



Coal Business in Indonesia Dilemma of Environmental Sustainability and Economic Development

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Abstract

The coal business has indeed given birth dilemma between economic growth and environmental sustainability. In Indonesia, an indication of the increased activity of the mining and utilization of coal after the promulgation of the Undang-Undang Cipta Kerja generates a problematic dilemma the same. On the other hand, indicative of an increase in the Undang-Undang Cipta Kerja is motivated by a political law of the government is more inclined leads to the economic growth of the country. On the other hand, the reality of the environmental damage caused by mining activities and coal utilization tends to be neglected. This research is a normative legal research. This research has focused answer the question how the legal regime of mining the coal sector, especially after the enactment of the Legislation of the Undang-Undang Cipta Kerja as an aspect of economic development in Indonesia as well as to analyze how the implementation of the mining and use of coal in Indonesia based on the perspective of sustainable development. The results of this study show that the activity of the mining and utilization of coal in Indonesia will tend to increase after the enactment of the Undang-Undang Cipta Kerja. The fact that there are also shows that the mining and utilization of coal is not in accordance with the concept of sustainable development. The economic aspect is still used as the only consideration. It is evident from the neglect of pollution that occurs, the less dipertimbangkannya the issue of climate change, as well as the issuance of FABAs from the category of B3 waste. Based on this, the future of the environment in Indonesia is becoming increasingly threatened.

Keywords: *Business; Environment; Environmental Sustainability*

Introduction

The use of coal in Indonesia still seem to be constantly increasing, it is evident from the statistical data compiled in CEIC shows that from 1965 to 2018 increased consumption. [1] The impact of the increase in coal consumption also has a negative impact that is produced, as well as tend to be the longer

it can be resolved. From the side of the activity of the mine, coal mining became one of the mining activities which is crucial. In addition to providing revenue for the state, the impact of environmental, economic and social of the existence of such mining it is also interesting to be used as a study. One of the issues is the mining and use of coal is a major contributor to the carbon emissions that adversely impacts the environment and climate change. [2] Mining activities in general can not be separated from the issue of the negative impact on the environment that accompanies it.

In developing countries, mining is still a major tool to increase the income of the state in the context of economic development. Special for coal in Indonesia, coal production has increased from year to year. According to BPS data, the coal production in Indonesia is 461.087.221 tons (2017), 557.983.706 ton (2018) and 616.154.054 ton (2018). [3] The increase was also apparently not without reason as it is a cheap source of energy, coal also occupies an important position in achieving the target of economic growth in Indonesia. It is accompanied with its use, namely for the Steam Power Plant coal. Unfortunately, economic considerations are not the only things that should be preferred, because of the implementation related to the environment should not be separated from the concept of sustainable development. Law Number 32 Year 2009 on Environmental Protection and Management or hereinafter called UUPPLH in Indonesian with this concept. Based on the Provisions of The General UUPPLH, Sustainable development is a conscious effort and planned that combines aspects of environmental, social, and economic development strategies to ensure the integrity of the environment and safety, the ability, well-being, and quality of life of the present generation and future generations. [4] Based on the concept of sustainable development in UUPPLH, aspects of the environmental, economic, and social should be harmonized. Therefore, if only one aspect is taken into consideration, it certainly doesn't fit the concept.

Social conflict that often occurs is strongly associated with environmental issues. Damage departments that result from the activity of the mining and use of coal is often a source of conflict. In addition, the coal mining activity has a bad impact significantly on the environment. Some of these negative impacts include changes in landscape, threats to biodiversity, decline in water quality, declining soil fertility, pollution of the environment due to waste generated from mining activities, as well as a decrease in air quality. [5]

The activity of coal mining can also cause adverse effects for human health. The pollution that is produced can be derived from land clearing activities, exploitation, transportation, temporary storage, and the time of burning coal. Ecosystem destruction occurs when land clearing. The activities of temporary storage and exploitation can lead to the occurrence of pollution of water, soil and air. The presence of silting, erosion, pollution of heavy metals and the formation of AMD (Acid Mine drainage) is the impact of the exploitation activities. Acidic conditions high then it can cause heavy metals that exist in coal carried away and dissolved into the waters of the fast. The activities of the combustion of coal as an energy source can also lead to the emission of hazardous materials in the form of As, Hg, NO_x, SO₂, Se and CO₂ into the air that can interfere with human health. [6]

In Indonesia, after the enactment of Law Number 11 Year of 2020 of the Cipta Kerja, a change in the provisions of the law that is added to Article 128A and Article 162 of the Law No. 4 of 2009 (the Act of Mining). If you see the new terms, indicated that the activity of the mining and use of coal tends to be increased. When analyzed further, it seems that economic considerations that tend to be preferred. This paper aims to determine how the legal regime of mining the coal sector, especially after the enactment of the Legislation of the Cipta Kerja as an aspect of economic development in Indonesia as well as to analyze how the implementation of the mining and use of coal in Indonesia based on the perspective of sustainable development.

Research Methods

This paper uses normative legal research and use secondary data in the form of primary legal materials, namely laws and regulations as the object of the main study. Secondary legal materials such as books and journals will also be used in this study. Furthermore, the contextual approach will also be used to support the analysis of research data.

Discussion

1. Overview of Sustainable Development

The development of sustainable is a concept popularized by the Commission Brutland or WCED (*World Commission on Environment and Development*). WCED is a commission that is chaired by G. Harlem Brutland and was formed in 1983 by the General Assembly of the United Nations. [7] WCED then published a report that Our Common Future, which explains some of the concepts and understanding in environmental sustainability. [8] Understanding sustainable development in the report, namely:

“development that meets the needs of the present without compromising the ability of future generations to meet their own needs” [9]

The definition was later adopted and used as the principle of the 1992 Rio Declaration at the Earth SUMMIT in Rio de Janeiro.

The concept of sustainable development appeared simultaneously with increasing international awareness of the importance of environmental protection. A long debate related to the needs of development and protection of the environment also accompanies the birth of this concept. Economic aspects which initially be the primary consideration in the construction of the present must be balanced with other aspects namely environment and social given the environmental damage continues to increase due to the construction activity. The harmonization of the three aspects was then used as a pillar in the concept of sustainable development.

In Indonesia, the concept has been ratified and included in the Environmental Management Act 1997 using the term “sustainable development of environmentally sound life” as well as given the definition of the juridical. In UUPPLH 1997, the concept is mentioned clearly in Article 1 number 3. In Chapter 3, also mentioned explicitly that the sustainable development of environmentally sound becomes one of the principles in environmental management. Thus, UUPPLH 1997 has recognized the term sustainable development although there are some environmentally friendly. In UUPPLH 2009 that change the UUPPLH 1997, the term mentioned is changed to “sustainable development” course. Sustainable development and the definition of the juridical listed in the Chapter 1 General Provisions Article 1 number 3.

2. The dilemma mining: Between Economic Growth and Environmental Sustainability

The mining sector is indeed never cease to give birth to a discourse or controversial issues in the community. One of the issues most often discussed is related to the dilemma of economic growth with environmental sustainability. it is also created two camps, namely a stronghold of pro-development and pro-environment. Don't be denied, on the one hand, the activity of the business sector and coal mining, including coal, has a very vital role when viewed from the aspect of state revenues (state budgeting revenue) and aspects of development capital (state development) and on the other hand, the preservation of the environment to be at stake when you see the reality of the environmental damage caused by the

activity of mining. More than that, the impact can also be a problem of socio-cultural and geo-political. [10].

To address the problem of the dilemma that, as an initial approach, the author will describe the research done about mining mining-related aspects of the dilemma between economic growth and environmental sustainability. In its development, both the theory of the growth of classical economics and neoclassical assume that the available natural resources has the function to be used as part of capital accumulation. But this is disproved by the research done by Sach and Warner. [11] The study confirms that the unavailability of natural resources has not been proved as the main barriers to economic growth of a country.

This is evidenced by the presence of countries such as Singapore, South Korea, and Taiwan that do not have abundant natural resources, but these countries remain on a path of rapid economic growth rely on the manufacturing industry and the service sector. On the other hand, countries that have the potential of abundant natural resources, such as Nigeria, Peru, Chile, Venezuela, and others, are faced with the struggle for the pursuit of self-sustaining economic growth. Not infrequently also some countries that actually fall in the economic crisis. The conclusion from both of these researchers is at the end-the end of the 20th century, countries with abundant natural resources are facing a slowdown in economic growth.

There are also other findings reveal that developing countries with reserves of abundant natural resources are often faced with the dilemma of the problems of the environment. Not infrequently the abundant natural resources of developing countries are often exploited by the developed countries because they want to find a backup source of energy due to the limited natural resources that they have. Multinational companies also often use natural resources in developing countries due to the wish to avoid the strictest standards in the environmental field.[12] Unfortunately, these conditions will be more severe if there is a weak law enforcement in the environmental field, so that the reality shows that the mining activities in developing countries produce a level of more serious damage to the environment compared with developed countries.[13] In addition to environmental damage, not infrequently also the people in the country with abundant natural resources are experiencing poverty are particularly severe, such as the exposure of the fact that happens to most people in Venezuela.[14]

Based on the explanation above, to face the dilemma of issues between economic growth and in particular the environmental damage in Indonesia needed a comprehensive study and in-depth. Policies issued by the government should not be done carelessly. There must be consideration of the balance between the economic, social and environmental. The way that the utilization of natural resources will certainly boost the national economy should be reconsidered, in particular by incorporating environmental consideration in any policy-making. In the next chapter, will be described in more detail, especially regarding the activity of the mining and utilization of coal in Indonesia.

3. The Use of Coal in Indonesia in The Perspective of Sustainable Development

In the early part of this paper has been alluded to that the coal mining does have important benefits for economic growth in Indonesia. But such considerations are one of the aspects of the course and there are still other aspects that must be considered, namely the social and environmental aspects of life. In reality, coal mining is often collided with the social and especially environmental aspects. It seems to be rooted from the clash between economic interests and the need for preservation of the environment. It is, shows that the concept of sustainable development can not be applied in Indonesia.

Mining actually should be done by using the rules of mining a good and friendly environment. Environmental sustainability in the mining activity is called with the concept of sustainable mining. According to the concept, the main focus that should be done is to press as much as possible the negative

environmental impact caused by the mining activity and should also do mining with full responsibility to ensure the sustainability and quality for generations to come (as a backup). [15] The concept of sustainable mining is of course very related to the concept of sustainable development.

Furthermore, it is interesting to mention research conducted by a Research Team at Harvard University. [16] Based on the research indicated that the first, even though Indonesia is listed as one of the exporting country's biggest coal in the world, but mirisnya that 20% of Indonesian people still not get access to electricity from the state. Second, the coal industry is apparently accounted for only 4% of the GDP of Indonesia, of course it is very contrary to the claims stating that coal is one of the important aspects that support the growth of the national economy.

Third, coal mining causes damage that cannot be repaired on the land, water, air as well as harmful for human health living around the mining site. Fourth, according to the International Energy Agency, fossil fuel, coal is one of the triggers of climate change because it accounted for 44% of total global CO₂ emissions. Fifth, the coal being burned in steam power plants emit pollutants such as NO_x and SO₂ which these pollutants are the main causes of acid rain and pollution PM_{2.5}. Air pollution is very dangerous for health. Sixth, harmful pollutants produced are causing the premature death of about 6,500 people per year in Indonesia.

Air pollution is one of the worst effects of the mining and use of coal as an energy source. It can not be allowed to continue to happen because citizens get a guarantee of the rights over the neighborhood live good and healthy in constitution. These rights are listed in Article 28H paragraph (1) UUD NRI 1945. According to the news from time to time, more and more people are experiencing health problems caused by coal mining and also the activity of the Steam Power Plant coal. Damage to the environment ranging from deforestation and pollution are also increasingly toned sound. Actually UUPPLH has been providing the provisions of the law so that all mining activity and the things related to it is done using the concept of sustainable development. But the political laws that the dominant makes the implementation of the sustainable development is difficult to do in Indonesia.

What happened in Indonesia is very different from what happened in other countries. In some countries such as the United States and China, coal began to lose popularity. The increasing awareness of the international community to the impacts of pollution and the affordability of renewable energy makes a lot of rejection made by the international community against the use of coal. Indonesia should already have started to give more attention to the welfare of the society. Such as to cope with air pollution, it should start the unthinkable to make a regulation of the kind of the Clean Water Act or something, rather than the more toned of a regulation-oriented economic growth without regard to the environmental aspects of life. Fundamental changes and radical needs to be done on the perspective of the political laws of this state so that the environment of the note can be saved as well as the lives of future generations are not getting threatened.

Still associated with changes in perspective, it is interesting to mention what was written by Alder, [17] outlining that nature should be preserved because it is very valuable to living creatures. The value that is owned by the nature is of instrumental value, existence value and intrinsic value. Instrumental value is the value of nature as providers of the needs of human life (consumption, etc.). Existence value means with the existence of that nature alone is able to give the beauty without the need for our consumption, it is very influential on the psychological man. Intrinsic value is the value attached to himself. This means that in the absence of humans, nature still has a purpose and meaning for himself. If refer to the theory, regulation in the field of environment in Indonesia to accommodate the two values, namely instrumental and existence value. For the latter, it can be said that the value is completely untouched. These viewpoints should be embedded in the politics of environmental law in Indonesia.

4. Coal and Climate Change Issues

In the previous chapter already mentioned that the coal to be one of the contributors to 44% of global CO₂ emissions, which is very triggering climate change. The issue of climate change to be a very often discussed. Climate change is also not only become a discourse, but it has become an international movement. The international community increasingly loud voiced the importance of adaptation and mitigation of climate change so that the future of the earth can be saved.

Climate change is the issue of the global environment which is indicated by an increase in the temperature of the surface of the earth because of the concentration and the presence of substances CO₂, CH₂, NO_x and CFCs in the atmosphere. Substances that are concentrated and accumulate in earth's atmosphere form a layer like a blanket which makes the sun come to earth inhibited when reflected back by the earth into space because it is able to penetrate such substances so as to make the temperature at the earth's surface increases. [18] The negative impacts of climate change are increasingly felt. In the last 20 years, the world experienced the heat level you've never experienced before.

Scientist-scientist global have agreed on the cause of climate change is rising greenhouse gas concentrations (as mentioned above). These gases accumulate in the earth's atmosphere and cause an increase in temperature of the earth. A natural phenomenon that is currently often the case due to changes in the climate's heat waves, melting of ice at the North Pole and the South Pole, sea level rise, droughts, increased frequency of storm or typhoon, and the destruction of coral reefs. In Indonesia, the impact of which has been felt is the cycle of the seasons irregular, sinking several small islands at high tide, and the occurrence of disasters Rob. [19]

In the international realm, *The United Nations Framework Convention on Climate Change* (UNFCCC) is an international law that was formed to address the issue of climate change. The objective of the UNFCCC:

“stabilization of greenhouse gas concentrations in the atmosphere at level that would be prevent dangerous anthropogenic interference with climate system”[20]

As a follow up of the UNFCCC, was born the Kyoto Protocol that is produced by the participating countries of the UNFCCC. The Kyoto Protocol set the control of the six greenhouse gases, namely CO₂, CH₄, HFCs, NO₂, SF₆ and PFCs. Indonesia has ratified the Kyoto Protocol with the ACT No. 17 of 2004.

In the context of Indonesia, especially after the enactment of the Law of Cipta Kerja, it seems that Indonesia doesn't have a commitment to contribute seriously in climate change adaptation and mitigation. The use of coal that has negative impact on the environment which still continues is proof of that. Economic considerations seemed to be on top of everything and the threat of climate change seemed to just be a joke for the government. Indonesia should start to stop the construction of a Steam Power Plant new coal and have to start all stopped obsessed with the fossil energy that is not environmentally friendly. The use of renewable energy be the solution that should continue to be encouraged by the government. The improvement and enforcement of environmental law should also be fixed given the danger posed by the Steam Power Plant coal.

5. FABA and a Business Perspective

The appearance of licensing risk-based which replaces patterns licensing in Law Number 32 years 2009 on Environmental Protection and Management fear it would make the question of the environment is getting bigger. Why the authors analyze that? For licensing risk-based licensing trying and implementation of monitoring based on the level of business risk, in this case the business is grouped

into several categories. Before the birth of Law Number 11 Year of 2020 of Undang-Undang Cipta Kerja, Indonesia has had a rule that has been very good on the issues of environmental licensing in Indonesia conducted by the business but still can't escape from the problems, then by the presence of the licensing risk-based and classification feared would make the government was experiencing a degradation of supervision that will be fatal.

Another problem that we can observe from these activities which were related to the policy which then appears after the entry into force of Law No. 11/2020. The policy in question, including that policy in Government Regulation Number 22 Year 2021 on the Implementation of the Environmental Protection and Management authorized the beginning of February 2021, where in the rule issued coal waste (fly ash and bottom ash), or that in the short as FABA from the category of B3 waste. FABA this is a waste product from burning coal in a Steam Power Plant. On the combustion of coal will produce waste products in the form of materials (dust or fine sand) a fly is referred to as fly ash and sedimentation flock under the so-called bottom ash. FABA in Government Regulation Number 22 Year 2021 on the Implementation of the Environmental Protection and Management, written in Attachment 14 reads:

“List of types of coal waste that is removed and excluded from the category B3 is *fly ash* and *bottom ash*”

Explanation of Article 459 of the letter C

“Explain that fly ash and bottom ash is the result of burning coal from the power PLANT and other activities are not included as the B3 waste, but the waste of non B3”

This means that when the regulations are made, the concept of the selected policy is made in accordance with the systematics of the concept of economy, where the previous Government through the Ministry of Koordinator the Field of Maritime and Investment explains that when FABA in the category of B3 waste, it will be difficult to use it in the middle of a management fee which is great.[21] Essentially, the implementation of the environmental policy should be based on systematic environmental sustainability which is based on the rights of the environment as the main priority of policy-making.

In the perspective of business, of course it is very profitable, because the previous developers have to do the management of waste coal in Bogor with the cost of which is not little. The implementation of the business is often at odds with aspects of the environment, but with the passage of time, the increase in economic income is required to build a country.

6. Mining the coal sector after Undang-Undang Cipta Kerja

The law is an important part in the political developments in a country and in this case provide an explanation regarding what to do with the policy that will be enforced by the government. Through a rule of law, then the government is expected to set or choose a priority to be implemented in the state. State law must look to the law to be a regulation that is arrayed in a system that is systematic in a hierarchy that applies a concept called groundnorm. [22]

A basic foundation in Indonesia related to the use of natural resources based on Article 33 of the Undang-Undang Dasar 1945 which reads:

Earth and water and natural resources contained therein are controlled by the state and used for the greatest prosperity of the people.

The meaning of the article identifies that the ideals of the Indonesian nation mandate that all the wealth contained in Indonesia, including natural resources and its contents, in this case mining, controlled by the state to then managed for the welfare of the people. After the enactment of the Law of Cipta Kerja, it seems that the environment will increasingly become victims because the spirit of the Law is not in favor of the protection of the environment. There are many provisions that are not in accordance with the principles and the willingness to protect and preserve the environment. Special to the coal sector, the Laws of the Cipta Kerja tends to lead to an increase in the activity of coal mining and its use in Steam Power Plants coal. Article 128A of the Cipta Kerja as a chapter of the Laws of Mineral, coal and even provide special treatment for the coal sector by providing incentives for the utilization of coal. It is of concern given the impact of the mining activities and the use of coal have a negative impact on the environment. Article 128A also implies the message so that coal can be used with the maximum.

The law of Cipta Kerja and the Act of Mining does have one and the same soul that the soul exploitative and only attach great importance to economic growth. It will surely keep Indonesia from the implementation of the concept of sustainable development. It is far more will also be in violation of Article 33 paragraph (4) Undang-Undang dasar negara Republik Indonesia 1945. There is a potential violation of some principles of the national economy, namely the principle of justice, sustainability and environment. The legislation also has the potential to violate some of the principles in UUPPLH and also the principles of environmental law globally.

Conclusion

The rules of fundamental as the beginning of a development in Indonesia refers to the Paragraph 4 of the Undang-Undang Dasar 1945, which reads: “then than it is to form a State government of Indonesia and the entire homeland of Indonesia and to promote social welfare..” in this case means that Indonesia has admitted that the state government had to carry out all their duties for the sake of advancing the social welfare of his subjects, in this case also of course closely related to the responsibility of the state to pay attention to environmental sustainability, because protecting all natural resources in Indonesia is an inseparable part of the welfare of the Indonesian people.

On the implementation of the coal business in Indonesia, the government is faced with a dilemma, where environmental sustainability is at stake to meet the needs of the economic development of the country. It is clearly visible from the rules issued by the government, the government seemed powerless to act firmly related things that are related to the environment and the economy, for example by removing FABA from the category of B3 waste because the foundation of the economy. This can certainly be said to be contrary with the provisions in the Constitution of Indonesia, because environmental aspects tend to be neglected. With the continuation of the business of coal, especially after the enactment of the Law of Cipta Kerja, environmental sustainability can be threatened, whether by pollution, climate change and ecosystem degradations that exist in Indonesia.

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