

Indonesia's Carbon Trading Dilemma: Navigating Regulatory Uncertainty

Prepared by:

Maurice Maulana Situmorang (Partner), Winda Tania (Partner), Reyner Mulia (Associate) and Audrey Florence Natalia Sitepu (Associate)

In recent years, carbon trading has emerged as a central focus in global climate discussions, particularly in Indonesia, which ranks among the world's top 10 carbon dioxide (CO₂) emitters.¹ Due to Indonesia's current high-level emission production, carbon trading is largely viewed as a strategic mitigation approach to environmental and economic concerns deriving from climate change to reduce carbon emissions and achieve sustainable development goals. One of the measures to reduce carbon emissions or Greenhouse Gas ("GHG") emissions is through carbon trading opportunities to promote cleaner energy.²

As is well known, carbon trading in Indonesia is regulated under Minister of the Environment and Forestry Regulation No. 21 of 2022 concerning the Procedures for the Application of Carbon Economic Value ("MOEF 21/2022"), Article 5 of which divides carbon trading into emission trading and GHG emission offsets, with their practical implementation occurring through carbon exchange and/or direct trading, particularly in the electricity generation subsector.³ To facilitate domestic carbon trading, the Government of Indonesia ("Gol") launched IDXCarbon in 2023 reinforcing its commitment to climate action, as reaffirmed at the UN Climate Change Conference Baku (COP29) in November 2024.⁴ Indonesia's participation in COP29 represents a strong commitment to achieving energy independence in reducing carbon emissions through mutually beneficial partnerships, without relying on foreign assistance or grants.⁵ This commitment was further demonstrated in 2025, when the Gol opened the national carbon exchange to international buyers to generate funding for domestic climate goals and offer foreign investors opportunities to offset their emissions.⁶

The electricity generation subsector is recognized locally as the most advanced subsector in carbon mitigation whereby the Emissions Threshold for Business Actors (*Persetujuan Teknis Batas Atas Emisi Pelaku Usaha* ("PTBAE-PU")) has been established. In this subsector, business actors in that sector who have been assigned PTBAE-PU are required to reduce their carbon production in the event of a carbon quota deficit. Such reductions could be made through carbon exchanges and/or direct trading. As observed, there have been numerous opinions and assessments regarding the implementation of carbon trading, which have raised various challenges and a lack of preparedness in Indonesia. Among these issues, we intend to address several gaps in the existing regulations regarding the application of carbon economic value via carbon trading in Indonesia, particularly in the electricity generation subsector:

¹ [CO₂ Emissions by Country 2024](#), accessed on 18 February 2025.

² [Kementerian ESDM RI - Berita Unit - Direktorat Jenderal Ketenagalistrikan - Perdagangan Karbon Sebagai Komitmen Transisi Energi Bidang Ketenagalistrikan](#), accessed on 7 February 2025.

³ MOEF 21/2022, Article 5.

⁴ [News Press Release | IDX Carbon](#), accessed on 20 February 2025.

⁵ [Menteri LH Tegaskan Indonesia Aktif dalam COP29 untuk Meneguhkan Komitmen Tanpa Tergantung Bantuan](#), accessed on 18 February 2025.

⁶ [Indonesia launches international carbon exchange - Regulations - The Jakarta Post](#), accessed on 18 February 2025.

1. The Absence of Procedures for Carbon Unit Transaction.

The implementing regulations for carbon trading in the electricity generation subsector are governed by the Ministry of Energy and Mineral Resources Regulation No. 16 of 2022 concerning the Procedures for the Implementation of Carbon Economic Value in the Electricity Generation Subsector ("MEMR 16/2022"), under which business actors engaged in carbon trading are required to submit reports to the Minister of Energy and Mineral Resources, such as reports on GHG emission monitoring plans, GHG emission reports, and reports on the results of carbon trading implementation.⁷ Upon thorough examination, **MEMR 16/2022 and other carbon-related regulations do not have further provisions concerning the procedures for the mechanism of carbon unit transactions between business actors** that would serve as guidelines for business actors to conduct the direct carbon trading, which needs to be stated in the agreements.

As a reference for the implementation of carbon trading outside of Indonesia, namely by referring to the European Union ("EU") Emission Trading System ("ETS"), there are 3 carbon trading agreement standards for direct carbon trading⁸: (i) International Swaps and Derivatives Association (ISDA) for financial institutions trading EU allowances; (ii) International Energy Trading Association (IETA) for corporate and industrial players trading physical carbon credits; and (iii) European Federation of Energy Traders (EFET) for energy companies integrating carbon trading into electricity and gas markets.⁹ These standards are also used in the United States and Switzerland.¹⁰

Due to the abovementioned absence of provisions in the law, business actors and other interested parties must diligently incorporate the provisions on carbon trading clearly into an agreement, ensuring that the carbon units being traded are appropriately targeted and effective in their function.

2. Carbon Pricing Uncertainty.

Within the business-to-business trading system of carbon units, the carbon pricing differs for every transaction depending on the transacting parties. The domestic average of carbon pricing for every unit in Indonesia is estimated to be around \$2 – \$18/unit.¹¹ In comparison, as per 2024, the standard price range of carbon unit globally is between US\$0.46 – US\$167 with EU ETS as the long-standing pioneer of global ETS carbon unit pricing on average at \$61.30.¹² For such, the GoI has given the transacting parties the discretion to determine their own price through independent negotiation. With no intervention by the government to set a minimum price, it may pose a risk of carbon pricing undervaluation and cannot be controlled by the state, whereas the commitment to mitigate GHG is a responsibility that lies with the state on a large scale. Without clear pricing standards or regulatory involvement in business-to-business transactions, the domestic market may struggle to set a competitive, incentivizing value for carbon units, potentially delaying further market development.

3. Validity and Recording of SPE-GRK.

GHG emissions produced by business actors in the electricity generation sector must be validated and verified.¹³ Once the PTBAE-PU is established, it can be determined whether the business activities of the electricity generation actor result in a carbon deficit or surplus that can be traded. Following our analysis of MOEF 21/2022 and MEMR 16/2022, it can be interpreted that the carbon surplus to be traded between business actors is in the form of certificates known as greenhouse gas emission reduction certificates (*Sertifikat Penurunan Emisi Gas Rumah Kaca/SPE-GRK*). If the SPE-GRK is sold to another business actor, the ownership rights to the SPE-GRK will rationally transfer from the seller to the buyer. However, to the best of our knowledge, **there is currently no procedure or recording mechanism in place for the transfer of ownership of the traded carbon surplus, including the clarification that determines the validity period of the SPE-GRK that is traded and transferred.** As it stands, the carbon surplus

⁷ MEMR 16/2022, Article 7, Article 19 and Article 21.

⁸ [Fit for 55 and its impact on the current industry standard EU carbon trading documentation - HFW](#), accessed on 19 February 2025.

⁹ [Short Guide to Carbon Emissions Trading | Perspectives | Reed Smith LLP](#), accessed on 19 February 2025.

¹⁰ [The ISDA EU ETS Annex and its use with Article 25 linked ETS systems - HFW](#), accessed on 19 February 2025.

¹¹ [Harga Karbon Dibanderol Rp 30 ribu-Rp 270 ribu per Ton CO2 | Republika Online](#), accessed on 4 February 2025.

¹² [Price | Carbon Pricing Dashboard](#), accessed on 1 February 2025.

¹³ MEMR 16/2022, Article 25.

purchased by the buyer that is stated in the SPE-GRK is no longer recorded as originating from the seller's validated and verified business activities, but rather becomes owned by and attributed to the buyer.

These gaps indicate the need for stronger governance and regulatory oversight to ensure a well-structured and sustainable carbon trading market in Indonesia. Standardized pricing mechanisms and a clear technical framework will be essential in optimizing the country's carbon trading potential while aligning with national emission reduction goals. Furthermore, Indonesia's carbon market requires the development of a

comprehensive carbon offset registry that records the issuance, transfer, and retirement of every carbon unit, ensuring transparency and validity, and preventing double counting. This registry should operate with transparency and clear regulatory oversight, similar to the American Carbon Registry (ACR), which collaborates with government bodies to uphold market credibility.¹⁴

¹⁴ [The ACR Standard - ACR](#), accessed on 19 February 2025.

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The article above was prepared by Dentons HPRP's lawyers

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