Jurnal Magister Hukum "Law and Humanity" 18-39

IMPLEMENTATION OF CARBON TRADING IN INDONESIA POST THE ISSUE OF POJK NUMBER 14 OF 2023 ABOUT CARBON EXCHANGES

[1]Suci Ariyanti, [2]Suwarno Abadi, [3]Taufiqurrahman
[1,2,3]Master of Law Wijaya Putra University Surabaya
Email: [1]*sucibegreat@gmail.com*, [2]*suwarnoabadi@uwp.ac.id*,
[3]*taufiqurrahman*@uwp.ac.id

ABSTRACT:

POJK Number 14 of 2023 on Carbon Exchange is the Government's effort to create a carbon trading arrangement through a carbon exchange. Previously, the government issued two regulations related to carbon trading, namely Presidential Regulation Number 98 of 2021 and Minister of Environment and Forestry Regulation Number 21 of 2022. However, it turns out that these regulations still have weaknesses. This research is a normative legal research. The results show that after the enactment of POJK on Carbon Exchange, there are still weaknesses where the basis of paid-up capital as a carbon exchange organizer is exactly the same as the stock exchange rules listed in Article 3 POJK 3/2021. This provision is considered to make the carbon exchange exclusive. In addition, several rules in POJK 14/2023 such as the form of carbon trading is securities, so there will be delisting, even though carbon has no such thing as disappearing or delisting. In addition, Article 27 related to the terms and procedures of carbon exchange organizers must meet the principles of openness, access, and equal opportunity contradicts the definition of carbon as securities. This is because if the form of carbon exchange has become securities, then those who will enter will also be stock exchange players. Therefore, this regulation does not explain who can be involved in carbon trading other than the organizers. Individuals, cooperatives, communities, NGOs can be involved in carbon trading or not.

Keywords: *Carbon Trading; Carbon Exchange; Financial Services Authority*

INTRODUCTION

The Financial Services Authority (OJK) has issued OJK Regulation Number 14 of 2023 concerning Carbon Trading through the Carbon Exchange on August 2, 2023. This regulation becomes a guideline and reference for carbon trading implemented by market operators. This regulation is also part of OJK's efforts to support the government

in implementing climate change control programs through reducing greenhouse gas (GHG) emissions. However, there are still important notes on the weaknesses of this regulation, one of which is that the basis of paid-up capital as a carbon exchange operator is exactly the same as the stock exchange rules listed in Article 3 of POJK Number 3/POJK.04/2021 concerning the Implementation of Activities in the Capital Market Sector. Financial Services Authority.

Related to the above, climate change has become an issue that cannot be denied by mankind. Climate change itself has become an annual routine discussion in the global forum *'Conference of Parties'* (COP). Changes in the global climate system are believed to have a negative impact on human life in all parts of the world.[1] Over the past few years, the world has experienced shifts in weather patterns that threaten food production, to rising sea levels that increase the risk of catastrophic flooding, as a result of climate change. The United Nations (UN) reports that the earth is on a path to global warming more than double the 1.5 degrees Celsius limit agreed in Paris in 2015. Leon Hermanson, a researcher, predicts that global temperatures will continue to rise beyond 1.5°C above pre-industrial levels. The World Meteorological Organization (WMO) further reported that at least one year between 2022-2026 the world will reach its hottest on record, shifting 2016.[2]

The Intergovernmental Panel on Climate Change reports that greenhouse gas emissions produced by human activities have increased since 2010 across major sectors globally.[3] Therefore, reducing carbon emissions is considered one of the key aspects to tackle climate change. Countries in the world further worked together to address climate change and the cooperation resulted in international commitments to prevent an increase in the concentration of greenhouse gases in the atmosphere with the signing of the United Nations Framework Convention on Climate Change (UNFCCC) by several countries in the world, including Indonesia on June 5, 1992. The Convention aims to control greenhouse gas emissions originating from human activities.

Indonesia ratified the UNFCCC through Law Number 6 of 1994 on: Ratification of the United Nations Framework Convention on Climate Change (United Nations Framework Convention on Climate Change). As a follow-up to the UNFCCC goals

---

[1] Pamela S. Chasek, David L. Downie, and Janet Welsh Brown, *Global Environmental Politics*, Sixth Edition (Westview Press, 2013), hlm.179

[2] Wardoyo, "Climate Change and Carbon Trading from Reducing Greenhouse Gas Emissions", *Journal of Business Management* 5, no. 1 (2016): 39-44, http://dx.doi.org/10.31000/jmb.v5i1.1993.g1232

[3] Neng Shen, Yuqing Zhao and Rumeng Deng, "A review of carbon trading based on an evolutionary perspective", *International Journal of Climate Change Strategies and Management* 12, No. 5, (5 October, 2020): 739-756. https://doi.org/10.1108/IJCCSM-11-2019-0066

through concrete targets and steps to reduce GHG emissions, in 1997 UNFCCC participating countries made an additional agreement, namely the Kyoto Protocol which set quantitative targets for reducing greenhouse gas emissions.[4]

The Kyoto Protocol provides a basis for industrialized GHG emitting countries to reduce their total GHG emissions in 2012 by approximately 5 percent from 1990 emissions. The Kyoto Protocol Convention itself introduces 3 (three) methods in reducing carbon emissions, namely *Joint Implementation* (JI), *Clean Development Mechanism* (CDM) and *Emission Trading* (ET) or also called carbon trading. Furthermore, in the mission to reduce greenhouse gas emissions, the Kyoto Protocol groups countries into two classifications, namely developed countries as Annex 1 countries, and developing countries as non-Annex 1 countries. Efforts to reduce global carbon emissions can be carried out between Annex 1 countries, and between Annex 1 countries and non-Annex 1.1 countries.[5]

Joint Implementation (JI) is a mechanism for reducing carbon emissions carried out through cooperation between Annex 1 countries. Annex 1 member countries can reduce their carbon emissions through carbon emission reduction projects located in Annex 1 countries. The carbon emission reduction unit used in this scheme is called the Emission Reduction Unit (ERU) which is equivalent to 1 ton of CO2. While the CDM mechanism is a carbon emission reduction mechanism involving Annex 1 countries and non-Annex 1 countries. The units of carbon emission reduction used in this scheme are called *Certified Emissions Reductions* (CERs) which are equivalent to 1 ton of CO2. CERs can be traded on carbon trading exchanges such as the *European Climate Exchange* (ECX).[6]

Among the many methods that have been carried out to reduce carbon emissions, carbon trading is considered the most appropriate solution. More than 60 (sixty) countries have implemented carbon trading such as the European Union, Switzerland, South Korea and China. ET or Carbon Trading is regulated in Article 17 of the Kyoto Protocol and is defined as a market-based mechanism to reduce Greenhouse Gas Emissions through the purchase and sale of Carbon Units. Under the Kyoto Protocol, a country whose greenhouse gas emissions are below the allowable minimum can "sell" unused capacity

---

[4] F. Muhamad Iqbal and N. Ruhaeni. "Regulation of Greenhouse Gas Emissions Based on Kyoto Protocol and Its Implementation in Indonesia". *Global Dynamics: Journal of International Relations Sciences*, *7,* No. 2, (December 15, 2022), 225-246. https://doi.org/https://doi.org/10.36859/jdg.v7i02.1071

[5] Ade Bebi Irama, "Carbon Trading in Indonesia Institutional and State Finance Review," Journal of *Info Artha*, 4, No. 1 (June 29, 2020): 83-102. https://doi.org/https://doi.org/10.36859/jdg.v7i02.1071

[6] *Ibid.*

to another country whose emissions exceed the allowable limit as a permit to exceed the emission limit.[7]

Indonesia is one of the countries that signed the Kyoto Protocol and ratified it through Law Number 17 of 2004 concerning the Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change. By signing and ratifying the Kyoto Protocol, the government has opened up opportunities for Indonesia to participate in carbon trading. Furthermore, the Indonesian government issued Presidential Regulation Number 98 of 2021 concerning the Application of the Economic Value of Carbon for the Achievement of Nationally Determined Contribution Targets and Control of Greenhouse Gas Emissions in National Development as a form of commitment to overcome climate change. *The Nationally Determined Contribution* (NDC) itself contains Indonesia's commitment in the carbon emission reduction agenda which is expected to reach 29 (twenty-nine) percent or 41 (forty-one) percent with international support by 2030.[8]

According to CNBC Indonesia, the implementation of carbon trading in Indonesia will be a good business opportunity for entrepreneurs and carbon trading in Indonesia is estimated to reach US $ 300 billion or around Rp 4,290 trillion (assuming an exchange rate of Rp 14,300 per US $) per year. In the Indonesia Energy Outlook 2022 discussion organized by the Indonesian Coal and Energy Suppliers Association ("Aspebindo") on Thursday, February 17, 2022, the Chairman of the Indonesian Coal Mining Association (APBI), Pandu Sjahrir, further stated that this business opportunity can be obtained through carbon trading, both in terms of forest/land use such as reforestation, renewable energy, household appliances, to waste disposal.[9]

For these developments, as mentioned earlier, the Government through OJK issued OJK Regulation Number 14 of 2023 as an effort to create a carbon exchange and regulations governing the implementation of carbon exchanges. Previously, the Minister of Environment and Forestry had issued Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 21 of 2022 concerning Procedures for

---

[7] Easwaran Narassimhan, et.al,." Carbon pricing in practice: a review of existing emissions trading systems", *Climate Policy*, 18 No. 8 (May 18, 2018):967-991, DOI: 10.1080/14693062.2018.1467827

[8] Wilda Prihatiningtyas, and Zuhda Mila Fitriana. "Justice Perspective in Carbon Trading Policy in Indonesia as an Effort to Overcome Climate Change". *Legal Reflections: Journal of Legal Science*, 7, No. 2 (August 8, 2023), 163–186. https://doi.org/10.24246/jrh.2023.v7.i2.p163 - 186

[9] Wilda Asmarini, "Indonesia's Carbon Trading Has the Potential to Reach Rp.4290 Trillion!," cnbcindonesia.com, (February 17, 2022). Available on: https://www.cnbcindonesia.com/news/20220217170142-4-316253/perdagangankarbon-ri-berpotensi-tembus-rp-4290-triliun, accessed December 2, 2023

Implementing Carbon Economic Value. Based on Article 27, carbon trading is carried out through carbon exchanges classified as stock exchanges or trading operators that have obtained a business license from the authority that organizes an integrated regulatory and supervisory system for all activities in the financial services sector related to carbon trading and/or recording of carbon unit ownership.

In the issuance of the OJK regulation, although it is said to be an effort to create a carbon exchange, in its implementation, the securities-based carbon exchange system may cause confusion in the market. This is because the carbon exchange system applied in Europe and the United States (US) is actually commodity-based. If carbon trading is done on commodity exchanges, the market will be transparent. This means that the price will be market-based or equal to the price that is currently popular in the global market in actual. So this study focuses on the discussion of the Implementation of Carbon Trading in Indonesia After the Issuance of POJK Number 14 of 2023 concerning Carbon Exchange

RESEARCH METHODS

The type of research used is normative legal research. Normative legal research essentially examines laws that are conceptualized as norms or rules that apply in society, and become a reference for everyone's behavior. According to Soerjono Soekanto and Sri Mamudji, normative legal research is legal research carried out by examining library materials or mere secondary data[10], then normative legal research is also called literature law research, theoretical or dogmatic legal research.[11] The approach used in this writing is the statutory approach or *statute approach*, which is an approach through the use of legislation and regulations and also pays attention to the hierarchy and principles in laws and regulations.[12] Then, this research uses a *conceptual approach because* one part of this research will later begin by identifying existing principles or doctrinal views to then bring up new ideas. This normative legal research is descriptive as part of legal science activities to explain the law Only facts that become primary legal material to explain the law Make decisions about the law of the legal field.[13]

---

[10] Zainuddin Ali, *Legal Research Methods*. (Sinar Grafika, 2021), pp. 13-14

[11] H. Ishaq, *Legal Research Methods and Thesis, Thesis, and Dissertation Writing*, (Bandung: 2017), p. 66

[12] Peter Mahmud Marzuki, *Legal Research*, 13th printing, (Kencana Prenada Media Group: 2017), p. 137.

[13] The Suffering of Prapti Rahayu, *Legal Research Methods.* (Thafa Media, 2020), p. 87.

DISCUSSION

International Legal Framework as a Basis for Carbon Trading

Carbon trading was born because it was motivated by the Convention on Climate Change or UNFCCC, the result of the Earth Summit in Rio De Janeiro, Brazil in 1992. Climate change is a global problem that requires the willingness of countries to jointly address it. United Nations Framework Convention on Climate Change (UNFCCC) in 1992 at the Summit in Rio de Janeiro, Brazil. The UNFCCC is the legal basis for addressing the problem of climate change. The UNFCCC notes and states that the largest portion of greenhouse gas emissions currently come from developed countries while greenhouse gas emissions from developing countries are still relatively low. This raises the next problem, namely uncertainty related to efforts to reduce greenhouse gas emissions between countries. Developed countries and developing countries have different responsibilities in terms of timing, amount and pattern of implementation of greenhouse gas emission reductions. Therefore, the UNFCCC adheres to the principle of *common but differentiated* responsibilities ("CBDR") where each country has the same responsibilities but with different burdens.

The UNFCCC is general in nature and is a legal framework that requires further regulation and explanation to implement greenhouse gas emission reductions. The implementation of the UNFCCC requires further technical specifications. Therefore, through the third COP, the Kyoto Protocol was born which later became the basis for the implementation of carbon trading.[14]

The Kyoto Protocol is the basis and legal instrument for countries in dealing with climate change. The Kyoto Protocol uses a trade approach as a strategic and adequate way to achieve the world's carbon emission reduction targets. The Kyoto Protocol regulates six types of greenhouse gas emissions, namely carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hex fluoride (SF6). Each gas has a specific rating based on its strength in accelerating global warming. The ranking index was awarded by the United Nations Panel on Climate Change (IPCC) in its second assessment report in 1995. Based on this index, each gas is translated into CO2 equivalents. Each Kyoto emission right (AAU, RMU, ERU and CER) represents one metric ton of CO2 equivalent. The Kyoto Protocol adopts a *cap-and-trade* system and *a baseline-and-credit* mechanism, whereby *cap-and-trade* refers to a system in which Annex B Parties are allocated emission limits, Assigned

[14] Christian Almer, dan Ralph Winkler, "Analyzing the effectiveness of international environmental policies: the case of the Kyoto Protocol." *J Environ Econ Manag* 82, (Maret, 2017):125–151, https://doi.org/10.1016/j.jeem.2016.11.003

Amounts. A Party emitting less than that limit may sell its excess AAU and the Party emitting more than that limit must purchase additional emission rights. Meanwhile, JI and CDM are *baseline-and-credit* systems. In both of these systems, emission rights can be obtained (ERU and CER) by participating in emission reduction projects held abroad. Each emission right obtained represents one metric ton of CO2 equivalent reduced by the project. At the beginning of the project, *a baseline* is created by calculating the amount of emissions that would occur if the project did not exist (business-as-usual scenario). The difference between the baseline and the actual (lower) emissions as a result of the project being converted into tradable emission rights.[15]

Provisions related to the transfer of emission rights need further scrutiny. If we further examine the provisions of Article 17 of the Kyoto Protocol, countries that can transfer their emission rights are only countries that fall into the Annex B category because the transfer of emission rights is considered a means for Annex B countries to fulfill their commitments to Article 3 of the Kyoto Protocol. The Kyoto Protocol stipulates a carbon trading mechanism commonly referred to as a flexible mechanism, which consists of:[16]

1. *International Emission Trading* (IET) regulated in Article 17 of the Kyoto Protocol;
2. *Joint Implementation* (JI) stipulated in Article 6 of the Kyoto Protocol; and
3. *Clean Development Mechanism* (CDM) stipulated in Article 12 of the Kyoto Protocol.

Pursuant to Paragraph 5 of Annex to Decree No.11 on Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol ("IET Modalities"), legal entities are allowed to participate in International Emissions Trading.[17]

Furthermore, the *Marrakesh Accord* ("Marrakesh Agreement") is also the basis and legal instrument for developing countries to participate in tackling climate change. The agreement favors developing countries that lack the technical and financial capacity to cope with the effects of climate change. *The Marrakesh Accord* adheres to an additional and complementary principle, whereby CDM or JI projects based on *the Marrakesh*

---

[15] David Freestone, et.al., *Legal Aspects of Carbon Trading Kyoto, Copenhagen, and Beyond* (Oxford University Press: 2009), hlm. 158-159

[16] Boqiang Lin dan Zhijie Jia, "Can Carbon Tax Complement Emission Trading Scheme? The Impact Of Carbon Tax On Economy, Energy And Environment In China", *Climate Change Economics* 11, No. 3, (Juli 16, 2020):190-203, https://doi.org/10.1142/S201000782041002X

[17] Hanna-Mari Ahonen, et al. "Current Developments in Carbon & Climate Law." *Carbon & Climate Law Review* 11, No. 2 (2017): 150-165, https://doi.org/10.21552/cclr/2017/2/10

Accord will be additional if the greenhouse gas emissions exhaled by the source are reduced below the emissions of registered CDM projects. The *Marrakesh Accord* regulates technical issues regarding emission reduction mechanisms, land use, land change and forestry, procedures and mechanisms related to compliance under Kyoto Protocol Articles 5, 7, and 8, guidelines for national systems, as well as Good practices in policy and assessment among interested parties. The *Marrakesh Accord* discusses verification procedures and the institutions that implement them. *The Marrakesh Accord* states that the party verifying and establishing the procedure is an independent institution, either established by the relevant Government or appointed an international agency in the form of an Accredited Independent Body for the JI *Project*, an Executive Board for CDM, a secretariat for Emissions Trading.[18]

The Marrakesh Accord recognizes the transfer of carbon units carried out by the Parties as long as the transfer is intended to fulfill obligations and the Parties involved do not meet the requirements or do not have the status of parties prohibited from carrying out activities (*suspended*). This requirement relates to the obligations of the parties involved in the transfer to maintain the submission of project reports and registrations as well as the history of the implementation of their obligations.[19]

The Paris Agreement is an international agreement on climate change that aims to hold global average temperature rise below 2°C above pre-industrialization levels and continue efforts to reduce temperature rise to 1.5°C above pre-industrialization levels. In addition, the Paris Agreement is directed at increasing adaptability to the negative impacts of climate change, towards climate resilience and low-emission development, without threatening food production, and setting up funding schemes for low-emission and climate-resilient development.[20]

The Paris Agreement, which is *legally binding and applicable to all* countries with the principle of *common but differentiated responsibilities and respective capabilities*, gives responsibility to developed countries to provide funding, capacity building, and technology transfer to developing countries. In addition, the Paris Agreement mandates

---

[18] Lisa Benjamin, dan David A. Wirth. "From Marrakesh to Glasgow: Looking backward to move forward on emissions trading." *Climate Law* 11, No. 3-4, (Noember 16, 2021): 245-264, https://doi.org/10.1163/18786561-11030002.

[19] Adiwarman, "Carbon trading as an effort to reduce greenhouse gas emissions: A juridical study of instruments, markets, institutions and utilization by Indonesia", *Dissertation,* (Doctoral University of Indonesia, 2018), p. 113

[20] Faris Faza Ghaniyyu, and Nurlina Husnita. "Efforts to Control Climate Change through Restrictions on Oil-Fueled Vehicles in Indonesia Based on the Paris Agreement." *Morality: Journal of Legal Studies* 7, No. 1 (Jun 25, 2021): 110-129, http://dx.doi.org/10.52947/morality.v7i1.19

more effective and efficient bilateral and multilateral cooperation to implement climate change mitigation and adaptation actions with the support of funding, technology transfer, capacity building supported by transparency mechanisms and sustainable governance.[21]

In order to achieve the goals of the Paris Agreement, the national contribution to global efforts outlined in the NDC, all States Parties implement and communicate their ambitious efforts and demonstrate progress over time, related to NDCs (mitigation, adaptation), and support of funding, technology and capacity building for developing countries by developed countries. Indonesia's NDC covers mitigation and adaptation aspects.[22]

Implementation of Carbon Trading in Indonesia Before the enactment of POJK Number 14 of 2023 concerning Carbon Exchange

The legal basis governing carbon trading in Indonesia is stipulated in Presidential Regulation Number 98 of 2021 concerning the Application of Carbon Economic Value for the Achievement of Nationally Determined Contribution Targets and Control of Greenhouse Gas Emissions in National Development. Presidential Regulation Number 98 of 2021 does not regulate carbon trading in detail. However, the provisions in this presidential regulation are the legal basis for carrying out carbon trading. Based on Article 47 paragraph (1), the implementation of Carbon Economic Value can be carried out through: 1) Carbon trading; 2) Performance-Based Payments; 3) Carbon Rewards; and/or 4) Other mechanisms in accordance with the development of science and technology determined by the Minister.[23]

The main elements of the implementation of Carbon Trading through domestic trade and/or foreign trade as referred to in paragraph (1) include: 1) Emission Trading mechanisms and procedures; 2) GHG Emission Offsetting mechanisms and procedures; 3) Use of state revenues from Carbon Trading within the country; 4) Approval and recording mechanisms and procedures; 5) Sharing of trade proceeds; 6) Guidelines for the implementation of Carbon Trading; 7) Transfer of Carbon Rights status domestically

---

[21] Daniel Bodansky, "The legal character of the Paris Agreement." *Review of European, Comparative & International Environmental Law* 25.2 (Juni 22, 2016): 142-150, https://doi.org/10.1111/reel.12154.

[22] Axel Michaelowa, Igor Shishlov, dan Dario Brescia. "Evolution of international carbon markets: lessons for the Paris Agreement." *Wiley Interdisciplinary Reviews: Climate Change* 10, No. 6 (Agustus 6, 2019): e613, https://doi.org/10.1002/wcc.613

[23] Nurjannah Septyanun, et al. "Regulation and Governance of the Implementation of Voluntary and Compulsory Carbon Economic Value in West Nusa Tenggara." *GEOGRAPHY: Journal of Educational Studies, Research and Development* 11, No. 2 (September, 2023): 399-411, https://doi.org/10.31764/geography.v11i2.17210

through the recording mechanism of the National Registry System for Climate Change Control (SRN PPI) and abroad through the mechanism of recording SRN PPI and ratification of Carbon Trading abroad.

Carbon trading as referred to in Article 47 paragraph (1) point a can be carried out through domestic trade and/or trade abroad. Based on this Presidential Regulation, national carbon trading can be carried out based on: 1) Based on the relevant National Registry System for Climate Change Control ("SRNPPI"); 2) Prioritize the use of Greenhouse Gas Emission Reduction Certificates produced through national emission reduction certification mechanisms; 3) Prioritizing the use of Greenhouse Gas Emission Reduction Certificates produced through national emission reduction certification mechanisms; 4) Prioritizing the use of Greenhouse Gas Emission Reduction Certificates produced through national emission reduction certification mechanisms; 5) Prioritize the use of Greenhouse Gas Emission Reduction Certificates produced through national emission reduction certification mechanisms.

The Carbon Trading Policy through domestic trade and/or foreign trade is determined by the Minister after coordination with the relevant ministers, in accordance with Article 49 paragraph (2), Carbon trading at home and abroad is carried out through Emission Trading and GHG Offsetting Trading, Emissions Trading and GHG Offsetting Trading itself can be implemented cross-sectorally. Carbon trading through the Emissions Trading mechanism, carried out for businesses or activities that have an Upper Limit of GHG Emissions. The Upper Limit of GHG Emissions is the highest level of GHG Emissions set in a certain period, while carbon trading through the GHG Emission Indemnity mechanism is carried out for businesses or activities that do not have an Upper Limit of GHG Emissions.[24]

Article 52 paragraph (2) further explains that GHG Emission Offsetting is carried out in terms of business or activity; (1) does not have a predetermined Upper Emission Limit; (2) the results of GHG Emission reduction from Climate Change Mitigation Actions carried out are below the targets and baselines that have been set; or (3) the results of GHG Emission reduction achievements from Climate Change Mitigation Actions carried out are above the target and below the established Baseline.

Article 54 stipulates that Domestic and International Carbon Trading is carried out through carbon market mechanisms through Carbon Exchanges and/or direct trading, Carbon Trading through market mechanisms is carried out by; (1) development of carbon

[24] Muh Sutartib, "Challenges of Carbon Tax Administration in Indonesia." *Indonesian Journal of State Budget and Finance (Accuracy)* 3, No. 2 (November 29, 2021): 38-55, DOI: https://doi.org/10.33827/akurasi2021.vol3.iss2.art127

trading infrastructure; (2) regulation of the utilization of state revenues from Carbon Trading; (3) and/or administration of carbon transactions.

In 2022, the Minister of Environment and Forestry issued Regulation of the Minister of Environment and Forestry No. 21 of 2022 concerning procedures for implementing the economic value of carbon which further regulates the implementation of carbon trading. In Article 1 Number 19 of the Minister of Environment and Forestry Regulation, Carbon Trading is defined as a market-based mechanism to reduce Greenhouse Gas (GHG) Emissions through Carbon Unit trading activities. The carbon unit itself is defined as proof of carbon ownership in the form of a certificate or technical approval expressed in 1 (one) ton of carbon dioxide recorded in the National Registration System for Climate Change Control.

Regulation of the Minister of Environment and Forestry No. 21 of 2022, classifies parties who can trade carbon into two broad categories, namely Sectors and Sub-Sectors. Parties classified into sector groups are those engaged in energy, waste, industrial processes and product use, agriculture, forestry and / or other sectors in accordance with the development of science and technology. Furthermore, sub-sectors consist of power plants, transportation, buildings, solid waste, liquid waste, garbage, industry, rice fields, animal husbandry, plantations, forestry, peat and mangrove management and/or other sub-sectors in accordance with the development of science and technology.

Under Article 4, carbon trading can be carried out both domestically and abroad. According to the provisions of Article 5 paragraph (1), carbon trading at home and abroad can be carried out through GHG emission trading and offset mechanisms, both emission trading and GHG emission offsetting can later be carried out through carbon exchanges and/or direct trading. According to Article 58 paragraph (4) Tradable GHG emissions consist of carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hex fluoride (SF6), and other compounds in accordance with the development of science and technology. Emission trading is applied to businesses and/or activities that have a Maximum GHG Emission Limit that has been determined through the Determination of the Maximum GHG Emission Limit ("PTBAE"), which is a technical approval regarding the Maximum GHG Emission Limit in the Sub-Sector or sub-sector. Meanwhile, GHG emission offsetting is carried out for businesses and/or activities that do not have GHG Emission Limits; surplus emissions, in terms of GHG Emission reduction achievements from Climate Change Mitigation Actions carried out are below the GHG Emission Target and Baseline that has been set; or emission deficit, in the event that the achievement of GHG Emission

reduction from Climate Change Mitigation Action carried out is above the target and below the established GHG Emission Baseline.

In implementing GHG Emission Reduction, Business Actors are required to prepare a *Climate Change Mitigation Action Plan document* ("DRAM"). DRAM is a document made by Business Actors in order to obtain a Certificate of Greenhouse Gas Emission Reduction ("SPE-GRK"). DRAM must later be validated by the Validator and the results of the validation will later be submitted in a report and given to Business Actors so that Business Actors can later register the DRAM in the National Registration System for Climate Change Control ("SRN PPI"). As for international carbon trading, it can be done after the relevant Minister determines and submits plans and strategies for achievement related to NDC Sectors and Sub-Sectors to the Minister; has achieved NDC targets in Sub-Sectors or sub-Sectors for Carbon Trading abroad; and obtain endorsement from the Minister.

Article 18 paragraph (1) states that the relevant Minister can cooperate in international carbon trading to produce GHG Emission reduction results in order to achieve NDC targets in the Sub-Sector after coordinating with the Minister. Furthermore, in paragraph (2) it is explained that part of the emission reduction proceeds from Climate Change Mitigation Action can be transferred to foreign cooperation partner countries in accordance with the cooperation agreement taking into account; in order to assist developing countries in achieving NDC targets and enhancing their ambitions; *abatement costs*; and its emission reduction performance below the established emission target.

In implementing international carbon trading through cooperation, based on Article 21 paragraph (1), the minister will establish an appointed national authority. The appointed national authority has the following duties: 1. Review foreign cooperation proposals submitted by the relevant Minister; 2. Review the report on the results of the implementation of foreign cooperation for the issuance of SPE-GRK; 3. Provide recommendations to the Minister for approval of foreign cooperation; 4. Provide recommendations to the Minister to authorize the transfer of carbon rights abroad; and 5. Report on the planning, implementation, and results of foreign cooperation to regulatory bodies under the Paris Agreement. Report on the planning, implementation and results of foreign cooperation to regulatory bodies under the Paris Agreement.

In accordance with the regulations of the Ministry of Environment and Forestry, carbon trading can also be carried out cross-sectorally, cross-sectoral carbon trading itself is defined as Carbon Trading between different Sectors and/or Sub-Sectors. Cross-sector carbon trading can be done internationally and domestically. International Cross-Sector Carbon Trading can be carried out in the event that the sub-sectoral GHG Emission

reduction target and/or Climate Change Mitigation Action plan has been achieved, while domestic cross-sector carbon trading can be carried out based on cross-sector carbon trading quotas set by the relevant minister. To obtain ministerial approval to conduct international carbon trading through cooperation, the relevant Minister and/or Business Actors must submit an application to the Minister by attaching a proposal and draft agreement on carbon trading cooperation. As already mentioned, carbon trading can be done through carbon exchanges. According to Article 27 paragraph 2, carbon exchanges are classified as stock exchanges or trading operators that have obtained a business license from the authority that organizes an integrated regulatory and supervisory system for all activities in the financial services sector related to Carbon Trading and/or recording ownership of Carbon Units.

In order to measure, report and verify the implementation of carbon trading, business actors and/or governments, local governments and communities are required to prepare planning documents and reports on the results of implementation. The preparation of planning documents must contain; (1) general data on the implementation of NEK; (2) emission measurement against *GHG Emission Baseline*; (3) measurement of GHG emission reduction targets and GHG removal; and (4) the need for financial resources, capacity building, and technology transfer. The report on the results of carbon trading will later be verified to ensure its quality, the verification report must contain the amount of GHG emissions or actual removals and GHG emission reduction achievements by comparing the amount of GHG emissions or actual removals with GHG emission reduction targets. This verification will later be carried out by verifiers who are independent third parties certified by Verification bodies that have been accredited by the National Accreditation Committee to verify the implementation of Carbon Economic Value. Verification is carried out within a maximum period of 6 (six) months since the NEK implementation report is submitted by the verifier.

The information will be provided in the form of graphs, tables and maps of the distribution of actions and resources for climate change adaptation and climate change mitigation. The Public Information itself will consist of; (1) procedures and mechanisms for implementing NEK; (2) information related to activities and/or businesses that organize NEK including trading opportunities, carbon prices, and carbon markets; (3) planning documents for Climate Change Mitigation Actions and annual NDC achievement reports through the implementation of the NEK; (4) monitoring and evaluation report on the implementation of NEK; (5) information on groups of experts in the field of climate change. This Public Information will be announced periodically at least 1 time within a period of 1 year through SRN PPI.

Based on the provisions mentioned above, the impact of carbon trading on Indonesia's domestic market is related to Domestic Carbon Trading Business actors who have SPE-GRK can conduct domestic, foreign, or cross-sector carbon trading, all of which must be done through SRN. To be able to have SPE-GRK, business actors must first register in SRN, their general data and special data are verified by an independent verifier, and considered by the Minister of Environment and Environment to be issued their SPE-GRK through the SRN system. In the event that the Minister of Environment and Environment decides to issue SPE-GRK, the business actor will be given a certificate number, where the certificate number (SPE-GRK) is something that is sold and bought with the procedures mentioned in this paper.

While the implications for Foreign Carbon Trading, business actors who conduct foreign carbon trading must be done through SRN. This is because carbon trading abroad must first meet domestic carbon fulfillment targets. This has also been confirmed by officers of the Directorate of GHG Inventory and Monitoring, Reporting and Verification of the Ministry of Environment and Forestry (hereinafter referred to as the "Dir of GHG Inventory and MRV"). The procedures taken in domestic trade must first be taken by business actors who want to conduct foreign trade, including obtaining validation of general data and special data through SRN. However, it does not stop there, to conduct foreign trade business actors must also apply for and authorization from the government, as explained below. Thus, foreign carbon trading has a longer procedure than domestic carbon trading. Authorization of applications submitted by business actors to conduct foreign trade will first consider whether the domestic NDC target has been met or not, and whether the project is considered suitable for international sale or not. In the event that the domestic NDC target has been met, and/or the project is considered suitable for trade abroad, the Minister of Environment and Forestry will issue an authorization.

Carbon trading across foreign sectors is carried out in the event that the sub-sector GHG emission reduction target and/or climate change mitigation action plan has been achieved. Meanwhile, domestic cross-sector carbon trading is carried out based on cross-sector carbon trading quotas set by the relevant Minister. Cross-sector carbon trading must also be (i) carried out after the relevant minister has determined and submitted plans and strategies for achieving NDC targets to the Minister, (ii) must be after achieving NDC targets in related sub-sectors or sub-sectors for foreign carbon trading, and (iii) must obtain authorization from the Minister.

In SE MenLHK 95/2023, it has also regulated the Carbon Exchange before being regulated by POJK Number 14 of 2023 concerning Carbon Exchange:

1. As mandated in the PPSK Law, the Carbon Exchange can only be held by market operators who have obtained a business license from the Financial Services Authority (OJK). Currently, a Regulation of the Chairman of the OJK is being prepared regarding the operationalization and Rule Base of the Carbon Exchange in Indonesia as an implementation of Presidential Regulation No. 98/2021. The operationalization of the carbon exchange in Indonesia is prepared to be *fully connected* with SRN and effective;
2. Currently, there are several entities/organizations/institutions that have and are developing or preparing carbon trading initiatives or options on the secondary market through carbon exchanges. MoEF as the NFP/*National Focal Point* of the UNFCCC for Indonesia, together with the NDC sector supervisors continue to strengthen regulation and implementation of climate change mitigation and adaptation actions. Its implementation broadly involves all: Government, local government, business NGOs/activists, and grassroots communities;
3. *The carbon exchange trading rule base* is being prepared by OJK in collaboration with the Ministry of Finance and MoEF with the affirmation of norms by the MoEF as NFP. Technically, it will be regulated by the Carbon Exchange by OJK together with the Ministry of Finance and other KLs related to technical regulations, requirements, work principles, transparency, etc. The main norm affirmed by the MoEF based on Presidential Regulation No. 98/2021 is the absolute obligation to register in SRN and affirms that carbon authorization with SPE and arrangements that affirm the fulfillment of BAE for projects/activities on a single basis (*single project*) to assist in the achievement of national NDCs. So the fulfillment of BAE is a single project/activity not an aggregate NDC. Thus, the assumption that foreign carbon markets have not been able to run or become closed because they have to meet NDCs first, is also very wrong.
4. The technical preparation of the Carbon Exchange with OJK will be completed where NEK trials will be carried out with trials for domestic and foreign trade transaction mechanisms at a carbon value of 100 million tons of CO2e from 577 million tons of CO2e that have been available or have been listed on SRN.

Implementation of Carbon Trading in Indonesia After the Issuance of POJK Number 14 of 2023 concerning Carbon Exchange

In 2023, through Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector (*Financial Services Omnibus Law*), it will make a

major contribution to the opening of carbon trading[25]. With regard to carbon trading, in this case OJK as the institution that oversees the financial services sector, has issued POJK Number 14 of 2023 concerning Carbon Trading Through Carbon Exchanges and SEOJK 12/SEOJK.04/2023 concerning Procedures for Implementing Carbon Trading Through Carbon Exchanges. This provides an opportunity that carbon trading can be done just like trading stocks or other securities. Because, related to carbon trading, what is sold is indeed certificates or securities related to nature conservation ownership.

As for the substance of the regulation of the Carbon Exchange POJK, among others, carbon units traded through carbon exchanges are securities. Also, it must first be registered with the National Registry System for Climate Change Control (SRN-PPI) and carbon care organizers. Parties that can carry out business activities as carbon exchanges are market organizers who already have a business license from the OJK. In POJK 14/2023 Article 3 Paragraph (3), it is stated that carbon exchange operators can facilitate the trading of carbon units from abroad recorded in SRN-PPI or carbon units that are not recorded in SRN PPI, as long as they do not conflict with the provisions of laws and regulations. Then in Article 6 Paragraph (2) explained, carbon exchange operators can develop carbon unit-based products after obtaining approval from the OJK. For its limitations, Article 9 states, carbon exchange operators are prohibited from being parties to conduct transactions for their own interests in the system they host. In addition, carbon exchange operators are required to have a paid-up capital of at least IDR 100 billion and must not come from loans as stated in Article 13.

OJK supervises carbon trading through carbon exchanges, which includes, among others, supervision of carbon exchange operators, supporting market infrastructure for carbon trading, carbon exchange service users, carbon unit transactions and settlements, carbon trading governance. In addition, OJK also oversees risk management, consumer protection, parties, products, and/or activities related to carbon trading through carbon exchanges. In addition, in conducting their business activities, carbon exchange operators are allowed to formulate regulations. The regulations of carbon exchange operators and their amendments come into effect after obtaining OJK approval.

In this regulation, there are still shortcomings, such as the basis of paid-up capital as a carbon exchange operator is exactly the same as the stock exchange rules listed in Article 3 POJK 3/2021. This provision is considered to make carbon exchanges exclusive.

---

[25] Mochammad Rizaldy Insan Baihaqqy, "The Impact of Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Services Sector (P2SK) on the Duties and Supervisory Functions of the Financial Services Authority." *Co-Value Journal of Cooperative Economics and entrepreneurship* 14, No. 6 (November 6, 2023): 1-8, https://doi.org/10.59188/covalue.v14i6.3972.

In addition, several rules in POJK 14/2023 such as imitating stock exchange regulations. In addition, another note, the form of carbon trading is securities, so there will be *delisting*. Though there is no such thing as carbon loss or *delisting*.

Article 27 POJK 14/2023 related to the terms and procedures for carbon exchange operators must meet the principles of openness, access, and opportunity that contradict the definition of carbon as securities. Because, if the form of the carbon exchange has become a effect, then the stock exchange players will also enter. It is also unclear who can engage in carbon trading other than organizers. Individuals, cooperatives, communities, NGOs can be involved in carbon trading or not.

Article 25 C point 7 which contains the suspension of trade and the continuity of trade in emergency conditions. There was no explanation of the emergency in question. Though carbon is not owned by companies that can go bankrupt. Though carbon will always be there, unless at the location of carbon there are forest fires that affect the value of carbon. On the other hand, continued Bhima, the securities-based carbon exchange system will actually cause confusion in the market. This is because the carbon exchange system applied in Europe and the United States (US) is actually commodity-based. If carbon trading is done on commodity exchanges, the market will be transparent. This means that the price will be market-based or equal to the price that is currently popular in the global market in actual. Securities-based carbon exchanges make the depth of the carbon market 'shallow'.

Trading carbon units in the future may not stop at tackling global warming. These can develop into sharia-based carbon units or other types of substances that cause massive and mass pollution. In addition, it is possible that carbon exchange will initiate other issues within the framework of sustainability, not only the environment, but such as peace issues or the like. Where, the issue can be used as an object that not only provides economic value for all parties, but for the sake of improving a better quality of life.

In such a context, carbon exchange that exists as a forum for carbon trading should be able to be a concrete solution that is certainly fair and sustainable. Measures to address the climate crisis through carbon trading must be ensured to be fair, integrity, and consistent with the original objectives. However, achieving this goal will not be easy. This is certainly due to the fear that carbon trading, which was originally intended to solve the climate crisis, is instead more focused on siphoning off rupiah coffers, thus marginalizing the fairness of the trading process itself.

CONCLUSION

After the enactment of the POJK on Carbon Exchanges, there are still weaknesses wherethe target of paid-up capital as a carbon exchange operator is exactly the same as the stock exchange rules listed in Article 3 of POJK 3/2021. This provision is considered to make carbon exchanges exclusive. In addition, some rules in POJK 14/2023 such as the form of carbon trading are securities, so there will be *delisting*, even though there is no such thing as carbon loss or *delisting*. In addition, Article 27 related to the terms and procedures for carbon exchange operators must meet the principles of openness, access, and opportunity that contradict the definition of carbon as securities. This is because if the form of the carbon exchange has become a effect, then the stock exchange players will also enter. So this arrangement has not made it clear who can be involved in carbon trading other than organizers. Individuals, cooperatives, communities, NGOs can be involved in carbon trading or not,

REFERENCES

Adiwarman, "Perdagangan karbon sebagai upaya penurunan emisi gas rumah kaca: Studi yuridis tentang instrumen, pasar, kelembagaan dan pemanfaatan oleh Indonesia", *Disertasi*, (Doktor Universitas Indonesia, 2018)

Ahonen, Hanna-Mari, et al. "Current Developments in Carbon & Climate Law." *Carbon & Climate Law Review* 11, No. 2 (2017): 150-165, https://doi.org/10.21552/cclr/2017/2/10

Almer, Christian dan Ralph Winkler, "Analyzing the effectiveness of international environmental policies: the case of the Kyoto Protocol." *J Environ Econ Manag* 82, (Maret, 2017):125–151, https://doi.org/10.1016/j.jeem.2016.11.003

Ali, Zainuddin. *Metode Penelitian Hukum*. (Sinar Grafika, 2021)

Asmarini, Wilda "Perdagangan Karbon RI Berpotensi Tembus Rp.4290 Triliun!," cnbcindonesia.com, (February 17, 2022). Tersedia pada: https://www.cnbcindonesia.com/news/20220217170142-4-316253/perdagangankarbon-ri-berpotensi-tembus-rp-4290-triliun, diakses 2 Desember 2023.

Benjamin, Lisa dan David A. Wirth. "From Marrakesh to Glasgow: Looking backward to move forward on emissions trading." *Climate Law* 11, No. 3-4, (Noember 16, 2021): 245-264, https://doi.org/10.1163/18786561-11030002.

Baihaqqy, Mochammad Rizaldy Insan. "Dampak Undang-Undang Nomor 4 Tahun 2023 tentang Pengembangan dan Penguatan Sektor Jasa Keuangan (P2SK) terhadap

Tugas dan Fungsi Pengawasan Otoritas Jasa Keuangan." *Co-Value Jurnal Ekonomi Koperasi dan kewirausahaan* 14, No. 6 (November 6, 2023): 1-8, https://doi.org/10.59188/covalue.v14i6.3972.

Bodansky, Daniel. "The legal character of the Paris Agreement." *Review of European, Comparative & International Environmental Law* 25.2 (Juni 22, 2016): 142-150, https://doi.org/10.1111/reel.12154.

Chasek, Pamela S. David L. Downie, and Janet Welsh Brown, *Global Environmental Politics,* Sixth Edition, (Westview Press, 2013).

Easwaran Narassimhan, et.al,."Carbon pricing in practice: a review of existing emissions trading systems", *Climate Policy*, 18 No. 8 (May 18, 2018):967-991, DOI: 10.1080/14693062.2018.1467827

Freestone, David, et.al, *Legal Aspects of Carbon Trading Kyoto, Copenhagen, and Beyond* (Oxford University Press: 2009)

Ghaniyyu, Faris Faza dan Nurlina Husnita. "Upaya Pengendalian Perubahan Iklim Melalui Pembatasan Kendaraan Berbahan Bakar Minyak di Indonesia Berdasarkan Paris Agreement." *Morality: Jurnal Ilmu Hukum* 7, No. 1 (Jun 25, 2021): 110-129, http://dx.doi.org/10.52947/morality.v7i1.19

Iqbal, F. Muhamad dan Ruhaeni, N. "Pengaturan Emisi Gas Rumah Kaca Berdasarkan Protokol Kyoto Dan Implementasinya di Indonesia". *Dinamika Global: Jurnal Ilmu Hubungan Internasional*, *7*, No. 2, (Desember 15, 2022), 225-246. https://doi.org/https://doi.org/10.36859/jdg.v7i02.1071

Irama, Ade Bebi. "Perdagangan Karbon di Indonesia Kajian Kelembagaan dan Keuangan Negara," *Jurnal Info Artha*, 4, No. 1 (Juni 29, 2020): 83-102. https://doi.org/https://doi.org/10.36859/jdg.v7i02.1071.

Ishaq, H. *Metode Penelitian Hukum dan Penulisan Skripsi, Tesis, Serta Disertasi*, (Bandung: 2017)

Lin, Boqiang dan Zhijie Jia, "Can Carbon Tax Complement Emission Trading Scheme? The Impact Of Carbon Tax On Economy, Energy And Environment In China", *Climate Change Economics* 11, No. 3, (Juli 16, 2020):190-203, https://doi.org/10.1142/S201000782041002X

Marzuki, Peter Mahmud. *Penelitian Hukum*, Cetakan ke-13, (Kencana Prenada Media Group: 2017)

Michaelowa, Axel, Igor Shishlov, dan Dario Brescia. "Evolution of international carbon markets: lessons for the Paris Agreement." *Wiley Interdisciplinary Reviews: Climate Change* 10, No. 6 (Agustus 6, 2019): e613, https://doi.org/10.1002/wcc.613

Prihatiningtyas, Wilda dan Zuhda Mila Fitriana. "Perspektif Keadilan Dalam Kebijakan Perdagangan Karbon (Carbon Trading) di Indonesia Sebagai Upaya Mengatasi Perubahan Iklim". *Refleksi Hukum: Jurnal Ilmu Hukum*, 7, No. 2 (Agustus 8, 2023), 163–186. https://doi.org/10.24246/jrh.2023.v7.i2.p163 – 186

Rahayu, Derita Prapti. *Metode Penelitian Hukum.* (Thafa Media, 2020)

Septyanun, Nurjannah et al. "Regulasi dan Tata Laksana Penerapan Nilai Ekonomi Karbon Berbasis Voluntary dan Mandatory di Nusa Tenggara Barat." *GEOGRAPHY: Jurnal Kajian, Penelitian dan Pengembangan Pendidikan* 11, No. 2 (September, 2023): 399-411, https://doi.org/10.31764/geography.v11i2.17210

Shen, Neng, Yuqing Zhao and Rumeng Deng, "A review of carbon trading based on an evolutionary perspective", *International Journal of Climate Change Strategies and Management* 12, No. 5, (5 October, 2020): 739-756. https://doi.org/10.1108/IJCCSM-11-2019-0066

Sutartib, Muh. "Tantangan Administrasi Pengenaan Pajak Karbon di Indonesia." *Jurnal Anggaran dan Keuangan Negara Indonesia (Akurasi)* 3, No. 2 (November 29, 2021): 38-55, DOI: https://doi.org/10.33827/akurasi2021.vol3.iss2.art127

Wardoyo, "Perubahan Iklim Dan Perdagangan Karbon Dari Penurunan Emisi Gas Rumah Kaca", *Jurnal Manajemen Bisnis* 5, no. 1 (2016): 39-44, http://dx.doi.org/10.31000/jmb.v5i1.1993.g1232.