



The Urgency of Carbon-Based Market Mechanisms for Reducing Emissions in Indonesia (PJOK No. 14 of 2023)

Mir'atul Hayati,¹ Meli Ekhsanti,²

¹Universitas Islam Negeri Salatiga, ²Universitas Islam Negeri Salatiga

¹hayatimiratul476@gmail.com, ²ekhasantim@gmail.com

ABSTRACT:

This article discusses carbon trading as a form of market-based mechanism in efforts to reduce emissions in Indonesia. By referring to PJOK regulation no. 14 of 2023 as a legal instrument related to carbon trading mechanisms, it is found that carbon trading is a market-based mechanism to reduce greenhouse gas emissions through buying and selling carbon units. This has the effect of many companies buying carbon from companies that use less carbon. This then raises the question: what are the benefits for companies that are able to reduce carbon use. The research method used in this research is juridical-normative with a statutory approach and a conceptual approach. By reviewing the regulations and norms related to carbon trading arrangements. That companies that are able to reduce carbon emissions are able to earn additional profits from selling carbon, and continue to be intensive in continuing to reduce carbon.

Key words: *Carbon market mechanism, emission reduction, PJOK No. 14 of 2023*

INTRODUCTION

in this case, every country is obliged to guarantee a decent life for all its citizens by providing a good and healthy living environment. Therefore, every country has the responsibility to build a sovereign, strong and prosperous country through development. Apart from that, Indonesia is required to play an active role in climate change control programs in accordance with the constitution. Apart from being one of the contents required by the 1945 Constitution of the Republic of Indonesia, environmental problems are currently receiving special attention from the international community. The use of coal and petroleum carried out by companies so far has apparently caused various negative impacts, one of which is the production of large amounts of carbon dioxide (CO₂) which causes air pollution and global warming. This environmental problem not only threatens Indonesia but also threatens the whole world. In this regard, ideas have emerged that attempt to solve current environmental problems. This initiative aims to address environmental problems and their negative impacts(Prasojo et al., 2019).

The carbon market or “ETS” emissions trading system is an attempt to set a price on carbon (or other greenhouse gas emissions) by establishing ownership of emissions in the form of rights/emissions. Emission permits (hereinafter referred to as subsidies) can be traded through market mechanisms (Field, 1997 p. 253). This system is also called cap and trade because the government must determine the amount of the emission target (cap) before dividing it into allowances and trading them. As mentioned previously, there are two economic tools for controlling emissions. , namely financial instruments (carbon taxes) and markets, especially the ETS. Under ideal conditions, both types of tools provide the same results. ETS can be chosen if the government wants to prioritize the scale of its emission reduction targets. This is fully consistent with Indonesia's requirements to achieve its NDC emission reduction targets. On the other hand, financial instruments can be chosen if the government wants to be more certain about the costs of reducing emissions. In this release effort, PJO regulation no. On January 14 2023, as a legal instrument related to the carbon trading mechanism, it turned out that carbon trading is a market-based mechanism for reducing greenhouse gas emissions through trading carbon units. In fact, the economic value of carbon (NEK) or carbon pricing is compensation given by polluters as a form of compensation for environmental damage due to carbon emissions. Luhut Binsar Pandjaitan, as Coordinating Minister for Maritime Affairs and Investment, aims to help Indonesia achieve net zero emissions (NZE) by 2060. Therefore, carbon trading is an effort to achieve the net zero emissions target. there are no specific regulations governing carbon trading. Therefore, this research aims to make a contribution to the government in the context of environmental protection through carbon pricing with a carbon market mechanism(Sutanto et al., 2023)

Methods

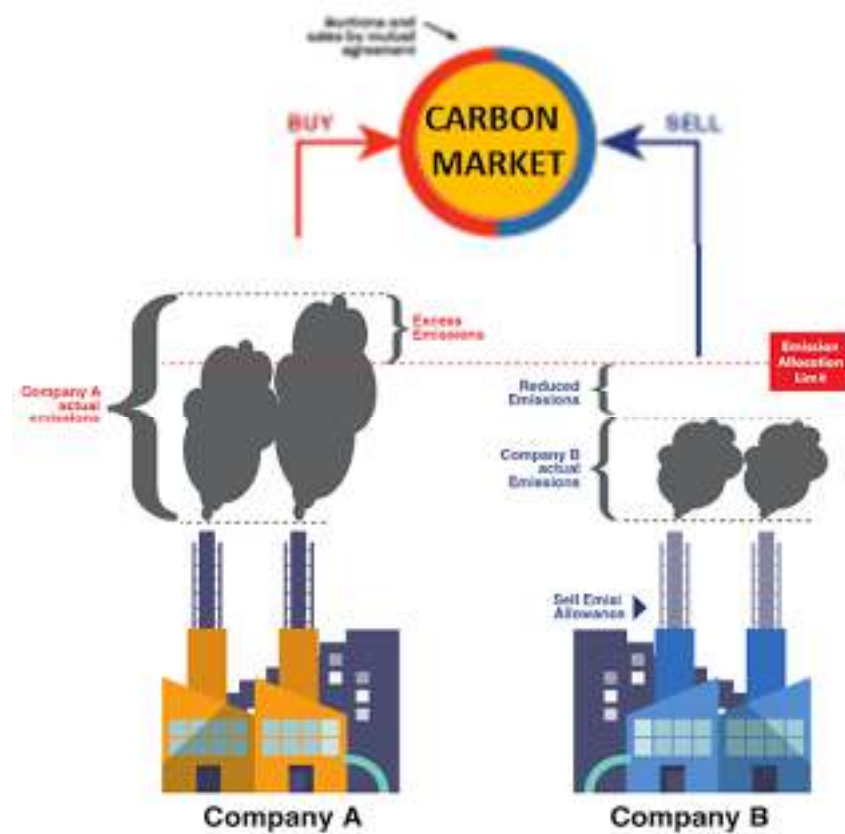
To answer this research question, standard legal research methods are used. Sunaryati Hartono believes that legal research can study legal principles, legal theories and form new legal principles. According to Bagir Manan, normative research is the study of applicable legal rules and principles. The research focuses on library data, also called secondary data. The standard legal approach in this research is used for the purpose of discussing national legislation related to carbon trading mechanisms. Carbon trading is considered a market-based mechanism for reducing greenhouse gas emissions through carbon trading. units. Apart from that, an empirical approach was also taken to examine the current legal basis through secondary data to see the implementation of existing laws and regulations related to increasing state income, and additional income for companies through evaluating the economics of carbon services. The empirical normative research method will focus on enforcement (facts) and normative legal provisions (laws) to control state financial management. This research uses legal documents as the main data, including primary legal

documents, secondary legal documents and third level legal documents. The various legal documents used as the basis for this research were collected through document research, both in physical form during library visits and through online searches. To analyze the data and draw conclusions from the research results, various legal documents were analyzed using descriptive and prescriptive evaluation techniques.

Result

Carbon emissions trading Carbon emissions trading is one form of realizing the commitment of countries around the world to control global warming by reducing global carbon emissions. This cycle began with the agreement of the Paris Agreement which marked the start of a new phase of global climate recovery. Carbon emissions trading agreements are not explicitly regulated in the terms of the Paris Agreement, but their implementation is permitted and provides the basis for the agreement to become more centralized. Because previously, trading in carbon emission rights was carried out through a number of mechanisms that referred to the provisions of the Clean Development Mechanism (CDM) of the Kyoto Protocol. The definition of carbon trading can be interpreted as the practice of buying and selling certificates for reducing carbon emissions from climate change mitigation activities, as stated in Presidential Regulation Number 46 of 2008 concerning the National Council for Climate Change. The same thing is also stated in PJOK Regulation no. On January 14 2023, as a legal instrument related to the carbon trading mechanism, it turned out that carbon trading is a market-based mechanism for reducing greenhouse gas emissions through trading carbon units. Carbon trading can be said to be a market-based procedure that supports efforts to reduce the amount of CO₂ in the atmosphere through trading carbon emission reduction certificates(Siagian & Arifin, 2022).

Gambar 1.1 Mekanisme Pasar Karbon



Based on Figure 1.1, it is explained that the carbon market mechanism that occurs is when in one factory it is calculated how much reasonable carbon emissions are emitted for one year, for example the cement industry's normal emissions for one year are 300 thousand tons of CO². Well, in practice there is one cement company that more in using CO², namely reaching 360 thousand CO² due to old machines or something else, but for example, on the one hand there are companies that rely on geothermal powered PLTUs or electricity generators, and when the government calculates it turns out that the average CO² that can be released is, for example, 150 thousand tons of CO², but because it uses renewable energy it only produces 90 thousand CO², so there is 60 thousand CO² remaining and they can sell it to companies that have excess carbon, this is what can be calculated and can make money, and companies can continue to be intensive in reducing emissions carbon(Kajian et al., 2023).

Tabel 1.1 Transaksi Karbon

Volume (tCO ₂)	Nilai (IDR)	Pengguna Jasa
1	69.600	20

PASAR REGULER

Pengelompokkan Unit Karbon	Harga Pembukaan	Harga Penutupan	Volume (tCO ₂)
IDTBS	69.600	69.600	1

In accordance with OJK Regulation (POJK) Number 14 of 2023 concerning Carbon Trading through the Carbon Exchange, IDXCarbon as the Carbon Exchange Organizer provides a transparent, orderly, fair and efficient trading system. Apart from providing transparency in prices, IDXCarbon trading also provides an easy and simple transaction mechanism. Currently, there are 4 (four) IDXCarbon trading mechanisms, namely Auction, Regular Trading, Negotiated Trading, and Marketplace. IDXCarbon is connected to the National Climate Change Control Registry System (SRN-PPI) belonging to the Ministry of Environment and Forestry (KLHK), making it easier to administer the transfer of carbon units and avoid double counting. Business actors in the form of companies who have an obligation and/or commitment to voluntarily reduce Green House Gas emissions, can become IDXCarbon Service Users and purchase available Carbon Units. In carbon trading, IDXCarbon recorded carbon trading of 459,953 tons of Carbon Units and there were 27 transactions. The provider of Carbon Units in this inaugural trade is Pertamina New and Renewable Energy (PNRE) which provides Carbon Units from the Lahendong Unit 5 and Unit 6 Projects of PT Pertamina Geothermal Energy Tbk (*Bursa Efek Indonesia*, 2023). The companies that act as buyers of Carbon Units in the initial IDXCarbon trade include:

Tabel 1.2 Data Pembeli Karbon

No	Nama Perusahaan
1	PT Bank Central Asia Tbk
2	PT Bank CIMB Niaga Tbk
3	PT Bank DBS Indonesia
4	PT Bank Mandiri (Persero) Tbk
5	PT BNI Sekuritas

6	PT BRI Danareksa Sekuritas (bagian dari PT Bank Rakyat Indonesia (Persero) Tbk)
7	PT CarbonX Bumi Harmoni
8	PT MMS Group Indonesia
9	PT Multi Optimal Riset dan Edukasi
10	PT Pamapersada Nusantara
11	PT Pelita Air Service
12	PT Pertamina Hulu Energi
13	PT Pertamina Patra Niaga
14	PT Truclimate Dekarbonisasi Indonesia
15	PT Udara Untuk Semua (Fairatmos).

Sumber: Data Bursa Efek Indonesia 2023

“IDXCarbon is an important step in Indonesia's commitment to decarbonize towards net zero emissions by 2060 or sooner. IDXCarbon strives to ensure transparency, reliability and security by providing the best solutions for carbon trading in Indonesia to create orderly, fair and efficient transactions. By providing a platform that prioritizes user experience, we hope that all business actors can easily benefit from carbon trading(Prasojo et al., 2019)

From Indonesia's perspective, funds for carbon emission reduction programs in developed countries will be translated into demand factors related to global carbon trading. These funds have the potential to enter Indonesia if the fund owner accepts the fund management system proposed by the Indonesian government. Apart from that, a guarantee from the Indonesian government in the process of managing environmental funds is also a mandatory requirement (Ayu, 2012). The demand for environmental management funds from developed countries has been fully considered by the Indonesian government to increase BPD LH's credibility as an environmental fund manager in Indonesia. The supply side captured by BPD LH, in the form of carbon credit projects in carbon-intensive economic sectors, is a response to the demand side emerging in developed countries. If the supply and demand aspects come together, it is necessary to ensure that both parties obtain measurable benefits in the long term. Developed countries receive carbon credits to reduce carbon emissions, while Indonesia receives benefits in the form of non-tax state revenues (PNBP), new jobs, technology transfer and other benefits. In addition, the main global climate change agenda, which reaches its peak in 2050, is the subject of a cooperation agreement between BPD LH and developed countries or parties that have obligations to reduce carbon emissions.(Irama, S.E., M.B.A., 2020)

Conclusion

So, it can be concluded that according to POJK regulation No. 14 of 2023 regarding carbon trading mechanisms, it is found that carbon trading is a market-based mechanism to reduce greenhouse gas emissions through buying and selling carbon units, meaning that there is a market mechanism because there is a buying and selling process, there is supply. and the demand that forms the price of carbon is aimed at reducing greenhouse gas emissions. It is important to know that every activity we do produces carbon, such as when we use a computer, as long as the electricity we use uses coal, it will produce CO² and other activities such as business, economics. This produces CO² and can be counted as one carbon unit and this is what can make the value of money.

Bibliography

- Ayu, K. P. (2012). *Peran Negara Dan Institusi Internasional Dalam Distribusi Pendanaan Karbon. Bursa Efek Indonesia*. (2023).
- Irama, S.E., M.B.A., A. B. (2020). Perdagangan Karbon Di Indonesia: Kajian Kelembagaan Dan Keuangan Negara. *Info Artha*, 4(1), 83–102. <https://doi.org/10.31092/jia.v4i1.741>
- Kajian, J., Septyanun, N., Harun, R. R., Jaya, I., & Ariani, Z. (2023). *KARBON BERBASIS VOLUNTARY DAN MANDATORY DI NUSA*. 11(2), 399–411.
- Prasojo, H., Septiriana, R. T., & Nugroho, A. (2019). Penerapan Pasar Karbon (Emission Trade System) di Indonesia dan Pembelajaran dari Uni Eropa Oleh Hadi Prasojo , Ratih Twi Septiriana , dan Avianto Nugroho. *PPI Brief*.
- Siagian, A. W., & Arifin, A. H. (2022). *PROTECTION OF MANGROVE FORESTS THROUGH ECONOMIC VALUATION OF CARBON SERVICES AS A STATE INCOME INCREASE EFFORTS*. 111–125.
- Sutanto, N. N., Maharati, D. D., & Fachran, S. (2023). Tinjauan Yuridis Penerapan Pajak Karbon sebagai Solusi Percepatan Green Energy di Indonesia. *Spektrum Hukum*, 20(1), 1. <https://doi.org/10.56444/sh.v20i1.3714>