacional*, 66, e022.
- Trisasongko, B. H. (2024). Understanding deforestation in the tropics: post-classification detection using machine learning and probing its driving forces in Katingan, Indonesia. *Asia-Pacific Journal of Regional Science*, 1-29.
- Velasco, J. C. (2023). Southeast Asian Regionalism: An Examination of the Progress and Priorities of ASEAN through its Joint Communiqués. *JAS (Journal of ASEAN Studies)*, 11(2).
- Yang, F., & Li, C. (2024). The Status Quo, Dilemma, and

Transformation Path of the
Carbon Neutrality-Related
Policy of the
ASEAN. *Sustainability*, 16(3),
1348.