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Imposition of Zero Percent Royalty for Mining Companies Increasing the Added-Value of Coal in Indonesia

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Abstract

Indonesia is a country rich in natural resources. The 1945 Constitution provides a mandate for the Government to manage natural resources within the jurisdiction of the State for the greatest prosperity of the people. In mining sectors, Indonesian Government requires mining companies to conduct activities to add value to coal that will provide more benefit for low-quality coal and reduce carbon emissions from the use of processed coal. To support this activity, the Government imposed a zero percent royalty policy. The purpose of this study is to analyze changes in royalty policy in Indonesia and to analyze the most beneficial profit-sharing system to be used in Indonesia. This research is legal research that uses a statutory approach, conceptual approach, and comparative approach with China and Australia to analyze the principle and regulations related to royalty and profit-sharing policies in the coal mining sector. This policy has the possibility to give impacts that will give both benefits and disadvantages that must be anticipated by the Government. The profit-sharing system that will give the maximum benefit for Indonesia is the royalty system which also reflects the principle of State control of natural resources as mandated by the 1945 Constitution

Keywords: Coal Mining; Profit Sharing; Non-tax Revenue; Zero Percent Royalty Policy.

1. INTRODUCTION

After the proclamation of independence, the Indonesian government reformed the colonial legal system to be consistent with the needs of Indonesian society [1]. Subsequently, regulations on mining were adjusted with the mandate of the Indonesian Constitution which further promoted the issuance based on the principle of State Control of Natural Resources [2]. According to the vision and mission of the Indonesian government within the Indonesian Constitution, the court interprets the phrase "controlled by the state" in Article 33, Paragraph (3) of the Indonesian Constitution as the mandate to conduct policymaking (*beleid*), government actions (*bestuursdaad*), regulatory acts (*regelendaad*), management actions (*beheersdaad*), and supervisory actions (*toezichthoudensdaad*) to achieve the greatest prosperity for society.[3]

Under the mandate of the Indonesian Constitution, the government enacted Law No. 78 of 1958 on Foreign Direct Investment ("Law 78/1958") as the first

[1] Indra Perwira (2017) "Realitas Politik Hukum Perundang-Undangan Indonesia Pasca Reformasi," *Padjadjaran Law Review* 5.
[2] Adrian Sutedi (2022), *Hukum Pertambangan* (Sinar Grafika), 24.
[3] Constitutional Court Decision Number 1-021-022/PUU-I/2003 [2003] [334].

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regulation for policy on the mining sector in Indonesia. Law 78/1958 stipulates that foreign investors are prohibited from conducting business activities in the mining sector of excavated commodities.[4] The Indonesian government severely limits the workspace of foreign investors to conduct mining activities and provides opportunities for citizens to manage natural resources.

As a continuation of the nationalization of the prevailing mining regulations in Indonesia, Law No. 10 of 1959 on the Cancellation of Mining Rights was promulgated to revoke mining rights in effect during the Dutch Colonial Era. Mining rights canceled in this regulation include (a) an unexpired investigation permit, (b) the right to obtain mining exploitation concessions as referred to in Article 28 paragraph (3) of the *Indische Mijnwet*, (c) mining concessions, (d) an agreement to conduct an investigation into mineral mining under Article 5a of the *Indische Mijnwet*; (e) mining permits for excavated commodities not stated in Article 1 of the *Indische Mijnwet*.[5]

The government enacted Regulation instead of Law No. 37 of 1960 on Mining ("GRL 37/1960") to replace the *Indische Mijnwet* 1899 [6]. During the implementation of the regulation, President Soekarno put pressure on foreign investors to conduct business activities. GRL 37/1960 stipulates that the activities related to the mining sector such as exploration and exploitation are fully controlled by the State. Production Sharing is also conducted to attract investors to invest capital in other open fields [7] to overcome the absence of capital due to suppression of Foreign Direct Investment (FDI).

During the New Order era, President Soeharto started to prioritize economic development as the main goal. The vision of the President was to maximize the potential of natural resource wealth used as a source of economic strength.[8] As a country free from colonialism, Indonesia needs help from other countries to drive the wheel of the economy, especially with limited knowledge and technology. Subsequently, the government enacted Law No. 1 of 1967 on FDI ("Law 1/1967") which allowed FDI to conduct business activities, especially in the mining sector.[9]

Law 1/1967 initiated the issuance of Law No. 11 of 1967 on Basic Provisions of Mining ("Law 11/1967") and affirmed the right of FDI to participate in the mining sector. The Minister was allowed to appoint other parties as mining managers when necessary and did not provide any restrictions regarding the appointment. This regulation also categorizes the mining business implementation system based on a Contract of Work (*Kontrak Karya* or "KK") and Coal of Work (*Perjanjian Karya Pengusahaan Pertambangan Batubara* or "PKP2B") [10].

Following the development of the mining situation in Indonesia, the centralized nature of Law 11/1967 is no longer suitable for future challenges, especially in the

[4] Law No. 78 of 1958 of Foreign Direct Investment, s 3.

[5] Law No. 10 of 1959 on the Cancellation of Mining Rights, s 2.

[6] Tri Hayati, *Era Baru Hukum Pertambangan: Di Bawah Rezim UU No. 4 Tahun 2009* (Yayasan Pustaka Obor Indonesia, 2015), 34.

[7] .I B R Supancana, "Pelaksanaan Kerjasama Di Bidang Pertambangan (Mineral Dan Batubara)," *BPHN, Jakarta*, 2008, 21.

[8] Resolution of the Provisional People's Consultative Assembly of the Republic of Indonesia Number XXIII/MPRS/1966 on Reform of the Policy on Economic, Financial and Development Foundations, Chapter II, s 8.

[9] Mining activities in Indonesia carried out by FDI are based on a Contract of Work (*Kontrak Karya* or "KK") or other forms determined by the Government. A CoW is an ongoing agreement between the Government and an Indonesian legal company to conduct mining business activities in Indonesia. See: Law No. 1 of 1967 on FDI, s 8(1); . Lukman Santoso and Muh Fauzi Arifin, "Problematika Kontrak Karya Dalam Hukum Perjanjian Indonesia," *YUDISIA: Jurnal Pemikiran Hukum Dan Hukum Islam* 10, no. 1 (2019): 54.

[10] Ahmad Redi and Luthfi Marfungah, "Perkembangan Kebijakan Hukum Pertambangan Mineral Dan Batubara Di Indonesia," *Undang: Jurnal Hukum* 4, no. 2 (2021): 489.

social situation prioritizing democratization, regional autonomy, human rights, and the environment.[11] The government adjusted the development of the mining situation by enacting Law No. 4 of 2009 on Mineral and Coal Mining ("Law 4/2009"). The most significant change in Law 4/2009 is the form of mining business activities permits which no longer use the terms of KK and PKP2B. The name is changed to Mining Business License (*Izin Usaha Pertambangan* or "IUP"), People's Mining Business Permits (*Izin Usaha Pertambangan Rakyat* or "IPR"), and Special Mining Business License (*Izin Usaha Pertambangan Khusus* or "IUPK").[12] The IUP consists of two stages, namely the Exploration and Production Operation IUP. The Exploration IUP includes general investigation, and feasibility research of an excavated commodity, while Production Operation IUP comprises construction, mining, processing, refining activities, transportation, and sales.[13] The IUPK also consists of two stages, namely the Exploration and Production Operation IUPK. The Exploration IUPK includes general investigation, and feasibility research activities, while Production Operation IUPK comprises construction, mining, processing, refining activities, transportation, and sales.[14] Furthermore, Law 4/2009 was amended to Law No. 3 of 2020 concerning the Amendment of Law No. 4 of 2009 on Mineral and Coal Mining ("Law 3/2020"), which added another form of mining business activities known as Rock Mining Permit (*Surat Izin Penambangan Batuan* or "SIPB").[15]

This research aims to examine the legal and fiscal implications of Indonesia's shift in mining regulation—highlighting that Article 95 of Law 3/2020 directs IUP and IUPK holders at the production stage to increase mineral added value, that the term "mandatory" in Article 102 of Law 4/2009 was softened to "may" in Article 102(2) of Law 3/2020, and that Article 128A was later inserted via Law 11/2020 to promote coal value-addition; the study finds that the zero-percent royalty policy has detrimental fiscal consequences because it eliminates the most pragmatic and enforceable source of state revenue—the royalty system—which functions as the clearest form of profit-sharing between the sovereign and the coal industry, and unlike complex tax schemes limited by administrative capacity, royalties provide a direct, streamlined method to capture resource rent, so their removal deprives the state of a critical revenue stream suited to existing institutional capabilities.

The findings of this study illuminate the detrimental fiscal consequences associated with the zero percent royalty policy. Despite the policy's intent to incentivize industry development, the elimination of this obligation undermines the most pragmatic mechanism for state revenue collection available today. Within the current bureaucratic landscape, the royalty system serves as the most applicable and enforceable form of profit-sharing between the coal industry and the sovereign. Unlike complex taxation schemes that may be hindered by administrative limitations, royalties provide a direct and streamlined method for resource rent capture. Consequently, removing this

[11] General Elucidation of Law No. 4 of 2009 on Mineral and Coal Mining.

[12] Law No. 3 of 2020 on Amendment of Law No. 4 of 2009 on Mineral and Coal Mining ("Law 3/2020"), s 35. IUP is a permit granted to a company that conducts mining business activities. IPR is a permit granted to carry out a mining business in a small-scale mining area and whose investment is limited. IUPK is a permit granted to a company conducting mining business activities in a special mining business permit area. See: Law 3/2020, s 1(7), s 1(10).

[13] Law 3/2020, s 36 (1)

[14] Law 3/2020, s 76 (1)

[15] SIPB is a permit granted to carry out mining business activities of certain types of rock or for certain purposes. See: Law 3/2020, s 1 (13a).

instrument deprives the state of a critical revenue stream that is uniquely suited to existing institutional capabilities.

This research employs a rigorous normative legal methodology, founded upon a theoretical legal analysis that uses four key frameworks: The Middle Path, Fiduciary Duty, Sustainable Return of Investment, and the Rational Choice Theory (RCT), all viewed through the lens of investment law policy. The investigation systematically utilizes primary legal materials (statutes and regulations) and secondary sources (academic commentaries) to conduct a multi-faceted analysis of royalty and profit-sharing policies within the coal mining sector. The research procedures involve a Statutory Approach to examine the legal basis of the zero-percent royalty rule; a Conceptual Approach to clarify legal doctrines like Fiduciary Duty; and a Comparative Approach to benchmark Indonesian policy against other resource-rich jurisdictions. Crucially, the Rational Choice Theory (RCT) provides the analytical framework to evaluate the rationality of governmental and corporate actors' decisions concerning revenue trade-offs, which is then integrated with an Economic Analysis of the Law (EAL) to assess the policy's overall efficiency and its compliance with the principles of long-term fiscal stability.

2. ANALISYS AND DISCUSSION

2.1. Indonesia's State Revenue Scheme In The Coal Mining Sector

Article 128 of Law 3/2020 provides a stipulation that mining permit holders should pay state and regional revenues divided through Tax State Revenue and other income incorporated into Non-Tax State Revenue (*Penerimaan Negara Bukan Pajak* or "PNBP"). Coal is a mining commodity that recently changed the status to become goods subject to Value Added Tax ("VAT") excluded from mining or drilling commodities[16] at a tariff of 10 % .[17] The status of coal as taxable goods also shows that the commodities are burdened with Income Tax (*Pajak Penghasilan* or "PPh") and specification of PPh Article 22.[18]

According to the tax sector, revenues received by the States are included in the PNBP. Building upon this, PNBP within the sector is divided into four forms, namely fixed fees, production fees, compensation for information data, and other state revenues valid by the government through the provisions within the applicable law.[19] In 2018, the Ministry of Energy and Mineral Resources listed the types of PNBP considered valid, and these included the following.

a. services for providing mineral and coal data information system,
b. fixed premiums,
c. production fees/royalty,
d. information data compensation,
e. the share of the net profit of the Production Operation IUPK holder,
f. guarantee of the seriousness of the auction of the Mining Business Permit Area (*Wilayah Izin Usaha Pertambangan* or WIUP) or Special Mining Business Permit Area (*Wilayah Izin Usaha Pertambangan Khusus* or WIUPK) for metal minerals or coal-owned by the Central government,

[16] Law No. 11 of 2020 on Job Creation, s 112(2).
[17] Law No. 42 of 2009 on the Third Amendment of Law No. 8 of 1983 on Value Added Tax on Goods and Services and Sales Tax on Luxury Goods, s 7 (1).
[18] Minister of Finance Regulation PMK-34/PMK.03/2017 on Levy of Article 22 Income Tax in connection with Payment for Delivery of Goods and Activities in the Import Sector or Business Activities in Other Fields, s 1(1)(a).
[19] Law 3/2020 (n 14), s 128 (4).

g. guarantee of the seriousness of the conduct of exploration activities owned by the Central Government under the provisions of applicable laws,
h. other types of state revenues regulated by statutory provisions.

From all the recognized PNBP, fixed and production premiums have the most contribution to state revenue. Fixed premiums or land rent is a compensation payment received by the State for general investigation, or exploitation in a work area.[20] The amount is calculated based on the tariffs determined by the Indonesian government multiplied by the breadth of the mining area. The fixed premiums applicable have a progressive tariff as stipulated within Regulation No. 45 of 2003 on Tariffs on Non-Tax State Revenue applicable to the Ministry of Energy and Mineral Resources ("GR 45/2003"). This policy also distinguishes the tariffs imposed on Exploration IUP and IUPK holders from Production Operation IUP and IUPK holders.[21]

GR 45/2003 imposes progressive tariffs per year by dividing the coal production process into five stages, namely general investigation, exploration, extension of exploration, exploitation facility development, and exploitation. This policy also stipulates the duration of each stage of mining by stating the year of tariff. The implementation impacts mining permit holders in conducting business activities more effectively to limit production expenditures.[22] The regulation is amended by Government Regulation No. 81 of 2019 on Type and Tariffs for Non-Tax State Revenue Applicable to the Ministry of Energy and Mineral Resources, ranging from IDR 20,000 to IDR 60,000 per year.

Production premiums which include exploration and exploitation tariffs are a form of payment made by the mining permit holder for the opportunity to explore and exploit mining commodities. The imposition of production premiums is calculated based on the number of excavated commodities exploited by the mining permit holder using tariffs determined through statutory regulations. The division of tariffs in coal production premiums is classified based on the number of calories from the exploited coal.

Initially, Government Regulation (GR) No. 45 of 2003 established a progressive tariff structure based on five distinct mining stages—from general investigation to exploitation—and differentiated tariffs between Exploration IUP/IUPK holders and Production Operation IUP/IUPK holders. This policy, designed to encourage efficiency, was subsequently amended by GR No. 81 of 2019, which set the tariffs ranging from IDR 20,000 to IDR 60,000 per year.[23] Simultaneously, the production premium, covering exploration and exploitation tariffs, functions as payment for the right to extract mining commodities. This premium is calculated based on the volume of excavated commodities and differentiated by the coal's calorific value, using tariffs set by statutory regulations.

However, the financial landscape of coal mining is characterized by high volatility, evidenced by the Indonesian Coal Index 3 (ICI 3), which fluctuated between $37.6/ton and $74.9/ton from January 2012 to December 2019, creating uncertainty for mining companies.[24] This uncertainty is compounded by recent regulatory changes. The

[20] Government Regulation No. 55 of 2005 on Balancing Fund, s 1

[21] Attachment to the Government Regulation No. 45 of 2003 on Tariffs on Non-Tax State Revenues Applicable to the Ministry of Energy and Mineral Resources.

[22] Siti Mahmudah, Siti Malikhatun Badriyah, and Bagus Rahmanda, "THE POSITION OF THE GUARANTOR IN RECONCILIATION ON THE BANKRUPTCY ACT ACCORDING TO THE LAW OF BANKRUPTCY IN INDONESIA," *Diponegoro Law Review* 3, no. 2 (n.d.): 243–56.

[23] I F Rahman and Y A Nainggolan, "Valuation of Pt Adaro Energy TBK by Forecasting of Indonesian Coal Index Using Geometric Brownian Motion and Fiscal Impact of Indonesian Law 3 Year 2020," in *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2021, 1347–57.

[24] Rahman and Nainggolan, 1347–57.

Indonesian House of Representatives legalized Law No. 3 of 2020 concerning Mineral and Coal Mining, which notably permits first-generation Coal Contract of Work (CCOW/PKP2B) holders to extend their contracts for two periods of ten years each in the form of a Special Business Mining License (IUPK). This law also introduced significant fiscal policy changes, including revisions to value-added tax, royalty structures, and corporate tax, generally tending to increase government earnings. Furthermore, Law No. 3 of 2020 mandates an additional 10% portion of earnings after-tax to be implemented as profit-sharing.

2.2. Scheme Of State Revenue After The Enactment Of Law 11/2020

Following the enactment of Law 11/2020, the Indonesian government in practice has not provided any alternative for a state revenue scheme replacing the loss from zero percent royalty policy. The sources used instead of royalty are the taxation sector and the profits of coal sales. According to expert opinion, VAT charged on coal mining commodities is used as a substitute for the possibility of state revenue losses due to the zero percent royalty policy [25].

The government has the potential to substitute state revenue losses through the sale of mining commodities due to an increase in Benchmark Coal Price (*Harga Batubara Acuan* or "HBA") which increases selling price. HBA is the price obtained from the average coal price index in the previous month determined by the Minister.[26] For a period of several months at the end of 2021, global HBA has experienced a rapid increase. The prices in September, October, and November 2021 were USD150.3, USD161.63, and USD215.01 per tonne, respectively. The increase was launched due to the influence of demand for electricity generation, which is more than the supply of coal in China [27]. In addition to demand from China, South Korea, and the European region also experienced an increase in line with the rising of natural gas prices. The HBA data reported that increased sales from coal had the potential to cover state revenue losses due to the zero percent royalty policy.

The activity to increase the coal added-value initiated through Article 128A paragraph (1) of Law 3/2020 is the main requirement for granting a zero percent royalty policy. This can be carried out by IUP or IUPK holders in the Production Operation stage of activities. Coal development is achieved by a. upgrading, b. briquetting, c. coking, d. coal liquefaction, e. gasification, and f. slurry/water mixture. Meanwhile, mining companies use coal by building Electric Steam Power Plant (*Pembangkit Listrik Tenaga Uap* or "PLTU") at the mouth of the mine.[28] The policy provides benefits for the Indonesian people at large considering the main objective of zero percent royalty.

The project increase the benefits of low-quality coal found in Indonesia, especially the fulfillment of energy requirements [29]. After fulfilling domestic energy requirements, the government also sells excavated commodities subjected to a process of increasing

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[25] "Royalti 0% Batu Bara Berpotensi Ciptakan Snow Ball Effect Industri Baru - Dunia Energi," accessed July 23, 2024, https://www.dunia-energi.com/royalti-0-batu-bara-berpotensi-ciptakan-snow-ball-effect-industri-baru/.

[26] Kepmen ESDM 1823 (n 34) Attachment I Letter B number 10.

[27] Wilda Asmarini, "Tertinggi Dalam 1 Dekade, HBA Oktober Naik Ke US$ 161,63/Ton," accessed December 24, 2025, https://www.cnbcindonesia.com/news/20211007100512-4-282053/tertinggi-dalam-1-dekade-hba-oktober-naik-ke-us--16163-ton.

[28] Law 3/2020 (n 14), Elucidation s 102 (2).

[29] Daulat Ginting, "Kebijakan Dan Prospek Pengelolaan Batu Bara Di Indonesia," *Buletin Sumber Daya Geologi* 5, no. 1 (2010): 45.

the coal added-value. Additionally, the foreign exchange rate and the costs incurred to import energy sources are also reduced.

Based on the description, this project is profitable in increasing the potential of coal and suppressing foreign exchange. However, the government has not been able to ensure the effectiveness of the zero percent royalty policy on the development of coal added-value. The opportunity to exterminate the obligation to pay royalty without ensuring the effectiveness of the activities to increase coal added-value does not guarantee that this policy will provide more benefits than those enacted within Law 11/2020. There is a legal dilemma regarding the requirement to increase the coal added-value. In Article 95 of Law 3/2020, IUP and IUPK holders should increase coal added-value, in line with Article 102 of Law 4/2009. The obligation to increase the coal added-value is exterminated by replacing the word “mandatory” with “may” through an amendment in Law 3/2020. A regulatory inconsistency exists between Article 95 and 102 paragraph (2) of Law 3/2020 as the basis for the addition of Article 128A of Law 3/2020. The presence of inconsistency causes the main requirement for giving zero percent royalty to be unnecessary.

In addition to increasing coal added-value, another requirement for receiving a zero percent royalty policy is the consideration of energy independence and the requirement of industrial raw materials.[30] This assessment is carried out by examining the coal produced by the mining companies [31]. Energy independence is a form of security and a measure of economic progress [32]. The effort to achieve energy independence is the ability to defend the State against disturbances from inside and outside of the country. This can be seen from four factors, namely purchasing power, availability, public acceptance, and infrastructure [33].

The requirement is mandated by the Indonesian government, considering the energy usage, particularly the reliance on coal, which accounted for approximately 38.04 % of the total national energy mix in 2020 [34]. The use of coal as an energy source is found within the industrial sector such as the manufacture of Liquified Petroleum Gas (“LPG”). Indonesia is protected from potential indirect attacks such as restrictions on trade in energy sources from other trading countries by having energy independence.

The amount requirements and procedures for imposing a zero percent royalty policy are regulated by a Ministerial Regulation. The zero percent royalty is obtained by coal companies after first approval from the “minister in charge of government affairs in the field of state finance” or Ministry of Finance. The Ministry of Energy and Mineral Resources stated that the Ministerial Regulation related to the more extensive requirements with the procedures for granting zero percent royalty is planned and is expected to be completed in the first or mid-second semester of 2021 [35]. However, there

[30] GR 25/2021 (n 39) s 3 (2).

[31] “Kementerian ESDM Kebut Aturan Royalti Batu Bara Nol Persen | Kumparan.Com,” accessed July 23, 2024, https://kumparan.com/kumparanbisnis/kementerian-esdm-kebut-aturan-royalti-batu-bara-nol-persen-1vK07sx6l3b.

[32] Riyadi Santoso, “Kebijakan Energi Di Indonesia: Menuju Kemandirian,” *Jurnal Analis Kebijakan* 1, no. 1 (2017): 29.

[33] Herry Zadrak Kotta and Djoko Wintolo, *Energi Terbarukan: Konsep Dasar Menuju Kemandirian Energi* (UGM PRESS, 2018), 29.

[34] Ministry of Energy and Mineral Resources, “Menuju Bauran Energi Nasional Tahun 2025,” accessed July 23, 2024, https://ebtke.esdm.go.id/post/2021/04/09/2838/forum.kehumasan.dewan.energi.nasional.menuju.bauran.energi.nasional.tahun.2025.

[35] Denis Riantiza Meilanova, “Permen Royalti Batu Bara Nol Persen Segera Rampung,” accessed December 24, 2025, https://ekonomi.bisnis.com/read/20210309/44/1365624/permen-royalti-batu-bara-nol-persen-segera-rampung.

has been no derivative Ministerial Regulation from GR 25/2021 until mid-December 2021.

The absence of implementing regulations for the zero percent royalty policy leads to a legal vacuum to create uncertainty (*rechtsonzekerheid*) and legal chaos (*rechtsverwarring*) [36]. Unclear regulations can affect the interest of investors, especially with the potential for a more complicated bureaucracy than the announced and applied regulations. As stated in Article 102 paragraph (2) of Law 3/2020, IUP and IUPK holders who can receive zero percent royalty are limited at the Production Operation stage.[37] The Indonesian government does not limit the form of investment since FDI and Domestic Direct Investment have the same opportunity to be granted the zero percent royalty policy. Forms of mining companies with Production Operations IUP and IUPK include business entities, including limited partnership companies.[38]

2.3. The Practice Of Increasing The Added-Value Of Coal In Indonesia

Increasing the coal added-value can be achieved in several methods as mentioned in the previous sub-chapter. Gasification is an important method for increasing and improving the added-value of coal. This is reflected in the existence of two National Strategic Projects ("NSP") namely the gasification of coal into the form of Dimethyl Ether ("DME") in Tanjung Enim, South Sumatra, and into the form of Methanol in East Kutai, East Kalimantan [39]. The coal gasification project supports the 35th National Medium-Term Development Plan Strategic Priority for 2020-2024 points related to reducing LPG imports.[40] Director of Coal Business Development at the Ministry of Energy and Mineral Resources of Indonesia, Sujatmiko stated that the reason for promoting the project was due to the increase in demand for LPG, while 78 % of LPG needs were met through imports [41].

PT Bukit Asam Tbk. ("PTBA") is entrusted to carry out the coal gasification project into DME. PTBA joined the Indonesian Mining State-Owned Company Holding through Regulation No. 47 of 2017 on the Addition of Indonesia's State Equity Participation into the Share Capital of PT Indonesia Asahan Aluminum.[42] The company commits to building a coal gasification plant to implement the projects into DME [43]. The project is scheduled to commence in mid-2021, with operations set to start in 2025 and process 6 million tons of coal annually, converting into 1.4 million tons of DME. This provides

[36] Gamal Abdul Nasir, "Kekosongan Hukum & Percepatan Perkembangan Masyarakat," *JHR (Jurnal Hukum Replik)* 5, no. 2 (2017): 175.

[37] Zero percent royalty relief is applied by conducting an assessment of the excavation results, therefore relief is given to IUP and IUPK holders during Production Operations.

[38] Private business entities that can have IUP and IUPK include National Private Business Entities and private Business Entities that are part of foreign investment. See: Government Regulation No. 96 of 2021 on Implementation of Mineral and Coal Mining Business Activities, s 9 (1), (2), (3), (4).

[39] Rayful Mudassir, "Cadangan Migas Turun, Pemerintah Kebut Gasifikasi Batu Bara," accessed December 24, 2025, https://ekonomi.bisnis.com/read/20210926/44/1446986/cadangan-migas-turun-pemerintah-kebut-gasifikasi-batu-bara.

[40] Presidential Regulation concerning the 2020-2024 National Mid-Term Development Plan, Attachment II.

[41] "Ini Roadmap Pengembangan DME Dan Methanol Kementerian ESDM Hingga 2045," accessed July 23, 2024, https://industri.kontan.co.id/news/ini-roadmap-pengembangan-dme-dan-methanol-kementerian-esdm-hingga-2045.

[42] Government Regulation No. 47 of 2017 concerning Addition of State Equity Participation of the Republic of Indonesia into the Share Capital of the Company (Persero) PT Indonesia Asahan Aluminum, s 3.

[43] "Hemat Devisa, Peningkatan Nilai Tambah Batu Bara & Ketahanan Energi Nasional, Inilah Sejumlah Manfaat Gasifikasi Batu Bara Untuk Indonesia | PT Bukit Asam Tbk," accessed July 23, 2024, https://www.ptba.co.id/berita/hemat-devisa-peningkatan-nilai-tambah-batu-bara-ketahanan-energi-nasional-inilah-sejumlah-manfaat-gasifikasi-batu-bara-untuk-indonesia-1303.

an investment of USD32 trillion using low-calorie coal that cannot be sold [44] as well as saving State Revenue by reducing the volume of LPG imports and energy dependence [45].

The coal gasification project into methanol was initiated by a consortium consisting of PT Powerindo Energi ("PT PCE") from Indonesia and China National Chemical Engineering Corporation ("CNCEC") [46]. This project establishes a new factory with an investment value of USD 560 million and processes 1.1 million tons of coal into 600 thousand tons of methanol per year. In addition to economic benefits, coal value-added projects also have a fairly high risk of loss. The plan to gasify coal causes a loss of state revenue based on research conducted by the Institute for Energy Economics and Financial Analysis ("IEEFA")[47]. The project on coal gasification project provides benefits through suppression of foreign exchange related to LPG imports but may cause losses of an estimated amount of USD 377 million per year [48]. This loss is accepted due to the high costs incurred to conduct the process of increasing the added-value of coal.

Responding to the results, the Balitbang Coal Downstream Study Team conducted an analysis and confirmed this research with PTBA [49]. The difference in the results between IEEFA and PTBA is in the price assumptions used to increase the added-value of coal. The LPG price assumption used by IEEFA is USD365 per tonne when energy demand decreases during the pandemic. Meanwhile, the LPG price assumption used by PTBA is the average price of LPG for the last 10 years. There are differences in coal inputs carried out by the two institutions, where the price of coal used by IEEFA and PTBA is USD37 and USD21 per tonne, respectively.

The price assumption diverts the benefits as calculated by PTBA to losses as calculated by IEEFA. The government must be able to anticipate the two possibilities to avoid the losses in State Revenue affecting the economy. The construction of a factory used to increase the added-value of coal will absorb labor from the community. [50] However, this can cause the community to lose the land used as a factory site. Potential for environmental damages may exist due to waste from the process of increasing the added-value of coal when not properly managed. The government must anticipate the possibility of environmental damages in building factories used to increase the coal added-value.

2.4. The Impact of Royalty Policy Changes Towards The International Movement Towards New And Renewable Energy

Indonesia is among the countries committed to transitioning from fossil fuel-based energy sources to New and Renewable Energy (NRE) as the primary energy source. By

[44] "Hemat Devisa, Peningkatan Nilai Tambah Batu Bara & Ketahanan Energi Nasional, Inilah Sejumlah Manfaat Gasifikasi Batu Bara Untuk Indonesia | PT Bukit Asam Tbk."

[45] Annisa Muliahati, Eva Fathul Karamah, and Ika Kaifiah, "Study of Domestic Coal-Based Dimethyl Ether (DME) Utilization to Reduce LPG Import," in *E3S Web of Conferences*, vol. 67 (EDP Sciences, 2018), 67.

[46] Ministry of Industry, "Kemenperin: Hilirisasi Batubara, Menperin Dorong Pendirian Industri Pionir Coal to Methanol," accessed July 23, 2024, https://kemenperin.go.id/artikel/22868/Hilirisasi-Batubara,-Menperin-Dorong-Pendirian-Industri-Pionir-Coal-to-Methanol.

[47] Ghee Peh, "Proposed DME Project in Indonesia (D)Oes Not (M)Ake (E)Conomic Sense," 2020, https://ieefa.org/wp-content/uploads/2020/11/Proposed-DME-Project-in-Indonesia-Does-Not-Make-Economic-Sense_November-2020.pdf.

[48] Peh.

[49] "Bantah Kajian Proyek DME Bikin Rugi Rp5 T Per Tahun, ESDM: Ada Perbedaan Asumsi Data," accessed July 23, 2024, https://ekbis.sindonews.com/read/261948/34/bantah-kajian-proyek-dme-bikin-rugi-rp5-t-per-tahun-esdm-ada-perbedaan-asumsi-data-1607490749.

[50] Mohamad Nasir, "Implication Of Coal Mining Permit Governance To Environmental Degradation In East Kalimantan," *Mulawarman Law Review* 7 (2022): 137–39.

signing the Paris Agreement, Indonesia has pledged to achieve NZE by 2060 through emission reduction initiatives. In addition to fulfilling the commitments, the transition to NRE achieves energy independence to impact the development of the economy [51]. The use of NRE is also a form of sustainable development and will become a long-term industry as the supply of raw materials can be renewed.

A few definite steps have been taken to reflect commitment and the action is related to investment, such as the incorporation of Indonesia into the Clean Energy Demand Initiative ("CEDI") [52]. CEDI is an agency established by the United States to bring companies with an interest in investing in NRE sector [53]. This action is the right initiation step in the efforts to develop NRE sector in terms of capital and technology[54]. Through Indonesia's incorporation into the Clean Energy Demand Initiative (CEDI), a US-led initiative designed to attract interested private companies to the sector, primarily providing capital and technology transfer. While this represents a crucial initiation step to inject necessary financial and technological resources into NRE development, its ultimate success is contingent upon the establishment of robust sustainable mining governance. Effective implementation of such large-scale investment hinges on a delicate balance between decentralization and centralization in resource management, as posited within the welfare state framework. Specifically, the positive influence of NRE investment via CEDI must be supported by high Environmental Quality, strong Governance Quality marked by clear regulations and transparency, Community Quality ensuring local participation and accountability, and Economic Quality managing financial resources effectively—all of which are essential factors to enhance Decentralization Performance.[55] Only through this comprehensive governance framework can the initial promise of capital and technology from CEDI be translated into genuinely sustainable NRE development, mitigating the risks of corruption and sub-optimal policy execution often seen in other resource-rich nations

The government has prepared a roadmap used to support the NRE sector regardless of the challenges and risks of climate change. There are 5 main principles applied in Indonesia, namely reducing fossil energy, using electric vehicles in the transportation sector, using electricity usage in households, and adopting Carbon Capture and Storage ("CCS") [56]. The government is also implementing "early retirement" for the first phase of PLTU and plans to stop imports of LPG by 2027. Therefore, Indonesia is expected

[51] Ministry of Energy and Mineral Resources, "Menteri ESDM: Sumber EBT Melimpah Wujudkan Kemandirian Energi," accessed July 23, 2024, https://ebtke.esdm.go.id/post/2020/03/03/2492/menteri.esdm.sumber.ebt.melimpah.wujudkan.kemandirian.energi.

[52] Ministry of Energy and Mineral Resources, "Sejalan Dengan Kebijakan, Indonesia Bergabung Dalam Clean Energy Demand Initiative," 2021, https://ebtke.esdm.go.id/post/2021/11/08/3003/sejalan.dengan.kebijakan.indonesia.bergabung.dalam.clean.energy.demand.initiative.

[53] "The Clean Energy Demand Initiative (CEDI) - United States Department of State," accessed July 23, 2024, https://www.state.gov/the-clean-energy-demand-initiative-cedi.

[54] Sujono, Suwarno, and Renny Friska, "Building a Sustainable Mining Governance Model Through Decentralization Performance and Governance Transformation in Indonesia," *International Journal of Sustainable Development and Planning* 20, no. 6 (June 1, 2025): 2654, https://doi.org/10.18280/IJSDP.200632.

[55] R Friska, "Building a Sustainable Mining Governance Model Through Decentralization Performance and Governance Transformation in Indonesia," *International Journal of Sustainable Development and Planning* 20, no. 6 (2025): 2651–60, https://doi.org/10.18280/ijsdp.200632.

[56] "Kementerian ESDM RI - Media Center - Arsip Berita - Ini Prinsip Dan Peta Jalan Pemerintah Capai Net Zero Emission," accessed July 23, 2024, https://www.esdm.go.id/id/media-center/arsip-berita/ini-prinsip-dan-peta-jalan-pemerintah-capai-net-zero-emission.

to create an investment environment friendly to investors who have an interest in the NRE sector.

The project to increase the added-value of coal is another action taken to reduce carbon emissions. This changes the coal into other forms to produce less impact on the environment. The provision of zero percent royalty for the coal mining sector can inhibit the transfer of energy sources to NRE. The granting of waivers of premiums may prevent Indonesia from changing the usage of fossil energy to NRE.

The granting of waivers of fees in investment law is a form of action from the government to attract investors. A zero percent royalty policy attracts mining companies to increase the added-value of coal. The potential transfer of usage from fossil energy sources to NRE is inhibited by the presence of the regulation since investors prefer profitable sector. The enactment of regulations that promote the coal sector have an impact on investment activities. In general, investors prefer the most profitable areas in countries with stable regulations. The government must be able to create an investor-friendly atmosphere to ensure a comfortable activity and reduce uncertainty.

Enacting a zero percent royalty policy creates uncertainty over the direction of regulations in Indonesia. The two possible developments are in investment-friendly environment in the coal and NRE sectors. Investors may be reluctant to invest due to the uncertainty of regulations. The sectors are separate even though the directions reduce carbon emissions and are in line with commitments in the Paris Agreement. Additionally, the enactment of a zero percent royalty policy has good and bad impacts. The project to increase the added-value of coal has a positive impact on low-quality coal in Indonesia. In this context, there is no certainty over the effectiveness of the project, bringing losses to the State Revenue.

2.5. Profit-Sharing System Among The Government And Investors In The Mining Sector In Indonesia

The natural resources of Indonesia are all within the jurisdiction of the government, which has the right to benefit from the discovery and exploitation carried out by a mining company. Profit-sharing generated through the discovery and exploitation of natural resources is a remuneration provided by a mining company.

In Indonesia, some natural resource sectors such as PMDN or PMA are excluded from the business field category.[57] Besides, a party can manage the oil and gas as well as coal mining sectors. These sectors have a profit-sharing development system compatible with the applicable mining permit system. This system must be fair and deliver the highest profit for each unit of exploited natural resources. Besides the public interest, the government must balance regulations to ensure the safety of investors under an adequate system.

The first profit-sharing system was based on concessions in the mining industry. The *Indische Mijnwet* 1899 regulates the concession system in the general mining sector. After enactment of Government Regulation in place of Law Number 44 of 1960 Concerning Oil and Gas Mining (GRL 44/1960), Indonesia has discontinued the profit-sharing system through concessions. Meanwhile, the coal mining concession system

[57] Law No. 25 of 2007 on Capital Investment, s 12.

was changed to a Contract of Work ("CoW") under GRL 37/1960, allowing private companies and individuals to mine.[58] According to GRL 44/1960 and GRL 37/1960, the government has the authority to seize control of oil, gas, and coal mining, as well as set the conditions to be fulfilled through cooperation in a Contract of Work.[59]

The CoW system has changed the legal status between the government and the mining permit holder. Based on the description, the mining permit holder is considered the implementing partner for exploiting minerals rather than the mining authority [60]. However, the rights of the mining permit holders are not significantly different from the concession system. There is also a broad jurisdiction under the agreement, starting with a single right to carry out mining activities, sell products, and bear associated risks [61].

The State should have more authority over natural resource management as the holder of the right to govern natural resources. Indonesia will not have the bargaining position for more significant benefits from exploitation when the government and mining permit holders are on an equal basis. The bargaining position influences the negotiations of CoW on tariffs of commodities. Since the contribution rate conforms with the negotiated agreement, the potential for state revenue cannot be maximized by reaching the highest tariff.

The profit-sharing system used in CoW was replaced with a royalty system. With the enactment of Minerba Law 2009 and the modifications in Minerba Law 2020, Mining rights were converted into IUP and IUPK in the form of permits, as specified in Chapter II. The licensing structure shows the position of the government' as the holder of the right to control natural resources. [62]A fee scheme, fixed premiums, and royalty are used to distribute profits from the coal mining sector based on IUP and IUPK. The fees of the mining permit holder are calculated under the applicable regulations using a licensing system. s.

The licensing system is the simplest profit-sharing scheme and direct profits can be calculated according to laws and regulations. This contribution is paid in advance to minimize payment arrears,[63] as specified in Chapter II. Since payments are made according to the amount of commodities obtained by the mining permit holder, implementing the royalty system maximizes state revenue. The government eliminates the obligation of mining permit holders to pay royalty on exploited mined commodities by the framework in the Job Creation Law (Law No. 11 of 2020 on Job Creation), eliminating the revenue sources. According to Chapter II, there is no alternative PNBP plan to compensate for the lack of royalty. These changes may draw the interest of the investors' interest but have negative effects on the country.

[58] Government Regulation in Lieu of Law (Perpu) Number 37 of 1960 concerning Mining, s 5 (1); The CoW agreement is open to international companies who want to operate mining in Indonesia, according to the FDI Law of 1967. See: Law No. 1 of 1967 on FDI, s 1.

[59] If the State Company, which is the holder of the mining permit, is deemed incapable to carry out its duties in the form of a CoW agreement, the Minister has the authority to select another party as a contractor. See: Article 6 number (2). See: Government Regulation in Lieu of Law Number 44 of 1960 on Oil and Gas Mining

[60] Marulak Pardede, "Implikasi Hukum Kontrak Karya Pertambangan Terhadap Kedaulatan Negara," *Jurnal Penelitian Hukum P-ISSN* 1410 (2018): 8..

[61] Pardede, 10.

[62] According to Spelt and Ten Berge, permission is a type of government consent that allows a legal subject to deviating from a prohibited restriction in specific instances based on applicable laws. This notion expresses the belief that the government is the party that grants permission to occupy a higher position since it has the authority to allow permit applications to be submitted see: . Victor Imanuel Williamson Nalle, "Hak Menguasai Negara Atas Mineral Dan Batubara Pasca Berlakunya Undang-Undang Minerba," *Jurnal Konstitusi* 9, no. 3 (2012): 482.

[63] Kepmen ESDM 1823 (n 34) Appendix III Letter C Number 1 and 3.

2.6. Comparison Of Coal Mining Profit-Sharing System Among The Government And Investors In Australia

Australia is the largest and second-largest metallurgical and thermal coal exporting country in 2020 after Indonesia.[64] Due to the presence of COVID-19 pandemic and the informal import restrictions imposed by China on commodities originating from Australia, metallurgical coal revenues remained stable and reached AUD23 million for the 2020 to 2021 period. Mining-related laws in Australia vary according to the regulations issued by each state. The regulations analyzed in this section are applied in Queensland, which is among the main coal-producing states in Australia.

Criteria	Queensland, Australia (Pursuant to the Mineral Resources Act 1989 and related GR)	Indonesia (Based on Law No. 3/2020 & PNBP Regulations such as GR 81/2019)
Resource Control Principles	The state has the right to control resources and grant permits to companies.	The state controls natural resources and issues Mining Business Permits (IUP) or SpecialMiningBusinessPermits (IUPK).
Applicable Permit Types	Exploration Permit Mineral DevelopmentLicense(MDL), Mining Lease	Mining Business Permit (IUP) Special Mining Business Permit (IUPK) (including for PKP2B extension)
Initial Submission Mechanism	Through competitive tender (for Work Programs) or regular applications.	Through auctions for Special Mining Business Permit Areas (WIUPK) or applications for IUP.
Fixed Costs / Land Rent (PNBP)	Progressive rental fee is charged based on the year and area (per sub-block/per hectare). The goal is to encourage rapid development.	A Fixed Premium is charged which is calculated based on the area (GR 81/2019), with a progressive rate per year based on the mining stage.
FixedCostStructure (MFS) Example	High Progressive: From AUD 4.65/ha (Year 1) to AUD 30.40/ha (Year 5 and above).	Relatively Fixed: Ranges from IDR 20,000 to IDR 60,000 per year (GR 81/2019).
Production Costs (Royalty / PNBP)	Royalties are calculated as a percentage of the production value	Production Premium (Royalty) iscalculatedbasedontheamount of commodity exploited, with rates classified based on the calorific value of the coal.

[64] Based on data from the Australian Department of Industry, this revenue represents an increase in revenue in coal exports following the drop in metallurgical coal revenues at the start of the COVID-19 pandemic. Looking at the graph provided, the data concludes that the coal industry in Australia tends to be stable. See also: . David Thurtell, "Resources and Energy Quarterly December 2021," 2021, 55, https://www.industry.gov.au/sites/default/files/2022-09/resources-and-energy-quarterly-december-2021.pdf.

Permit Administration Fee	specific Issuance Fee is charged for each permit type (e.g., AUD 1,360 for an Exploration Permit).	A fee is charged for IUP/IUPK applications and extensions, which are included in the PNBP service/licensing category.
Fiscal Policy Focus	Decentralization of regulations (state-by-state) and the use of progressive rental fees to force efficiency and rapid resource development.	Centralization of regulations (National Minerba Law) and emphasis on profit-sharing through Royalties and an additional 10% after-tax (Law 3/2020), which tends to increase state revenue.

In managing natural resources, Australia adheres to the principle that the State has the right to control natural resources in the jurisdiction. Based on the principle, the State becomes the party granting permits to mining companies to carry out business activities. The Mineral Resource Act 1989 divides permits in the mining sector into five, namely prospecting permits, mining claims, exploration permits, mineral development licenses, and mining leases, However, only exploration permits, mineral development licenses, and mining leases are applied to coal commodities.

Exploration permits are granted by the Australian government for mining companies to explore or search for natural resources for a period less than five years. To obtain these permits, mining companies must participate in a competitive tender process by offering work program for coal mining to the government. In addition to competitive tenders, exploration permits should be granted through applications. Mining companies must also pay an issuance fee determined by the government to issue exploration permits. The issuance fee for coal is set at AUS1.360, while the first and second extensions are at AUD678.[65] Exploration permits also charge a rental fee calculated at AUD167,7 per sub-block[66] and are converted into mineral development licenses to increase the value of excavated commodities[67] within a period of less than five years. In carrying out activities under mineral development licenses, mining companies are required to pay rental and permit issuance fee. The costs of issuing mineral development licenses for coal and renewal of permits are set at AUD2.724 and AUD952, respectively.[68] The rental fee charged in mineral development licenses is pegged using a progressive fee with the following details.[69]

a. For the first year, the fee is AUD4,65 per hectare,
b. For the second year, the fee is AUD9,55 per hectare,
c. For the third year, the fee is AUD14,65 per hectare,
d. For the fourth year, the fee is AUD25,25 per hectare,
e. For the fifth year and above, the fee is AUD30,40 per hectare.

The use of progressive rental fee rates for mineral development licenses is intended to promote mineral development activities because mining companies are developed in the shortest possible time by providing increasingly expensive costs.

[65] Part 3 *Mineral Resources Regulation* 2013 ("MRR").
[66] Part 3 *Mineral Resources Regulation* 2013 ("MRR").
[67] *Mineral Resources Act* 1989, s 181 (3).
[68] MRR Schedule 5 Part 4.
[69] MRR Schedule 4.

For the last stage, mining companies extracting coal commodities must have a mining lease. As a condition of the issuance of a mining lease, the Australian government imposes a compensation payment specified in the agreement or through a Land Court decision. Mining companies conducting business activities using leases should pay royalty to the government. The royalty scheme in Australia is very complicated due to several calculations. In line with the result, each state has regulations and there are different royalty for the extracted commodity. Royalty charged to coal are calculated using the following calculations:[70]

a. For the average of AUD100 per tonne, the royalty rate charged is 7% times the selling price per tonne,
b. For the average selling price of coal between AUD100 and AUD150 per tonne, the royalty rate charged is calculated using the following formula.

$$RR = 7 + \left(\frac{AP - 100}{AP} \times 5.5\right)$$

(1)
RR = Royalty Rate
AP = Average Price

c. For the average selling price of coal of AUD150 per tonne, the royalty rate charges are calculated using the following formula.

$$RR = 7 + \left(\frac{AP - 100}{AP} \times 5.5\right) + \left(\frac{(AP - 150)}{AP} \times 2.5\right)$$

(2)
RR = Royalty Rate
AP = Average Price

Royalty uses the financial year system, where payments are due three months after mining operations are completed.[71] In addition, there is a rental fee of AUD64,80 per hectare paid by the mining lease owner.[72] The use of a profit-sharing system in the form of royalty in Australia is difficult to calculate since there is no fixed rate to be charged to the mining companies. However, this calculation provides maximum benefits for processing coal commodities for the mining companies and the Australian government. The calculation ensures that the tariffs imposed are consistent with the profits received based on fluctuations in coal sales prices. The royalty calculation adopted can give a sense of fairness to mining companies because the percentage is adjusted to the selling price of coal to minimize the losses from paying royalty in line with the prevailing price of coal. This system does not burden the investors with royalty payments that have the potential to exceed the potential profits.

2.6. The Appropriate Profit-Sharing System For Coal Mining In Indonesia Using Rational Choice Theory

Rational Choice Theory (RCT) is widely used in constituting a policy. This theory is carried out by studying several aspects of the market including the behavior of consumers,

[70] MRR Schedule 3 Number 5.
[71] MRR Schedule 3
[72] MRR Schedule 4.

producers, and companies [73] as well as the effects on the economy. Furthermore, RCT explains social phenomena by analyzing the consideration [74]. In constituting a policy, the government applies the theory concerning the investment policy where the enactment is closely related to gains and losses [75].

Based on the description, policy implemented in the community must (a) emphasize the importance of opportunity costs in achieving the interests of the community, (b) provide benefits to the community other than through the government hierarchy and bureaucracy, (c) emphasize the importance of customer-oriented criteria to assess public satisfaction with services provided by the government, and (d) underline that waivers based on public interest are more effective than coercive regulations [76]. Subsequently, RCT can be used with an economic analysis of law which presents two basic questions, namely 1) What is the impact of government policy on behavior? and 2) What is the result achieved by the enactment of the policy? [77]. Considering the questions, this research aimed to analyze government policy through economic benefits [78]

The law of demand analyzes the effect of a commodity, where individuals calculate the possibility of substituting the commodity under certain price conditions. Opportunity cost shows that individuals consistently seek options to provide the greatest benefits, including maximizing economic gains. Equilibrium shows a state in which there are no barriers for buyers and sellers to enter and exit the market easily.

Following the development of investment, the government uses a system to provide the greatest benefit to the community. The profit-sharing system implemented provides the maximum benefit under the principle of State Control as mandated by the Indonesian Constitution. The elaboration of the profit-sharing system in Australia showed that there was no perfect system. This was because every system has advantages and disadvantages as well as highly dependent on the quality of the commodity and the state of the market.

In the coal sector, profit-sharing is a royalty system through the imposition of fixed and production premiums.[79] To determine policy related to the system, the government can use RCT connected to the economic analysis of law. The royalty system can provide the most benefits and gives the government a higher position to determine the fee rate charged to mining permit holders. Furthermore, certainty is provided about the details of the costs incurred in the context of conducting mining business activities.

The auction system or open tender to obtain exploration permits used in Australia and is unsuitable to be applied in Indonesia. Meanwhile, the Australian investment sector has a better opportunity to grow since the quality of coal is better than in Indonesia. To adopt this system, the Indonesian government must assess the potential advantages and disadvantages. The open tender system may provide benefits by creating a competitive scheme to obtain the best offers of investment. However, the concept does not limit the possibility of having offers under the expectations set by the government.

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[73] Guido Pincione, "Should Law Professors Teach Public Choice Theory," *Chi.-Kent L. Rev.* 79 (2004): 451.

[74] Frank Lovett, "Rational Choice Theory and Explanation," *Rationality and Society* 18, no. 2 (2006): 238.

[75] Max Neimun and Stephen J Stambough, "Rational Choice Theory and the Evaluation of Public Policy," *Policy Studies Journal* 26, no. 3 (1998): 451.

[76] Neimun and Stambough, 451.

[77] Louis Kaplow and Steven Shavell, "Economics Analysis of Law. Handbook of Public Economics," 1999, 1666.

[78] C Edwin Baker, "Posner's Privacy Mystery and the Failure of Economic Analysis of Law John A. Sibley Lecture: The Right of Privacy," *Georgia Law Review* 12, no. 3 (n.d.): 475–96, https://heinonline.org/HOL/P?h=hein.journals/geolr12&i=491.

[79] Law 3/2020 (n 14), s 128 (4).

Australia imposes rental and royalty fees calculated based on the area of land used for mining and excavated commodities, respectively. This contribution also has the same progressive system as China, which will be good to be adopted by Indonesia. Additionally, the calculation of royalty in Australia uses a rate based on the selling price of coal in Australia multiplied by the number of commodities exploited. This is difficult to apply in Indonesia since the quality of coal in Australia is higher, hence having increased selling price.

3. CONCLUSION

Although the zero-percent coal royalty was intended to spur downstream value-addition and lower emissions, the policy creates serious fiscal and legal risks: it eliminates a pragmatic, enforceable source of state revenue, conflicts with provisions in Minerba 2020 and the Job Creation Law, lacks a clear procedural basis or alternative revenue scheme, and has not demonstrated clear success in increasing value-adding projects—while potentially delaying the shift to renewable energy by privileging more profitable fossil-fuel investment. To balance investment incentives, environmental goals, and state revenue, the government should reinstate transparent profit-sharing mechanisms (e.g., progressive or price-linked royalties adapted to Indonesian coal quality), and use rational-choice and economic analysis of law to design fiscally responsible, investment-friendly regulations that align legal certainty with public interest.

Additionally, the government should adopt a phased, transparent framework that reintroduces calibrated royalties or hybrid profit-sharing linked to price and coal quality with clear sunset clauses tied to renewable-energy milestones; establish firm legal authority and reporting obligations to avoid ambiguity; and create a dedicated just-transition fund (for infrastructure, remediation, and worker retraining) financed by these revenues, together with an independent monitoring body and structured stakeholder consultation to preserve public revenue while maintaining investor certainty and accelerating the shift to low-carbon alternatives.

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