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Center for Policy and Public Management
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Unlocking Indonesia's Carbon Market Potential for a Just Net-Zero Transition

Highlights

Indonesia's carbon market stands at a pivotal crossroads. With its commitment to net-zero emissions by 2060 and the vast carbon sequestration potential of its forests and ecosystems, the country has launched a regulated carbon market under Presidential Regulation No. 98/2021 and OJK Regulation No. 14/2023. However, despite positive momentum, critical challenges related to market readiness, clarity of regulations, sectoral integration, and international alignment persist. This policy brief outlines the strategic imperatives to strengthen Indonesia's carbon market to ensure its role in driving a just and effective low-carbon transition. Indonesia's carbon trading is still in its infancy compared to mature markets like the EU ETS or California Cap-and-Trade, and it needs strategic realignment to scale effectively.

Challenges and Structural Gaps

Fragmented Governance and Overlapping Regulations

Indonesia's carbon market currently operates under both voluntary and compliance schemes, such as the SRN-PPI system and the IDX Carbon platform. However, the coexistence of these two systems has led to confusion among stakeholders, particularly those in sectors affected by overlapping standards and regulatory expectations. For example, a company may be uncertain whether its emission reduction activities should comply with voluntary protocols or those required under the compliance market.

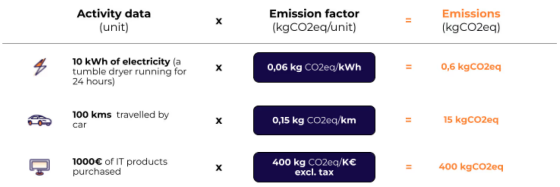

Figure 1. Examples of SAMI's 0% uncertainty measurement platform (Sami, 2025)

The problem is made worse by the involvement of multiple institutions with unclear and overlapping mandates. The Ministry of Environment and Forestry (MOEF/KLHK), the Financial Services Authority (OJK), the Ministry of Finance, and various coordinating ministries all play roles in carbon market regulation and oversight, yet their coordination is weak. This fragmentation results in inefficiencies and delays in decision-making. Furthermore, there is still no unified system to account for emissions reductions across sectors, weakening both transparency and policy coherence. According to the World Bank's 2023 State and Trends of Carbon Pricing report, such lack of policy coherence is a critical barrier in many emerging carbon markets, including Indonesia.

Limited Market Liquidity and Sector Participation

The first carbon credit auction conducted through IDX Carbon in October 2023 demonstrated the early-stage nature of Indonesia's carbon market. The volume of credits traded was low, and participation from major industrial sectors—such as energy, mining, and cement—was minimal. These sectors are known to be "hard-to-abate," meaning they emit significant levels of greenhouse gases and would benefit most from participating in carbon trading schemes.

A key reason for this lack of engagement is the uncertainty surrounding long-term compliance obligations. Without a clear timeline or mandate requiring companies to purchase carbon credits or reduce emissions, many private actors have no incentive to join the market. This concern aligns with findings in Bappenas' 2022 Low Carbon Development report, which noted that voluntary, market-driven efforts alone will likely not succeed without stronger regulatory backing. As a result, market growth remains stagnant, and the potential for large-scale emissions reduction through trading mechanisms remains underutilized.

Insufficient Incentives and Pricing Signals

At present, the average carbon price in Indonesia is about IDR 69,600 per ton, which is equivalent to approximately USD 4.5 per ton. This is considerably lower than the globally recommended carbon price range of USD 30 to 100 per ton, as suggested by the High-Level Commission on Carbon Prices (World Bank, 2017). Such low pricing fails to send a strong economic signal to polluters and therefore does not effectively incentivize investment in low-carbon technologies or emissions reductions.

In addition, the implementation of Indonesia's carbon tax—originally planned for 2022—has been delayed. This delay further weakens market confidence in the country's commitment to establishing a robust carbon pricing framework. Without strong and predictable pricing signals, businesses are unlikely to shift their strategies or allocate capital toward emissions mitigation.

Readiness of MRV Systems and Standards

A crucial component of a credible carbon market is a reliable Measurement, Reporting, and Verification (MRV) system. Currently, Indonesia's MRV system—especially the SRN-PPI platform—is still under development and not yet fully harmonized with international standards such as those from the ICVCM (Integrity Council for the Voluntary Carbon Market) or the VCMI (Voluntary Carbon Markets Integrity Initiative).

This lack of standardization limits the ability of Indonesian carbon credits to be accepted in international markets, which require high levels of transparency and integrity. Moreover, without a strong MRV system, the credibility of emission reductions is difficult to ensure, making it harder for project developers to access climate finance. The Asian Development Bank (ADB) has emphasized that a consistent and trustworthy MRV framework is essential for attracting international investment

and ensuring that carbon offset projects can deliver measurable and verifiable results.

Equity and Just Transition Considerations

Although carbon markets are intended to support climate action, there are early signs that their benefits in Indonesia are disproportionately captured by large corporations. These companies typically have better access to capital, technical expertise, and regulatory resources, enabling them to participate more easily in carbon trading schemes.

In contrast, Indigenous Peoples and Local Communities (IPLCs)—who are often the stewards of forests and key participants in REDD+ and other nature-based solutions—remain on the margins. Their involvement in carbon projects is limited, and mechanisms to ensure benefit-sharing are often absent or poorly implemented. The 2022 UNDP report on inclusive carbon markets underscores the importance of addressing this imbalance by ensuring that IPLCs receive a fair share of revenues and are actively involved in project design and decision-making. Integrating social safeguards and equity considerations is essential for ensuring that the carbon market contributes to a just transition.

Case Study: Indonesia's Just Energy Transition Partnership (JETP)

The USD 20 billion Just Energy Transition Partnership (JETP), announced during the G20 Bali Summit, is a landmark initiative that illustrates Indonesia's commitment to decarbonizing its power sector. The JETP aims to facilitate the early retirement of coal plants and accelerate the transition to renewable energy through a mix of public and private finance.

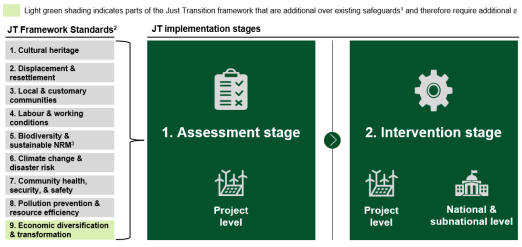

Figure 2. Further explanations on the operationalization of the JT Framework, including its challenges (Chapter 6 in the CIPP) (JETP Indonesia, 2024)

However, the success of JETP is contingent upon the availability of reliable carbon financing and robust MRV systems to track emission reductions accurately. The program highlights the broader challenges facing Indonesia's carbon market: the need for credible emissions accounting, the importance of mobilizing private capital, and the critical role of transparency in building stakeholder trust. The JETP thus serves as both a model and a test case for how carbon finance can support structural transformation in the energy sector.

Policy Recommendations

1. Strengthen Regulatory Clarity and Institutional Coordination

Indonesia should develop a comprehensive Carbon Market Law that consolidates various existing regulations and clearly defines the roles of all involved institutions. This legal framework is necessary to resolve current overlaps and streamline responsibilities. Furthermore, establishing a dedicated National Carbon Market Taskforce—preferably under Bappenas or the Coordinating Ministry for Economic Affairs—would help align strategy, coordinate actions, and enhance overall market governance.

2. Enhance Market Depth and Private Sector Engagement

To increase participation and improve market liquidity, the government should gradually introduce compliance obligations, starting with the top ten emitting sectors, including PLN, Pertamina, the cement industry, and steel producers. Fiscal incentives such as tax deductions for verified offsets or certified carbon-neutral products can stimulate private sector interest. Additionally, state-owned enterprises (SOEs) can be positioned as anchor buyers and issuers of carbon credits, helping to boost early market demand and demonstrate viability.

3. Align Domestic Standards with International Best Practices

Indonesia must harmonize its Measurement, Reporting, and Verification (MRV) protocols with globally recognized standards. This is essential for enabling carbon credit fungibility with international markets such as CORSIA (for aviation) and Article 6 of the Paris Agreement. Building partnerships with trusted international registries such as Verra and Gold Standard can also support the development of dual-certification pathways that will make Indonesian credits more credible and marketable abroad.

4. Invest in Infrastructure and Ecosystem Readiness

Upgrading the SRNP-PI platform into a fully integrated national carbon registry is crucial. This registry should be interconnected with IDX Carbon to allow seamless end-to-end traceability of carbon transactions.

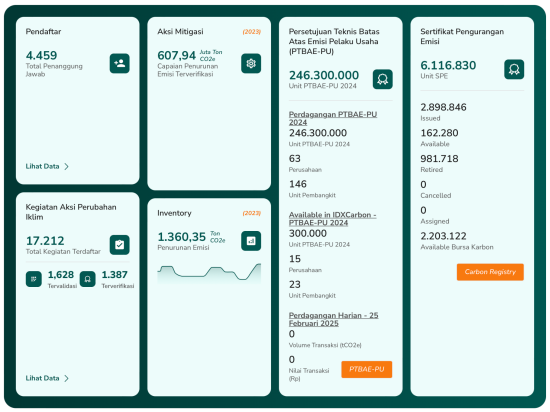

Figure 3. Sistem Registri Nasional-Platform Perubahan Iklim Nasional (MenLHK, 2025)

Furthermore, the government should invest in capacity-building initiatives for local verifiers and project developers. Collaborations with universities and development agencies can help grow a pipeline of qualified professionals, thereby supporting the long-term scalability of the carbon market.

5. Integrate Just Transition Principles

Carbon market mechanisms must be designed to be socially inclusive and fair. Projects should be implemented with Free, Prior, and Informed Consent (FPIC), especially when they involve Indigenous Peoples and Local Communities (IPLCs). Establishing clear and transparent benefit-sharing mechanisms will ensure that these communities receive equitable returns. Additionally, carbon projects should be encouraged to deliver co-benefits aligned with the Sustainable Development Goals, such as biodiversity protection, gender equality, and green job creation.

Conclusion

Indonesia has the potential to become a global leader in carbon trading by leveraging its abundant natural capital and strong policy ambitions. However, realizing this potential requires the government to address the current regulatory fragmentation, strengthen institutional coordination, and foster trust among stakeholders. By undertaking a focused reform agenda—emphasizing legal clarity, private sector participation, international alignment, and inclusive benefit-sharing—the carbon market can evolve into a key pillar of Indonesia's sustainable development strategy. Strengthening this market is not only an environmental necessity but also a critical economic opportunity in the country's journey toward a just and net-zero future.

Annex: Key Stakeholders

- Ministry of Environment and Forestry (MOEF/KLHK)
- Financial Services Authority (OJK)
- Ministry of Finance (Fiscal Policy Agency)
- Coordinating Ministry for Economic Affairs
- Bappenas
- IDX Carbon (BEI)
- PT Sarana Multi Infrastruktur (carbon fund manager)
- Verifiers, Project Developers and Community Organizations

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