The Dilemma Of Indonesia's Coal Policy In 2020-2060: A Modality Of State Revenue

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Abstract

Coal commodity management policies in Indonesia ar closely related to efforts to reduce carbon emissions and increase carbon sequestration. This has the potential t create regulatory synchronization problems because i relates to sectoral challenges from the relevan ministries and/or agencies. To describe th synchronization problem, this research uses a normativ juridical method with a statute approach and a conceptual approach. The results of this study are tha there are three ministries that are directly or indirectly related to coal management, namely the Ministry o Energy and Mineral Resources, the Ministry o Environment and Forestry, and the Ministry o Finance. The conclusion is that although the 2005-2025 national development target has been announced by th Government, particularly regarding the NZE2060 target, it turns out that the implementation of th regulations in the three ministries has experienced predicaments that have resulted in a dilemma o synchronizing the national climate policy. However short-term policies implicitly indicate the modality o state revenue as a priority.

I. Introduction

Coal as a commodity is a major part of the energy system targeted for Net Zero Emissions (NZE). Since the 2015 Paris Agreement, various analyzes consider options or scenarios for the transition to NZEs in all sectors while avoiding techno-economic, social and environmental risks as much as possible. Despite the shortcomings of the Agreement, the trend of emission reduction commitments is being followed by both developed and developing countries.

Even though globally, the Government is required to meet the NZE target, the reality is that currently it still faces many challenges. The reason is that achieving the NZE target must focus on decarbonizing the economy as a whole, including energy supply and demand, as well as other sources of emissions including industrial processes, agriculture, forestry and other land uses (Forestry and Other Land Use, FOLU). The energy system in many countries, including Indonesia, is the dominant source of emissions, and there are many decarbonization options for this source; Meanwhile, emissions from other sectors, such as agriculture, will be very difficult to reduce to zero.

Starting from the early 2020 period until now, the Government has formed various regulations and legislation related to the management of coal commodities. Variations in some of these laws create a wedge in terms of regulatory material and validity period. The policy regarding stopping or continuing coal exploitation in Indonesia must still look at the priority scale because it is related to the electricity needs of the community. However, legal norms at the statutory level indicate harmonious and consistent conditions. At first glance, there is no conflict with norms and they tend to obey principles. The indication is that the law is general in nature with broad coverage.

The general and broad law in this case is Law Number 17 of 2017 concerning the National Long Term Development Plan for 2005-2025. This law with a 20 year period is the "root" of statutory regulations which culminate in regulations and/or decisions of the relevant Minister. It is these arrangements at the "edge" that have the potential to be problematic and require synchronization because the sector is connected to several different ministries. There are at least three ministries that directly or indirectly face this problem, namely the Ministry of Energy and Mineral Resources, the Ministry of Environment and Forestry, and the Ministry of Finance.

The direct management of coal commodities in Indonesia is the Ministry of Energy and Mineral Resources, hereinafter abbreviated as ESDM. The Ministry of Energy and Mineral Resources is responsible for reducing or decreasing carbon emissions, which in this case are caused by the use of coal for Steam Power Plants (PLTU). The Ministry of Environment and Forestry (hereinafter abbreviated to KLHK) and the Ministry of Finance (hereinafter abbreviated to Ministry of Finance) do not directly manage coal commodities. However, the Ministry of Environment and Forestry is responsible for increasing carbon absorption through preserving forest areas; while the Ministry of Finance is responsible for aspects of state finance related to the activities of the two Ministries (ESDM and KLHK). In other words, there is a correlation in roles and functions between the three Ministries in managing coal in Indonesia.

An important starting point that needs to be explained is the "root" law, namely Law Number 17 of 2007 concerning the 2005-2025 National Long Term Development Plan, hereinafter abbreviated to the RPJPN Law. The a quo RJPN Law serves as a guideline, both hierarchically in the formation of lower level legislation; as well as sectorally in the formation of laws related to our national development vision and mission.

Even though it was published in 2007, the provisions of the RPJPN Law cover the research period, namely from early 2020; and becomes an important guideline hierarchically.

The a quo RJPN Law further reduced Presidential Regulation Number 18 of 2020 concerning the 2020-2024 National Medium Term Development Plan, hereinafter referred to as the RPJMN Presidential Decree.

The consideration of the RPJMN Presidential Decree is to implement the provisions of Article 19 paragraph (1) of Law Number 25 of 2004 concerning the National Development Planning System. Where the regulation of the RPJMN Presidential Decree is also related to other laws, namely: Law Number 17 of 2003 concerning State Finances, Law Number 25 of 2004 concerning the National Development Planning System, and of course the RPJPN Law itself.

However, because the National RPJM Presidential Decree is an elaboration of the President's vision, mission and program resulting from the 2019 General Election, its content tends to be general and broad. The regulatory norms are in the form of national development strategies, general policies, and several other aspects including a macroeconomic framework which includes a comprehensive picture of the economy and the direction of fiscal policy. This is a work plan in the form of a regulatory framework and an indicative funding framework (see Article 2 in conjunction with Article 6 of the National RPJM Presidential Decree).

Furthermore, referring to Article 3 of the a quo Presidential Decree, there are two things that are the common thread in the discussion in this article. First, the National RPJM functions as a guideline for Ministries/Institutions (hereinafter abbreviated to K/L) in preparing K/L Strategic Plans. Second, the National RPJM is actually also a reference for the community to participate in the implementation of national development.

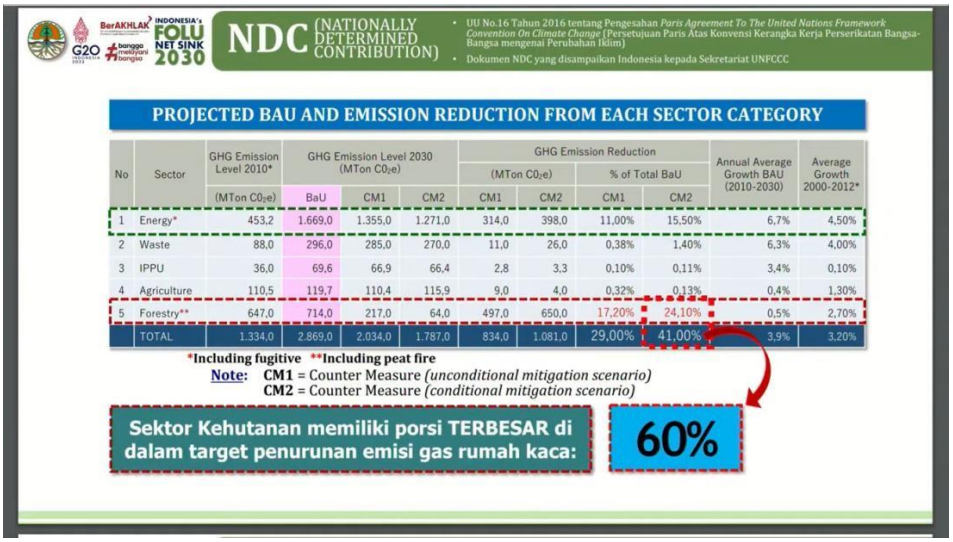
Apart from being hierarchical, there are examples of regulations that also stem from the RPJPN Law but in the form of sectoral guidelines, namely Law Number 30 of 2007 concerning Energy. This law then mandates at least two implementing regulations. First, Government Regulation Number 79 of 2014 concerning National Energy Policy (KEN). Second, Presidential Regulation Number 22 of 2017 concerning the General National Energy Plan (RUEN). The KEN is a guideline for national energy management in order to realize energy independence and national energy security. Apart from that, KEN also aims to support sustainable national development. The phrase "sustainable national development" is a concretization of the meta-principles of Sustainable Development which have developed in such a way, including the adoption process into the natural resource legal system in Indonesia, and is the main tool for analyzing the problems in this paper.

Apart from that, of course what is directly related to the RPJPN Law as well as regulating coal commodities is Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining (UU Minerba). Meanwhile, another example of regulation that does not directly stem from the RJPN Law is Law Number 41 of 1999 concerning Forestry (hereinafter abbreviated as UUK) which in terms of regulating coal commodities is closely related to Law Number 32 of 2009 concerning Environmental Protection and Management Life (UUPPLH). These three sectoral laws (UU Minerba, UUK, and UUPPLH) have given birth to many implementing regulations, starting from the level of Government Regulations (PP), Presidential Regulations (Perpres), Ministerial Regulations (Permen), to Regional Regulations (Perda), including Governor Regulations and Regent/Mayor Regulations.

The common thread in the examples above is that the sectoral policies of the relevant ministers and heads of government agencies will be outlined in strategic plan documents in their respective areas of duty as part of the National Medium Term Development Plan. In addition, the hierarchy of statutory regulations – from laws to implementing regulations – tends not to indicate legal problems. In fact, there are various work plans from each ministry or institution related to coal commodity management which may not have been collaborated on

through a national systemic mechanism.

To explain this potential problem and if it is related to state revenues, it is necessary to emphasize again that there are at least three ministerial sectors that are closely related to the regulation of coal commodities in Indonesia, namely: the Ministry of Energy and Mineral Resources (ESDM), the Ministry of the Environment and Forestry (KLHK), and the Ministry of Finance. The correlation between the three ministries is very clearly visible in the data table and chart below.



No	Sector	GHG Emission Level 2010*	GHG Emission Level 2030 (MTon CO_2e)			GHG Emission Reduction (MTon CO_2e)		% of Total BaU		Annual Average Growth BAU (2010-2030)	Average Growth 2000-2012*
		(MTon CO_2e)	BaU	CM1	CM2	CM1	CM2	CM1	CM2		
1	Energy*	453,2	1.669,0	1.355,0	1.271,0	314,0	398,0	11,00%	15,50%	6,7%	4,50%
2	Waste	88,0	296,0	285,0	270,0	11,0	26,0	0,38%	1,40%	6,3%	4,00%
3	IPPU	36,0	69,6	66,9	66,4	2,8	3,3	0,10%	0,11%	3,4%	0,10%
4	Agriculture	110,5	119,7	110,4	115,9	9,0	4,0	0,32%	0,13%	0,4%	1,30%
5	Forestry**	647,0	714,0	217,0	64,0	497,0	650,0	17,20%	24,10%	0,5%	2,70%
	TOTAL	1.334,0	2.869,0	2.034,0	1.787,0	834,0	1.081,0	29,00%	41,00%	3,9%	3,20%

Figure 1: Emission Reduction Projection Table.

The actual fact that must be taken into account is that coal primary energy in Indonesia is currently still dominant in contributing to national energy security, including the provision of electricity. The development of electricity on the generation side will indeed continue to involve new renewable energy (EBT) or generators with environmentally friendly technology. But the price of such technology is still high.

Even though the Government is not planning the development of new coal-fired power plants, coal-fired power plants which are already in the construction stage (financial closing) will still be built. "In areas with quite large coal potential, the type of generator that is prioritized for development is mine mouth PLTU." Also, if the construction of a Gas and Steam Power Plant (PLTGU) is not possible because there is no certainty of gas supply, then PLN will operate a coal PLTU as a medium load bearer with a relatively low capacity factor.

It should also be noted that PLN has adopted coal PLTU technology in the clean coal technology category for better efficiency and lower CO2 emissions; such as the Java-Bali electric power system which uses ultra-supercritical 1,000 MW class coal PLTU technology. Likewise, the Sumatran electric power system is starting to adopt the same technology with a smaller capacity (300-600 MW). Also, the Kalimantan and Sulawesi systems have begun to introduce coal-fired power plants with a capacity class of 200 MW. At least until 2029, PLN's electricity supply will still be dominated by fossil fuel plants, especially coal. It seems that the Government of Indonesia still has to ensure that meeting local energy needs is a priority for the next few decades .

As mentioned above, the legal basis for its use refers to Government Regulation Number 79 of 2014 concerning National Energy Policy (KEN). KEN's target regarding the optimal energy mix still states that by 2025 the role of coal will be at least 30%; although by 2050 the role of coal will decrease to at least 25%. KEN also refers to the 2019-2038 National Electricity General Plan (RUKN), which expects that the new and renewable energy mix in electricity generation in 2025 and 2038 will still rely on coal at a maximum of 55% and 47%,

respectively. In other words, the national coal commodity is still needed to provide electricity for the Indonesian people.

Government policy support will directly affect Indonesia's current account, which during the Covid-19 pandemic experienced a deficit. Data shows that tax revenues from the mining sector in January-May 2022 are very dominant.

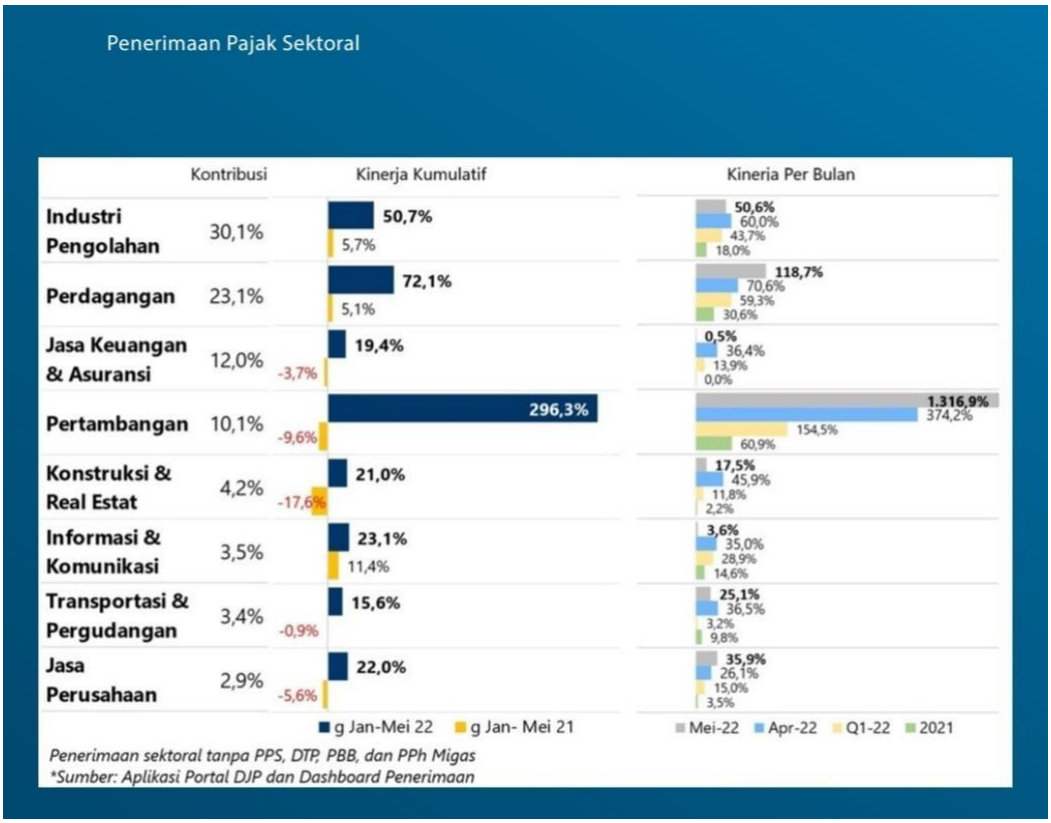


Figure 2: Sectoral Tax Revenue Graph 2021-2022.

It is also proven that from the end of 2021 to the first semester of 2022, coal commodities have made a major contribution to the national economy. Realization of PNBP up to May 2022 shows growth of 105.34% (Year on Year). This is in accordance with the confirmation from the Minister of Finance Sri Mulyani in the press conference for our APBN, that until the end of May 2022, the mineral and coal sector contributed IDR 29 trillion to PNBP.

Realisasi Penerimaan Negara Bukan Pajak

PNBP (Miliar Rupiah)	APBN 2022	Realisasi s.d. Mei 2022	% APBN	% Growth (YoY)
Penerimaan Negara Bukan Pajak	**335.555,61**	**224.140,64**	**66,80**	**33,73**
A Pendapatan SDA	**121.950,11**	**94.620,68**	**77,59**	**100,49**
1 Migas	85.900,62	**62.946,68**	**73,28**	**98,13**
2 Non Migas	**36.049,49**	**31.673,99**	**87,86**	**105,34**
a Pendapatan Pertambangan Minerba	28.011,27	29.011,91	103,57	120,67
b Pendapatan Kehutanan	4.856,96	1.856,74	38,23	3,25
c Pendapatan Perikanan	1.627,80	526,63	32,35	117,89
d Pendapatan Panas Bumi	1.553,46	278,71	17,94	17,08
B Pendapatan KND	**37.000,00**	**25.100,05**	**67,84**	**64,67**
C Pendapatan PNBP Lainnya	**97.807,95**	**70.332,69**	**71,91**	**15,50**
D Pendapatan BLU	**78.797,56**	**34.087,22**	**43,26**	**(23,01)**

Revenue growth reached 105.3% from last year (2021) because coal commodity prices experienced a significant increase. This means that PNBP on mineral and coal resources contributes greatly to state revenues.

Realisasi APBN s.d 31 Mei 2022

APBN (triliun rupiah)	2021				2022			
	APBN	Realisasi s.d. 31 Mei	% thd APBN	Growth (%)	APBN	Realisasi s.d. 31 Mei	% thd APBN	Growth (%)
A. Pendapatan Negara	**1.743,65**	**726,52**	**41,67**	**9,32**	**1.846,14**	**1.070,41**	**57,98**	**47,33**
I. Pendapatan Dalam Negeri	**1.742,75**	**726,50**	**41,69**	**9,54**	**1.845,56**	**1.070,26**	**57,99**	**47,32**
1. Penerimaan Perpajakan	1.444,54	558,89	38,69	6,20	1.510,00	846,12	56,03	51,39
a. Pajak	1.229,58	459,57	37,38	3,37	1.265,00	705,82	55,80	53,58
b. Kepabeanan dan Cukai	214,96	99,32	46,20	21,62	245,00	140,30	57,27	41,26
2. PNBP	298,20	167,61	56,20	22,38	335,56	224,14	66,80	33,73
II. Penerimaan Hibah	**0,90**	**0,03**	**2,92**	**(98,05)**	**0,58**	**0,15**	**25,26**	**455,83**
B. Belanja Negara	**2.750,03**	**945,68**	**34,39**	**12,05**	**2.714,16**	**938,17**	**34,57**	**(0,79)**
I. Belanja Pemerintah Pusat	**1.954,55**	**647,64**	**33,14**	**20,53**	**1.944,54**	**653,91**	**33,63**	**0,97**
1. Belanja K/L	1.031,96	359,79	34,86	33,07	945,75	319,17	33,75	(11,29)
2. Belanja Non K/L	922,59	287,85	31,20	7,82	998,79	334,75	33,52	16,29
II. Transfer Ke Daerah dan Dana Desa	**795,48**	**298,03**	**37,47**	**(2,80)**	**769,61**	**284,25**	**36,93**	**(4,62)**
1. Transfer Ke Daerah	723,48	275,70	38,11	(0,73)	701,61	257,30	36,67	(6,67)
2. Dana Desa	72,00	22,34	31,02	(22,64)	68,00	26,96	39,64	20,69
C. Keseimbangan Primer	**(633,12)**	**(67,44)**	**10,65**	**100,28**	**(462,15)**	**298,91**	**(64,68)**	**543,24**
D. Surplus/(Defisit) Anggaran	**(1.006,38)**	**(219,15)**	**21,78**	**22,17**	**(868,02)**	**132,24**	**(15,24)**	**160,34**
% Surplus/(Defisit) thd PDB	*(5,70)*	*(1,29)*	*22,66*	*11,11*	*(4,85)*	*0,74*		
E. Pembiayaan Anggaran	**1.006,38**	**310,39**	**30,84**	**(13,27)**	**868,02**	**83,28**	**9,59**	**(73,17)**
Kelebihan/(Kekurangan) Pembiayaan Anggaran	-	91,23			-	215,52		

dalam Triliun Rupiah

Responding to this situational condition, some environmental observers say that the Government is currently unmoved, (as if) ignoring global environmental discourses, such as climate change, global warming, greenhouse gas effects, and the Nationally Determined Contribution target for 2030 (NDC 2030). : 29%, own efforts; and 41%, international support) and Net Zero Emissions in 2060 (NZE 2060). In other words, the Government's policy in managing coal commodities in Indonesia is expected to continue to pay attention to contemporary environmental issues, especially carbon emissions and carbon sequestration for the 2060 NZE target. Controversy between efforts to increase state revenues and fulfilling commitments climate becomes an inevitability that creates policy dilemmas. According to Minister of Finance Sri Mulyani, these various policies are ready to be implemented and even expanded, but the impact on the economy still needs to be taken into account.

In connection with the description above, the formulation of the problem raised in this

paper is related to the dilemma of regulating and implementing coal management in Indonesia today. On the one hand, exports of coal commodities in the last few months have been very significant, resulting in a current account surplus which has increased state revenues. But on the other hand, there is a global discourse that opposes the use of primary coal energy based on the meta-principles perspective of sustainable development towards NZE 2060.

2. Review Literature

This article uses a normative juridical legal research method with a statutory approach and a conceptual approach. The primary legal material is in the form of laws and regulations related to coal management in Indonesia which expire after 2020.

Analysis of research data is divided into general (lex generalis) and specific (lex specialis) legal regulations, including technical regulations for their implementation. Then the two categories of legal regulations are described by sector, especially legal regulations in the mineral and coal mining sector as well as the environment and forestry sector. These two categories are also related to national energy policy. The policy analysis period limit is the Net Zero Emission (NZE) target, namely NZE in 2060.

3. Results and Discussion

National Coal Commodity Structuring

The discussion of coal commodity policy in the three relevant ministries above will of course refer to the process of forming legislative regulations in Indonesia. The legal basis is Law Number 12 of 2011 which has been amended twice, namely Law Number 15 of 2019 (first amendment) and Law Number 13 of 2022 (second amendment). This law initially establishes certain, standard and standard methods and procedures that are binding on all authorized institutions in the formation of statutory regulations. Meanwhile, Law 12/2011 which was passed and promulgated on 12 August 2011 replaced Law Number 10 of 2004 because it was deemed that there were still deficiencies and could not accommodate the development of community needs regarding the rules for establishing legal goods and regulations. The element of community needs is important, as stated by Rudolf Stammler (1856-1939), as quoted by Maria Farida Indrati Soeprapto, that "legal ideals are a construction of thought which is a necessity to direct the law towards the ideals desired by society".

Currently, Law Number 13 of 2022 concerning the Second Amendment to Law Number 12 of 2011 concerning the Formation of Legislative Regulations is expected to facilitate the policies of the three ministries so that they remain in sync. Although it is alleged that the "main agenda" of Law 13 of 2022 is the use of the omnibus method as mentioned in point (b) in the Considerations section and Articles 42A, 49, 58, 64, 72, 73, 85, 95A, 96, 97A, 97B, 97C, 97D, 98, and 99. The final aim is to facilitate Law Number 11 of 2020 concerning Job Creation which is "suspended" and needs to be evaluated because of the decision of the Constitutional Court Number 91/PUU-XVIII/2020 dated 25 November 202. In fact, through Job Creation Law, the Government seeks to provide ease of doing business (EoDB) in Indonesia which costs attract foreign investors to invest in Indonesia. In fact, generally legislation is a political product that must go through appropriate political compromise.

In accordance with the socialization from the Director General of Legislation (28/6/2022) that Law Number 13 of 2022 concerning the Second Amendment to Law Number 12 of 2011 concerning the Formation of Legislative Regulations (hereinafter abbreviated to Law P3), it is

stated that the law this is very important. The P3 Law is related to the main tasks, especially functions at the Regional Office due to changes in the scope of activities. His presentation stated that there were ten basic substances that were used as material for change, namely: handling the review of statutory regulations; multipurpose method; harmonization, conciliation and consolidation of the conception of draft regional regulations (raperda) and draft regional head regulations (raperkada); correction of technical errors in writing the draft law; announcement of statutory regulations; monitoring and reviewing legislation; public participation; formation of legal regulations electronically; participation of legal analysts in the formation of legislative regulations; and techniques for drafting legislative regulations.

Of course, the public hopes for significant improvements in the development of national law in general, in particular the synchronization of the rules in the law with its implementing regulations. Regarding the synchronization of sectoral policies – MEF, ESDM, and Ministry of Finance as previously explained – the P3 Law must be implemented in a planned, integrated and sustainable manner. Apart from that, the three ministries must always pay attention to the principles of forming good laws and regulations.

If we look at it technically, the P3 Law also contains techniques for preparing the Academic Text of the Bill. This study is also supported by several analyses, such as the Regulatory Impact Analysis (RIA) method and the Rule, Opportunity, Capacity, Communication, Interest, Process, and Ideology (ROCCIPI) method. The function and importance of Academic Manuscripts is to support the achievement of drafting good laws and regulations that meet the regulatory needs of various existing problems, as well as meeting the needs for harmonization in the field of laws and regulations.

This is very relevant because the changes in question relate to Academic Papers regarding statutory regulations. The focus on changing the techniques for preparing Academic Papers is carried out by paying attention to the implications of implementing a new system which will be regulated in a Law or Regional Regulation, not only on aspects of people's lives but also on the impact on aspects of the state's financial burden. Therefore, this research is supported by analysis using certain methods, including the RIA and ROCCIPI methods.

In other words, the P3 Law has clearly stated its impact on state finances, including of course the possibility or necessity (modalities) of forming policies aimed at increasing state revenues.

State Revenue Modalities

Modalities in this case relate to certain methods or procedures to increase state revenues. This relevance is very significant if modality is defined as the word "modality" in English which means: "a certain way in which something exists, is experienced, or is done". Likewise, in Indonesian, modality is defined as grouping statements according to the conditions of presenting or rejecting possibility or necessity; The word "modality" is also interpreted as meaning possibility, necessity, and so on expressed in a sentence. In other words, the phrase "state revenue modalities" is an interesting discourse that "might" or even "should" become a priority for coal management policy in Indonesia through certain methods or procedures.

Coal management policy is related to the current state revenue modality not only to meet domestic needs but also for export needs for consumers abroad. Since Russia's invasion of Ukraine on February 24 2022, several European Union countries have experienced an energy crisis and asked Indonesia to supply their country's coal needs. In addition, the energy crisis has resulted in power outages and the cessation of their industry. In fact, over the last few decades, developed countries have emphasized ending "dirty energy" from fossils, namely coal and oil and gas which in fact have become the mainstay of the economy of developing countries like Indonesia.

This significant increase in demand causes coal prices to continue to increase. Regardless of

whether or not Indonesia's coal production is able to meet global needs, this condition creates business opportunities for national coal entrepreneurs. Entrepreneurs certainly need support from government policies that are more conducive to coal export transactions.

The Ministry of Energy and Mineral Resources has actually prepared various strategic work plans that support state revenues. Since the drafting of the Job Creation Bill which consists of 11 clusters, the ESDM sector has been included in at least two clusters, namely: (i) Business Licensing Simplification Cluster related to adjustments to licensing provisions in the ESDM sector law; and (ii) Government Administration Cluster related to adjustments to Criminal Provisions in the ESDM sector.

During its development, Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining was also issued. This change is a momentum for the Government's support for legal certainty for coal entrepreneurs whose permits are nearing maturity. In essence, entrepreneurs holding a Coal Mining Concession Work Agreement (PKP2B) receive an "extension" of their business in line with the shift from the contract regime to a licensing regime. Shifting the contract regime to a licensing regime is a mandate from Article 169A of Law Number 3 of 2020 a quo.

Thus, currently there are two state revenue regimes in the coal mining sector that run simultaneously. First, the licensing regime refers to the provisions of applicable laws and regulations. Second, the contract regime in the form of PKP2B refers to the provisions in the contract until its end. A contract regime that has expired can be extended to a licensing regime, namely a Special Mining Business Permit (IUPK) as a continuation of the Operational Contract/Agreement. The main consideration is efforts to increase state revenues.

These efforts to increase state revenue are then supported by Government Regulation Number 15 of 2022 concerning Tax Treatment and/or Non-Tax State Revenue (PNBP) in the Coal Mining Business Sector. The consideration is to provide legal certainty and business certainty for coal entrepreneurs holding mining business permits (IUP), holders of special mining business permits (IUPK), holders of special mining business permits as a continuation of contract/agreement operations, and holders of coal mining business agreements (PKP2B).) in carrying out tax obligations and/or non-tax state revenues while still paying attention to increasing state revenues. This is stated in the opening and second paragraph of the General Explanation of Government Regulation Number 15 of 2022 concerning Tax Treatment and/or Non-Tax State Revenue in the Coal Mining Business Sector.

However, referring to the issue of policy synchronization at the technical level in the form of implementing regulations under law, the next section in this article is a discussion of the legal products that underlie work programs in three successive Indonesian Ministries: (i) PLTS Rooftop Electricity Plants based on Ministerial Regulations ESDM Number 26 of 2021: Rooftop Solar Power Plants Connected to the Electric Power Network Holders of Business Permits for Providing Electricity for Public Use; (ii) Indonesia's 2030 Net FOLU based on Decree of the Minister of Environment and Forestry Number 168 of 2022 concerning Indonesian Forestry and Other Land: and (iii) Carbon Tax based on Law Number 7 of 2021 concerning Harmonization of Legislation (HPP).

In fact, the Government is still continuing to optimize climate recognition by drafting various derivative regulations from Presidential Regulation Number 98 of 2021 concerning the Application of the Economic Value of Carbon to Achieve Nationally Determined Contribution Targets and Control of Greenhouse Gas Emissions in National Development. These derivative regulations include, among other things, the implementation of the Economic Value of Carbon (NEK) and Nationally Determined Contributions (NDC) at the Ministry of Environment and Forestry and the NEK Steering Committee at the Coordinating Ministry for Maritime Affairs and Investment.

The aspect that differentiates the three is the aspect of the amount of carbon emissions which is the responsibility of the Ministry of Energy and Mineral Resources (ESDM); then the aspect of the ability to absorb carbon (carbon sequestration) which is the responsibility of the Ministry of Environment and Forestry (KLHK); and aspects of increasing state revenue from Carbon Tax which is the responsibility of the Ministry of Finance (Kemenkeu). The following discussion describes the problems and challenges of the three flagship programs of each Ministry and then explains the dilemmas in their implementation. It should be noted that these three provisions are only examples of policies related to the discussion of the topic of this article.

ESDM Dilemma in Reducing Carbon Emissions

One of KESDM's mainstay legal products in terms of reducing carbon emissions is the regulation of Rooftop Solar Power Plants (hereinafter abbreviated as Rooftop Solar Power Plants). Technically, the potential for using solar power in Indonesia for new and renewable energy is considered more effective and efficient than wind power, ocean wave power or geothermal power. Apart from relatively cheaper development costs, the aspect of distance between resources and users (demand) is also a consideration. Solar Power Plants can be built on the roofs of consumers' houses. Meanwhile, wind farms and ocean wave farms are further away from consumers. This means that the current discussion on the arrangement of PLTS in Indonesia will be more current, prominent and economically valuable.

The Rooftop PLTS system is the process of generating electricity using photovoltaic modules which are installed and placed on the roof, walls or other parts of buildings belonging to Rooftop PLTS customers and distribute electrical energy through the Rooftop PLTS customer's electricity connection system. The use of the Rooftop PLTS system was initially intended to save electricity bills for its customers. In addition, the aim is to obtain electricity from renewable energy sources thereby contributing to reducing greenhouse gas emissions.

Ironically, the PLTS Rooftop arrangement was changed and revoked several times. The use of Rooftop Solar Power Plants was previously regulated in Minister of Energy and Mineral Resources Regulation Number 49 of 2018 concerning the Use of Rooftop Solar Power Generation Systems by Consumers of State Electricity Company (Persero); which was determined on 11/15/2018 and promulgated on 11/16/2018.

This regulation was amended twice and then repealed. The first change was through Minister of Energy and Mineral Resources Regulation Number 13 of 2019 (stipulated 2/9/2019 and promulgated 6/9/2019). Then it was changed again by Minister of Energy and Mineral Resources Regulation Number 16 of 2019 which was stipulated on 27/9/2019 and promulgated on 14/10/2019. Finally, this regulation was revoked and replaced with a new nomenclature. Regulation of the Minister of Energy and Mineral Resources Number 49 of 2018 concerning the Use of Rooftop Solar Power Generation Systems by Consumers of PT Perusahaan Perusahaan Perusahaan Perusahaan Asli Negara (Persero). Meanwhile, after the Minister of Energy and Mineral Resources Regulation Number 26 of 2021 was revoked, it became about Rooftop Solar Power Plants Connected to the Electric Power Network.

Consideration of changes at that time is also to encourage the acceleration of the use of environmentally friendly solar energy for electricity generation with rooftop solar power generation systems by consumers of PT Perusahaan Perusahaan Perusahaan PerusahaanEL Negara (Persero) for their own interests. In particular, this regulation changes the provisions regarding business permits and certificates of operational worthiness which are regulated in Minister of Energy and Mineral Resources Regulation Number 49 of 2018. The Directorate General of New and Renewable Energy ESDM once said that "because the implementation has not yet been realized and therefore it will be changed again because the impact still has to be

taken into account."
The dilemma of the Rooftop PLTS policy going back and forth in the current conditions is thought to be caused by two things. First, because the electricity supply is greater than demand, PT PLN (Persero) will suffer losses because PLN is bound by an agreement with a third party. Clearly, several PLN electricity systems are currently not ready to accept new and renewable energy due to conditions of excess supply due to decreased demand during the pandemic.

Second, PLN's losses in this case are related to the method of calculating "exports and imports" or transfers of electrical energy between Rooftop PLTS Customers and Business Permit Holders for Providing Electricity for Public Use (IUPTLU holders). The purchase price of electricity from PLTS is regulated in Minister of Energy and Mineral Resources Regulation Number 50 of 2017 concerning the Utilization of Renewable Energy Sources for Providing Electricity. Maybe these two things are also the reason why "the use of PLTS in Indonesia is not yet positive, it is still below 200 MW and is still far below neighboring countries such as Malaysia and Vietnam".

4. Conclusion

The dynamics of coal commodity management policies in Indonesia continue to shift. On the one hand, Indonesia must fulfill its global commitment to reduce coal mining exploitation. On the other hand, coal commodities are still highly relied upon to improve the national economy. Coal mining regulations for the 2020-2022 period which contain provisions at the "law" level and implementing regulations show that the Indonesian Government still views coal management as a commodity that supports state revenues.

Recommendations

The policies currently needed are not only related to the Government's desire to replace coal with other energy sources, but also the Government's ability to overcome the APBN deficit, without relying on revenues originating from exports of coal commodities. In addition, the national coal commodity management system requires openness and coordination between Ministries and Institutions to remain in line with the global environmental paradigm. In this way, harmonious, consistent and synchronized policies are formed down to the implementing regulations level, so that the Government can resolve all these challenges.

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