

## Termination of the Operational Period of Coal-Fired Power Plants amid Indonesia's Sustainable Development Plan

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### Abstract

*Amid Indonesia's sustainable development plan, Indonesian government Presidential Regulation of the Republic of Indonesia Number 112 of 2022 concerning the Acceleration of Renewable Energy Development for Electricity Supply aims to terminate the operational period of coal-fired power plants. However, the regulation also provides exemptions for the development of new coal-fired power plants under certain conditions. The author analyzes the influence of environmental issues on Presidential Regulation 112/2022 regarding the termination of coal-fired power plants' operational periods, as well as the influence of economic issues on the exemptions for new coal-fired power plants outlined in the regulation. In analyzing the issues, the author uses a socio-legal approach, supported by primary legal materials literature related to sociology of law and sustainable development, as well as news and other credible sources from the internet are also used for this research.*

### KEYWORDS

*Coal-fired power plants, sustainable development*

## I. Introduction

Indonesian government plans to terminate the operational period of power plants that utilize coal-fired energy sources through Presidential Regulation of the Republic of Indonesia Number 112 of 2022 concerning the Acceleration of Renewable Energy Development for Electricity Supply ("Presidential Regulation 112/2022"). Presidential Regulation 112/2022 considers that regulation is needed to accelerate the achievement of renewable energy mix targets in the national energy mix and reduce greenhouse gas emissions, as well as the development of power plants from renewable energy sources. As a move to terminate the operation of coal-fired power plants, Article 3 paragraph (1) of Presidential Regulation 112/2022 states that the Minister prepares a roadmap to accelerate the termination of the operational period of coal-fired power plants which is stated in the sectoral planning document<sup>1</sup>.

The development of this coal-fired power plants is not fully prohibited. Article 3 paragraph (4) of Presidential Decree 112/2022 provides exemptions that the development of new coal-fired power plant is permitted for power plants that are integrated with industries that increase the added value of natural resources or national strategic projects that contribute greatly to creating jobs and/or national economic growth, are committed to reducing greenhouse gas emissions by at least 35% within 10 years since the coal-fired power plant operates, and it can only operate at the latest until 2050.

In sociological studies, there is a belief that what has been regulated in the law is no different from what applies in society. This sociological or anthropological perspective is actually a fiction that law is society. This is called *fictie* because from the study of economics, politics, social, and culture, law is not always the society or even law is not society. Law as a text

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<sup>1</sup> "Peraturan Presiden Republik Indonesia Nomor 112 Tahun 2022 Tentang Percepatan Pengembangan Energi Terbarukan Untuk Penyediaan Tenaga Listrik," Pub. L. No. 112 (2022).

is not always the same and consistent with its reality in a socio-cultural context.

Presidential Regulation 112/2022 was issued to accelerate the achievement of renewable energy mix targets in the national energy mix and to reduce greenhouse gas emissions, as well as to accelerate the development of power plants from renewable energy sources. One of the ways to accelerate the development of renewable energy power plants is to terminate the operational period of the coal-fired power plants. However, this regulation also provides flexibility for industries to develop new coal-fired power plants in certain conditions.

Author found several journals related to the analysis related to coal-fired power plants associated with Presidential Regulation 112/2022:

1. The Impact of Government Policy on the Sustainability of Batang Coal-Fired Power Plants on Indonesia's Vision 2024 Regarding Environmental Management by Muhammad Zahiir Al Faraby.

This research shows that construction of the Batang Coal-Fired Power Plant has positive economic impacts but has the potential to harm the environment and local communities. The use of coal for power plant causes air and environmental pollution, posing a threat to ecosystem balance. Meanwhile, Presidential Regulation 112/2022 plans to strengthen the commitment to energy transition towards Net Zero Emission, aligning with the Vision of Indonesia 2045. With a focus on sustainability and well-being, Presidential Regulation 112/2022 emphasizes the prohibition of new coal-fired power plant construction without affecting the existing, such as Batang Coal-Fired Power Plant<sup>2</sup>.

2. Case Study: The Impact of coal-fired power plants Development on the Social, Economic, and Environmental Life of the North Morowali Community, Central Sulawesi in the Eyes of Sociology by Rizqi Ahmad Muzaki, Septian Bintang Cahyo, and Tegar Vicho Virdyanto.

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<sup>2</sup> Muhammad Al-Faraby, "Dampak Kebijakan Pemerintah Dalam Keberlanjutan PLTU Batang Terhadap Visi Indonesia 2024 Terkait Pengelolaan Lingkungan" 1, no. 4 (December 2023): 59–76, <https://doi.org/10.51903/perkara.v1i4.1459>.

This research explores the impact of the development of captive coal-fired power plant infrastructure in Sulawesi on the livelihood of local communities from a sociological perspective. Using a qualitative approach and case study design, this research explores the social, economic and environmental changes that occurred as a result of development interventions by PT GNI and PT COR. The construction of the captive coal-fired power plant is based on Presidential Regulation No. 112/2022 concerning the Acceleration of Renewable Energy Development for the Supply of Electric Power. Local residents experience a range of negative impacts, including air pollution and disruption to livelihoods that depend on natural resources. This research found that the development project has taken away the rights of local communities and caused various human rights violations<sup>3</sup>.

3. The Role of Policy on Presidential Regulation Number 112 of 2022 in Externalizing the Environmental Impacts of Captive Coal-Fired Power Plant by Richard Fernandez Labiro.

The Presidential Regulation 112/2022, which aims to initiate the transition to renewable energy, actually facilitates captive coal-fired power plant to continue operating in industrial areas until 2050. This policy inconsistency has direct implications for the health of the surrounding community, such as in Bungku Barat District, Morowali Regency, which experienced a significant escalation in cases of acute respiratory infections. Instead of emphasizing sustainability, the policy is considered to shift environmental risks and impacts to the community, in line with the concept of risk externalization outlined by experts, where large companies and local governments shift the burden of risk to vulnerable community groups without reparation or

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<sup>3</sup> Rizqi Muzaki, Septian Cahyo, and Tegar Virdyanto, "Studi Kasus: Dampak Pembangunan PLTU Terhadap Kehidupan Sosial, Ekonomi, Dan Lingkungan Masyarakat Morowali Utara, Sulawesi Tengah Dalam Kaca Mata Sosiologi," *Jurnal Insan Pendidikan Dan Sosial Humaniora* 2, no. 3 (June 8, 2024): 161–68, <https://doi.org/10.59581/jipsoshum-widyakarya.v2i3.3436>.

equivalent compensation<sup>4</sup>.

4. The Impact of the Development of the Ropa Coal-Fired Power Plant on Sustainable Development in Keliwumbu Village, Maurole District, Ende Regency by Adrianus Mbele Nuwa, Fransina W. Ballo, Maria Indriyani Hawe Tiwu.

This research aims to explain the impact of the construction of the Ropa coal-fired power plant on sustainable development in Keliwumbu Village, Maurole District, Ende Regency, in the form of socio-economic and environmental impacts on the community of Keliwumbu Village. The research results show that the development of the Ropa coal-fired power plant industry has had an impact on sustainable development in the socio-economic dimension of the Keliwumbu Village community in the form of changes in community income, availability of employment opportunities, opening up of new economic business opportunities, changes or additions to sources of livelihood, and good community education. However, there is also environmental impact such as pollution felt by the people of Keliwumbu Village. The pollution caused by coal-fired power plant's liquid waste and coal loading and unloading dust which pollutes the ocean and beach sand turns black, and coal loading and unloading dust causes air pollution, reducing fishermen's catches and harvests. farmers, highways are damaged due to passing coal-laden vehicles<sup>5</sup>.

5. Indonesian Government towards Net Zero Emmission (NZE) in 2060 with Variable Renewable Energy (VRE) in Indonesia by Nabila Putri Zahira and Dening Putri Fadillah.

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<sup>4</sup> Richard Fernandez Labiro, "Peran Kebijakan Tentang Peraturan Presiden Nomor 112 Tahun 2022 Dalam Dampak Lingkungan PLTU Captive," *INNOVATIVE: Journal Of Social Science Research* 4, no. 6 (2024), <https://doi.org/10.31004/innovative.v4i6.16435>.

<sup>5</sup> Adrianus Mbele Nuwa, Fransina W. Ballo, and Maria Indriyani Hawe Tiwu, "Dampak Pembangunan PLTU Ropa Terhadap Pembangunan Berkelanjutan Di Desa Keliwumbu Kecamatan Maurole Kabupaten Ende," *Jurnal Ekonomi Pembangunan* 6, no. 1 (March 2024): 37–47, <https://elastisitas.unram.ac.id/index.php/elastisitas/article/view/130>.

NZE has become a popular program after the 2015 Paris Climate Agreement. This program has the intention of reducing environmental pollution that causes global warming. Various countries have started to program NZE starting from production countries to developed countries, including Indonesia. The Indonesian government continues to innovate to achieve the NZE target, one of which is by enacting Presidential Regulation No. 112 of 2022. However, several articles contradict the NZE program itself. Such as the shift of the coal-fired power plant into a renewable energy which cannot instantly make a very large transition and also the imposition of a carbon tax that burdens the people's economy and is less significant in addressing carbon dioxide emission<sup>6</sup>.

From those researches, concluded that coal-fired power plants have both sides of positive and negative impacts on the society. It also not an easy task for Indonesian government to instantly terminate the coal-fired power plants.

In this research, the author analyzes the influence of environmental issues on the Presidential Decree 112/2022 for terminating the coal-fired power plants operational period and the influence of economic issues on the exemptions for new coal-fired power plants in Presidential Regulation 112/2022. The formulation of the issues that the author determined has not been solved by previous researchers. If there is a similar study before, the formulation of the issues and the objectives of the research are different from this research.

## II. Methods

Author uses a socio-legal approach for analyzing the influence of

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<sup>6</sup> Nabila Putri Zahira and Dening Putri Fadillah, "Pemerintah Indonesia Menuju Target Net Zero Emission (NZE) Tahun 2060 Dengan Variable Renewable Energy Di Indonesia," *JIS: Jurnal Ilmu Sosial* 2, no. 2 (December 2022): 114–19, <https://doi.org/10.21831/jis.v2i2.25>.

environmental issues on the termination of the operational period of coal-fired power plants in Presidential Regulation 112/2022 and influence of economic issues on the exemptions for the new coal-fired power plants in Presidential Regulation 112/2022.

Philippe Nonet (1976), quoted from Treviño, said that the normative approach structures the sociology of law in four ways<sup>7</sup>:

1. The sociology of law needs to seriously consider normative issues relevant to jurisprudence such as legal, political, and historical issues; values; adequacy, effectiveness, achievements, limitations, growth, and decline of various social orders. In other words, the sociology of law needs to be more than a scientific study of quantitative and measurable behavior.
2. The sociology of law must have redeemed value for policy. Thus, every project undertaken by a sociologist of law must have some practical benefits and must not stand alone based on its theoretical benefits.
3. The sociology of law must take the idea of law seriously. That is, sociologists cannot hope to capture everything that is truly important about the legal order without knowing something about the complex and unclear arguments that are important to lawyers. In other words, sociologists who want to study law must be legally literate.
4. The sociology of law must combine jurisprudence with policy analysis. In other words, the sociology of law must link moral dilemmas concerning jurisprudence with evaluative research concerning policy.

For data collection, author uses primary legal material from the Presidential Regulation 112/2022 and other related regulations to analyze the issues. In addition, literature study related to sociology law and sustainable development, news, and other information from credible source on the internet are also used for this research.

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<sup>7</sup> A. Javier Treviño, *The Sociology of Law: Classical and Contemporary Perspectives* (New York: Routledge, 2008).

### III. Result and Discussion

#### ***1. Influence of Environmental Issues on the Termination of the Operational Period of Coal-Fired Power Plants in Presidential Regulation 112/2022***

At the normative level, legal principles regarding the status of humans in relation to the environment establish fundamental values that emphasize the importance of the environment and nature in human life<sup>8</sup>. In the global stage, nations have collectively endorsed various declarations to promote effective environmental management.

The Stockholm Declaration of 1972 stated that the protection and improvement of the human environment is a major issue affecting human welfare and economic development throughout the world. This represents an urgent aspiration of people around the world and the duty of all governments<sup>9</sup>. Then, the Rio Declaration of 1982 stated that human beings are the focal point of sustainable development. They have the right to a healthy and productive life in harmony with nature<sup>10</sup>.

Indonesia has also ratified the Paris Agreement as outlined in the Law of the Republic of Indonesia in 2016 concerning the Ratification of the Paris Agreement to the United Nations Framework Convention in Climate Change. Through this ratification, Indonesia participates in the commitment of world countries to hold the average global temperature increase below 2 degrees celsius above the pre-industrial era, and continue

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<sup>8</sup> Moh. Fadli, Mukhlis, and Mustafa Lutfi, *Hukum & Kebijakan Lingkungan* (Malang: UB Press, 2016).

<sup>9</sup> "Report of The United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972" (New York, 1973).

<sup>10</sup> "Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3- 14 June 1992, Volume I, Resolutions Adopted by the Conference" (New York, June 1993).



to suppress the global temperature increase to 1.5 degrees celsius above the pre-industrial era.

The Indonesian government has also stated the target for reducing greenhouse gas emissions in Presidential Regulation of the Republic of Indonesia Number 98 of 2021 concerning the Implementation of Carbon Economic Values for Achieving Nationally Determined Contribution Targets and Controlling Greenhouse Gas Emissions in National Development. This regulation was created as a guideline for achieving the Nationally Determined Contribution (NDC) target and controlling greenhouse gas emissions in terms of national development. Article 3 paragraphs (2) and (3) state that Indonesia's NDC target is to reduce greenhouse gas emissions by 29% with its own capabilities or 41% with international support by 2030<sup>11</sup>. Then, as mandated by the Decision 1/CMA.3 of the United Nations Framework Convention on Climate Change, Indonesia determines the Enhanced NDC to be 31.89% with its own capabilities and 43.20% with international support<sup>12</sup>.

The existence of environmental law highlights the essential and substantial role that nature and the environment play in relation to humanity. Given this, it is crucial that the environment is not only valued but actively protected, ensuring that it can continue to exist in harmony with human life for future generations. Environmental laws, along with all forms of legal frameworks and regulations, will undoubtedly serve as vital instruments in regulating and controlling the relationship between humans and the environment. By doing so, they help establish a balance that allows for sustainable development while safeguarding the planet's ecological integrity.

Global environmental issues reflection the concerns of the international community, particularly with regard to the various forms of environmental

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<sup>11</sup> "Peraturan Presiden Republik Indonesia Nomor 98 Tahun 2021 Tentang Penyelenggaraan Nilai Ekonomi Karbon Untuk Pencapaian Target Kontribusi Yang Ditetapkan Secara Nasional Dan Pengendalian Emisi Gas Rumah Kaca Dalam Pembangunan Nasional" (2021).

<sup>12</sup> "Enhanced Nationally Determined Contribution Republic of Indonesia," 2022.

damage or pollution caused by development. The environment is fundamentally the most crucial and decisive factor for the existence and survival of humanity, as well as for the preservation of culture and civilization. As long as human life persists, environmental factors remain an inseparable part of human<sup>13</sup>.

Development has succeeded in improving the welfare and quality of life of the community. However, on the other hand, this process has also caused quite significant negative impacts on the sustainability of the environment and natural resources<sup>14</sup>.

From a global social and environmental perspective, there are various pressures that prompt the government issue regulations aimed at accelerating the achievement of the renewable energy mix target. Presidential Regulation 112/2022 acknowledges that Indonesia needs to reduce greenhouse gas emissions, with one of its efforts is by terminating the operational period of coal-fired power plants. It is known that coal-fired power plants are one of the largest contributors to greenhouse gas emissions. According to the Ministry of Energy and Mineral Resources<sup>15</sup>, each coal-fired power plant with a capacity of 1 gigawatt produces 5 million tons of CO<sub>2</sub>.

The formation of Presidential Decree 112/2022 uses the principle of sustainability. According to Machmud<sup>16</sup>, the principle of sustainability implies that every Indonesian citizen has a responsibility to preserve the environment. Additionally, development undertaken for the welfare of the people must consider the capacity of the environment and must not compromise the well-being of future generations.

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<sup>13</sup> Moh. Fadli, Mukhlis, and Mustafa Lutfi, *Hukum & Kebijakan Lingkungan* (Malang: UB Press, 2016).

<sup>14</sup> Emil Salim, *Pembangunan Berwawasan Lingkungan* (Jakarta: LP3ES, 1986).

<sup>15</sup> Verda Setiawan, "Dianggap Kotor, Cek Segini Emisi Karbon Dari PLTU Raksasa RI," CNBC Indonesia, January 24, 2023, <https://www.cnbcindonesia.com/news/20230124123650-4-407792/dianggap-kotor-cek-segini-emisi-karbon-dari-pltu-raksasa-ri>.

<sup>16</sup> Syahrul Machmud, *Penegakan Hukum Lingkungan Indonesia* (Yogyakarta: Graha Ilmu, 2012).

From the United Nations Conference on Environment and Development (UNCED) document, according to Mas Ahmad Santosa, there are five main principles of sustainable development<sup>17</sup>, namely:

- The Principle of Intergenerational Equity: This principle emphasizes the need for justice in the use of natural resources between the current and future generations. Future generations should not be burdened with a lower quality of life due to the actions of the present generation.
- The Principle of justice within one generation (intragenerational equity): This principle focuses on justice within a single generation, specifically among individuals and groups within that generation. Environmental damage should be regarded as a shared responsibility among all members of society.
- The Precautionary Principle: This principle asserts that when there is a significant threat of irreparable environmental damage, the absence of conclusive scientific evidence should not justify delaying preventive measures. It responds to traditional environmental policies that often postpone action until the risk is scientifically proven.
- The Principle of Conservation of Biological Diversity: This principle is a core goal of sustainable development, as it pertains to ethical considerations and human survival. The protection of biodiversity is essential for the success of intergenerational equity and is directly linked to efforts to prevent environmental damage.
- The Principle of Internalization of Environmental Costs: This principle requires that the costs of environmental damage be integrated into decision-making processes related to the use of natural resources. Environmental harm is considered an external cost of economic activities that must be factored into decisions through instruments such as regulations, fees, and property rights.

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<sup>17</sup> Muhammad Akib, *Penegakan Hukum Lingkungan Dalam Perspektif Holistik-Ekologis* (Yogyakarta: Graha Ilmu, 2015).

Considering Gustav Radburch's legal objectives, the principle of utility in the Presidential Regulation 112/2022 is to accelerate the achievement of renewable energy mix targets within the national energy framework, Electricity Supply Business Plan issued by PT Perusahaan Listrik Negara (PLN), a state-owned enterprise. In an effort to increase the share of renewable energy in the electricity mix, PLN is expediting the termination of the operational periods of its own coal-fired power plants and/or the power purchase agreements for coal-fired power plants developed by independent developers, taking into account the conditions of electricity supply and demand.

The portion of renewable energy in the energy mix has shown an increasing trend. However, its achievement has not yet reached the specified target. In the national energy policy and the national energy general plan, one of the targets of national energy management is to achieve a national energy mix consisting of four types of primary energy, namely petroleum, natural gas, coal, also new and renewable energy with the target of achieving the new and renewable energy of at least 23%, petroleum of less than 25%, coal of at least 30%, and gas of at least 22% in 2025<sup>18</sup>.

TABLE 1. New and renewable energy portion in the energy mix

	2021	2022	2023	2024
New and renewable energy in energy mix	11.7%	11.9%	13.93%	14.68%

Source: Ministry of Energy and Mineral Resources<sup>19</sup>

With the realization of 14.68% new and renewable energy in the energy mix in 2024, the government may need to increase 8.32% more to reach 23% target in the 2025. During 2021-2024, the average growth was only 0.68% annually.

<sup>18</sup> "Laporan Kinerja Kementerian Energi Dan Sumber Daya Mineral Tahun 2024," 2025.

<sup>19</sup> "Laporan Kinerja Kementerian Energi Dan Sumber Daya Mineral Tahun 2024," 2025.

Harmonization between development and environmental management policies must produce a development concept that is not only oriented towards the interests of economic growth, but must also be oriented towards the function of environmental sustainability. This development concept is commonly known as sustainable development or the concept of sustainable development which combines the concept of economic growth while maintaining the balance of the function of environmental sustainability<sup>20</sup>.

## ***2. Influence Economic Issues on the Exemptions for New Coal-Fired Power Plants in Presidential Regulation 112/2022***

The concept of legal sociology is a subset of the broader field of law and society. Legal sociology is an academic discipline within sociology that seeks to theoretically explain the relationship between law and society, the social organization of legal institutions (such as their structure and system), social interactions with individuals who engage with legal institutions and their representatives, and provides the meaning that people attribute to their legal reality<sup>21</sup>.

In its legal reality, coal-fired power plant is still the mainstay of electricity generation in Indonesia. By the end of 2023, the total installed capacity of electricity generation in Indonesia was 91,164 megawatts. Of that number, 54.58% or 49,756 megawatts is still dominated by power plants that are sourced from coal energy.

While the government has plans to terminate the operation of coal-fired power plants, they also continue to give green light to the construction of coal-fired power plants. As stated in the General Plan for Electricity

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<sup>20</sup> Moh. Fadli, Mukhlis, and Mustafa Lutfi, *Hukum & Kebijakan Lingkungan* (Malang: UB Press, 2016).

<sup>21</sup> A. Javier Treviño, *The Sociology of Law: Classical and Contemporary Perspectives* (New York: Routledge, 2008).

Supply 2021-2023, there is a plan to build a power plant with a capacity of 40,575 megawatts in the period 2021-2030. Of that amount, 34.05% or 13,819 megawatts comes from coal energy<sup>22</sup>. The government plans to retire 13 coal-fired power plants with a total capacity of 4.8 gigawatts owned by PLN. The coal-fired power plants early retirement program aims to accelerate the energy transition to cleaner and more environmentally friendly energy sources<sup>23</sup>. However, the government has instead permitted the construction of 12 captive coal-fired power plants or coal-fired power plants operated and used by companies and not for the PLN electricity network<sup>24</sup>.

The paradigm of developing countries in the context of development related to environmental management is faced with the basic problem of poverty, so that the development carried out is solely based on the highest possible economic growth target which then has implications for the emergence of environmental pollution and damage. For developing countries like Indonesia, the development paradigm in the context of the environment requires freedom to utilize and exploit existing natural resources. Development (developmentalism) can only be done by utilizing natural resources<sup>25</sup>.

The aspirations of developing countries to utilize these natural resources can be seen from the United Nations (UN) Resolution No. 1803 (XVII) concerning "Permanent Sovereignty over Natural Resources". In number 1 of the Declaration, it is stated that the rights of the people and nation to have permanent sovereignty over their wealth and natural resources must be implemented in the interests of national development

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<sup>22</sup> "Rencana Usaha Penyediaan Tenaga Listrik 2021-2030 PT PLN (Persero)," 2021.

<sup>23</sup> "Kementerian ESDM RI - Media Center - Arsip Berita - Pensiunkan Dini PLTU, Pemerintah Pertimbangkan Hal Ini," August 22, 2024, <https://www.esdm.go.id/id/media-center/arsip-berita/pensiunkan-dini-pltu-pemerintah-pertimbangkan-hal-ini>.

<sup>24</sup> "Mimpi Indah Transisi Energi," July 26, 2024, <https://www.tempo.co/kolom/pltu-batu-bara-captive-409177>.

<sup>25</sup> Moh. Fadli, Mukhlis, and Mustafa Lutfi, *Hukum & Kebijakan Lingkungan* (Malang: UB Press, 2016).

and the welfare of the people of the country concerned<sup>26</sup>.

Exploitation of natural resources and the environment is considered inevitable in efforts to achieve economic growth. This is due to the use of the industrialism and developmentalism paradigm. With this approach, economic growth is used as the main benchmark for the success of development. This paradigm has encouraged massive exploitation of natural resources and the environment, which has led to a prolonged environmental crisis and a sharp decline in environmental quality over time. Progress in the economic and industrial sectors often has to be paid at a very high price, in the form of environmental damage, pollution, and destruction<sup>27</sup>.

The formation of Presidential Regulation 112/2022 refers to Law Number 30 of 2007 concerning Energy, Government Regulation Number 23 of 2014 concerning Amendments to Government Regulation Number 14 of 2012 concerning Electricity Supply Business Activities, Government Regulation Number 79 of 2014 concerning National Energy Policy, and Presidential Regulation Number 14 of 2017 concerning Amendments to Presidential Regulation Number 4 of 2016 concerning Acceleration of Electricity Infrastructure Development.

From those law references, justice as a legal objective that appears in the target to be achieved from Presidential Regulation 112/2022 is based on Article 6 of Government Regulation Number 79 of 2014 concerning National Energy Policy ("PP 79/2014") which states that energy independence and national energy security are achieved by realizing, among other things, access for the community to energy in a fair and equitable manner. In Presidential Regulation 112/2022, electricity for the benefit of the community is regulated to increase the use of renewable energy power plants and terminate the operational period of coal-fired power plant.

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<sup>26</sup> "Resolutions Adopted by the General Assembly United Nations during Its Seventeenth Session 18 September-20 December 1962, Supplement No. 17 (A/5217)" (New York, 1963).

<sup>27</sup> Muh. Aris Marfai, *Moralitas Lingkungan: Refleksi Kritis Atas Krisis Lingkungan Berkelanjutan* (Yogyakarta: Kreasi Wacana, 2005).

To achieve energy independence and national energy security, the 2021-2030 Electricity Supply Business Plan PLN has a target of electrification ratio of up to 100% in 2022. As of the fourth quarter of 2020, the electrification ratio in Indonesia has reached 99.20%. The electrification ratio in the Sumatra and Kalimantan regions was recorded at 99.46%, the Java, Madura, and Bali regions were recorded at 99.58%, and the Sulawesi, Maluku, Papua, and Nusa Tenggara regions were recorded at 96.93%. Meanwhile, the condition of the village electrification ratio in the Maluku, Papua, and Nusa Tenggara regions is still less than 95%<sup>28</sup>.

**PICTURE 1.** Map of Village Electrification Ratio Distribution in Indonesia



Source: PLN<sup>29</sup>

Indonesia targeted 100% electrification ratio target in 2022. While amid the plan in terminating coal-fired power plants, the Ministry of Energy and Mineral Resources recorded addition of coal-fired power plants in 2024. The addition is higher than other energy sources.

<sup>28</sup> "Rencana Usaha Penyediaan Tenaga Listrik 2021-2030 PT PLN (Persero)," 2021.

<sup>29</sup> "Rencana Usaha Penyediaan Tenaga Listrik 2021-2030 PT PLN (Persero)," 2021.



**TABLE 2.** Realization of Addition of Power Plants

Power plants	2024	
	Target (MW)	Realization (MW)
<b>Fossil fuel power plant</b>	<b>2,065</b>	<b>8,836.59</b>
Coal-fired power plants	65	4,680.07
Coal-fired power plants ultra super critical technology	2,000	0.00
Coal-fired power plants mine-to-mouth	0	0.00
Gas-fired power plants	0	2,975.55
Diesel power plants	0	1,180.97
<b>Renewable energy power plants</b>	<b>3,109.85</b>	<b>1,114.63</b>
Geothermal power plants	375	41.25
Hydro power plants	1,936.55	486.55
Bioenergy power plants	102.60	275.27
Solar power plants	315.70	311.56
Wind power plants	380	0.00
Total	5,174.85	9,951.22

Source: Ministry of Energy and Mineral Resources<sup>30</sup>

Coal needs for power plants have increasing trend amid the plan to terminate the operational period of coal-fired power plants. In the last 5 years, coal needs for power plants were only decreased once in 2023 compared to 2022. In 2024, coal needs for power plants increased by 10.12% compared to 2023.

<sup>30</sup> "Laporan Kinerja Kementerian Energi Dan Sumber Daya Mineral Tahun 2024," 2025.

**TABLE 3.** Coal Needs to Power PlantsClick or tap here to enter text.

Indicator				2020	2021	2022	2023	2024
Coal	needs	for	power	104.83	112.13	129.23	121.20	133.47
plants (in million tonnes)								

Source: Ministry of Energy and Mineral Resources<sup>31</sup>

While Presidential Regulation 112/2022 outlines plans to terminate the operational periods of coal-fired power plants, the government cannot easily phase out their use. In applying Gustav Radbruch's principle of justice within the regulation, the government holds both the authority and the responsibility to ensure equitable access to electricity for all Indonesian citizens, striving to achieve equality in energy distribution.

From an economic perspective, the Indonesian government, through Presidential Regulation 112/2022, has not fully endorsed the termination of the operational period of coal-fired power plants. This is evident in the exemptions outlined in Article 3, paragraph (4)(b), which permits the development of coal-fired power plants, provided they are integrated with industries aimed at increasing the added value of natural resources, or are part of a national strategic project that significantly contributes to job creation and/or national economic growth.

Although Presidential Regulation 112/2022 outlines a plan to accelerate the renewable energy mix, it does not address the environmental aspect in the preparation of the Electricity Supply Business Plan. Article 2, paragraph

(2) specifies that the preparation of the Electricity Supply Business Plan takes into account factors such as the balance between supply and demand, the readiness of the electricity system, and the financial capacity of the state. Megantara argues that in the anthropocentric approach, humans are often viewed as separate from their environment. The environment is considered to exist solely for the benefit of humans, leading to frequent negligence in its maintenance. To address this deeply ingrained approach

<sup>31</sup> "Laporan Kinerja Kementerian Energi Dan Sumber Daya Mineral Tahun 2024."

within the broader social order, a more comprehensive framework is needed—one that unites humans and the environment through an ecocentric perspective. In the ecocentric approach, humans are not positioned outside their environment; rather, they are part of an integrated whole that cannot be separated. Therefore, every development initiative aimed at enhancing human welfare must be accompanied by efforts to preserve or improve environmental functions<sup>32</sup>.

Presidential Regulation 112/2022 appears to adopt an ecocentric approach, as it outlines a plan to accelerate the renewable energy mix by terminating the operational period of coal-fired power plants. However, in practice, the approach reflected in the regulation is more anthropocentric. The government has not fully prioritized environmental considerations, as evidenced by the exclusion of environmental aspects from the Electricity Supply Business Plan and the provision of exemptions for the development of new coal-fired power plants.

Karl Marx argued that harmony is merely an illusion, as there is ongoing conflict between the economy and the environment, with both unable to coexist in true harmony<sup>33</sup>. The provisions of Presidential Regulation 112/2022 conflict with the environmental objectives it seeks to achieve. This creates a tension between economic development and environmental protection, reflecting a divide between pro-capitalist and pro-environmental interests.

According to the instrumental perspective of Marxism, law is merely a tool of class rule, with the ruling class as the controller of law formation. This perspective posits that law is a reflection of evolving economic conditions. The primary objective of the capitalist ruling class is to preserve its position of power and ensure the maximization of profit. Marx argues that society operates on two levels: the base and the superstructure. The

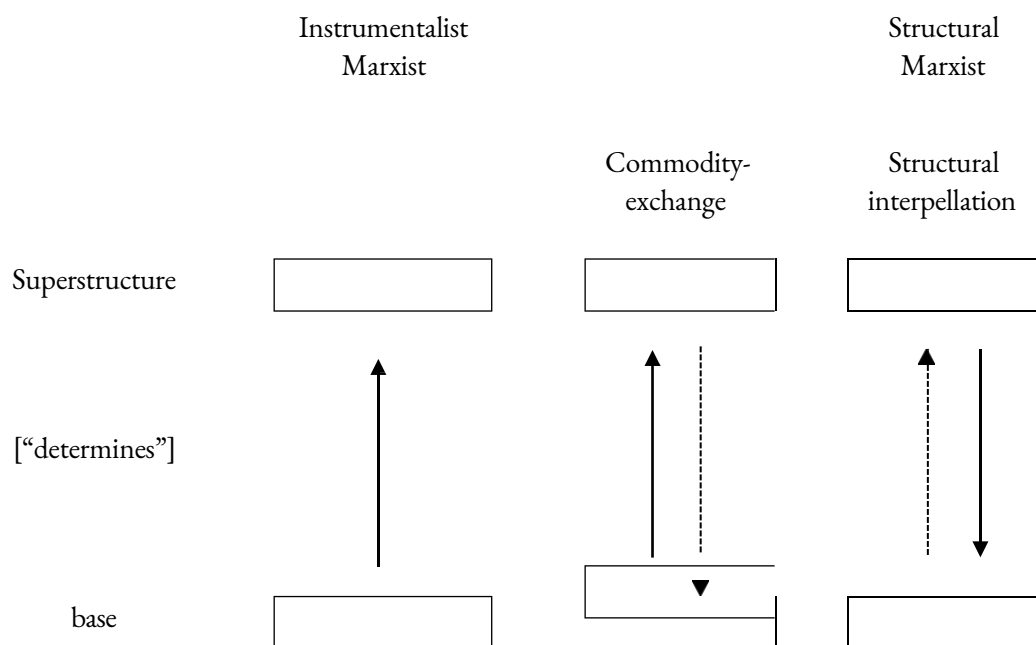
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<sup>32</sup> Erri N. Megantara, "Pendekatan Pembangunan Antroposentris VS Ekosentris," *Republika*, January 11, 1997.

<sup>33</sup> Dragan Milovanovic, *An Introduction to the Sociology of Law*, 3rd ed. (New York: Criminal Justice Press, 2003).

economic system forms the base, while the superstructure encompasses the entirety of beliefs, sentiments, morality, illusions, ways of thinking, worldviews, forms of consciousness, ideals, ideas, and more. It also includes the domains of politics, law, and ideology. Within this framework, the state can be viewed as an integral component of the superstructure<sup>34</sup>.

**PICTURE 2.** Marxist Perspectives in the Sociology of Law<sup>35</sup>



Since law is developed and promoted by the ruling class, it will reflect the interests of that class. Instrumentalist Marxists argue that the state and its institutions, such as law, courts, and police, serve as tools for the capitalist class to maximize profits and exert control over the working class. According to Marxist criminologist Richard Quinney, the state is structured

<sup>34</sup> Dragan Milovanovic, *An Introduction to the Sociology of Law*, 3rd ed. (New York: Criminal Justice Press, 2003).

<sup>35</sup> Dragan Milovanovic, *An Introduction to the Sociology of Law*, 3rd ed. (New York: Criminal Justice Press, 2003).

to serve the interests of the dominant economic class—the capitalist ruling class<sup>36</sup>.

This refers to the exemptions outlined in Article 3, paragraph (4) b. Presidential Regulation 112/2022 which allows industries to continue developing coal-fired power plants within their projects. Additionally, the regulation provides flexibility until 2050 for capital owners to develop coal-fired power plants.

Indonesia is endowed with abundant natural coal resources, particularly in terms of energy sources. In fact, Indonesia is the third largest coal producer in the world<sup>37</sup>. In 2023, Indonesia produced 775.22 million tons of coal, or higher than the original target of 694.5 million tons<sup>38</sup>.

The coal sector is also the largest contributor to state revenue. In 2023, non-tax state revenue from the mineral and coal sector reached IDR 173 trillion or 58% of the total non-tax revenue<sup>39</sup>. Of this amount, 80% came from the coal industry. Furthermore, the coal sector has generated employment opportunities for Indonesian citizens. In 2023, the coal sector employed 43,335 workers, a number that does not account for the employees of mining service companies operating within the mines. Meanwhile, the workforce employed under the Mining Service Business Permit for minerals and coal totaled 216,416 Indonesian workers<sup>40</sup>.

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<sup>36</sup> A. Javier Treviño, *The Sociology of Law: Classical and Contemporary Perspectives* (New York: Routledge, 2008).

<sup>37</sup> “Statistik Ketenagalistrikan Tahun 2024,” 2024.

<sup>38</sup> “Kementerian ESDM RI - Media Center - Arsip Berita - Produksi Batubara Domestik Tembus Target, Ketahanan Energi Nasional Terjaga,” accessed April 6, 2025, <https://www.esdm.go.id/id/media-center/arsip-berita/produksi-batubara-domestik-tembus-target-ketahanan-energi-nasional-terjaga>.

<sup>39</sup> “Kementerian ESDM RI - Media Center - Arsip Berita - Tembus Rp300,3 Triliun, PNBP Sektor ESDM Di 2023 Lampau Target,” accessed April 6, 2025, <https://www.esdm.go.id/id/media-center/arsip-berita/tembus-rp3003-triliun-pnbp-sektor-esdm-di-2023-lampau-target>.

<sup>40</sup> Verda Setiawan, “Luhut Ungkap Mesin Uang Terbesar RI, Sumbang Rp 540 T Ke Kas Negara,” CNBC Indonesia, September 9, 2024, <https://www.cnbcindonesia.com/news/20240909180741-4-570393/luhut-ungkap-mesin-uang-terbesar-ri-sumbang-rp-540-t-ke-kas-negara>.

## IV. Conclusion

Presidential Regulation 112/2022 was issued as a response to the global target to hold the world's temperature increase. From a global social and environmental perspective, there are various pressures that prompt the government issue regulations aimed at accelerating the achievement of the renewable energy mix target. Indonesia has ratified the Paris Agreement as outlined in the Law of the Republic of Indonesia in 2016 concerning the Ratification of the Paris Agreement to the United Nations Framework Convention in Climate Change. Through this ratification, Indonesia participates in the commitment of world countries to hold the average global temperature increase below 2 degrees celsius above the pre-industrial era, and continue to suppress the global temperature increase to 1.5 degrees celsius above the pre-industrial era.

Principle of utility of the Presidential Regulation 112/2022 is to accelerate the achievement of renewable energy mix targets in the national energy mix and reduce greenhouse gas emissions, as well as the development of power plants from renewable energy sources. In the last few years, the portion of renewable energy in the energy mix has shown an increasing trend. However, its achievement has not yet reached the specified target. Needs of coal for the source of power plants also keep increasing in the last few years.

Not only mentioned about terminating the operational period of coal-fired power plants, the Presidential Decree 112/2022 also provides permission for coal-fired power plants that are integrated with industries that increase the added value of natural resources or national strategic projects that contribute greatly to creating jobs and/or national economic growth, are committed to reducing greenhouse gas emissions by at least 35% within 10 years since the coal-fired power plant operates, and it can only operate at the latest until 2050.

In outlining the exemption for new coal-fired power plants, the

government also considers economic issues as Indonesia's development has been heavily relied on its natural resources. Indonesia is endowed with abundant natural coal resources, particularly in terms of energy sources. In fact, Indonesia is the third largest coal producer in the world. The coal sector is also the largest contributor to state revenue and generates employment opportunities for Indonesian citizens.

Presidential Regulation 112/2022 appears to adopt an ecocentric approach, as it outlines a plan to accelerate the renewable energy mix by terminating the operational period of coal-fired power plants. However, in practice, the approach reflected in the regulation is more anthropocentric. The government has not fully prioritized environmental considerations, as evidenced by the exclusion of environmental aspects from the Electricity Supply Business Plan and the provision of exemptions for the development of new coal-fired power plants. In issuing the regulation, the state is structured to serve the interests of the dominant economic class—the capitalist ruling class.

## References

- Akib, Muhammad. *Penegakan Hukum Lingkungan Dalam Perspektif Holistik-Ekologis*. Yogyakarta: Graha Ilmu, 2015.
- Al-Faraby, Muhammad. "Dampak Kebijakan Pemerintah Dalam Keberlanjutan PLTU Batang Terhadap Visi Indonesia 2024 Terkait Pengelolaan Lingkungan" 1, no. 4 (December 2023): 59–76. <https://doi.org/10.51903/perkara.v1i4.1459>.
- "Enhanced Nationally Determined Contribution Republic of Indonesia," 2022.
- Fadli, Moh., Mukhlis, and Mustafa Lutfi. *Hukum & Kebijakan Lingkungan*. Malang: UB Press, 2016.
- "Global Coal Production Share by Country 2023 | Statista." Accessed April 6, 2025. <https://www.statista.com/statistics/265638/distribution-of-coal-production-worldwide/>.

- “Kementerian ESDM RI - Media Center - Arsip Berita - Pensiunkan Dini PLTU, Pemerintah Pertimbangkan Hal Ini,” August 22, 2024.  
<https://www.esdm.go.id/id/media-center/arsip-berita/pensiunkan-dini-pltu-pemerintah-pertimbangkan-hal-ini>.
- “Kementerian ESDM RI - Media Center - Arsip Berita - Produksi Batubara Domestik Tembus Target, Ketahanan Energi Nasional Terjaga.” Accessed April 6, 2025. <https://www.esdm.go.id/id/media-center/arsip-berita/produksi-batubara-domestik-tembus-target-ketahanan-energi-nasional-terjaga>.
- “Kementerian ESDM RI - Media Center - Arsip Berita - Sektor Pertambangan Serap 300 Ribu Tenaga Kerja Di 2023.” Accessed April 6, 2025.  
<https://www.esdm.go.id/id/media-center/arsip-berita/sektor-pertambangan-serap-300-ribu-tenaga-kerja-di-2023>.
- “Kementerian ESDM RI - Media Center - Arsip Berita - Tembus Rp300,3 Triliun, PNBP Sektor ESDM Di 2023 Lampau Target.” Accessed April 6, 2025.  
<https://www.esdm.go.id/id/media-center/arsip-berita/tembus-rp3003-triliun-pnbp-sektor-esdm-di-2023-lampau-target>.
- Labi, Richard Fernandez. “Peran Kebijakan Tentang Peraturan Presiden Nomor 112 Tahun 2022 Dalam Dampak Lingkungan PLTU Captive.” *INNOVATIVE: Journal Of Social Science Research* 4, no. 6 (2024).  
<https://doi.org/10.31004/innovative.v4i6.16435>.
- “Laporan Kinerja Kementerian Energi Dan Sumber Daya Mineral Tahun 2024,” 2025.
- Machmud, Syahrul. *Penegakan Hukum Lingkungan Indonesia*. Yogyakarta: Graha Ilmu, 2012.
- Marfai, Muh. Aris. *Moralitas Lingkungan: Refleksi Kritis Atas Krisis Lingkungan Berkelanjutan*. Yogyakarta: Kreasi Wacana, 2005.
- Megantara, Erri N. “Pendekatan Pembangunan Antroposentris VS Ekosentris.” *Republika*, January 11, 1997.
- “Mimpi Indah Transisi Energi,” July 26, 2024.  
<https://www.tempo.co/kolom/pltu-batu-bara-captive-409177>.
- Muzaki, Rizqi, Septian Cahyo, and Tegar Virdyanto. “Studi Kasus: Dampak Pembangunan PLTU Terhadap Kehidupan Sosial, Ekonomi, Dan Lingkungan Masyarakat Morowali Utara, Sulawesi Tengah Dalam Kaca Mata Sosiologi.” *Jurnal Insan Pendidikan Dan Sosial Humaniora* 2, no. 3 (June 8, 2024): 161–68.  
<https://doi.org/10.59581/jipsoshum-widyakarya.v2i3.3436>.



Nuwa, Adrianus Mbele, Fransina W. Ballo, and Maria Indriyani Hawe Tiwu. "Dampak Pembangunan PLTU Ropa Terhadap Pembangunan Berkelanjutan Di Desa Keliwumbu Kecamatan Maurole Kabupaten Ende." *Jurnal Ekonomi Pembangunan* 6, no. 1 (March 2024): 37–47. <https://elastisitas.unram.ac.id/index.php/elastisitas/article/view/130>

Peraturan Presiden Republik Indonesia Nomor 98 Tahun 2021 tentang Penyelenggaraan Nilai Ekonomi Karbon untuk Pencapaian Target Kontribusi yang Ditetapkan secara Nasional dan Pengendalian Emisi Gas Rumah Kaca dalam Pembangunan Nasional (2021).

"Rencana Usaha Penyediaan Tenaga Listrik 2021-2030 PT PLN (Persero)," 2021.

"Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, Volume I, Resolutions Adopted by the Conference." New York, June 1993.

"Report of The United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972." New York, 1973.

"Resolutions Adopted by the General Assembly United Nations during Its Seventeenth Session 18 September-20 December 1962, Supplement No. 17 (A/5217)." New York, 1963.

Salim, Emil. *Pembangunan Berwawasan Lingkungan*. Jakarta: LP3ES, 1986.

Setiawan, Verda. "Dianggap Kotor, Cek Segini Emisi Karbon Dari PLTU Raksasa RI." CNBC Indonesia, January 24, 2023. <https://www.cnbcindonesia.com/news/20230124123650-4-407792/dianggap-kotor-cek-segini-emisi-karbon-dari-pltu-raksasa-ri>.

———. "Luhut Ungkap Mesin Uang Terbesar RI, Sumbang Rp 540 T Ke Kas Negara." CNBC Indonesia, September 9, 2024. <https://www.cnbcindonesia.com/news/20240909180741-4-570393/luhut-ungkap-mesin-uang-terbesar-ri-sumbang-rp-540-t-ke-kas-negara>.

Treviño, A. Javier. *The Sociology of Law: Classical and Contemporary Perspectives*. New York: Routledge, 2008.

Zahira, Nabila Putri, and Dening Putri Fadillah. "Pemerintah Indonesia Menuju Target Net Zero Emission (NZE) Tahun 2060 Dengan Variable Renewable Energy Di Indonesia." *JIS: Jurnal Ilmu Sosial* 2, no. 2 (December 2022): 114–19. <https://doi.org/10.21831/jis.v2i2.25>.