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Legal Analysis on President Regulation on Carbon Pricing in Indonesia

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LEGAL ANALYSIS ON PRESIDENT REGULATION ON CARBON PRICING IN INDONESIA¹

By Linda Yanti Sulistiawati² and Louie Buana³

Abstract

This paper aims to analyse Indonesia's new law of carbon pricing namely Presidential Regulation Number 98 Year 2021 on Carbon Economic Value. The Presidential Regulation is analyzed based on the legal framework for hierarchy in Law Number 12 Year 2011 on the Formation of Legislation. This paper found that even though this regulation has fulfilled all the principles stated in the Law on the Formation of Legislation, many details are left to be regulated in the implementing regulation (as indeed requested in the Presidential Regulation), and more clarification needed for the roles of each actors and stakeholders in carbon economic value and how carbon economic value will invite public participation in its implementation.

Keywords: Carbon economic value, carbon pricing, carbon taxation, presidential regulation, legislation

I. INTRODUCTION

The world is facing a global threat of environmental collapse as the result of climate change. One of the biggest contributors to climate change is the increase of carbon emissions in the atmosphere. Since the industrial revolution in the 18th-19th century, human activities continue to produce artificial or anthropogenic carbon emissions which consequently exacerbated earth's naturally produced emissions.⁴ The use of fossil fuels reaches an unprecedented peak in human history during the 21st century, causing not just extreme weather events, and increased risk of crop failure but also global mortality and disease.⁵ According to United Nations, pollutions derived from the increasing reliance on fossil fuels as energy source are responsible for about 1 in 5 deaths worldwide in 2018.⁶ Even with all the current efforts to stop carbon emissions "it would still take up to 200 years for the last artificially emitted CO² particle to leave the atmosphere."

As the world enters climate emergency era, new approaches and strategies are being discussed in both international and national levels involving various stakeholders. In order to gather global awareness and commitment to act against climate change, several international treaties and intergovernmental plans were initiated as late as 1972 through the establishment of UN Conference on the Human Environment in Stockholm. In 1992, UN Framework Convention on Climate Change (UNFCCC) set the key instruments of climate change regime. UNFCCC sets seven GHG emissions including CO², methane, nitrous oxide, hydrofluorocarbons,

¹ This article was written and reviewed prior to the enactment of the Ministry of Environment and Forestry Regulation Number 21 Year 2022 on Guideline of Carbon Economic Value (Tatalaksana Penerapan Nilai Ekonomi Karbon).

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⁴ United Nations Handbook on Carbon Taxation for Developing Countries (New York: United Nations, 2021), 17.

⁵ Karn Vohra, et al., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem in *Environmental Research* Vol. 195, April 2021.

⁷ United Nations Handbook on Carbon Taxation, 17.

perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride. The UNFCCC then followed by Kyoto Protocol in 1997, Copenhagen Accord in 2009 and Paris Agreement in 2015. These instruments requires acts from all state parties to limit their Greenhouse Gas (GHG) emissions. The Paris Agreement demands more than 70 countries under UNFCCC to undertake efforts to working toward net zero emissions by 2050. Through the Paris Agreement, each state parties must put their best efforts to curb carbon emissions by establishing Nationally Determined Contributions (NDCs).

Scientifically, anthropogenic carbon emissions can only be effectively reduced by using non-fossil fuels sources such as wind or geothermal energy, or decreasing activities which require intensive energy use such as the pulp and steel industries. Another way to reduce carbon emissions is by expanding the forestation project. Green areas such as forests and national parks can absorb carbon emissions produced by industrial activities, which in turn helps to generate net zero emissions. This theory constitutes the concept of carbon offsets that is currently being practiced by several countries and corporations. Since human activities in modern days cannot be entirely prohibited from producing carbon emissions, the carbon offsets concept provides opportunity for public and private sectors to finance forestation projects and support the invention of renewable technology as compensation to reduce emissions they produced. Consequently, this gives birth to the carbon pricing mechanism as "policy instruments that use prices to provide incentives for economic agents to support climate mitigation."

World Bank defines carbon pricing as "an instrument that captures the external costs of greenhouse gas emissions—the costs of emissions that the public pays for, such as damage to crops, health care costs from heat waves and droughts, and loss of property from flooding and sea level rise—and ties them to their sources through a price, usually in the form of a price on the carbon dioxide (CO₂) emitted." Based on this definition, carbon pricing mechanism puts the responsibility for GHG emissions back to the emitters who caused it and who can avoid it. By giving a price on carbon, the emitters are pushed to "either transform their activities and lower their emissions, or continue emitting and paying for their emissions." ¹²

Despite controversies surrounding it, the practice of carbon pricing is growing on acceptance worldwide. In 2019, Brazilian Ministry of Economy arranged discussions focusing on the creation of carbon pricing system with participants from the private sector and international organizations.¹³ Meanwhile in China, the government is finalizing the MRV for the ETS and conducted carbon taxing pilot project for airlines business in 2020.¹⁴India which owns 7% of GHG global emissions,¹⁵ has also committed to reduce the emissions intensity of its Gross Domestic Product (GDP) by 45% by 2030.¹⁶

In Indonesia, the national government set the goals to reduce its GHG emissions by 41% by 2030 with international assistance (29% with its own resources) relative to a business-as-usual

⁸ *Ibid., 18.*

⁹ Ibid.

¹⁰ Ibid., 20

¹¹ The World Bank, *Carbon Pricing Dashboard*, https://carbonpricingdashboard.worldbank.org/what-carbon-pricing, accessed Friday, June 17th, 2022.

¹² Ihid

¹³ Government of Brazil, *Ministry of Economy advances in discussions on carbon market in Brazil*, December 23, 2019, http://editor.economia.gov. br:8080/Economia/noticias/2019/12/ministerio-da-economia-avanca-nas-discussoes-sobre-mercado-de-carbono-no-brasil.

¹⁴ Beijing Municipal Ecology and Environment Bureau, Notice of the Beijing Municipal Bureau of Ecology and Environment on the announcement of the list of key carbon emission units and reporting units in Beijing in 2019, March 16, 2020, http://sthij.beijing.gov.cn/bjhrb/index/xxgk69/zfxxgk43/fdzdgknr2/hbjfw/1745093/index.html.

¹⁵ Richard H. Rosenzweig, Global Climate Change Policy and Carbon Markets: Transition to a New Era (London: Springer), 232.

¹⁶ BBC News, Climate change: What emission cuts has India promised, https://www.bbc.com/news/world-asia-india-58922398, accessed Wednesday, January 18th, 2023.

(BAU) scenario through NDC. In order to meet these targets, Indonesia established The Environmental Fund Management Agency through Presidential Regulation No. 77 Year 2018 about Environmental Management Fund. This agency is a public service agency, a non-echelon unit under the Minister of Finance of the Republic of Indonesia. It is set to bring "multiple sources of funding together to be deployed through a variety of instruments across a number of different sectors (including forestry, energy and mineral resources, carbon trading, environmental services, industry, transport, agriculture, marine and fisheries)."

This article aims to reflect on Indonesia's new law in regard to carbon pricing. The issuance of Presidential Regulation Number 98 Year 2021 on Carbon Economic Value (Hereinafter: Presidential Regulation No. 98/2021) is the latest follow up by the Indonesian government to contribute on the carbon emissions reduction. The main questions surrounding the issuance of this law are: What is the legal basis for the application of carbon pricing regulation in Indonesia?; How can the implementation of carbon pricing law aligned with basic legal principles and other policy?; Who are the stakeholders involved in the process?; and finally, What is the role of banks on the implementation of carbon pricing? This article will be focused on the abovementioned questions.

This preliminary study on carbon economic value will provide beneficial inputs for determining the direction of environmental policy in Indonesia. The analysis will give an insight from legal perspective about *raison d'etre* behind carbon pricing within national legal system context and some recommendations to fill gaps in Presidential Regulation No. 98/2021. It is important for the Presidential Regulation to open the possibility for derivative regulations in the future to regulate the issue in more detailed and practical manners. Lastly, the discussion in this article can contribute further on strategic involvement of national banking actors in the new carbon market activities. Considering that climate issue is a multifaceted problem which urgently demand for political, economic and legal approaches, the new regulation on carbon pricing thus must act as multisectoral receptacle for the involvements of various stakeholders.

II. DISCUSSION

II.A. Legal Basis for Presidential Regulation No. 98/2021

Indonesia is a state of law that adheres to the supremacy of Constitution and other legal regulations derived from it. The legal framework for hierarchy in Indonesian law is regulated by Law Number 12 Year 2011 on the Formation of Legislation (Hereinafter: Law No. 12/2011). According to this Law, the position of the Presidential Regulation is below and must not in conflict with the Constitution, Laws and Government Regulations. On the other hand, Presidential Regulation can be instrumented as a reference or basis for Provincial Regulation, and Regency/Municipal Regulations because the position of Presidential Regulation is higher than Regional Regulations in the hierarchy of law.

As a Presidential Regulation No. 98/2021 derived its legal basis from the following Indonesian laws:

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¹⁷ Badan Pengelola Dana Lingkungan Hidup, https://bpdlh.id/about-bpdlh/, accessed Friday, June 17th, 2022.

¹⁸ *Ibid.*

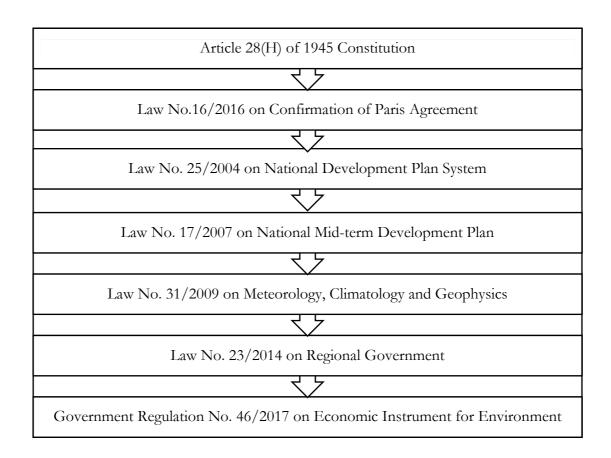


Figure 1 Indonesia's legal framework according to Law No. 12/2011

Article 28(H) of the 1945 Constitution provides the rights to healthy environment for Indonesian citizens, thus this article serves as the constitutional mandate to acknowledge and implement carbon rights. According to the Constitution, every citizen deserves the right to live in physical and spiritual prosperity, to have a place to live, and to have a good and healthy living environment and have the right to obtain health services. Therefore, the state is obliged to provide all of the necessary efforts to provide healthy environment, including to reduce GHG emissions that can lead to environmental damage. As the ratifying party of International Covenant on Economic, Social and Cultural Rights, Indonesia is also bound to fulfil the requirement to improve 'all aspects of environment and industrial hygiene' as stated within Article 12(2)(b) of the convention. According to ESCR Committee's General Comment 14, the right to a healthy environment includes the obligation to ensure prevention and reduction of the population's exposure to substances such as radiation and harmful chemical or other detrimental environmental conditions that can create impact upon human health.

At the lower tier of legal hierarchy, Indonesia recognizes the enforceability of international agreement within its national legal system as stated in Law Number 24 Year 2000 about International Treaty (Hereinafter: Law No. 24/2000). In order to make the rules within Paris Agreement to be enforceable in national level, Indonesian government did not just ratify the convention but also confirmed it through Law No. 16/2016. According to Constitutional Court Decision Number 12/PUU-XVI/2018 International Treaty must be legalized through Laws in order to enter the national legal system. This decision shows Indonesia's tendency towards Dualistic approach which creates distinction between international agreement and the positive law.¹⁹

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¹⁹ Damos Dumoli Agusman, Sistem hukum Perjanjian Internasional dalam Hukum Nasional RI (Tinjauan dari Perspektif Praktik Indonesia) in *Indonesian Journal of International Law*, Vol. 5 No. 3, April 2008, p. 488-504.

Other laws such as Law No. 25/2004 on National Development Plan System, Law No. 17/2007 on National Mid-term Development Plan, Law No. 31/2009 on Meteorology, Climatology and Geophysics, and Government Regulation No. 46/2017 on Economic Instrument for Environment serve as multisectoral basis for the implementation of carbon economic value. The Presidential Regulation also mentions Law No. 6/1994 on the Ratification of United Nations Framework Convention on Climate Change as one of the basic laws. As previously discussed, UNFCCC is the key instrument of climate change regime which sets seven GHG emissions. Thus, the inclusion of laws related to strategic planning, economic development and environmentally based regulations shows the government's apprehension of cross-sectoral urgency in enacting carbon economic value at the national level.

CARBON PRICING

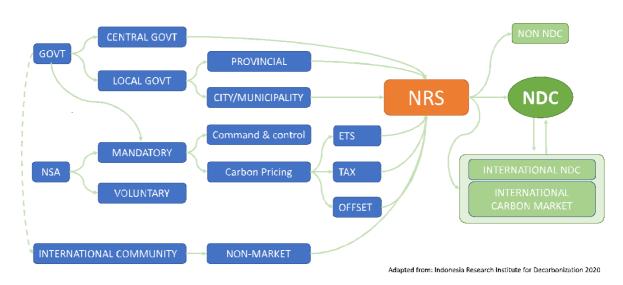


Figure 2 Carbon Pricing Mechanism from International to Local Implementation to support NDC

In addition, Law No. 23/2014 about Regional Government ensures the inclusion of Regional Government to City/Municipality level to implement carbon pricing policy. It provides basis for Presidential Regulation No. 98/2021 to communicate instruments from Paris Agreement to the domestic levels. The Regional Government is one of key stakeholders responsible for the NDC in domestic level.²⁰ The binding commitments set forth in the NDC places Regional Government as the ownership and commitment development.

Besides Law No. 23/2014 on Regional Government, the division of authority for environmental management is regulated through Law No. 32/2009 on Environmental Protection and Management. This regulation gives Regional Governments the authority to protect and manage the environment to plan, use, control, supervise and enforce laws. So far, there is no specific regulation which acts as the implementation law for the Paris Agreement on domestic level, despite the participation of Regional Government as one of the determinants of success for achieving targets set by NDC. This absence was primarily due to the conception that environmental issue is often treated as central government issue instead of local one too, due to the lack of knowledge of environmental and climate issues.²¹ Moreover, Regional Government

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²⁰ Ministry of Environment and Forestry, Summary Nationally Determined Contribution (NDC) and Its Progress of Implementation, 2017, 9.

²¹ The Conversation, Empat tantangan pemerintah daerah dalam menjalankan program lingkungan dan pengendalian perubahan iklim, https://theconversation.com/empat-tantangan-pemerintah-daerah-dalam-menjalankan-program-lingkungan-dan-pengendalian-perubahan-iklim-172852, accessed Friday, January 20, 2023.

faces administrative challenges because there are no binding regulations, and there is overlapping bureaucracy that hinders performance in carrying out programs related to the environment and climate change.²²

To incorporate the role of Regional Government in the carbon economic value implementation, Article 2 (4) of Presidential Regulation No. 98/2021 stipulates that emission control is carried out by policies in national, central and regional development as well as from, for, and by the Government, Regional Government, business actors and the community. Based on the above mentioned laws and regulations, the applicability of Presidential Regulation No. 98/2021 is critical to be integrated within Indonesian legal system because:

- 1. It serves as the legal basis for NDC and Indonesia's NDC achievements.
- 2. It provides procedural guide for carbon economic value.
- 3. It sets up channel for carbon economic value implementation in Indonesia.
- 4. It gives incentive option for business actors.
- 5. It establishes legal basis for the implementation of environmental-funding instruments.
- 6. It supports the performance of the implementation of environmental-funding instruments.

II.B. Analysing Presidential Regulation No. 98/2021

II.B.1. Provisions regarding basic principles, rights and obligations in the presidential regulation

Presidential Regulation No. 98/2021 acts as the legal foundation to regulate carbon trading, carbon market and the implementation of Carbon Economic Value (Hereinafter: CEV) concept to support the national targets as stated in the NDC document for controlling climate change. The Presidential Regulation is expected to be able to mobilize more green financing and investments that have an impact on reducing GHG emissions involving various stakeholders from the central government, local governments, business actors, and the local community.

Article 1(2) of the Presidential Regulation No. 98/2021 defines CEV as: "The value of each unit of GHG emission resulting from human activities and economic activities." According to Article 11(3), human and economic activities that can be inventoried for GHG emissions are activities that have potential as a source of GHG Emissions.

Based on Greenhouse Protocol, emissions as the results of human economic activities are broken down into three categories:²³

- Scope 1 All Direct Emissions from the activities of companies' owned or controlled sources, such as emissions from companies' power facilities or vehicles.
- **Scope 2 Indirect Emissions** from electricity that companies purchase, such as commercial buildings and manufacturing companies that consume electricity.
- Scope 3 All Other Indirect Emissions from sources that are not controlled by the companies but occur in the value chain, including both upstream and downstream emissions, such as the extraction and transportation of purchased materials (upstream) and the use of sold products and services (downstream).

The concept of CEV requires comprehensive calculation of GHG emissions produced during human and economic activities from upstream to downstream. Presidential Regulation No. 98/2021 acknowledges this mechanism by obliging stakeholders (Article 11(2)) to make inventory of GHG emissions' source activity data including carbon absorption (Article 10). Furthermore, Presidential Regulation No. 98/2021 stated that Carbon Rights is managed by the State. The word for 'managed' used in this regulation is "dikuasai" in Indonesian language. Based on its terminology,

²² Ibid.

²³ Aaron Ezroj, Carbon Risk and Green Finance (Oxon: Routledge, 2021), 29-30.

the word 'dikuasai' sometimes can also be interpreted as 'owned'. But in terms of State's power on natural resources, as argued by Budi Harsono and Maria Soemardjono, the correct interpretation for the word 'dikuasai' is managed, not owned. This would give the State the authority to use, harvest, benefit, etc of natural resources for good of the Indonesian people. In other words, the Constitution (Art.33) and Presidential Regulation 98/2021 do not give ownership right for the Carbon, but rather, management right for the good of the Indonesian people.

According to Presidential Regulation 98/2021, carbon rights are strictly limited only for:

- The fulfilment of CEV's legal certainty;
- To achieve NDC's targets;
- To be authorized and managed by the state;
- Providing incentive and fiscal needs in order to support stakeholders reduce their GHG emissions.

The Indonesian legal system requires every law produced by governing bodies to comply with some basic principles. These principles are known as The Principles for the Formation of Laws. According to Soeprapto (2007), the proper principles to form law must follow guidelines and guidance by: 1) Pancasila as the ideals of state law, 2) State fundamental norms, 3) The principles of the state and the principles of government.²⁴

Constitutionally, Article 5 of Law No. 12/2011 sets standard for the Principles for the Formation of Laws. An overview of the basic elements of the Principles for the Formation of Laws in Presidential Regulation No. 98/2021 is explained here:

1. The clarity of purpose Principle:

Article 3 (1) of Presidential Regulation No. 98/2021 states its purpose to regulate the reduction of GHG emissions, increase Climate Resilience, and Economic Value of Carbon in order to reach NDC's targets by referring to Baseline for GHG emissions in 2030 (2,869 millions ton of CO²) and Climate Resilience Baseline. The guidelines for emission reduction is set to follow NDC targets and to control GHG emissions within the scope of national development. Therefore, Presidential Regulation No. 98/2021 has a clear direction and goals to be achieved.

2. Institutional or Proper forming officials Principle:

Every legal regulations must be constituted by state institutions or authorized law-making officials. In this case, Presidential Regulation No. 98/2021 was decreed by the President of Republic of Indonesia, legislated by the Ministry of Law and Human Rights, and initiated by the Ministry of Environment.

3. Suitability between types, hierarchies and material contents Principle:

During the law-making process, the focus must be drawn to the appropriate material contents in accordance with types and hierarchies of legislations. In this context, UU No. 16/2016 on the Confirmation of Paris Agreement acts as the international general guidelines for the material contents of Presidential Regulation. Based on its type, Presidential Regulation No. 98/2021 serves as the legal basis and norms to regulate CEV. The implementation of CEV will further be exercised by lower tier of legal product, in this case the Ministerial Regulation as mandated inside the regulation.

4. Enforceability Principle:

The principle of Enforceability emphasizes that the process of law-making must take into account the law's effectivity within the society, based on philosophical, sociological and juridical foundations. Presidential Regulation No. 98/2021 includes procedures for CEV implementation in the field, the parties appointed to carry out to enforce the law and the supervisory mechanism.

5. Effectivity and Efficiency Principles:

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²⁴ Ahmad Redi, Hukum Pembentukan Peraturan Perundang-Undangan (Depok: Sinar Grafika, 2021), 22.

Based on this principle, every legal regulations is created because it is compulsory and beneficial in order to regulate life in society, nation and state. The global threat caused by climate change makes carbon emissions regulation critical and mandatory. It is by far the most efficient way to fulfil targeted plans set by NDC and allowing human economic activities to continue running.

6. The clarity of formulation Principle:

Every law must fulfilled technical requirements of composing legal regulations, systematic, word and terminology choices, and clear and understandable legal language to avoid various interpretation on its execution. In this regard, Presidential Regulation No. 98/2021 has a complete structure of a legislation with General Terms, Aims, Purposes, Scope of Application, NDC's Targets, Climate Change Mitigation, Climate Change Adaptation, CEV, Carbon Trading, Carbon Taxing, Transparency Framework, Sanctions, Directing Committee, Transitional Terms and Closing.

7. Transparency Principle:

Every steps of the law-making process starting from planning, composing, discussion, ratification and stipulation must be open and transparent. All levels of society has equal opportunity to give feedbacks during law-making process.

In addition to containing the Principles of the Formation of Laws, as a legal regulation Presidential Regulation No. 98/2021 must also contain provisions related to the rights and obligations of all actors involved in carrying out the CEV policy. Article 2(9) of Presidential Regulation No. 98/2021 stipulates that GHG emissions control is conducted with national development policy involving Government, Regional Government, business actors, and the society. The Government in this context refers to the central government (President, Ministry of Environment and Forestry, Ministry of Maritime & Investment Affairs, other related Ministries) and local government (Provincial and City/Municipal levels). In implementing CEV policy, Presidential Regulation No. 98/2021 sets a clear division for regulatory and executory roles that must be carried out by the relevant parties.

The stakeholders and their institutional roles in implementing CEV policy

Presidential Regulation No. 98/2021		Institution(s)
Article 6 (3)	Coordinating Climate Change Mitigation	Minister of Environment and Forestry
Article 11 (2)	Inventorying national GHG emissions (executory role)	At national level - Minister of Environment and Forestry;
		At sectoral level – related Ministries;
		At provincial level – Governor;
		At city/municipal level – Regent;
		At company level – business actor
Article 11 (4)	Setting other source of GHG emissions (regulatory role)	Minister of Environment and Forestry
Article 15 (4)	Composing sectoral GHG emissions Baseline (executory/regulatory role)	Minister of Environment and Forestry, Coordinating Minister of Maritime & Investment Affairs
Article 15 (5)	Establishing the result of GHG emissions Baseline (regulatory role)	Minister of Environment and Forestry

Article 27 (2)	Arranging plan for Provincial Climate Change	Minister of Environment and
	Mitigation Action in accordance with Action Plan for	Forestry
	Climate Change (regulatory role)	
Article 27 (3)	Coordination for the implementation of Climate	Minister of Environment and
	Change Mitigation Action (executory/regulatory roles)	Forestry
Article 35 (2)	Inventorying the impact of climate change (executory	Minister of Environment and
	role)	Forestry and/or related institutions
Article 42 (3)	Implementing Climate Change Adaptation Action	Each related ministries
, ,	(executory role)	
Article 50 (2)	Stipulating Carbon Trading mechanism	Minister of Environment and
		Forestry
Article 53 (3)	Developing Carbon Market infrastructure	Minister of Environment and
, ,		Forestry and/or related institutions
Article 56	Establishing RBP guideline (executory role)	Minister of Environment and
		Forestry
Article 57	Recipients of RBP's benefits to Government	Related ministries/institutions,
	-	business actors, community

II.B.2. Additional Notes for Legal Aspects in Presidential Regulation No. 98/2021

Despite many legal aspects that are important to be the basis for implementing CEV and achieving NDC, Presidential Regulation No. 98/2021 is still in need of many improvement. For instance, Article 1 gives definition about Carbon Right without explanation about its application. Especially towards earmarking construction for the use of funds as the result of CEV implementation. Furthermore, Article 59 stipulates types of state income managed by an institution which administering environmental fund or a specifically appointed institution.

Indonesian legal system recognizes the existence of derived legal regulations as reflection and implementation of Constitution, Laws, Government Regulations, Presidential Regulations, or Local Government Regulations. ²⁵ The derived legal regulations are created through mandate from the Laws must be seen as an integral part of Indonesian legal system. In several articles, Presidential Regulation CEV promises follow-up supporting documents. These documents are expected to be issue through Ministerial Regulation involving multisectoral coordination with the Ministry of Finance and other related ministries. The regulation also stipulates that fund management and distribution of benefits from implementing Carbon Trading, Performance-Based Payments, and Carbon Fees can be made through Environmental Fund Management Agency or institutions that is appointed by the Ministry of Finance.

The list of derived rules based on Presidential Regulation No. 98/2021 goes as follows:

Presidential Regulation No. 98/2021	Follow-up Ministerial Regulations	
Article 30	Regulation on the implementation of Climate Change Mitigation	
Article 40	Regulation on the implementation of Climate Change Adaptation	
Article 68 (6)	Regulation on validation procedure, verification, competence standard for independent validator and verificator	
Article 48 (4)	Stipulation on domestic Carbon Trading and/or abroad by Ministry of Environment after coordination with other related ministries	
Article 49	Regulation on the implementation of cross-sectoral Carbon Trading	
Article 54 (4)	Regulation on the implementation of Carbon Trading	
Article 55 (6)	Regulation on the paying procedure based on performance	
Article 58 (3)	Stipulation and Strategy of implementation for Carbon Taxing	
Article 61 (3)	Regulation on MRV Guideline for Climate Change Mitigation, Climate Change Adaptation, and CEV	
Article 69 (5)	Regulation on the implementation of SRN Climate Change	

²⁵ Dominikus Rato, *Dasar-Dasar Ilmu Hukum: Memahami Hukum Sejak Dini* (Jakarta: Prenada Media, 2021), 14.

Article 70 (4)	Regulation on procedure of sanction implementation for business actors	
Article 71 (4)	Regulation on certification of GHG emissions reduction	
Article 75	Offset sanction	

In terms of the public participation, Presidential Regulation No. 98/2021 stipulates Government to increase involvement from stakeholders for Climate Change Mitigation, Climate Change Adaptation and CEV implementation. With respect to that, Article 82 (1) recommends Government to provide:

- a. Information;
- b. Capacity building, and/or;
- c. Appreciation or award.

Despite acknowledging public participation, currently Presidential Regulation No. 98/2021 does not have mechanism about the flow of the participation process for public. It does not have regulation over period of follow-up for community participation/complaints to ensure legal certainty. In accordance with the mandate of Law no. 14 of 2008 concerning Public Information Disclosure, Government is obliged to provide accurate information and in timely manner to the public. The implementation of this obligation also requires the Government to give facilities such as building or room for complaint, complaint desk, online complaint network, etc.

In order to ensure the clarity of follow up mechanism, Presidential Regulation No. 98/2021 must incorporate the following actions: verification, investigation, imposition of sanctions and decision in granting permits if community involvement has not been carried out. If the rights to participate by the community are not respected, it can result in legal repercussion. It will create legal implications for the actions of the Government and/or business actors such as delay in granting permits, cancelling permits, etc. Thus, it is necessary to initiate coordination between government agencies, especially the central-regional in order to follow up on public participation/complaints.

Lastly, Presidential Regulation No. 98/2021 and legal rules derived from it must incorporate evaluation and reporting of public participation implementation. The government shall make a report and evaluation of the implementation of public participation which contains:

- a. Reports received by system;
- b. Follow-up reports;
- c. Status of follow-up reports;
- d. Public satisfaction with the follow-up to complaints/participation;
- e. The facilities and infrastructure provided to engage community involvement.

The information gathered by the Government through this process can be used as benchmark to improve reports and evaluations on the implementation of CEV.

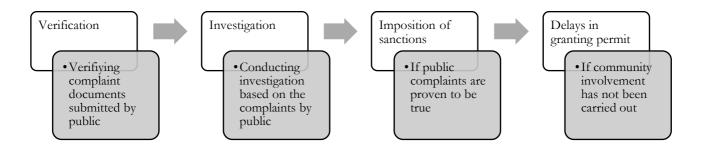


Figure SEQ Figure 3 Process of public complaint

II.C. The role of Banks and the Implementation of Carbon Pricing in Several Countries

A successful implementation of carbon pricing policy is also supported by the strong roles of banks within the national economic system. The introduction of carbon price policy through tax on the carbon content of goods and services or the creation of a market of emission permits would require business actors to seek external financial supports from other sources, mainly through bank lending mechanism. The position of central bank is also important to help stimulate low-carbon investments open and accessible for stakeholders.

On the other hand, many speculators believe that changes brought by new legal regime introducing Paris-consistent emission reductions might potentially create substantial high risks for the banking system. Carbon pricing is expected to have transitory inflation effect; thus it requires close monitoring by the central bank. According to a recent study conducted by European Central Bank (2022), early policy action implying more gradual changes in carbon prices is not expected to lead the adverse impacts on the banking system.²⁷ Therefore, it is crucial for banking system to be included in the larger framework of carbon pricing implementation. In light of it, several countries have different approaches to address the role of banks on the implementation of carbon pricing.

1) Lebanon

The central bank (Banque du Liban) provides cheap credit for projects related to renewable energy production and energy efficiency in buildings. Once a loan request from business actor was accepted by commercial banks, Banque du Liban would reduce an amount equal to 100-150% of the loan for the bank's obligatory reserve requirements.²⁸

2) Canada

In 2021, the Bank of Canada releases a statement addressing climate change as global challenge. As the central bank, it shows commitment to be involved on demonstrating leadership in managing climate risks in its own operations. The climate-related increases in the frequency and severity of extreme weather events and the transition to a low-carbon net zero economy pose significant risks to the financial system. By developing and advancing the use of tools to assess climate-related risks, the Bank aims to help markets price such risks. The Bank of Canada commits to taking the following concrete steps:²⁹

- 1. Asses the effects of climate change on the macroeconomy and price stability;
- 2. Evaluate the Canadian financial system's exposures to climate-related risks and improve associate risk management capacities;
- 3. Measure, mitigate and report on the Bank's operational risks related to climate change;
- 4. Engage and collaborate with Canadian and international partners.
- 3) China

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In 2021, the central bank of China (The People's Bank of China) introduces new strategy to provide financial institutions with low cost loans to help firms cut carbon emissions.³⁰ This new lending facility is expected to help China hit peak carbon

²⁹ Bank of Canada, Bank of Canada announces climate change commitments for COP26,

https://www.bankofcanada.ca/2021/11/bank-canada-announces-climate-change-commitments-for-cop26/, accessed Friday, July 8, 2022.

²⁶ Emanuelle Campiglio, "Beyond carbon pricing: the role of banking and monetary policy in financing the transition to a low-carbon economy" in *Ecological Economics*, 121, 2015, p. 220-230.

²⁷ Marco Belloni, Friderike Kuik, Luca Mingarelli, Euro Area banks' sensitivity to changes in carbon price in European Central Bank Working Paper Series No. 2654, March 2022.

²⁸ Campiglio, Beyond carbon pricing.

³⁰ Reuters, China's central bank rolls out lending tool for carbon emission cuts, https://www.reuters.com/business/sustainable-business/china-central-bank-provide-low-cost-loans-carbon-emission-cuts-2021-11-08/, accessed Friday, July 8, 2022.

emissions by 2030 and reach carbon neutrality before 2060.³¹ The loan is estimated to be in the amount equal to 60% of loan principals made by financial institutions for carbon emission cut with one-year lending rate at 1.75%. The central bank also allows the carbon emission reduction loans to be rolled over twice.

Reflecting on the international practices, there are some central banks that focus on inflation control aspect, arguing that "they have a legitimate stake in fighting the climate crisis by construing it as a direct threat to price or financial stability." ³² While in other, mostly in middle to low-income, countries the central banks "promoted or announced initiatives to encourage (small-scale) green private lending to green sectors, with the aim of accelerating the low-carbon structural transformation." ³³ Indonesia is yet to found its position on the role of central bank and carbon pricing implementation.

III. CONCLUDING REMARKS

Presidential Regulation 98/2021 is designed to achieve the fulfilment of CEV's legal certainty and achieve NDC's targets to be authorized and managed by the state, and provide incentive and fiscal needs in order to support stakeholders in reducing their GHG emissions. As per Law 12/2011 this regulation fulfilled the standard for the Principles for the Formation of Indonesian Laws. However, there are many things left to be regulated in the technical regulations under this regulation (as ordered by this Presidential Regulation) to make the objectives of this regulation come to light, and the deadline for these technical regulations is approaching fast.

The GoI needs to be extremely cautious and sensitive in forming and implementing these technical regulations, since: (a) the current carbon tax set Tax Regulation Harmonization Law (Law No. 7/2021) has set a very low minimum price for carbon tax. The implementing regulation on carbon valuation and carbon tax needs to be bold and not use the minimum price, but if possible maximum price for Indonesian carbon tax. This will send a message to the world that Indonesia cares and would like to protect her environment; (b) GoI needs to invite civil society and community at large to be informed and involved in CEV and carbon related activities, since even though international commitments are in the State level, but implementation of CEV and carbon related activities are in the grassroot level. Keeping an open communication and information channel is one of the best way to involve public at large in carbon related activities. Transparency and accountability in every level of government is needed and this can only happen with public support and involvement.

The Bank of Indonesia, as the Central Bank of Indonesia has stated that they acknowledged the increased of GHG emission potentially disturbing monetary and financial system³⁴. However, more crucial steps are to determine how the central bank is going to positioned itself in the new CEV and carbon market activities. There is an important nexus for the central bank can play a crucial role in creating policy innovations in market based instruments toward a greener Indonesia, such as assessing the effects of climate change on the macroeconomy and price stability, evaluating

³¹ Central Banking, PBoC launches carbon-reduction monetary policy facility, https://www.centralbanking.com/central-banks/monetary-policy/7895581/pboc-launches-carbon-reduction-monetary-policy-facility, accessed Friday, July 8, 2022.

³² Daniela Gabor, Green Central Banking in Heinrich Böll Stiftung Brussels European Union, https://eu.boell.org/en/green-central-banking, accessed Friday, July 8, 2022.

³⁴ Kontan, BI: Perubahan iklim berpotensi ganggu stabilitas moneter dan sistem keuangan, https://nasional.kontan.co.id/news/bi-perubahan-iklim-berpotensi-ganggu-stabilitas-moneter-dan-sistem-keuangan-1, accessed Friday, July 8, 2022.

the Indonesia's financial system's exposures to climate-related risks and improve associate risk management capacities, measuring, mitigating and reporting on the Bank's operational risks related to climate change, introducing new strategies to provide financial institutions with low cost loans to help firms cut carbon emissions, are among the examples taken by other central banks in other countries. It is up to Bank Indonesia to start picking up the 'baton' of carbon trading and support GoI on the climate change and GHG reduction relay race challenges.

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