

The Reform Initiatives

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The Reform Initiatives (TRI)

Indonesia Carbon Market Must Deliver Justice Not Just Profit

Global population was increased significantly from 3 billion (1960) to 8,3 billion (2026). It drove multiple economic activities which declined the earth's carrying and absorptive capacity, and increased greenhouse gas emissions—the primary cause of climate change. It has been a serious topic since the last three decades of the 20th century, as addressed in the 1972 Stockholm Declaration, the 1992 Rio Declaration, the 1997 Kyoto Protocol, and the 2015 Paris Agreement.

Global leaders met and acknowledged a shared awareness that they would never be able to provide enormous costs alone to reduce greenhouse gas emissions as measure to combat climate change. The 1997 Kyoto Protocol provided an early international instrument through the Clean Development Mechanism, Joint Implementation and International Emissions Trading. The European Union then established the Emissions Trading System (EU-ETS) in 2005 as the world's first large-scale carbon market for decades. It is an economic instrument designed to reduce emissions, mobilize climate finance and change economic behaviour. The 2015 Paris Agreement has also guided collective action to address global climate change, including mitigation, adaptation, and financing.

The scholars, academics and researchers responded to the climate finance source with two difference views. The principle of environmental economics emphasized polluters should pay the costs instead passing it on to the public covertly (Pigou, 1920; Stern, 2007). The theory of environmental policy later developed that into market-based mechanisms to reduce greenhouse gas emissions (Stavins, 2003; Tietenberg, 2006). That history, conversations and debates formed the foundation of the global carbon market.

Indonesia ratified Paris Agreement into Law No. 16/2016 and has progressively built its own carbon-market architecture through Presidential Regulation No. 98/2021 which introduced the framework for carbon economic value, while the government launched IDXCarbon in September 2023. The related ministries and the Financial Services Authority have developed supporting technical regulations. Presidential Regulation No. 110/2025 subsequently strengthened the national framework for carbon economic value instruments and greenhouse gas emission control. The Ministry of Forestry has followed it by issuing regulation No. 6/2026 governing carbon offsets in the forestry sector. These reforms matter because Indonesia possesses substantial carbon credit potential across forestry and land use (FoLU), energy, waste, agriculture, industrial processes and coastal ecosystems.

Indonesia should establish carbon market for three strategic reasons. First, the government requires a substantial budget resource to achieve its Nationally Determined Contributions (NDC), while the state budget can allocate only limited portion. Second, the government is responsible to reduce greenhouse gas emission while creating jobs, attracting investment and sustaining economic growth. Third, the government should demonstrate a strong commitment to develop hi-integrity and equitable carbon market ecosystem to realize social justice.

Economic potential

Indonesia committed to reduce greenhouse gas emissions by 2030 at around 915 million tons of carbon dioxide equivalent (CO₂-e) annually under the unconditional scenario and 1.24 billion tons CO₂-e under the conditional scenario supported internationally, as mentioned in the 2022 Enhanced Nationally Determined Contribution. FoLU sector represents the largest potential contribution from 500 million to 729 million tons of CO₂-e, and energy sector follows from 358 million to 446 million tons. Waste, agriculture and industrial processes will contribute lower.

MSCI Carbon Markets (2021) projected carbon credit price internationally could reach US\$30 and US\$50 per ton by 2030. It assumed the average price could be US\$35 per ton as growth of demand increases. The World Bank also emphasized that price is heavily influenced by international market demands on integrity. It depends on the methodology they used, compliance to the human rights principle, and equitable benefit sharing mechanism.

Indonesia's cross-sector carbon economic value in 2030 could be calculated using a projected average price of US\$35 per ton. The unconditional scenario of 915 million tons CO₂-e could represent a gross economic value of approximately US\$32 billion (IDR544 trillion). The conditional scenario of

1.24 billion tons could reach approximately US\$43 billion (IDR738 trillion). These potentially contribute to 1.98 percent and 2.68 percent of Indonesia projected GDP.

The research found more clearly in FoLU sector. Novita et al. (2022) on Natural Climate Solutions (NCS) identified potential carbon credits from forestry sector around 1.301 billion tons of CO₂-e annually from approximately 26 million hectares of mineral forest, peatland areas and mangrove landscapes (Prayitno, 2026). It could potentially generate an estimated gross economic value of around US\$46 billion (IDR774.6 trillion). It would multiply the contribution to Indonesia's projected GDP from an average of 0.7 percent during the 2010–2025 period to 3.4 percent in 2030, and could contribute substantially to the state revenues from an average of 0.24 percent to 2.46 percent. These figures demonstrated substantial role of the carbon markets as an environmental mechanism, as well as an economic and fiscal instrument.

Justice must come first

A high-integrity carbon market should demonstrate strong governance, robust technical aspect, and respect for and protection of the rights of indigenous peoples and local communities (IPLCs). It means absence of technical irregularities and violations of community rights (Prayitno, 2025; Yustika, 2025). Technical irregularities show the use of non-robust methodologies, inaccurate baseline calculations, and irresponsible MRV practices. Violations of community rights are often marked by human rights abuses—such as intimidation, displacement, and violence—as well as the manipulation of community consent (failing to adhere to proper FPIC procedures) and the failure to provide fair benefit-sharing.

Carbon credits could depreciate its market value when IPLCs reject the project, researchers uncover methodological flaws, journalists report manipulation and civil society organizations expose human rights violations. These demonstrate that carbon trading depends on credibility, integrity and public trust. International off-takers regularly scrutinize these aspects and routinely evaluate community rights, additionality, permanence and reputational exposure before purchasing carbon credits.

Indonesia has capabilities to transform as a carbon market global leader as long as they prioritize the quality of governance than multiply the volume of credit carbon generation. Indonesia should establish a carbon market that links economic value to environmental integrity and social justice by protecting public interest, distributing benefits fairly and safeguarding the rights of affected communities.

Carbon market should become mechanism to mobilize substantial benefits for IPLCs instead concentrate profits actors with greater financial resources, political influence and bargaining power.