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The Paradox Between Environmental Protection and Zero Percent Coal Royalties in Law Number 11 of 2020 Concerning Job Creation

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Abstract

This article examines the normative paradox between environmental protection and the 0% coal royalty policy in Indonesia's coal downstreaming framework. Coal is a non-renewable natural resource controlled by the State and must be used for the greatest prosperity of the people. However, coal mining creates serious environmental risks, including land degradation, water pollution, mine voids, biodiversity loss, and long-term post-mining restoration burdens. Using normative juridical research, this article analyzes statutory regulations, legal principles, and doctrinal concepts related to state control over natural resources, non-tax state revenue, coal royalties, and environmental responsibility. The findings show that coal royalty has a dual function. It serves as a source of non-tax state revenue and as a regulatory instrument that connects coal extraction with public welfare and ecological accountability. The 0% royalty policy may encourage downstreaming and domestic added value, but it does not remove the environmental impacts of coal extraction. This policy may weaken state revenue, reduce fiscal capacity for environmental restoration, and create unequal distribution of benefits and burdens between mining companies, affected communities, and future generations. The article argues that Indonesia should avoid broad royalty exemptions and adopt a more proportionate model. The ideal legal construction should maintain a minimum royalty, apply conditional and performance-based incentives, require environmental restoration contributions, strengthen data transparency, and improve revenue allocation for mining regions. Such a model would better align coal downstreaming with constitutional mandates, sustainable development, environmental protection, and social justice.

Introduction

Coal production contribution, commonly known as royalty, should not be reduced to 0% even when the policy is justified as an incentive for coal downstreaming. Coal is not an ordinary economic commodity. It is a non-renewable natural resource controlled by the State and must be used for the greatest prosperity of the people, as mandated by Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia. This constitutional mandate places the State not only as a regulator of mining business activities, but also as the guardian of public welfare, ecological balance, and intergenerational justice (Abdussamad et al., 2024; Rahardjo & Budianto, 2026; Rohman & Wibisono, 2025). In the mining sector, this responsibility becomes more urgent because coal extraction creates serious environmental risks, including land degradation, water pollution, air pollution, biodiversity loss, landscape damage, health problems, and social disruption in communities located around mining areas (Padhiary & Kumar, 2024; Kolawole & Iyiola, 2023; Atieku & Segbefia, 2024; Bansah et al., 2024).

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The legal position of coal as a strategic natural resource has been affirmed in Indonesia's mineral and coal mining framework. Law No. 4 of 2009 concerning Mineral and Coal Mining, as amended by Law No. 3 of 2020, recognizes mineral and coal resources as national assets that must support sustainable national development. The same direction appears in environmental law, where sustainable development requires the integration of economic, social, and environmental aspects into development policy (Law No. 32 of 2009, Article 1 number 3) (Sands, 2023; Hariram et al., 2023; Lemos, 2024; Liu et al., 2023). This means that coal governance cannot rely only on production targets, investment growth, and downstream industrialization. It must also include ecological safeguards, post-mining restoration, public participation, and fiscal instruments that can finance environmental recovery (Young et al., 2022; Florkowska & Bryt-Nitarska, 2026; Islam et al., 2024).

The policy of 0% coal royalty creates a fundamental tension within this legal and fiscal framework. Article 128A of Law No. 11 of 2020 concerning Job Creation provides special treatment for coal mining business actors that conduct coal added-value activities through the possibility of a 0% royalty. The Job Creation framework was later restated through Government Regulation in Lieu of Law No. 2 of 2022 and enacted as Law No. 6 of 2023. Its implementing regulation also confirms that holders of coal mining business permit that conduct domestic coal added-value activities may receive certain treatment in the form of a 0% royalty, with considerations related to energy independence and industrial raw material needs (PP No. 25 of 2021). Although this incentive aims to encourage downstreaming and industrial development, it raises serious concerns because royalty is one of the main instruments through which the State captures economic value from the exploitation of non-renewable resources (Adom, 2023; Al Mubarak et al., 2024; Sirant, 2023; Ristyawati et al., 2025; Mahardhani, 2023).

Royalty has two important functions. First, it serves as a component of non-tax state revenue or PNBP, which supports public finance and national development (Law No. 9 of 2018, Article 1 number 1). Second, it works as a regulatory instrument that reflects State control over natural resource extraction. Article 23A of the 1945 Constitution states that taxes and other compulsory levies for State purposes must be regulated by law. In this sense, royalty is not merely a payment imposed on mining companies. It represents the State's fiscal right over coal resources that have been removed from public control and converted into private commercial products. PNBP also has a budgetary and regulatory function, so its design should support public welfare, legal certainty, and environmental protection (Halim, 2014; Ditisrama et al., 2022; Febriani & Nasution, 2025; Wibisono et al., 2026; Hasyim et al., 2026; Wisudawaty & Purnamasari, 2026).

The urgency of maintaining coal royalty becomes stronger when the environmental costs of coal mining are considered. Coal mining changes land structure, removes vegetation, produces mine voids, and creates long-term ecological risks. Studies on coal mining areas in Indonesia show that mining activities can affect soil quality, water systems, agricultural productivity, and local livelihoods (Marganingrum & Noviardi, 2010; Kotijah, 2012; Narendra et al., 2025; Herdiyanti et al., 2026; Fikri et al., 2023). The obligation to provide reclamation and post-mining guarantees does not automatically eliminate State responsibility. Environmental protection and management remain based on the principle of State responsibility, which requires the government to ensure the use of natural resources for public welfare while preventing pollution and environmental damage (Law No. 32 of 2009, Article 2 letter a). PP No. 22 of 2021 also strengthens the framework for environmental protection and management by regulating environmental approval, environmental quality standards, and environmental damage control.

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The problem becomes more complex because Indonesia continues to rely heavily on coal as a source of state revenue and energy supply. The Ministry of Energy and Mineral Resources recorded coal production at around 836 million tons in 2024, showing the large scale of coal extraction in the national economy (ESDM, 2024). In the same period, mineral and coal PNBP reached Rp140.46 trillion, exceeding the target set by the government (Directorate General of Mineral and Coal, 2024). These figures show that the coal sector still plays a major fiscal role. However, this contribution must be read together with the ecological burden created by mining activities. High production without strong environmental recovery funding may transfer hidden costs to local communities and future generations.

Royalty also has a regional dimension. Revenue sharing from natural resources allows local governments to receive part of mining revenue and use it to support regional development, including environmental restoration (Hidayat et al., 2024; Mustofa, 2010; Oneț & Alexandru, 2023; Young et al., 2022). This is important because mining impacts often occur at the local level, while fiscal benefits may flow to the central budget or corporate actors. If coal royalty is reduced to 0%, local governments may lose one fiscal source that can help finance environmental rehabilitation, infrastructure repair, public health responses, and recovery of degraded land. This situation can weaken the link between resource extraction, regional justice, and environmental accountability.

Recent regulatory developments also show that the government recognizes the need to strengthen PNBP from the energy and mineral sector. PP No. 19 of 2025 replaced PP No. 26 of 2022 and regulates types and tariffs of PNBP applicable to the Ministry of Energy and Mineral Resources. The regulation aims to optimize PNBP, strengthen fiscal resilience, support sustainable and just national development, improve institutional functions, provide legal certainty, and protect the public (PP No. 19 of 2025). PP No. 18 of 2025 also amended PP No. 15 of 2022 concerning taxation and/or PNBP treatment in coal mining business activities. These developments indicate that royalty policy should not be separated from fiscal resilience, legal certainty, and public protection (Renigier-Bilozor et al., 2024; Damarani et al., 2025).

Therefore, the 0% royalty incentive for coal downstreaming must be assessed carefully. Downstreaming can create added value, employment, and industrial growth, but it should not remove the State's fiscal capacity to address environmental damage. A fair royalty policy should balance investment incentives, State revenue, environmental restoration, and community protection (Singh, 2025). International mining royalty literature also emphasizes that royalty systems must balance government revenue, investor certainty, administrative simplicity, and risk sharing (Omonbude, 2024). In Indonesia, this balance requires transparency in coal production data, sales value, company costs, and royalty payment compliance. Weak transparency may reduce the effectiveness of royalty collection and create risks of underpayment, manipulation, or unequal treatment among mining business actors (Omonbude, 2024; Mwape et al., 2025; Giusti et al., 2023).

The central issue is not whether downstreaming is important. The issue is whether downstreaming should justify the elimination of royalty from a non-renewable natural resource that creates long-term environmental costs. A 0% royalty policy risks separating economic benefits from ecological responsibility. It may increase private incentives while reducing public fiscal capacity to restore damaged environments. In a welfare state based on Pancasila and the 1945 Constitution, coal governance must ensure that the economic value of coal supports public welfare, environmental sustainability, and justice for affected communities. For that reason, coal royalty should remain an essential instrument in Indonesia's natural resource governance, even when the State promotes downstreaming as part of national industrial policy (Musafa et al., 2026).

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Method

Type of Research

This research uses normative juridical research. This type of research examines law as a system of norms that consists of legal principles, legal doctrines, statutory regulations, and legal concepts relevant to the issue under study. Normative juridical research is appropriate because the focus of this study is not the behavior of legal subjects in society, but the consistency, validity, and suitability of legal norms governing coal production contributions or royalties, environmental protection, and state control over natural resources. The study places law as the central object of analysis and examines whether the policy of 0% coal royalties is compatible with constitutional principles, environmental protection obligations, and the function of non-tax state revenue.

Normative juridical research is also known as doctrinal legal research. It studies legal rules through written legal sources and authoritative legal materials. This research therefore analyzes the paradox between environmental protection and the 0% coal royalty policy by examining the relevant legal norms, especially those contained in the 1945 Constitution of the Republic of Indonesia, mineral and coal mining laws, environmental protection laws, non-tax state revenue laws, and implementing regulations related to coal royalties and mining governance. Through this design, the research seeks to clarify the legal position of coal royalties as a state revenue instrument and as part of the State's responsibility to protect the environment.

Research Approach

This research applies several legal approaches to obtain a comprehensive analysis. The first approach is the statutory approach. This approach examines laws and regulations that govern state control over natural resources, coal mining, environmental protection, non-tax state revenue, and coal downstreaming incentives. The statutory approach is essential because the issue of 0% coal royalties is directly connected to the interpretation and application of positive law, particularly the provisions that allow special treatment for coal mining business actors that conduct added-value activities.

The second approach is the conceptual approach. This approach is used to examine legal concepts that support the analysis, such as state control over natural resources, public welfare, sustainable development, environmental responsibility, non-tax state revenue, royalty, reclamation, post-mining obligations, and environmental restoration. These concepts help explain why coal royalties should not be understood only as a fiscal payment, but also as a legal instrument that connects resource extraction, public interest, and ecological accountability.

The third approach is the analytical approach. This approach is used to assess the internal coherence of legal norms. It helps identify whether the 0% coal royalty policy is consistent with the constitutional mandate that natural resources must be used for the greatest prosperity of the people. It also helps examine whether the policy supports or weakens the State's obligation to prevent environmental damage and restore environmental functions affected by coal mining activities.

The fourth approach is the comparative approach, to the extent needed. This approach may be used to compare Indonesia's coal royalty framework with royalty models applied in other coal-producing jurisdictions. The purpose of comparison is not to transfer foreign rules directly into Indonesian law, but to identify possible policy lessons regarding fair royalty design, environmental cost internalization, fiscal transparency, and state revenue protection.

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Sources of Legal Materials

The data used in this research consist of secondary data. Secondary data are obtained from legal materials that are relevant to the research topic. These legal materials are divided into primary legal materials, secondary legal materials, and tertiary legal materials. This classification is important because normative legal research depends on the quality, hierarchy, and authority of the legal sources used in the analysis.

Primary legal materials consist of binding legal instruments. These include the 1945 Constitution of the Republic of Indonesia, laws on mineral and coal mining, laws on environmental protection and management, laws on non-tax state revenue, laws and regulations related to Job Creation, government regulations, ministerial regulations, and other implementing rules related to coal royalties, reclamation, post-mining obligations, and environmental management. These materials form the main basis for assessing the legal validity and implications of the 0% coal royalty policy.

Secondary legal materials consist of legal writings that explain, interpret, or criticize primary legal materials. These include books, journal articles, research reports, academic papers, legal commentaries, and expert opinions related to mining law, environmental law, natural resource governance, fiscal law, public finance, and sustainable development. Secondary legal materials are used to strengthen the interpretation of legal norms and to support the development of legal arguments.

Tertiary legal materials consist of supporting sources that help clarify legal terms and concepts. These include legal dictionaries, general dictionaries, encyclopedias, official legal databases, and other reference materials. These materials are used when the research requires clarification of technical terms such as royalty, production contribution, non-tax state revenue, reclamation, post-mining, environmental restoration, and downstreaming.

Technique of Legal Material Collection

The legal materials in this research are collected through library research and document study. Library research is conducted by identifying, collecting, and reviewing relevant legal sources from statutory regulations, official government documents, academic books, legal journals, research reports, and other credible publications. Document study is used because the research object consists of written legal norms and legal arguments related to coal royalties and environmental protection.

The collection process begins by identifying the main legal instruments that regulate coal mining, environmental protection, and non-tax state revenue. After that, the research collects secondary materials that discuss the legal, fiscal, and environmental implications of coal mining and royalty policy. The collected materials are then classified according to their legal authority and relevance. Binding legal materials are placed as the primary basis of analysis, while academic sources are used to explain and strengthen the interpretation of those legal provisions.

This research also pays attention to the relationship between one regulation and another. For example, the provisions on coal royalties must be read together with the constitutional rule on state control over natural resources, the legal framework on environmental protection, and the rules on non-tax state revenue. This technique allows the research to identify whether the 0% royalty policy creates harmony or contradiction within the Indonesian legal system.

Technique of Legal Material Analysis

The legal materials are analyzed qualitatively. Qualitative analysis is used because this research does not measure numerical data, but interprets legal norms, legal principles, and legal

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concepts. The analysis focuses on the meaning, purpose, and legal consequences of the rules governing coal royalties and environmental protection. Through this method, the research examines whether the 0% coal royalty policy is consistent with the principles of state responsibility, sustainable development, public welfare, and environmental justice.

The analysis is conducted through legal interpretation. The grammatical interpretation is used to understand the wording of statutory provisions. The systematic interpretation is used to examine the relationship between the rules on coal royalties, environmental protection, mining governance, and state revenue. The teleological interpretation is used to understand the purpose of the law, especially the constitutional purpose of using natural resources for the greatest prosperity of the people. These interpretation techniques help ensure that the analysis does not read legal provisions in isolation but places them within the broader structure of Indonesian law.

The research also uses legal reasoning to assess the normative implications of the 0% royalty policy. The analysis considers whether the elimination of royalties can weaken the State's fiscal capacity to finance environmental restoration. It also examines whether downstreaming incentives can justify the reduction of state revenue from a non-renewable natural resource that creates long-term ecological risks. The reasoning process is directed toward identifying a fairer and more sustainable legal arrangement for coal production contributions in Indonesia.

Research Focus

This research focuses on the legal paradox between environmental protection and the 0% coal royalty policy. The analysis is limited to the legal norms governing coal royalties, state revenue, environmental responsibility, coal downstreaming, and post-mining environmental restoration. The research does not conduct fieldwork, interviews, or statistical testing because the study is designed as normative legal research. Its main concern is the legal consistency and policy rationality of the 0% royalty provision within Indonesia's constitutional and environmental law framework.

The focus of the research is also directed toward the role of royalties as a fiscal and regulatory instrument. Royalties are examined not only as state income, but also as part of the legal mechanism through which the State exercises control over coal resources. This focus is important because coal mining creates economic benefits and environmental burdens at the same time. Therefore, the legal design of coal royalties must reflect both economic development and ecological responsibility.

Validity of Legal Analysis

The validity of the analysis is maintained by using authoritative legal materials and by applying consistent legal interpretation. Primary legal materials are prioritized because they contain binding rules. Secondary legal materials are used to support the interpretation of those rules and to provide doctrinal explanation. Tertiary legal materials are used only to clarify terms and support the accuracy of legal language.

The research also ensures consistency by comparing the 0% royalty policy with higher legal norms, especially the 1945 Constitution. This is important because lower-level regulations and policy incentives must remain consistent with constitutional principles. In the context of coal mining, every legal policy must support public welfare, environmental protection, and sustainable development. A regulation that reduces state revenue from coal extraction must therefore be tested against the State's obligation to protect the environment and ensure the greatest prosperity of the people.

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Result and Discussion

The analysis focuses on the legal relationship between coal royalty, state control over natural resources, non-tax state revenue, and environmental protection in Indonesia. The findings are organized to show how the existing legal framework regulates coal governance, how royalty functions as both a fiscal and regulatory instrument, and how the 0% coal royalty policy creates a normative tension with environmental responsibility. This structure is used to clarify that the problem is not merely an economic issue of downstreaming incentives, but a legal issue concerning public welfare, fiscal justice, environmental restoration, and the constitutional duty of the State to manage natural resources for the greatest prosperity of the people.

Coal Governance and Environmental Protection under the Principle of State Control

The statutory analysis shows that coal governance in Indonesia is rooted in the constitutional principle of state control over natural resources. Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia states that the earth, water, and natural resources contained therein are controlled by the State and used for the greatest prosperity of the people. This constitutional mandate places coal not only as an economic commodity, but also as a strategic national resource that must be managed for public welfare, environmental protection, and intergenerational justice. Coal is limited and non-renewable. Therefore, its exploitation must be accompanied by strict legal responsibility, fiscal accountability, and environmental safeguards.

The principle of state control does not give the State unlimited authority to exploit coal resources. It creates a constitutional obligation to regulate, manage, supervise, and control mining activities so that coal extraction produces public benefit and does not create excessive ecological loss. This obligation is important because coal mining has direct and long-term environmental impacts. Coal extraction may change land structure, remove vegetation, reduce agricultural land, pollute surface water and groundwater, damage landscapes, create mine voids, reduce biodiversity, and disturb the health and livelihood of communities around mining areas (Marganingrum & Noviardi, 2010). In this context, the legal governance of coal must be based on good mining practice and sustainable development.

The Mineral and Coal Mining Law framework confirms that mining activities must consider environmental protection, reclamation, post-mining obligations, and community welfare. Law No. 4 of 2009 concerning Mineral and Coal Mining, as amended by Law No. 3 of 2020, positions mineral and coal resources as national assets that must be managed for sustainable national development. This framework gives mining business actors the right to conduct mining activities, but those rights are followed by obligations. These obligations include administrative compliance, payment of state revenue, reclamation, post-mining management, and environmental protection.

Environmental protection is also strengthened through Law No. 32 of 2009 concerning Environmental Protection and Management. This law establishes several basic principles, including state responsibility, sustainability, precaution, justice, participation, and local wisdom. The principle of state responsibility requires the government to ensure that natural resource utilization improves the quality of life of the people and prevents pollution or environmental damage. This principle is highly relevant to coal mining because environmental impacts may continue after production ends. Mine voids, damaged land, polluted water, and social disruption are not temporary risks. They may become long-term public burdens when companies fail to restore environmental functions.

From the statutory approach, there is a strong normative relationship between coal governance, environmental protection, and public welfare. The Constitution requires natural resources to

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support the greatest prosperity of the people. The Environmental Protection and Management Law require the State to prevent pollution and environmental damage. The Mineral and Coal Mining Law require mining companies to meet legal, technical, fiscal, and environmental obligations. These legal instruments form an integrated structure. This structure confirms that coal extraction cannot be separated from environmental responsibility.

The legal structure also shows that economic development and environmental protection must not be treated as conflicting objectives. Sustainable development requires the integration of economic, social, and environmental interests. Therefore, state policy in the coal sector must not focus only on production, investment, and downstream industrialization. It must also ensure that mining activities do not transfer ecological costs to local communities or future generations. This is the main legal foundation for assessing the 0% coal royalty policy.

Legal Status of Coal Royalty as State Revenue and Regulatory Instrument

Coal royalty has a clear legal function in Indonesia's mining governance. It is not merely a payment made by mining companies. It is a production contribution that reflects the State's right to receive economic value from the extraction of non-renewable natural resources. Mining business actors obtain the right to own coal that has been produced only after fulfilling their legal obligations, including production contributions. This shows that coal remains under state control before it is extracted and transferred into commercial ownership.

In fiscal terms, coal royalty is part of Non-Tax State Revenue or PNBP. Law No. 9 of 2018 concerning Non-Tax State Revenue defines PNBP as state revenue outside tax and grant revenue that is managed through the State Revenue and Expenditure Budget. This means that coal royalty performs a budgetary function because it contributes to public finance. At the same time, it also performs a regulatory function because it allows the State to control the economic value, production volume, and accountability of mining activities. These two functions are inseparable in coal governance.

The royalty obligation is also connected to Article 23A of the 1945 Constitution. This provision states that taxes and other compulsory levies for state purposes must be regulated by law. Coal royalty follows this logic because it is a compulsory payment imposed by law for state purposes. Therefore, the design of coal royalty must reflect legal certainty, fairness, public welfare, and environmental responsibility. A policy that eliminates royalty from coal extraction must be tested against these constitutional and statutory principles.

The current coal royalty system in Indonesia generally uses a value-based royalty or ad valorem royalty model. Under this model, royalty is calculated based on a percentage of the value of coal commodities or the coal selling price determined by government policy. This model is relatively simple and easier to administer because it relies on production and sales data. However, its effectiveness depends on accurate reporting, reliable price references, and strict supervision. If supervision is weak, the self-assessment system may create risks of underreporting, underpayment, and manipulation of sales value or production volume.

From the conceptual approach, coal royalty should be understood as an instrument of distributive justice in natural resource governance. Mining companies receive economic benefits from coal extraction, while the State and affected communities bear environmental and social risks. Royalty becomes one mechanism that connects private profit with public responsibility. This connection is important because coal mining does not only generate revenue. It also creates ecological risks that require public intervention, legal supervision, and environmental recovery.

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Therefore, reducing coal royalty to 0% weakens the legal connection between coal extraction, state revenue, and environmental accountability. The issue is not only the potential loss of income. The deeper problem is the weakening of the State's fiscal and regulatory capacity in managing the environmental consequences of coal mining. This is why coal royalty should remain part of the legal structure of coal governance, even when the government promotes downstreaming.

Normative Mapping of Coal Royalty and Environmental Protection Regulations

The normative mapping of relevant legal instruments shows that coal royalty is closely linked to constitutional control, environmental responsibility, fiscal policy, and regional recovery. The following table summarizes the main legal instruments and their relevance to the research findings.

Table 1. Normative Mapping of Coal Royalty and Environmental Protection Regulations

Legal Instrument	Main Provision	Normative Meaning	Relevance to the Research Finding
Article 33 paragraph (3) of the 1945 Constitution	Natural resources are controlled by the State and used for the greatest prosperity of the people	The State has constitutional authority and responsibility over coal resources	Coal royalty must support public welfare, not only business incentives
Article 23A of the 1945 Constitution	Taxes and other compulsory levies for state purposes must be regulated by law	Production contribution is a legal fiscal instrument	Coal royalty should not be removed without strong public justification
Law No. 32 of 2009 on Environmental Protection and Management	Environmental governance is based on state responsibility, sustainability, precaution, justice, and participation	The State must prevent pollution and environmental damage	Coal mining policy must include environmental restoration financing
Law No. 3 of 2020 on Mineral and Coal Mining	Coal mining must follow mining governance, reclamation, and post-mining obligations	Mining companies must comply with legal, technical, fiscal, and environmental obligations	Reclamation obligations do not eliminate the need for royalty as state revenue
Law No. 9 of 2018 on Non-Tax State Revenue	PNBP is state revenue outside tax and grant revenue	Royalty is part of state fiscal rights	Coal royalty supports state finance and public interest
Law No. 11 of 2020 and Law No. 6 of 2023 on Job Creation	Coal downstreaming may receive certain fiscal treatment	Investment incentives may reduce royalty obligations	The 0% royalty policy creates tension with environmental responsibility
PP No. 55 of 2005 on Balance Funds	Natural resource revenue may be shared with regions	Regional governments receive fiscal support from	Royalty can support environmental

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		natural resource revenue	recovery in mining regions
PP No. 25 of 2021 on Energy and Mineral Resources	Provides implementing rules for mineral and coal governance	Downstreaming is supported through regulatory incentives	Incentives must remain consistent with environmental protection
PP No. 19 of 2025 on PNBP in the Energy and Mineral Sector	Regulates types and tariffs of PNBP in the energy and mineral sector	PNBP optimization supports fiscal resilience and public protection	A 0% royalty must be assessed against the need to optimize state revenue

Source: Author's normative analysis based on statutory approach.

Table 1 shows that coal royalty is not only a fiscal matter. It is connected to state control over natural resources, environmental protection, public welfare, and regional fiscal capacity. The legal instruments above indicate that royalty should remain part of coal governance because coal extraction creates public consequences beyond private business interests. Therefore, a 0% royalty policy must be assessed against higher legal principles, especially state control, state responsibility, and sustainable development.

Environmental Restoration Obligation and Fiscal Responsibility

The legal framework requires mining business actors to carry out reclamation and post-mining obligations. Mining permit holders must provide reclamation guarantee funds and post-mining guarantee funds. These obligations are designed to ensure that mined land can be restored and that mining activities do not leave unmanaged environmental damage. However, the existence of reclamation and post-mining guarantees does not automatically remove the State's responsibility. Environmental protection remains a state responsibility because the State controls natural resources and has statutory duties under environmental law.

The relationship between company responsibility and state responsibility must be understood as complementary. Companies must prevent, reduce, and restore environmental damage caused by their operations. The State must regulate, supervise, enforce compliance, and allocate fiscal resources when environmental recovery requires public intervention. In practice, environmental damage caused by coal mining may exceed the amount of reclamation and post-mining guarantee funds provided by companies. It may also continue after mining activities end. This creates fiscal risk for the State and local governments.

Local governments hold an important position because many mining impacts occur at the regional and local levels. Communities around coal mines face direct consequences, including loss of productive land, water quality degradation, health risks, livelihood disruption, and safety risks from abandoned mine pits. Therefore, regional fiscal capacity becomes relevant to environmental restoration. Revenue Sharing Funds from natural resources can support regional development and strengthen the capacity of local governments to respond to environmental impacts. If royalty revenue is reduced or eliminated, the fiscal space available for environmental recovery may also weaken.

Environmental restoration is not only a technical obligation. It is also a public finance issue. The recovery of degraded land, water resources, and affected communities requires funding, institutional capacity, and long-term monitoring. Coal royalty can support this agenda because it provides a fiscal source linked directly to the extraction of coal resources. The closer the fiscal source is to the environmental risk, the stronger the logic of environmental accountability. This supports the view that royalty should not be eliminated in the coal sector.

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The analysis shows that a 0% royalty policy creates a fiscal and environmental imbalance. On one side, coal mining companies may receive fiscal relief to support downstreaming. On the other side, environmental risks remain. The State may lose a source of revenue while still carrying responsibility for supervision, public protection, and environmental recovery. This imbalance becomes the core of the legal paradox examined in this study.

The Normative Paradox of the 0% Coal Royalty Policy

The Job Creation legal framework introduced a policy that allows special treatment for coal mining business actors that conduct coal added-value activities. This special treatment may include the imposition of a 0% royalty. The policy aims to encourage coal downstreaming, strengthen domestic industrialization, increase added value, support energy security, and stimulate investment. From an economic policy perspective, downstreaming may be part of a national industrial strategy. However, from a legal and environmental perspective, the 0% royalty policy raises a serious normative problem.

The first problem lies in the tension between investment incentives and state control over natural resources. Article 33 paragraph (3) of the 1945 Constitution requires natural resources to be used for the greatest prosperity of the people. This constitutional goal requires the State to capture a fair portion of economic value from coal extraction. When royalty is reduced to 0%, the State may lose one of the most direct fiscal instruments for capturing value from a non-renewable resource. This may weaken the distributive function of natural resource governance.

The second problem lies in the tension between downstreaming and environmental protection. Downstreaming may increase added value, but it does not remove the environmental damage caused by coal extraction. Coal used for downstream activities still comes from mining operations that disturb land, water, air, and ecosystems. Therefore, the legal justification for royalty elimination must be assessed carefully. If the environmental cost remains, the fiscal obligation should not disappear. A more proportionate policy would provide conditional incentives while maintaining a minimum royalty or requiring an equivalent environmental restoration contribution.

The third problem lies in the potential inconsistency between the 0% royalty policy and the principle of state responsibility in environmental law. Law No. 32 of 2009 requires the State to prevent pollution and environmental damage. This obligation requires institutional capacity and fiscal resources. A policy that reduces revenue from coal extraction may weaken the State's capacity to finance environmental governance, especially in mining regions. Therefore, the 0% royalty policy should not be evaluated only as an economic incentive. It must also be evaluated as a policy that affects environmental protection and fiscal risk.

The fourth problem lies in legal certainty and policy coherence. PNBP regulations in the energy and mineral sector show that the government continues to optimize non-tax state revenue to strengthen fiscal resilience, support sustainable development, provide legal certainty, and protect the public. This direction becomes difficult to reconcile with a broad 0% royalty incentive if the incentive is not accompanied by strict conditions, measurable public benefit, transparent reporting, and an alternative mechanism for environmental recovery funding.

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Table 2. Normative Paradox between 0% Coal Royalty and Environmental Protection

Legal Aspect	Expected Legal Orientation	Effect of 0% Coal Royalty	Normative Paradox
State control over natural resources	The State captures economic value from coal extraction for public welfare	The State may lose direct revenue from coal production	State control becomes weaker in fiscal terms
Environmental protection	Mining must prevent and restore environmental damage	Environmental risks remain although royalty is removed	Ecological burden remains while fiscal contribution decreases
Non-tax state revenue	Coal royalty contributes to PNBP and public finance	PNBP from certain coal activities may decline	Fiscal resilience may be reduced
Regional environmental recovery	Mining regions need fiscal support for restoration	Revenue-sharing potential may weaken	Local governments may face limited recovery funds
Public welfare	Coal exploitation must benefit the people	Corporate actors receive incentives, while communities still face mining impacts	Benefits and burdens are not distributed equally
Sustainable development	Economic, social, and environmental interests must be balanced	Downstreaming is prioritized, while restoration funding may decline	Economic growth may dominate environmental sustainability
Legal certainty	Fiscal incentives must be clear, measurable, and accountable	0% royalty may create unequal treatment if criteria are weak	Policy may create uncertainty and potential abuse
Intergenerational justice	Future generations should not inherit environmental damage	Post-mining risks may remain underfunded	Future generations may bear today's ecological costs

Source: Author's normative analysis based on conceptual and analytical approaches.

Table 2 confirms that the main problem is not downstreaming itself. The problem is the legal consequence of eliminating royalty from coal production. Downstreaming may support industrial development, but it does not remove the environmental impacts of coal extraction. The 0% royalty policy creates a paradox because the State still carries responsibility for environmental protection while one of its fiscal instruments from coal production is reduced or removed.

The Paradox between Downstreaming Incentives and Environmental Accountability

The findings show that the 0% coal royalty policy creates a legal paradox because it separates economic incentives from environmental accountability. Downstreaming is designed to increase added value and reduce dependence on raw commodity exports. This policy objective is legitimate. However, the legal problem appears when downstreaming becomes a reason to eliminate royalty from coal extraction. Coal downstreaming does not erase the ecological

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footprint of mining. Land clearing, excavation, waste generation, hydrological disturbance, and post-mining risks remain part of the coal production chain.

A sound legal policy should ensure that every incentive given to mining companies remains consistent with the constitutional mandate of public welfare. The greatest prosperity of the people cannot be measured only through investment growth, employment creation, or industrial output. It must also include clean water, safe land, healthy communities, ecological balance, and protection for future generations. If a royalty incentive increases private economic benefit but reduces fiscal capacity for environmental restoration, then the policy may fail to reflect substantive public welfare.

The paradox also shows the difference between formal legality and normative legitimacy. Formally, the 0% royalty policy may be supported by statutory provisions. However, normative legitimacy requires more than formal authorization. It requires consistency with higher legal principles, especially state control over natural resources, environmental responsibility, sustainability, and justice. A legal policy that is formally valid may still be normatively problematic if it weakens the public function of natural resource governance.

From the perspective of environmental law, the 0% royalty policy should be assessed through the precautionary principle. Coal mining has long-term and sometimes irreversible impacts. When environmental risk is high, the State should avoid policies that reduce its capacity to prevent or repair damage. A royalty exemption may be acceptable only if the State can prove that the exemption produces greater public benefit and does not reduce environmental protection. This proof requires measurable indicators, transparent data, and clear accountability mechanisms.

The policy also creates a distributive justice issue. Mining companies may receive reduced fiscal obligations, while affected communities continue to face environmental impacts. This creates an unequal distribution of benefits and burdens. A fair coal governance system must ensure that communities around mining areas receive protection, restoration, and compensation when their environment and livelihoods are affected. Royalty revenue can support that function. Therefore, eliminating royalty without a substitute mechanism may create injustice in the distribution of mining benefits and costs.

Royalty as an Environmental Fiscal Instrument

Coal royalty should be reconstructed as an environmental fiscal instrument. This means royalty should not be understood only as general state income. It should also be linked to environmental management, reclamation supervision, post-mining recovery, and community protection. Such reconstruction is consistent with the principle that economic activity must internalize environmental costs. When mining creates ecological risks, fiscal instruments should ensure that part of the economic value obtained from mining is returned to protect and restore the environment.

This reconstruction does not mean that all royalty revenue must be directly earmarked for environmental restoration. However, the legal framework should create a clearer connection between coal royalty revenue and environmental responsibility. The government may design a fiscal mechanism that allocates a portion of coal royalty or related PNBP to support mine rehabilitation, environmental monitoring, local government capacity, water quality recovery, public health programs, and restoration of degraded land. This would strengthen the public function of royalty and improve the legitimacy of coal governance.

The current ad valorem royalty system has advantages because it is simple and relatively easy to administer. However, it also has weaknesses because it may not fully reflect production

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costs, profit variation, environmental risk, and company capacity. Mining companies often argue that royalty rates should consider production costs, market conditions, and investment feasibility. This argument may be relevant, but it should not lead to a full exemption. A more balanced solution is to maintain a minimum royalty while allowing conditional adjustments based on transparent and verified economic data.

A profit-based and income-based royalty model may be considered as a complementary mechanism. This model allows royalty obligations to reflect company profitability. When profits are high, the State receives a larger share. When profits are low, the burden may be adjusted. This approach can create a fairer balance between state revenue and business sustainability. However, it requires strong data transparency, reliable audits, and institutional capacity. Without these safeguards, a profit-based system may create opportunities for cost manipulation, transfer pricing, or artificial profit reduction.

For that reason, the ideal policy should not rely on one model only. Indonesia may combine a minimum ad valorem royalty with profit-based additional levies or resource rent tax mechanisms. The minimum royalty ensures that the State always receives revenue from coal extraction. The profit-based or resource rent component ensures that extraordinary profits are shared with the State. This combination can reduce fiscal risk while maintaining investment certainty. It also prevents the extreme outcome of 0% royalty, which disconnects coal extraction from public revenue.

Transparency and Institutional Supervision in Coal Royalty Governance

The effectiveness of any royalty system depends on transparency and supervision. The legal analysis shows that royalty collection is vulnerable when payment depends heavily on company reporting. If production volume, sales price, coal quality, and production costs are reported without strong verification, the State may not receive the correct amount of revenue. This is important in coal mining because royalty calculation depends on technical and commercial data.

A stronger royalty system requires integrated data between mining production, coal transportation, sales, export records, domestic supply obligations, and PNBP payment. Data integration can reduce underreporting and improve compliance. The State should also separate regulatory, supervisory, and revenue collection functions clearly. Such institutional separation can create checks and balances among government bodies. It can also reduce conflicts of interest between agencies that promote mining production and agencies that collect revenue or protect the environment.

Transparency should also include public access to essential information. Communities affected by coal mining need access to information on mining permits, reclamation plans, post-mining guarantees, environmental approvals, royalty payments, and restoration programs. Public participation is not merely a procedural requirement. It is a mechanism for environmental oversight. When affected communities can access information and submit objections, the risk of environmental neglect becomes lower.

Anti-corruption governance is also important. Coal royalty involves large financial flows and complex reporting. Weak oversight may create opportunities for corruption, underpayment, and regulatory capture. Therefore, royalty governance should be connected with corruption prevention, digital reporting, audit mechanisms, and public accountability platforms. This would strengthen legal certainty and improve state revenue from the coal sector.

In this context, the 0% royalty policy may weaken the incentive to build a strong royalty governance system. If downstreaming companies can obtain a full exemption, the State may

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lose both revenue and control over coal data used in added-value activities. A better approach is to keep royalty payable while granting limited, transparent, and performance-based incentives. The incentive should be conditional on measurable outcomes, such as verified domestic value addition, environmental compliance, reclamation performance, community benefit, and full disclosure of coal use.

Legal Reconstruction of an Ideal Coal Royalty Policy in Indonesia

The ideal coal royalty rule for Indonesia should balance four objectives. It must secure state revenue, maintain investment certainty, protect the environment, and ensure justice for affected communities. These objectives should not be treated as separate goals. They must be integrated because coal mining creates economic benefits and environmental burdens at the same time.

Indonesia should avoid a broad 0% royalty policy for coal downstreaming. A full exemption is not proportionate because coal remains a non-renewable resource and its extraction continues to create environmental costs. The State should maintain at least a minimum royalty for every coal extraction activity. This minimum royalty would preserve the fiscal link between coal exploitation and public revenue. It would also affirm that coal remains under state control and that its economic value must benefit the public.

Royalty reduction should be conditional and measurable. The law should require clear criteria before companies receive incentives. These criteria may include verified downstream investment, domestic value-added output, compliance with reclamation and post-mining obligations, absence of serious environmental violations, transparent reporting, and measurable community benefits. Companies that fail to meet these criteria should not receive royalty reductions. Companies that cause environmental damage or fail to conduct reclamation should lose access to incentives.

The legal system should introduce an environmental restoration contribution as a substitute or supplement when royalty incentives are granted. If the State reduces royalty for downstreaming, it should require companies to pay a specific environmental contribution that supports restoration, monitoring, and community protection. This contribution should not be lower than the expected environmental cost. It should be calculated based on mining risk, production volume, disturbed land area, reclamation status, and ecological sensitivity of the mining location.

Indonesia should strengthen data transparency and audit mechanisms. The State should build an integrated royalty data system that connects mining production, sales, coal quality, transport permits, export data, domestic utilization, and PNBP payment. Independent audits should be required for companies receiving incentives. The audit should examine production data, coal use for downstreaming, sales value, environmental compliance, and reclamation performance. Without reliable data, a more complex royalty model such as profit-based royalty may not work effectively.

The government should improve the link between royalty revenue and regional environmental recovery. Mining impacts are often local, while revenue collection is often centralized. For this reason, revenue sharing and environmental budgeting should be strengthened. Local governments in mining regions should receive adequate fiscal support for environmental monitoring, restoration, and public health protection. This does not mean that local governments may use royalty funds without accountability. Instead, environmental spending from mining-related revenue should be transparent, measurable, and subject to public supervision.

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The government may consider a hybrid royalty model. The model may combine minimum ad valorem royalty, profit-based additional levy, and resource rent tax for extraordinary profits. This model is more balanced than a 0% royalty exemption. It allows the State to secure stable revenue while still considering business conditions and investment feasibility. It also ensures that when coal companies obtain high profits, the State and the public receive a fairer share.

Table 3. Legal Reconstruction of an Ideal Coal Royalty Policy in Indonesia

Policy Component	Current Problem	Proposed Legal Reconstruction	Expected Legal Outcome
Royalty rate	0% royalty may eliminate state revenue from certain coal activities	Maintain a minimum royalty for all coal production	The State still receives revenue from non-renewable resource extraction
Downstreaming incentive	Incentive may focus mainly on business growth	Make incentives conditional and performance-based	Incentives are linked to public benefit and legal compliance
Environmental responsibility	Reclamation funds may not fully cover long-term damage	Require environmental restoration contribution for incentive recipients	Environmental cost is internalized into coal governance
Revenue sharing	Mining regions may lack fiscal capacity for recovery	Strengthen allocation of mining-related revenue for local environmental restoration	Local governments can respond better to mining impacts
Data transparency	Self-reporting creates risk of underpayment and manipulation	Integrate production, sales, transport, export, and PNBP payment data	Royalty collection becomes more accurate and accountable
Supervision	Weak monitoring may reduce compliance	Require independent audits for companies receiving incentives	Incentives are controlled through verified compliance
Royalty model	Ad valorem royalty is simple but may not reflect profit variation	Combine minimum ad valorem royalty with profit-based levy or resource rent tax	Royalty becomes fairer for the State and business actors
Public participation	Community oversight may be limited	Open access to permit, royalty, reclamation, and post-mining information	Affected communities can monitor environmental responsibility

Source: Author's normative recommendation based on analytical and comparative approaches.

Table 3 shows that the ideal legal reform is not to reject coal downstreaming. The reform should ensure that downstreaming incentives do not weaken state revenue and environmental protection. A full 0% royalty is not proportionate because coal remains a non-renewable resource and mining activities continue to create environmental risks. A better legal design is to maintain a minimum royalty, apply conditional incentives, strengthen transparency, and require environmental restoration contributions from companies receiving fiscal facilities.

The discussion confirms that the main legal issue is not whether coal downstreaming should be encouraged. The issue is how downstreaming should be encouraged without weakening

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environmental protection and state revenue. A royalty incentive may be legally acceptable if it is limited, transparent, conditional, and balanced with environmental obligations. A full 0% royalty, however, is difficult to justify when coal extraction continues to create ecological damage and when the State remains responsible for environmental restoration.

The ideal legal reconstruction is to reposition coal royalty as part of sustainable natural resource governance. Royalty should function as state revenue, a control instrument, and an environmental accountability mechanism. This reconstruction is more consistent with Article 33 paragraph (3) of the 1945 Constitution, Law No. 32 of 2009, Law No. 9 of 2018, and the principle of sustainable development. It also provides a stronger normative basis for balancing economic development, environmental protection, and public welfare in Indonesia's coal mining sector.

Conclusion

This study concludes that the 0% coal royalty policy creates a normative paradox in Indonesia's natural resource governance because it weakens the fiscal function of state control while environmental risks from coal mining remain. Coal is a non-renewable resource controlled by the State and must be managed for public welfare, environmental sustainability, and intergenerational justice. Therefore, royalty should not be understood only as state revenue, but also as a regulatory and environmental accountability instrument. The elimination of royalty for coal down streaming may support investment and added-value policy, but it does not remove the ecological impacts of coal extraction, including land degradation, water pollution, abandoned mine pits, and post-mining restoration needs. A more proportionate legal policy is to maintain a minimum royalty for all coal production, apply conditional and performance-based incentives, strengthen transparency of production and sales data, require environmental restoration contributions, and improve revenue allocation for mining regions affected by environmental damage. Such a model is more consistent with Article 33 paragraph (3) of the 1945 Constitution, the principle of state responsibility in environmental law, and the objective of sustainable development.

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