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Implications Of Ratification Of The Paris Agreement About Climate Change For Indonesia

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ABSTRACT

Climate change is a change caused either directly or indirectly by human activities that alter the composition of the atmosphere. One of these human activities is the use of fossil fuels. Paris Agreement is an international treaty with the main objective of addressing climate change through more inclusive and binding international cooperation for countries that ratify it.The author discusses: First, What are the Implications of Ratification Paris Agreement on Climate Change for Indonesia? Second, What is the Responsibility of the Indonesian Government in Controlling Carbon Emissions? reducing carbon emissions will be focused on the transportation and energy sectors.The author uses normative and empirical juridical methods, the research specifications used are descriptive analytical. The results of implications ratification Paris Agreement for Indonesia. First: ratification by Indonesia Paris Agreement is part of positive law in Indonesia and has implications for the emergence of obligations and rights. Second: It has implications for forming programs in the transportation and energy sectors. The government's responsibility in reducing carbon emissions has not yet had a significant effect on climate change. Although Paris Agreement encourages countries to achieve emission reduction targets, its implementation relies on voluntary action, no sanctions.

Keywords: Carbon Emissions, Implications, Paris Agreement, Responsibility

I. INTRODUCTION

The United Nations Framework Convention on Climate Change (UNFCC) defines climate change as any change caused by human activities that alters the composition of the atmosphere directly or indirectly. Increasing concentrations of CO2 and other greenhouse gases are the main causes of global warming and climate change. The burning of fossil fuels in energy production and land use conversion are among the activities that cause increased concentrations of greenhouse gases and CO2. Data collected by Sign Smart from 514 districts and cities in 34 provinces shows that coal emissions were still 444,738 tons in 2000, but increased rapidly to 2,290,082 tons in 2013. Transportation sector emissions also increased almost threefold, reaching 142,318,307 tons in 2013.

According to data compiled by the European Commission's Emissions Database for Global Atmospheric Research (EDGAR), Indonesia ranks seventh out of eleven countries with the largest greenhouse gas emissions in the world in 2022. The six largest countries in the world with the largest greenhouse gas emissions in that year were China, the United States, the EU27, Russia, and Brazil. According to EDGAR, Indonesia

will emit 1.24 gigatons of carbon dioxide equivalent (Gt CO2e) in 2022 out of the total global GHG emissions, which reached 53.79 Gt CO2e.In Indonesia, the energy sector (46.35%), transportation (26.39%), manufacturing and construction (17.75%), and other sectors (4.63%) are the ones that contribute the most to emissions.

The paris agreement is ainternational treaties or agreementswith the main objective to address climate change globally through more inclusive and legally binding international cooperation for the countries that ratify it. The Paris Agreement is the successor to the Kyoto Protocol adopted in 2015 emerged as a response to a number of challenges and weaknesses faced by the Kyoto Protocol. The Paris Agreement is one part of the United Nations Framework Convention on Climate Change (UNCCCC) in 2015. It was agreed at the 21st UN Climate Change Conference in Paris by 195 representatives of countries. The goal is to reduce carbon dioxide and greenhouse gas emissions so that global warming is below 2 degrees Celsius and suppress the rate of global temperature to remain below 20c or 10c.

With the ratification of the Paris AgreementThis aligns with the Indonesian Constitution, which stipulates the right to a healthy environment, specifically Article 28H of the 1945 Constitution, which recognizes that every citizen has the right to a good and healthy environment. This demonstrates the importance of an unpolluted environment and its ability to support human well-being.Indonesia is committed to reducing greenhouse gas emissions and contributing to global efforts to address climate change by targeting a 29% emission reduction (with national efforts) and 41% (with international assistance).

If countries fail to truly commit and implement these agreements, the impacts of climate change will become increasingly difficult to address, and the losses caused by climate disasters will become even greater. Consequently, it will become increasingly expensive to invest in the development and expansion of climate-resilient infrastructure and ecosystem restoration. Therefore, the author would like to analyze the implications of ratifying the Paris Agreement on climate change for Indonesia andThe Indonesian government's responsibility for controlling carbon emissions will be emphasized. The primary focus in reducing carbon emissions will be on the transportation and energy sectors, as these sectors influence each other and contribute significantly to emissions in Indonesia.

II. RESEARCH METHODS

The author uses normative and empirical juridical methods. The normative juridical approach refers to legal norms contained in laws and court decisions as well as legal norms that exist in society. Empirical juridical research is legal research regarding the application or implementation of normative legal provisions in action in every particular legal event that occurs in society.The research specifications used are analytical descriptive. This descriptive includes the content and structure of positive law, namely an activity carried out by the author to determine the content or meaning

of legal rules that are used as references in resolving legal problems that are the object of study. The main data is in the form of secondary data (primary, secondary and tertiary legal materials) which are analyzed qualitatively..

III. RESULTS AND DISCUSSION

A. Implications of Ratification of the Paris Agreement for Indonesia

The Paris Agreement on the United Nations Framework Convention on Climate Change was enacted into law through Law Number 16 of 2016. This law serves as the legal basis for global and national efforts to address climate change. The following researchers analyze the implications of ratifying the Paris Agreement for Indonesia.

a.) Implications for Indonesia's Obligations

a. Lowering Global Average Temperatures

Article 2 of the Paris Agreement requires holding the global average temperature rise to well below 2 degrees Celsius above pre-industrial levels and continuing efforts to limit the temperature rise to 1.5 degrees Celsius above pre-industrial levels, recognizing that these efforts will significantly reduce the risks and impacts of climate change..

b. Limiting Greenhouse Gas Emissions

In order to control climate change due to carbon emissions, based on Article 3 of the Paris Agreement, it states that In accordance with Article 2 of the Paris Agreement, each country that has ratified the Paris Agreement must prepare its nationally determined contribution (NDC) enthusiastically and progressively to achieve the objectives of the agreement. Article 4 of the Paris Agreement, paragraph three, states,*The NDC submitted should be progressive compared to previously submitted NDCs to reflect the highest achievable ambitions, while still adapting to the conditions of each country, which of course vary.*

c. Reduce Emissions to*Net-zero emissions as a long-term goal*

Based on the contents of Article 4, global emissions can increase but must be balanced with technologies that contain negative emissions (technology that absorbs emissions) to achieve zero global emissions in the long term, namely an increase below 2°C and towards 1.5°C. Net-zero emissions means that emissions can increase but must be balanced with technologies that contain negative emissions (technology that absorbs emissions).

d. *Periodic Global Stocktake*

Article 14, paragraphs 1 and 2, establish a global review process, which will examine progress on the implementation of the Paris Agreement through a global stocktake, beginning in 2023 and every five years thereafter. The purpose of this global stocktake is to provide countries with information to update and improve their actions and support.

e. Obtaining Ease of Access to Funding Sources

In the Paris Agreement, access to funding, particularly for developing countries,

is regulated in several articles, including Article 9, which deals with increasing financial resources; Article 6, which discusses international cooperation mechanisms such as carbon credit mechanisms; and Article 2.1(c), which sets the goal of aligning financial flows with low-emission pathways. Indonesia will gain easier access to funding sources, technology transfer, and the ability to implement mitigation and adaptation measures.

b.) Implications for Forming Programs to Control Climate Change Due to Carbon Emissions

The Paris Agreement is essentially a national effort to protect the climate. The Paris Agreement's implications for Indonesia include the creation of programs to reduce carbon emissions. However, the author analyzes two sectors: transportation and energy, as these are the two sectors that emit the most carbon.

a. Through the Battery-Based Electric Motor Vehicle (KBLBB) Use Program in the Transportation Sector

The energy and transportation sectors are among the main contributors to carbon emissions in Indonesia. The increased use of cars and motorcycles has the potential to increase emissions.*CO2. The energy and transportation sectors dominate emissions with a percentage of 50.6% (potential of 1 Giga Ton CO2eq) of total emissions in Indonesia in 2022. The potential for emissions will continue to increase until 2030, where the percentage of emissions from the energy sector is predicted to reach 1.4 Giga Ton CO2eq (59%).*

Following the ratification of the Paris Agreement, the Indonesian government launched a battery-based electric motor vehicle (KBLBB) program as part of its efforts to reduce carbon emissions from the transportation sector. The Indonesian government encouraged the development of electric motor vehicles domestically following the ratification of the Paris Agreement. This has legal consequences, as evidenced by Presidential Regulation No. 22 of 2017. The National Energy General Plan (RUEN) sets a target of 2,200 electric car units by 2025 and 4.2 million units by 2050.In addition, the government aims to have 2.1 million electric motorcycles, which will save Rp 17.62 million per year in fuel combustion and maintenance costs. By using electric cars, the government will save 1.5 million kiloliters of imported fuel, save Rp 13.02 trillion in foreign exchange, reduce CO2 emissions by 3.21 million tons per year, and increase electricity consumption by 2.2 TWh per year. Furthermore, for users, using electric cars will be beneficial.

Battery-powered electric vehicles (BVs) are considered an environmentally friendly and low-emission vehicle innovation that can help mitigate the impacts of climate change. China, the US, and Europe have adopted electric vehicles extensively. Currently considered the center of electric vehicle production and consumption, three countries—the United States, the European Union, and China—sold half of all electric vehicles globally in 2019. With the

launch of the National High-Tech Research and Development Program in 2001, China initiated the advancement of electric vehicle adoption.

Then, in 2009, a national "New Energy Vehicle" policy was established, followed by incentives, subsidies, and regulations mandating the use of hybrid vehicles. Regulations for these electric vehicles exist nationwide and at regional levels. The Indonesian government issued Presidential Regulation No. 55 of 2019 concerning the Acceleration of the Battery-Based Electric Vehicle Program for Road Transportation to support this program. This regulation was created with the aim of encouraging people to switch from traditional motorized vehicles to battery-based electric vehicles. This regulation addresses issues such as energy sustainability and conservation, greenhouse gas emission reduction, and mastery of industrial technology. This includes providing incentives, ensuring the development of the domestic EV industry, providing electric charging infrastructure, and ensuring that technical standards are met.

It is hoped that this regulation will encourage the development of the environmentally friendly electric vehicle industry and its public use. As of September 2020, the Indonesian Ministry of Transportation had issued 2,278 EVs.

b. Through the New and Renewable Energy (EBT) Use Programin the Energy Sector

Power plants that use fossil fuels, especially coal, are a significant source of carbon emissions. The national GHG emission level in 2020 was 1,050,413 Gg CO2e, with the energy sector contributing the largest amount at 584,284 Gg CO2e (or 56% of the total), according to the 2021 GHG Inventory and Monitoring, Reporting, and Verification (MPV) Report of the Ministry of Environment and Forestry. With the increasing use of fossil fuels, GHG emissions in Indonesia are expected to continue to rise in 2021–2030.

Indonesia is striving to reduce its emissions from the energy sector through a new and renewable energy (NRE) development program following the ratification of the Paris Agreement. The Ministry of Energy and Mineral Resources stated that the government aims to achieve the Paris Agreement's renewable energy mix target of 23 percent by 2025 and 30 percent by 2030, with various derivative targets such as electricity sector development and increased use of biofuels (BBN).

To support the development of renewable energy and to achieve the Energy Mix target in accordance with the national energy policy, the Government has issued several regulations, including:

1. ESDM Ministerial Regulation Number 50 of 2017 concerning the Utilization of Renewable Energy Sources for the Provision of Electricity.
2. ESDM Ministerial Regulation Number 49 of 2018 concerning the Use of Rooftop Solar Power Generation Systems by Consumers of PT Perusahaan Listrik Negara (Persero).

3. ESDM Ministerial Decree No. 39 K/20/MEM/2019 concerning the Ratification of PLN RUPTL 2019-2028.

Regarding the renewable energy target for the 2025 energy mix of 23%, this target will be met through*Hydroelectric power plants accounted for 10.4%, and geothermal power plants and other renewable energy sources accounted for 12.6%. The government has signed several commitments to develop renewable energy. In the Power Purchase Agreement (PPA) IPP Progress from 2017 to 2018, 75 contracts were signed for renewable energy power plants, covering 7 COD stages, 32 construction stages, and 36 financial closing preparation stages. Opportunities for renewable energy development in Indonesia remain numerous. However, renewable energy development also faces several challenges. The economic price of renewable energy power plants is usually above the Cost of Supply (BPP), as BPP remains relatively low in some regions in Indonesia.*

c.) Implications for the United States' withdrawal from the Paris Agreement

United States of AmericaUnder President Donald Trump's administration, the United States withdrew from the Paris Agreement in 2017, and officially left in November 2020.Trump stated his reasons that the Paris Agreement: Harms the US coal, steel and manufacturing industries, leading to job losses, especially in the traditional energy sector, Burdens US companies with environmental regulations that are considered too stringent,Reduce US GDP by $3 trillion by 2040, Eliminate millions of jobs.

B.The Indonesian Government's Responsibility in Controlling Carbon Emissions

State responsibility is the embodiment of the principle of the state as the organizer of the state so that the state is obliged to protect its citizens, territory, and all its natural resources. Article 4 Paragraph 1 of the 2015 Paris Agreement determines who is responsible for reducing greenhouse gas emissions. To reduce greenhouse gas emissions, participating countries must develop mitigation and adaptation efforts that are appropriate to their national circumstances. Developed and developing countries are two separate groups. While developed countries tend to take action to target emission reductions across all economic sectors, developing countries develop more specific strategies for mitigation and adaptation in various sectors such as transportation, energy, buildings, industry, agriculture, land use, forestry, and waste.

The responsibilities of the Indonesian government from the central to regional levels that have ratified the Paris Agreement in reducing carbon emissions for climate control are as follows:

1. Establish a Directorate General of Climate Change Control within the Ministry of Environment and Forestry.

Presidential Decree No. 16 of 2015 established the Directorate General of Climate Change, which serves as the National Objective Center for the United Nations Framework Convention on Climate Change (UNFCCC). Its purpose is to facilitate climate change-related programs and processes implemented by various government sectors and stakeholders.

2. In the Transportation Sector, the Government is Accelerating the Battery-Based Electric Motor Vehicle (KBLBB) Program.

The government is accelerating the program so that it can run smoothly, so a number of regulations have been issued to support the acceleration of the program, namely as follows:

1	Presidential Decree Number 55 of 2019. Then Presidential Decree Number 79 of 2023	Acceleration of the KBLBB (Battery Electric Vehicle) Program for Road Transportation
2	Presidential Instruction Number 7 of 2022	Utilization of KBLBB as Operational Service Vehicles and/or Individual Service Vehicles for Central and Regional Government Agencies
3	Minister of Investment Regulation No. 6 of 2023	Guidelines and Governance for the Provision of Import Incentives and/or Handover of Four-Wheeled Motor Vehicles (KBLBB) in the Context of Accelerating Investment
4	Regulation of the Minister of Finance Number 8 of 2024	Value Added Tax borne by the Government for Fiscal Year 2024 for electric cars
5	Regulation of the Minister of Energy and Mineral Resources No. 1/2023	Provision of Electric Charging Infrastructure for Electric Motor Vehicles Based on Battery Charging and Tariffs
6	Regulation of the Minister of Energy and Mineral Resources Number 13 of 2023 concerning Amendments to Regulation of the Minister of Energy and Mineral Resources Number 3 of 2023	General Guidelines for Government Assistance in the Program to Convert Combustion-Powered Motorcycles to Battery-Powered Electric Motorcycles. An incentive of Rp 10 million per electric motorcycle conversion unit.
7	Regulation of the Minister of Industry Number 21 Concerning Amendments to Industrial Regulation Number 6 of 2023	1 Number of Parents Population = 1x purchase of a new electric motorbike with an incentive of IDR 7 million

8	Regulation of the Minister of Industry Number 28 of 2023	Specifications, roadmap for TKDN development and KBLBB provisions
9	Regulation of the Minister of Industry Number 29 of 2023	KBLBB is in a state of complete decomposition and incomplete decomposition
10	Circular Letter of the Minister of Home Affairs Number 024/4833/SJ	Implementation of the Battery Electric Motor-Based Accelerated Vehicle Program for Highway Transportation

Regulations issued by the government are still in the form of presidential directives. Presidential Instructions (Inpres) are policy regulations that cannot be categorized as laws. They cannot be formally considered official regulations. They are very similar to circulars from Ministers or Directors General addressed to civil servants within a scope that does not provide adequate responses. Presidential Instructions (Inpres) are more of an internal directive from the President to institutions under his authority, unlike laws, which are the highest legal regulations under the 1945 Constitution. Inpres are not binding and do not establish general legal standards.

3. In the Energy Sector, the Government is IncreasingNew and Renewable Energy Management (*(EBT)*

The development of renewable energy power plants, the use of low-carbon biofuels, and the use of biomass are ways the government manages renewable energy..However, from a legal perspective, the ratification of the Paris Agreement means that the government is responsible for improving the management of new and renewable energy, namely by issuing a number of regulations to support this. The government establishes implementing regulations at the national and local levels. These regulations cover the ratification of the Paris Agreement in various sectors, such as forestry, energy, IPPU, agriculture, waste, and others. These regulations include:

1. Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P.33/MENLHK/SETJEN/KUM.1/3/2016 concerning Guidelines for the Preparation of Climate Change Adaptation Actions
2. Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P.33/MENLHK/SETJEN/KUM.1/3/2016 concerning Guidelines for the Implementation of Measurement, Reporting and Verification of Actions and Resources Climate Change Control.

Specifically in the electricity sector itself, regulations governing climate change include:

1. Law Number 30 of 2009 concerning Electricity;
2. Government Regulation Number 79 of 2014 concerning National Energy Policy (KEN);
3. Presidential Regulation Number 22 of 2017 concerning the National Energy General Plan (RUEN);
4. Decree of the Minister of Energy and Mineral Resources Number 143 K/20/MEM/2019 concerning the National Electricity General Plan for 2019 to 2038 (RUKN); and
5. Decree of the Minister of Energy and Mineral Resources Number 188.K/HK.02/MEM.L/2021 concerning the Ratification of the Electricity Supply Business Plan of PT Perusahaan Listrik Negara (Persero) for 2021 to 2030 (RUPTL).

In addition to Indonesia's commitment in the NDC in the electricity energy sector, the Indonesian Government has a legal basis related to national energy policy through Government Regulation Number 79 of 2014 concerning National Energy Policy, where in Article 9 it is stated that the amount of primary energy supply mix is divided as follows:

1. New and renewable energy at least 23% in 2025 and at least 31% in 2050;
2. Oil must be less than 25% by 2025 and less than 20% by 2050;
3. Coal at least 30% in 2025 and at least 25% in 2050; and
4. Gas at least 22% in 2025 and at least 24% in 2050.

Based on the previous explanation, the author analyzes the regulations issued and implemented by the Indonesian government in the energy sector. The goal is to improve the management of new and renewable energy (NRE) by developing renewable energy plants, producing more low-carbon biofuels, and using biomass up to 23% of primary energy supply by 2025. According to data from the government's National Energy Council (DEN), the highest percentage of the energy mix in 2023 still consists of coal (40.46%), petroleum (30.18%), natural gas (16.28%), and NRE (13.09%). However, this result is still below the set target of 17.87%.

IV. CONCLUSION

Based on the analysis that the researcher has described, the following conclusions can be drawn:

1. The Paris Agreement has been ratified and ratified by Indonesia through Law No. 16 of 2016, making it a positive law in Indonesia. This agreement aims to limit global temperatures below 2 degrees Celsius, limit greenhouse gas emissions to net-zero emissions in the long term, take regular stock worldwide, facilitate access to funding sources, and end global warming. Furthermore, it has impacted the formation of programs in the transportation and energy sectors to reduce carbon emissions. The battery-based electric vehicle (KBLBB) program in the transportation sector was accelerated, and the government improved the management of new and renewable

energy (EBT) in the energy sector. Furthermore, other countries such as the United States, under the administration of President Donald Trump, withdrew from the Paris Agreement in 2017.

2. The government's responsibility in controlling carbon emissions is:Establishing a Directorate General for Climate Change Management within the Ministry of Environment and Forestry. The government is improving the management of new and renewable energy (EBT), particularly in the electricity sector, by issuing a Presidential Instruction and Ministerial Regulation. In the transportation sector, the government is also accelerating the battery-based electric motor vehicle (KBLBB) program. Regulations related to climate change include:: Law Number 30 of 2009 concerning Electricity; Government Regulation Number 79 of 2014 concerning National Energy Policy (KEN); Presidential Regulation Number 22 of 2017 concerning the National Energy General Plan (RUEN); Decree of the Minister of Energy and Mineral Resources Number 143 K/20/MEM/2019 concerning the National Electricity General Plan for 2019 to 2038 (RUKN); and Decree of the Minister of Energy and Mineral Resources Number 188.K/HK.02/MEM.L/2021 concerning the Ratification of the Electricity Supply Business Plan of PT Perusahaan Listrik Negara (Persero) for 2021 to 2030 (RUPTL).

   The collected data shows that despite various government initiatives, including regulations passed by the Indonesian government, fossil fuels continue to be the primary energy source. Consequently, the production of electric vehicles increases energy demand, much of which is still generated by fossil-fueled power plants. Since the availability of renewable energy is still insufficient, the use of electric vehicles can exacerbate emissions as more fossil fuels are burned to generate electricity. Therefore, the government must be responsible for implementing sanctions to control carbon emissions through strict regulations and strict law enforcement. Businesses and individuals who fail to comply with the rules should be punished.

REFERENCES

Book

*Hadad, Ismid, 2010:"*Climate Change and the Challenges of CivilizationClimate Change and Sustainable Development" An Introduction Jakarta: Prisma Magazine of Socio-Economic Thought.

Sundari, Rangkuti Siti. 2005, Law*Environment and National Environmental Policy*, Surabaya: Airlangga University Press

Abdul Kadir Muhammad, 2004,*Law and Legal Research, Bandung: Citra Aditya Bakti*

Machfud, Syahrul. 2012,*Indonesian Environmental Law Enforcement. 1st edition Yogyakarta: Graha Ilmu*

Soerjono Soekanto and Sri Mamudji, 2007,*Normative Legal Research, Jakarta: Raja Grafindo Persada*

Bambang Waluyo, 2002, *Legal Research in Practice, Jakarta Sinar Grafika*

Hans Kelsen, 2013,*General Theory of Law and State, Bandung: Nusa Media*

Hans Kelsen, 2013,*General Theory of Law and State, Nusa Media*

Sugiono, 2007, *MethodQuantitative Research and R&D, Bandung: Alfabeta*

Zainuddin Ali, 2013, Method*Legal Research,*Jakarta, Sinar Grafika

Journal

Aisya, NS (2019). Indonesian Perspective Journal. Volume 4 Number 2.Indonesia's Dilemma in the Paris Agreement on Climate Change.

Brilliant Laksita Rahmalia,Analysis of the United States' Withdrawal from the Paris Climate Agreement Faculty of Law, Muhammadiyah University of Yogyakarta, Indonesia

Cahyono, WE (2010). Aerospace News Journal. Volume 8 Number 2.The Impact of Global Warming on the Earth's Environment"

Firdaus Muhamad Iqbal, Neni Ruhaeni,Regulation of Greenhouse Gas Emissions Based on the Kyoto Protocol and Its Implementation in Indonesia, Journal of Global Dynamics Vol.7 No. 2, December 2022, p. 226

Heidy Jane, Gabriella Gianova, Linny Firdaus, Zoar Reinhard,Problems in the Implementation of the Three Flexible Mechanisms in the Kyoto Protocol, Volume 3, Number 1, October 2018, pp. 15-16

Helen Intania Surayda, Implementation of the Paris Agreement: Cooperation between the Indonesian and British Governments in the Low Carbon Program, Jurnal Penelitian Inovatif (JUPIN) Vol. 4, No. 4, November 2024, pp. 1841-1850

Ira Rahma Fariza, Analysis of China's Interests for Compliance with the UNFCC Paris Agreement 2015-2020,Journal of Global Transformation, Brawijaya University,Vol. 9 No. 1 2022.

Mohammad Faisal Rahman,Indonesia's Implementation of the Paris Agreement in the Aspect of Peatland Environmental Land Utilization for the 2016-2020 Period, Jakarta, July 26, 2023, p. 86

Nurjannah Septyanun,Regulation and Implementation of Voluntary and Mandatory Carbon Economic Values in West Nusa Tenggara, GEOGRAPHY Journal of Educational Studies, Research and Development, Vol. 11, no. 2, September 2023, Pg. 399-411

Retno Miranti,Sustainable Development Analysis of Indonesia's Climate Change Policy as an Effort to Accommodate the Paris Agreement. Transformation Number 34 of 2018, Volume I, Pages 1-87

Verdinand Robertua,From Stockholm to Rio: Critical Reading of Global Environmental Governance, AEGIS: Journal of International Relations, Vol. 2 No. 2, March 2018, p 168

Internet

Carbon monitor. (2020). Carbon monitor, 2020. https://carbonmonitor.org/ Danilovic, M. et al. (2021). In collaboration with Tomas Müllern. Accessed on November 28, 2024,

Climate Copernicus, Tracking warming threshold breaches, https://climate-copernicus-eu.translate.goog/tracking-breaches-150c-global-warming- accessed on December 13, 2024.

Department of Environment and Forestry. (2018). Getting to Know Greenhouse Gases Closer DIY Department of Environment and Forestry, https://dlhk.jogjaprov.go.id/mengenal-lebih-dekat-gas-rumah-kaca, accessed on November 28, 2024,

Ministry of Law and Human Rights. (2016, September). Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change, Law No. 16 of 2016

Ministry of Energy and Mineral Resources, Inventory of GHG Emissions in the Energy Sector https://www.esdm.go.id/assets/media/content/content-inventarisasi-emisi-gas-rumah-kaca-sektor-energi-tahun-2019.pdf , accessed on November 28, 2024

National Geographic Indonesia, Carbon Emissions from the Energy Sector, https://nationalgeographic.grid.id/read/13299878/emisi-karbon-dari-sektor-energi-yang-terus-meningkat, accessed on November 28, 2024

Statista. (nd). Global historical CO2 emissions 1758-2020 | Statista, 2020. Available: https://www.statista.com/statistics/264699/worldwide-co2-emissions/, accessed on November 13, 2024,

UNFCCC. (2020). China's Submission on 'Pre-2020 Implementation and Ambition Round Table.

World Bank. Indonesia Rising: Policy Priorities for 2010 and Beyond. <http://documents.worldbank.org/curated/en/124931468039864713/Memasyarakatkan-perubahan-iklim-demi-kelestarian-lingkungan>. Accessed December 13, 2024

Legislation

1. The 1945 Constitution of the Republic of Indonesia
2. Paris Agreement 2015
3. Law Number 16 of 2016 concerning Ratification of the Paris Agreement on Climate Change which was ratified on October 5 2016.
4. Other laws and regulations related to the discussion