

Challenges in EU–Indonesia Climate Cooperation: Pathways to Improve Inclusivity and Environmental Resilience in Indonesia

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ABSTRACT

Indonesia is facing escalating climate-related threats, including sea-level rise, forest degradation, and the intensification of natural disasters. In response, the Indonesian government has committed to reducing greenhouse gas emissions by 29% unconditionally and 41% with international support by 2030, with a broader goal of achieving net-zero emissions by 2060 or earlier. Cooperation with the European Union (EU) plays a critical role in supporting these national targets. Through institutions such as the European Commission and the European Investment Bank (EIB), the EU allocated €28.5 billion in 2022 to support climate action in partner countries, including Indonesia. However, this cooperation continues to face several challenges, such as unequal financial flows, limited coordination, and programs that often lack sensitivity to local needs and contexts. This study employs a descriptive qualitative method using literature review as the main data source to examine both the structural barriers and strategic opportunities within the EU–Indonesia climate partnership. The findings underscore the need for improved knowledge-sharing, transparent climate financing, community engagement, and stronger national ownership in project implementation. Without addressing these gaps, the effectiveness and sustainability of the cooperation may remain limited. This paper argues that renewing EU–Indonesia climate cooperation through more inclusive, context-responsive approaches and a focus on recipient-country capacity-building can meaningfully contribute to strengthening Indonesia’s environmental resilience and support a more balanced and just global climate governance framework.

Keywords: *Indonesia, European Union, Climate cooperation, environmental resilience, Inclusive developments.*

INTRODUCTION

Climate change has become one of the greatest challenges of the twenty-first century, exerting profound impacts on ecosystems, economies, and societies worldwide. Rising global temperatures, extreme weather events, and biodiversity loss highlight the urgency for collective and coordinated action. From the Americas to Asia, nations are experiencing droughts, floods, forest fires, and cyclones that threaten livelihoods and human security. Climate change, therefore, must be understood not only as an environmental concern but also as a political, economic, and humanitarian crisis requiring integrated global responses.

Indonesia, as the world’s largest archipelagic state with vast tropical forests, holds a central role in global climate governance. The country is highly vulnerable to climate-related threats, including sea-level rise, forest degradation, and natural disasters that disrupt economic and social stability. Yet, Indonesia also has strategic opportunities to lead climate action, particularly through forest conservation, renewable energy potential, and its status as one of the world’s key greenhouse gas emitters. Reflecting

this dual position, the Indonesian government has pledged to reduce emissions by 29% unconditionally and 41% with international support by 2030, while pursuing net-zero emissions by 2060 or earlier. These commitments demonstrate Indonesia’s seriousness but also underline its dependence on international partnerships (Gaora et al., 2023).

The European Union (EU) has emerged as a crucial partner for Indonesia. Through the European Green Deal and the legally binding European Climate Law, the EU seeks to project itself as a normative power in climate governance. Supported by instruments such as the European Investment Bank (EIB), which in 2022 alone allocated €28.5 billion for climate action. The EU provides financial assistance, technical expertise, and policy frameworks that can strengthen Indonesia’s climate capacity. Nevertheless, this partnership faces obstacles, including unequal financial flows, weak institutional coordination, and limited sensitivity to Indonesia’s socio-cultural and ecological contexts (Sabatira et al., 2023).

In this regard, climate diplomacy provides a useful analytical lens. As Tiwari (2022) argues, climate neutrality increasingly shapes international relations, requiring ecological practices, green scientific protocols, and time-bound strategies. Climate diplomacy thus extends beyond emission reduction negotiations; it embodies efforts to balance global equity, foster inclusivity, and promote cross-border green transformation. Situating EU–Indonesia cooperation within this broader frame highlights both the opportunities and challenges of aligning national and international agendas.

Several scholarly works provide additional insights. Rahayu and Aritonang (2025) stress that climate change functions as a threat multiplier, affecting security and defense stability. Their study of Indonesia and New Zealand demonstrates that defense diplomacy can facilitate collaboration in climate adaptation and mitigation, extending the relevance of climate diplomacy beyond environmental issues to political and security concerns. Meanwhile, Affandi et al. (2021) examine EU assistance to Indonesia, showing that while such aid contributes to environmental development, biodiversity protection, and poverty alleviation, it may also reinforce structural dependency, echoing critiques from dependency theory. This tension resonates with broader concerns about asymmetry and national ownership in EU–Indonesia cooperation.

At the regional level, Sabatira et al. (2023) note that ASEAN–EU cooperation has focused on frameworks such as the ASEAN–EU Statement on the Paris Agreement (2017) and the EU–ASEAN High-Level Dialogue on Environment and Climate Change. Yet ASEAN’s approach remains fragmented and declarative, in contrast to the EU’s binding legal frameworks. This institutional asymmetry mirrors challenges Indonesia faces in ensuring inclusivity and effective participation within EU-supported programs.

Furthermore, Gaora et al. (2023) highlight Indonesia’s evolving climate diplomacy under President Joko Widodo. By promoting “pro-people diplomacy” and initiatives like mangrove restoration showcased during the 2022 G20 Bali Summit, Indonesia has sought to position itself as a bridge between the Global North and Global South. However, persistent reliance on coal and slow renewable energy adoption reveal

inconsistencies between international commitments and domestic realities. This duality underscores the importance of context-sensitive cooperation with partners such as the EU.

Taken together, these studies reveal both the promise and pitfalls of EU–Indonesia climate cooperation. Rahayu and Aritonang (2025) expand the debate by linking climate change with security; Affandi et al. (2021) caution against structural dependency; Sabatira et al. (2023) emphasize institutional asymmetries; and Gaora et al. (2023) illustrate Indonesia’s strategic but complex positioning in global climate diplomacy. Yet, no study has specifically integrated these perspectives into the context of EU–Indonesia cooperation through the lens of climate diplomacy. Addressing this gap, the present paper argues that inclusivity, context-sensitive approaches, and stronger recipient-country ownership are essential to ensure effective and sustainable outcomes. To achieve this aim, the study employs a descriptive qualitative method using secondary data and literature review to explore both structural barriers and strategic opportunities in EU–Indonesia climate cooperation.

METHODS

This study employs a qualitative descriptive method to analyze the challenges and opportunities in EU–Indonesia climate cooperation. A qualitative descriptive design is suitable for providing a comprehensive understanding of complex social and political issues, empathizing with rich description and practical insights. Thematic analysis offers a flexible and rigorous framework to identify key patterns and insights in qualitative data (Braun & Clarke, 2022).

The data collection technique used in this study is a literature review, relying on secondary sources such as academic journal articles, policy briefs, government documents, and official reports from international organizations (e.g., the European Commission, the European Investment Bank, and the UNFCCC). From these sources, special attention is given to the work of Tiwari (2022) on Climate Diplomacy to Attain Global Eco-Neutrality, which provides the conceptual foundation for the analysis. Tiwari highlights that climate neutrality has become central in global politics, requiring states to adopt ecological practices, green scientific protocols, and comprehensive climate strategies. This perspective is employed in the study as the main analytical lens to understand the EU’s climate leadership and Indonesia’s pathways to enhance resilience.

Through this framework, the study identifies both structural barriers, such as unequal climate financing, weak institutional coordination, limited local sensitivity and strategic opportunities, including transparent financing mechanisms, inclusive knowledge-sharing, community engagement, and stronger national ownership. By grounding the analysis in the lens of climate diplomacy, the research aims to highlight how EU–Indonesia climate cooperation can evolve toward a more inclusive, context-responsive, and resilient model that meaningfully supports both Indonesia’s national climate goals and global sustainability objectives.

RESULTS AND DISCUSSION

ECOLOGICAL PRACTISES CHALLENGES

The European Union is targeting products frequently linked to deforestation, including palm oil, and requiring companies to demonstrate that their products are "deforestation-free" by December 31, 2020, as part of a regulation to reduce illegal logging by 50%, which follows the EU's 2019 communication on protecting the world's forests through the European Union Deforestation Rainforest (EUDR) program (European Commission, 2008; European Commission, 2019). The entry into force of EU Regulation 2023/1115 clarifies the legal instruments for the 2019 plan to enhance EU action to protect and restore the world's forests (European Parliament & Council of the European Union, 2023).

Indonesia's economy is heavily dependent on key commodities such as palm oil, which accounted for 68% of global supply in 2022, and nickel, with 40% of global supply (IEEP, 2025). This dependence directly conflicts with the EU's environmental policy objectives. The European Union's efforts to promote ecological practices globally through the European Union Deforestation Regulation (EUDR) face significant obstacles in its implementation in Indonesia. The EUDR's stringent traceability and transparency regulations create structural barriers, particularly for small-scale farmers, who contribute 40% of Indonesia's palm oil supply chain (Yunus, 2024). He argues that these barriers stem from gaps in access to information and limited technological resources among these farmers, potentially excluding them from the EU market. This situation reflects a conflict between environmental conservation goals and protecting the socio-economic well-being of local communities. Rather than promoting an inclusive ecological transition, this policy risks triggering economic dislocation, diplomatic tensions, and even encouraging export market orientation to countries with lower environmental regulatory standards.

CHALLENGES IN IMPLEMENTING “GREEN SCIENTIFIC PROTOCOLS”

Harmonized protocol implementation is a key measure but poses a significant challenge to maximizing the distribution of climate funds from EU financial institutions. In this context, Indonesia uses a different green energy categorization than other actors. Indonesia classifies coal-fired power plants used for the nickel industry as "low-carbon transition" efforts (Christina et al., 2024). Differences over the recognition of certification standards, particularly in palm oil production, exist. While Indonesia uses the Indonesian Sustainable Palm Oil (ISPO), and many producers also hold international certifications such as the Roundtable on Sustainable Palm Oil (RSPO), the EU's policy, through the EUDR, does not automatically recognize these standards (Isaac, 2025). Indonesian Deputy Foreign Minister Arief Havas Oegroseno highlighted that the EUDR creates a perception of an imbalance of power, with the EU imposing different standards on geolocation data requirements for partner countries in the Global South, while the EU restricts European geolocation data sharing (Jong, 2025). This perception significantly erodes trust and weakens the legitimacy of climate cooperation, transforming it from an equal partnership into a hierarchical and unfair relationship. This

creates significant obstacles to the implementation of the green science protocol for Indonesia.

Transparency in presenting data for monitoring protocol progress remains a major challenge, as does trust in the management of both funds and data. The lack of an agreed-upon definition has led countries to use their own standards for reporting climate finance. Significant discrepancies between deforestation data reported by governments and data from civil society represent a lack of transparency and accountability, necessitating international efforts to develop clearer and more uniform definitions (Bergsvik et al., 2024). The uniformity of definitions and reporting from Indonesia remains far from ideal, leading to confusion and inconsistency in measuring actual contributions to climate resilience.

TIME-BOUND GOVERNMENT STRATEGY

Indonesia has set ambitious climate targets in its Nationally Determined Contribution (NDC) to the UNFCCC secretariat, where it targets a 41% emission reduction by 2030 with international support, and a net-zero target by 2060 (NDC Partnership, n.d.). Climate transition efforts have also been included in the 2025–2045 National Medium-Term Development Plan (RPJPN), but implementation at the regional level remains weak. However, the implementation of this time-bound strategy is hampered by economic and political realities. Dependence on coal remains very high, and construction of new coal-fired power plants continues. The Indonesian coal industry, with its powerful lobbying, significantly influences the government's position. In November 2022, the JETP (Just Energy Transition Partnership) Program was launched with the aim of reducing reliance on coal-fired power plants, encouraging the development of renewable energy, and significantly reducing carbon emissions by 2030, with a long-term target of achieving net-zero by 2050 (Jazuli et al., 2024). To achieve this goal, the JETP is supported by \$20 billion in funding, which is expected to catalyze the acceleration of Indonesia's energy transition. However, its realization has fallen short of expectations, as disbursement of funds has been extremely slow; as of December 2024, only 1% of the total commitments had been disbursed (Correia et al., 2025). Energy Minister Bahlil Lahadalia expressed frustration, stating that minimal JETP funding has reached Indonesia. Meanwhile, Hashim Djojohadikusumo, the younger brother of President-elect Prabowo Subianto, called JETP a "failure", citing the lack of disbursed aid (Baskoro, 2025).

The slow disbursement of funds has had a ripple effect, from significant financial uncertainty to providing the government with an excuse to delay the acceleration of coal-fired power plant phaseouts. This situation makes it difficult to achieve time-bound targets and undermines confidence in developed countries' international commitments. This situation highlights the gap between the ambition of the proposed policies and the stalled funding realization. Indirectly, the following conditions hinder a country's strategic progress.

OBSTACLES TO THE REALIZATION OF COMPREHENSIVE CLIMATE ACTION

The involvement of local actors, such as local governments, communities, and indigenous peoples, plays a crucial role in the realization of progressive climate action to achieve global climate goals. Less than 17% of global climate funding is allocated to building local resilience, while indigenous peoples receive only 5% of funding for environmental protection (World Bank, 2024). These data reflect that actors who should be at the forefront of climate action have insufficient resources. Comprehensive climate action requires an integrated and inclusive approach. The EU provides funding through various initiatives, such as the Global Gateway, Team Europe, and specific projects like JETP and Climate Resilient and Inclusive Cities (CRIC), with a dominant "top-down" approach in project design and implementation. Civil society organizations (CSOs) feel that their involvement in initiatives like the Global Gateway is still too little, too late, and often considered merely a formality (Rodríguez, 2024). The risk of maladaptation is an important note. An EU audit found that several funded projects risk increasing the risk of not taking long-term climate scenarios into account (European Court of Auditors, 2024). Due to these weaknesses, there is a risk that the funding policies that have been provided cannot be fully utilized and the progress of climate reform may not be able to keep pace with climate change.

RECOMMENDATION

Building resilience to these threats can no longer be simply a policy option, but a necessity. To achieve this resilience, partnerships must shift from often transactional relationships to strategic and inclusive collaborations. The following are recommended practical steps proposed by the authors

POLICY REFORM AT THE LOCAL LEVEL

Governance reform at the regional level is crucial for optimizing climate funding from the European Union and other sources, given that the main obstacles still lie in administrative, financial, and technical challenges at the sub-national level (Desdiana, 2022). This can be addressed through the formulation of clear regional regulations (Perda), as successfully implemented in East Kalimantan to clarify the division of authority and budget allocation for climate programs, accompanied by increased regional budgets and human resource capacity development through training. National initiatives such as the Ministry of Finance's GCF Readiness program are also important catalysts for transforming regional governments into strategic partners with strong capacity to lead the implementation of climate policies on the ground (Ekayana, 2020). Furthermore, the success of these policies is highly dependent on transparency and public participation. Therefore, monitoring and evaluation mechanisms with clearly defined performance indicators and outcomes are needed to ensure accountability and track community contributions. Moreover, the European Union, together with local governments, must move beyond mere consultation to substantive participation by providing a space for constructive and equal dialogue for all stakeholders, and integrating such engagement into the entire project cycle, from planning,

implementation, to evaluation, so that climate policies are truly sustainable and aligned with the needs of beneficiaries at the local level.

ACCELERATE THE REALIZATION OF AID FUNDS

Accelerating the disbursement of climate aid funds is key to the successful implementation of climate cooperation programs in Indonesia, as planning, implementation, monitoring, and evaluation require stable and timely financial support. Although the European Union has made significant commitments through initiatives such as JETP, totaling \$20 billion in funding, including from G7 countries, slow disbursement of funds can hinder the energy transition and climate change mitigation on the ground. These delays are often caused by complex bureaucratic processes and strict administrative requirements from donors. Simplifying funding mechanisms is crucial to ensure that financial commitments can be quickly translated into concrete actions in critical sectors such as renewable energy and forest management.

CAPACITY BUILDING AND TECHNOLOGY TRANSFER

To enhance the effectiveness of climate cooperation, it is crucial for the EU and Indonesia to focus on capacity building and comprehensive knowledge transfer. This includes the EU providing technical assistance to strengthen Indonesia's institutional capacity, such as training government staff in managing and reporting on climate projects efficiently. Furthermore, practical training should be provided to smallholder farmers and indigenous communities on sustainable agriculture and the use of technology to enable them to meet international standards and increase productivity. Finally, research and innovation collaboration between research institutions on both sides should be encouraged to develop locally relevant solutions.

COMMUNITY-BASED SOLUTIONS (BOTTOM-UP)

To address these barriers, a paradigm shift is needed from centralized funding models to community-led approaches. The Locally Led Adaptation (LLA) Principles offer a robust framework, including: Defining, designing, and implementing projects at the local level. Providing flexible and accessible funding. Ensuring accountability and transparency between local actors and funders. By empowering frontline actors, climate finance can be utilized more effectively, creating more innovative and sustainable solutions, and accelerating the move towards truly comprehensive climate action.

CONCLUSION

This research confirms that climate cooperation between the European Union and Indonesia plays a strategic role in supporting Indonesia's energy transition and sustainable development, but remains plagued by significant obstacles. Policies such as the European Union Deforestation Regulation (EUDR), while designed to encourage ecological practices, have the potential to exclude smallholder farmers due to limited access to technology and information. Furthermore, differing standards for implementing green scientific protocols, particularly regarding certification and data transparency, deepen the trust gap and create a perception of power imbalance in

partnerships. The Indonesian government's time-bound strategy, both through its National Development Planning (NDC) commitments and the Just Energy Transition Partnership (JETP) program, also faces serious challenges due to the slow disbursement of international funds and the strong influence of the domestic coal-based industry. Furthermore, the involvement of local actors and grassroots communities remains minimal, leaving many programs at risk of inclusivity and potential maladaptiveness.

Nevertheless, opportunities to strengthen cooperation remain wide open. Policy reform at the regional level, increased transparency and public participation, more equitable technology transfer, and community-based approaches could provide solutions to create more equitable, inclusive, and sustainable cooperation. From an academic perspective, future research should broaden its scope by conducting cross-regional comparative studies to determine whether similar challenges are experienced by other Global South countries, and using quantitative approaches to more measurably assess program effectiveness. Further study of the role of non-state actors such as civil society, indigenous communities, and the private sector is also crucial, given that they are on the front lines of climate adaptation. Equally important, research into domestic political and economic dynamics, including the influence of the coal and nickel industries, could provide a more comprehensive understanding of how national interests influence the direction and success of climate cooperation with the European Union.

By considering these dimensions, future research can make an important contribution to formulating a more contextual, responsive, and sustainable climate cooperation strategy, thereby strengthening Indonesia's climate resilience while supporting more equitable global climate governance.

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