



Research Article



Legal Politics toward Natural Energy: Natural Gas Utilization in Indonesia

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Abstract: Indonesia is abundantly blessed with natural resources, including energy, among which natural gas holds a significant position. As of 2017, global demand for natural gas accounted for 23.4% of the total global primary energy demand. The substantial demand for natural gas can be attributed to its reputation as a clean and efficient energy source compared to fossil fuels. Natural gas possesses the potential to become a vital component of the energy mix, driving economic growth. Consequently, effective management of natural gas resources is essential to harness the full potential of oil and gas reserves in Indonesia, thereby maximizing benefits for the well-being of the population. In pursuit of this objective, the Indonesian government has implemented various regulations to provide a legal framework for natural gas management.

Keywords: natural gas utilization; legal politics toward natural energy; management of natural gas resources



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INTRODUCTION

Natural gas, a non-renewable energy resource, plays a crucial role in meeting the world's energy demands. In 2017, it accounted for 23.4% of the global primary energy requirements. As nations strive for development, the need for energy continues to grow. Natural gas is among the essential energy sources that every nation requires, ranking third after coal and petroleum. Its versatile applications include cooking, water heating, industrial uses, and power generation through turbines and generators.¹

Natural gas serves as a bridge between fossil fuels and renewable energy sources. It has facilitated the replacement of coal and fuel oil in the transportation sector and is considered a clean and efficient energy source. Indonesia, therefore, needs to increase its utilization of natural gas energy. Compared to other energy sources, natural gas offers various advantages such as abundance, environmental friendliness, and efficiency in energy conversion, coupled with relatively lower initial investment costs. While coal remains cheaper, it is unsustainable, and other renewable energy sources like wind, solar, and wave energy tend to be more expensive. Given its potential to promote economic growth, natural gas can be developed as part of the energy mix.²

To guide energy development, the Indonesian government has established targets through Presidential Regulation Number 5 of 2006, known as the National Energy Policy (KEN). The target for 2025 includes a 30% share of natural gas consumption,

¹ Andri D. Setiawan and others, 'Evaluating Feed-in Tariff Policies on Enhancing Geothermal Development in Indonesia', *Energy Policy*, 168 (2022) <https://doi.org/10.1016/j.enpol.2022.113164>

² Yanku Kuo and others, 'Fresh Evidence on Environmental Quality Measures Using Natural Resources, Renewable Energy, Non-Renewable Energy and Economic Growth for 10 Asian Nations from CS-ARDL Technique', *Fuel*, 320 (2022) <https://doi.org/10.1016/j.fuel.2022.123914>



33% for coal, 20% for fuels, and the remaining percentage for other renewable energy sources. This goal aims to maximize renewable energy development while reducing reliance on petroleum for domestic energy needs. Indonesia holds 1.5% of the world's total natural gas reserves. As of January 1, 2018, the country's gas reserves stood at 135.55 TSCF (Trillion Standard Cubic Feet), including proven reserves (P1) of 99.02 TSCF, probable reserves (P2) of 21.26 TSCF, and possible reserves (P3) of 18.23 TSCF. P1 represents economically viable and drilled reserves, while P2 and P3 indicate reserves with development potential through further investigation and advanced technology utilization.³

METHOD

This research utilizes a descriptive method to examine the legal issues concerning the management of natural gas in Indonesia. The descriptive method is chosen to provide a comprehensive description of the current situation and to analyze the legal aspects related to the research topic. The research approach employed is qualitative, allowing for a deeper understanding of the legal framework and its implications. Primary, secondary, and tertiary legal materials serve as the main sources of data, gathered through literature studies. These sources include laws, regulations, and other relevant legal documents. The analysis of the legal issues involves an in-depth examination of the legal provisions, their interpretations, and their practical implementation. Furthermore, comparative analysis and case studies are employed to enrich the understanding of the subject matter. The descriptive method used in this research aims to provide readers with a clear understanding of the legal issues surrounding natural gas management in Indonesia, drawing upon the specified methodological approach, data sources, and analysis techniques.

RESULT AND DISCUSSION

Political Development of Oil and Gas Law in Indonesia

The philosophical foundation for the development of oil and natural gas law in Indonesia can be found in Article 33 of the 1945 Constitution (UUD 1945). This constitutional provision holds significant importance as it establishes the framework for the political and legal aspects of oil and natural gas in Indonesia. According to the 1945 Constitution, all statutory regulations must align with the materials contained within it, ensuring consistency and coherence in the legal system.⁴ The 1945 Constitution serves as a guiding document, determining the overall direction, content, and form of the laws implemented in Indonesia. In 2001, amendments were made to Article 33, resulting in the addition of two articles and a new chapter titled "National Economy and Social Welfare," which consists of five paragraphs and is located in CHAPTER XIV of the Body of the 1945 Constitution. These amendments further solidify the constitutional basis for the regulation of oil and natural gas in Indonesia.⁵

³ Lego Karjoko and others, 'Indonesia's Sustainable Development Goals Resolving Waste Problem: Informal to Formal Policy', *International Journal of Sustainable Development and Planning*, 17.2 (2022), 649–58 <https://doi.org/10.18280/ijstdp.170230>

⁴ Aled Williams and Philippe Le Billon, *Corruption, Natural Resources and Development: From Resource Curse to Political Ecology* (Edward Elgar Publishing, 2017).

⁵ Ibid. Thing. 55



According to Subianto Tjakrawerdaja, Oil and gas management based on Article 33 of the 1945 Constitution must contain seven constitutional characteristics, including⁶ (1) The economy aims to achieve common prosperity for all the people, this is explicitly explained in the elucidation of Article 33 of the 1945 Constitution; (2) People's participation in ownership, production processes and enjoying the results. This is in accordance with the formulation contained in Article 33 paragraph (1) and paragraph (4) of the 1945 Constitution; (3) In accordance with the principles of Article 33 paragraph (4) of the 1945 Constitution, namely fair efficiency, the economy needs to be run using a fair market mechanism based on fair competition and the role and authority of the state to intervene in the event of a market failure; (4) The state must be guaranteed, as mandated by Article 33 paragraph (1) and paragraph (3) of the 1945 Constitution, especially in terms of national economic planning, in forming and enforcing the implementation of laws, and in terms of implementing community service and empowerment programs, tax exemptions, granting subsidies and others; (5) State-Owned Enterprises as one of the cornerstones of economic activity control important production branches and affect the lives of many people. This is clearly stated in Article 33 paragraph (2) of the 1945 Constitution; (6) Cooperatives as pillars of the people's economy must be realized in the spirit of togetherness with BUMN and the private sector, as well as people's economic enterprises; and (7) The national economy must be an embodiment of an equal partnership between cooperatives, BUMN, and the private sector. This principle is contained in Article 33 paragraph (1) of the 1945 Constitution.⁷

These constitutional characteristics must become a legal basis for exploiting the potential of oil and gas in Indonesia in order to create maximum benefits for the welfare of the people. The maximum welfare of the people is the goal of every management and use of national natural resources. This goal is seen as an interest that cannot be ignored because apart from being a constitutional mandate, it is also coveted by every citizen and is the responsibility of the state as a consequence of the right to control the country itself.

Potential and Utilization of Natural Gas in Indonesia

Indonesia still has natural gas reserves of 77.29 trillion cubic feet (TSCF) in 2019. The potential for these reserves can still provide a 29-year period of production availability based on the *production-to-reserve ratio*, with production data of 2.64 TSCF. ⁸This potential reserve still does not include non-conventional sources of natural gas such as *coal beds methane* or *shale gas*. However, the value of gas reserves in 2019 has decreased significantly compared to 2018 which reached 135.55 TSCF. ⁹This is due

⁶ Fikry Adzikri, Didik Notosudjono, and Dede Suhendi, 'Strategy for Renewable Energy Development in Indonesia', *Student Online Journal (Jom) in Electrical Engineering*, 1.1 (2017), 7 <http://jom.unpak.ac.id/index.php/electrotechnics/article/view/667>

⁷ Abdul Kadir Jaelani, Resti Dian Luthviati, and Muhammad Jihadul Hayat, 'Permits for the Transfer of Agricultural Land Functions to Non-Agriculture in the Land Purchasing and Sale Process', in *International Conference on Environmental and Energy Policy (ICEEP 2021)* (Atlantis Press, 2021), pp. 216–19 <https://doi.org/10.2991/assehr.k.211014.046>

⁸ Sahat Aditua Fandhitya Silalahi and Ariesy Tri Mauleny, 'UPSTRIC AND DOWNSTREAM GAS POLICIES IN THE FRAMEWORK OF FULFILLING DOMESTIC REQUIREMENTS', *Journal of Economics and Public Policy*, 2.1 (2011), 530.

⁹ Ibid.



to a change in the calculation of the classification of reserves where the status of field reserves that are not cultivated becomes *unrecoverable* and *contingent* and a decrease in the number of reserves due to a recalculation due to new drilling or other supporting data.

As one of the primary energies, natural gas is the target for achieving the targets in national energy policy in Government Regulation Number 79 of 2014 concerning National Energy Policy. The role of natural gas is targeted to reach a minimum of 22% in 2025 and 24% in 2050 to achieve an optimal energy mix target.¹⁰ It can be seen that natural gas is different from other fossil energy sources such as oil and coal which play a reduced role in the target energy mix. The role of natural gas as clean energy is expected to increase from year to year because it is a transition to replace other fossil energy whose role is reduced in the primary energy mix. Apart from its role in the primary energy mix, the use of natural gas in the form of household gas is also the target of the national energy policy. The ratio of household gas use alone reached 85% in 2015.

Natural gas is one of Indonesia's energy export commodities, which in 2019 reached 36%.¹¹ In the national energy policy on the availability of energy for national needs, exports of fossil energy such as natural gas are reduced gradually and set a time limit for starting to stop exports. This is to support the first strategy of the national energy policy, which is to realize that energy resources are not only used as export commodities but as capital for national development. Utilization of natural gas energy sources is prioritized for industry, electricity, households and transportation, giving priority to utilization with the highest added value.¹² In addition, natural gas is included in the energy development priority along with new and renewable energy. Development of natural gas utilization in accordance with the national energy policy for electricity, households, transportation, and industrial raw materials.

In maximizing the utilization of natural gas in Indonesia, the government has issued a number of supporting regulations, including (a) Presidential Regulation No. 40 of 2016 concerning Natural Gas Pricing; (b) Regulation of the President of the Republic of Indonesia Number 6 of 2019 concerning the Supply and Distribution of Natural Gas through Natural Gas Transmission and/or Distribution Networks for Households and Small Customers; (c) Regulation of the Minister of Energy and Mineral Resources No. 6 of 2016 concerning Provisions and Procedures for Determining the Allocation and Utilization and Prices of Natural Gas; (d) Regulation of the Minister of Energy and Mineral Resources No. 8 of 2020 concerning Procedures for Determining Certain Natural Gas Users and Prices in the Industrial Sector; (e) Regulation of the Minister of Energy and Mineral Resources No. 10 of 2020 concerning Utilization of Natural Gas for Power Generation; (f) Regulation of the Minister of Energy and Mineral Resources No. 25 of 2017 concerning the Acceleration of Gas Fuel Utilization for Transportation; (g) Regulation of the Minister of Energy and Mineral Resources No. 32 of 2017 concerning Utilization and Selling Prices of Flare Gas in Upstream Oil and Gas Business Activities; and (h) Regulation of the Minister of Energy and Mineral Resources No. 14

¹⁰ Wibowo and Windarta. Op. cit.

¹¹ PertaminaGas, 'Viewing Indonesia's Natural Gas Wealth as One of the Foundations of the Indonesian Society's Energy Needs', 2020 <Viewing Indonesia's Natural Gas Wealth as One of the Foundations of the Indonesian Society's Energy Needs>

¹² Wiguna, Koestoer, and Indra. Op. cit.



of 2019 concerning Selling Prices of Natural Gas through Pipes in Downstream Oil and Gas Business Activities.

CONCLUSION

Indonesia possesses substantial potential for utilizing natural gas as a predominant energy source. Energy plays a crucial role in enhancing the welfare of society, necessitating the government's proactive utilization of Indonesia's natural gas resources. In accordance with the provisions of Article 33 of the 1945 Constitution, the government has taken various initiatives to optimize the potential of natural gas. Adherence to the constitutional principles ensures that the utilization of natural gas benefits the maximum number of individuals, aligning with the constitutional mandates.

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