

THE IDEAL CONCEPT OF ENERGY CONTROL IN INDONESIA FROM THE ECONOMIC CONSTITUTION PERSPECTIVE

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Abstract

Indonesia's energy transition trends are faced with many challenges and require support in several life sectors. Thus, the pledge of legal certainty and justice through the policies and legal arrangements has become a crucial factor. The present research employed normative legal research with a statutory, historical, and conceptual approach. The purpose of the research was to examine the regulation about energy control in Indonesia all this time and the prospects to regulate energy development from the economic constitution perspective. This study uses a normative juridical method with statutory, historical and conceptual approaches. The results had indicated that such a perspective became an ideal concept to be a basis, reference, and control to the energy regulation in the future. The economic constitution also implied that the economy was built as a shared effort referred to the principle of kinship. Consequently, each of the energy development elements, i.e., policy, management, regulation, and supervision had to be carefully measured for the sake of human's prosperity. The development and use of renewable energy as the core energy source were strongly consistent with the actualization of economic welfare and safety among the people, which remarked the key to indicating the existence of the economic constitution.

Keywords: *Concept; Economic; Energy.*

A. INTRODUCTION

Energy plays a significant role in support of humans' life. It connects economic growth, social welfare, and environmental conditions.¹ For that

1 United Nations General Assembly Declares 2014–24 Decade of Sustainable Energy for All, Press Release, GA/11333 EN/274, 21 December 2012, in Imam Mulyana, Indonesia's

reason, all of the countries over the universe need to set good plans, management, and procedures to use energy based on the existing categories. In some developed and big countries, the energy demand is extremely high – either the fossil-generated or the renewable one. Therefore, with the national energy demand raising, the availability of energy in the country is supposed to be high.²

Basically, energy is an element acquired from nature to fulfill the needs of living creatures, mainly humans, to carry over their activities. The use of energy is to help humans preserve their existence and elevate their social welfare and prosperity.³ The venture is in line with The Constitution of Indonesia, affirmed in Article 33 Verse (3) of the 1945 Constitution, that “The land, the waters, and the natural resources contained therein are controlled by the state and used for the greatest prosperity of the people”.⁴

The natural resources include the whole resources that exist and are manageable to be energy, which is referred to a certain ability to work and generate the other kinds of energy by itself. According to the national constitution and its real practice, the natural sources in Indonesia are categorized into two: non-renewable and renewable.⁵ The former constitutes any of the energy sources generated from non-renewable elements, meaning that the energy cannot stand massive exploitation, e.g., oil, gas, and coal. Meanwhile, the latter is referred to any energy sources that can relatively bear up the repeated use as long as it is well managed, e.g., geothermal power, wind power, bioenergy power, and solar power.⁶

Furthermore, the energy used in Indonesia is still dominantly fossil-generated, especially oil and coal. Unless no new energy sources can be significantly found until 2046, it can be assured that Indonesia will probably suffer from an energy deficit. It means that the obtainability of energy in Indonesia cannot sustain the energy demand that is getting higher day by day. This kind of phenomenon happens due to several factors, such as the decrease of energy production and depletion of the reserved energy sources in Indonesia, year to year.⁷ Thus, the use of non-renewable and renewable energy must receive serious attention from the Indonesian government, not

Regulation and Policy in the Energy Sector: Urgency to Promote Energy Efficiency in Urban Areas, *Journal Yustisia*, Vol. 7 No. 2, May-Agustus 2018, page. 211

- 2 Ahmad Redi, *Hukum Energi: Konsep, Sejarah, Asas, Dan Politik Hukum*, Rajawali Pers, Jakarta, page. 1
- 3 Faisal, Urgensi Pengaturan Pengembangan Energi Terbarukan Sebagai Wujud Mendukung Ketahanan Energi Nasional, *Ensiklopedia Social Review*, Vol. 3 No. 1, Februari 2021, page. 20
- 4 Zen Umar Purba, Kepentingan Negara Dalam Industri Perminyakan Di Indonesia: Hukum Internasional, Konstitusi Dan Globalisasi, *Jurnal Hukum Internasional*, Vol. 4 No. 2, Januari 2007, page. 257–58
- 5 Ketentuan umum Pasal 1 Undang-Undang Nomor 30 Tahun 2007 tentang Energi
- 6 Farah Nabila, Menjaga Kedaulatan Energi Dengan Reformasi Kebijakan Diversifikasi Sumber Daya Energi, *Jurnal Hukum Dan Pembangunan*, Vol. 4, No. 1, Januari-Maret 2016, page. 149
- 7 Maryuni Sutikono, *Ekonomi Sumber Daya Alam*, Badan Penerbit Fakultas Ekonomi Universitas Brawijaya, Malang, 2006, page. 22

only to reduce the massive use of fossil-generated energy but also to create clean and environmentally-friendly energy.⁸

Indonesia is hugely probable to develop new and renewable energy, such as wind power of 950-Megawatt, solar power 11-Gigawatt, water power 75-Gigawatt, biomass power 32-Megawatt, biofuel power 32-Megawatt, and geothermal power 29-Gigawatt as potentially estimated.⁹ Nonetheless, the use of new and renewable energy is still found less effective. In other words, the potentials of Indonesia in managing and using renewable energy remain less than maximum. It is indicated by the gradual growth of renewable energy in contributing to the energy supply as it only gained a 1% increase (6-7%) from 2014 to 2016.¹⁰ This happened due to several factors, i.e., financing, technological support, and the governmental policies and regulations that remained ineffective and uncertain.¹¹

For the long-termed management of energy sector, planning is needed to design a legal form that applies to energy issues and can be integrated with research and development of renewable energy sources. It is solely to guarantee the long-termed obtainability of energy. One of the governmental ventures to succeed in the management of renewable energy is delineated in General Plans of National Energy (RUEN), with the EBT deployment targeted to increase from 11.9% to 23% by 2025. Arriving at the goal is quite challenging as it needs strategic policies and a legal form of renewable energy management. The important aspect to highlight for now is how the regulations on power plants using renewable energy can be set well. In addition, the Government has currently designed and approved for Draft New and Renewable Energy Bill that has currently been a hot issue.

Referring to the economic perspective, energy is needed to carry over economic activities in Indonesia, either for consumptive acts or productive ones performed in the economic sectors.¹² The use of energy elevates dramatically along with the growth of economy and population increase. Adding to that, the massive technological advancement initiates the high energy demand. To be specific, the need of electricity is getting higher. In five years back (2012-2016), the electricity consumption was recorded to

8 Aan Jaelani, Renewable Energy Policy in Indonesia: Scientific Signs of the Qur'an and Its Implementation in Islamic Economics, *Munich Personal RePEc Archive Paper*, Paper No. 83314, Desember 2017, page. 2

9 Kementerian Energi dan Sumber Daya Mineral, Mengarusutamakan EBT Sebagai Energi Masa Depan, *Jurnal Energi: Media Komunikasi Kementerian Energi Dan Sumber Daya Mineral*, Edisi 02, 2016, page. 10

10 Nunuk Febrianingsih, *Tata Kelola Energi Terbaru Di Sektor Ketenagalistrikan Dalam Kerangka Pembangunan Hukum Nasional*, Pusat Analisa dan Evaluasi Hukum Nasional, BPHN Kemenkumham RI, Majalah Hukum Nasional Nomor 2 Tahun 2019, page. 35

11 Agus Sugiyono, Permasalahan dan Kebijakan Energi Saat Ini, in *Prosiding Peluncuran Buku Outlook Energi Indonesia 2014 & Seminar Bersama BPPT Dan BKK-P11*, Jakarta, 2015.

12 Elinur, et. al., Perkembangan Konsumsi Dan Penyediaan Energi Dalam Perekonomian Indonesia, *Indonesian Journal of Agricultural Economics (IJE)*, Vol. 2 No. 1, Desember 2010, page. 98.

reach an average increase of 6.7% per year.¹³ The energy management and development now is still a crucial issue for policy making, especially to decide the prospective life of the people.¹⁴ For that reason, the energy control that is now being sustained needs to be preserved and led to the economic constitution goals of Indonesia, especially the people's social welfare.

Discussions on energy control, especially those related to economic constitution, have not received much attention and been researched academically. A topic that is almost close to being reviewed by the Center for Data and Information Technology of the Ministry of Energy and Mineral Resources on "Implementation of National Economic and Energy Policy", this report does not approach the economic constitution approach only at the national policy level. Then the journal written by Muhammad Siddiq Armia "The role of Indonesia Constitutional Court in Protecting Energy Security" this journal does not specifically discuss the economic constitution but rather the practice of constitutional courts in protecting energy security. This article is aimed to provide any information and portrayals about the dynamics of energy control and its ideal concept in Indonesia from the economic constitution perspective. The economic constitution is expected to be effective in the capitalization and management on sustainable energy construction that benefits Indonesian people in the future. Moreover, this article is state-of-the-art and relatively different from previous studies since the analysis of energy control development is carried out on the basis of the economic constitution perspective.

B. RESEARCH METHODS

A doctrinal research method was used in this research, also known as normative legal research. The normative legal research is conducted by examining the statutory regulation, rule of law, legal principles, and doctrines that ascend and are integrated with certain issues to be discussed.¹⁵ Therefore, a statutory, historical, and conceptual approach was applied to explore and analyze energy control in Indonesia from the economic constitution perspective.

Furthermore, the legal sources were obtained from primary legal materials, especially regarding legislation and regulations, that consisted of the legislation, official records or minutes of lawmaking, and verdicts. Meanwhile, secondary legal materials involved the results of previous researches, scientific articles, journals, legal dictionaries, and relevant products persistent with the current research. To collect the data from legal sources, a literature review was conducted. Further, the legal materials were

13 Syamsir Abduh, Pengelolaan Dana Ketahanan Energi, *Jurnal Mineral & Energi, Badan Penelitian Dan Pengembangan Energi Dan Sumber Daya Mineral*, Vol. 12, No. 2, Juni 2016, page. 4

14 Mohammed Galal Abdallah Mostofa, The Impact of Energy Subsidy Reform on Economic Growth in Egypt Over the Period from 2013 to 2020, *International Journal of Energy Economics and Policy*, Vol. 11 Issue 4, 2021, page. 31

15 Zainuddin Ali, *Metode Penelitian Hukum*, Sinar Grafika, Jakarta, 2016, page. 24

processed, and the results were descriptively and analytically analyzed and interpreted to generate new legal prescriptions and argumentations.¹⁶

C. RESULT AND DISCUSSION

1. The Meanings of Economic Constitution in Indonesia

The term 'constitution' can be defined as the highest consensus, agreements, and conventions, or can either be referred to as a social contract in carrying out the state activities. Its formulations can be in the forms of (i) a written and documented legal draft called the Constitution, (ii) a written but not documented draft, with many historical records, and (iii) an unwritten draft but only applied to the administration of the state power.¹⁷

Substantially, the constitution embeds written fundamental values and norms that are applicable for the real practice of the state power administration. The constitution, furthermore, as the highest convention is strongly coercive.¹⁸ The 1945 Constitution as the primary source of Indonesia's constitution has fundamentally ruled out any kinds of state activities.

Meanwhile, Pancasila as the state philosophy has become the foundation to structure the national goals as stated in the opening section of the 1945 Constitution. Protecting all Indonesian people, enriching the life of a nation, participating in carrying out the world order are the national goals persistent with the values of Pancasila. After the independence of Indonesia, a very basic regulation on the state economic system has been added into the constitution, especially in Article 33 Verse (1) of the 1945 Constitution, stating that "The economy shall be organized as a common endeavor based upon the principles of the family system".¹⁹

The 1945 Constitution of Indonesia has ruled out the national economy that is exclusively inserted in Chapter 14 about "The National Economy and Social Welfare". There also denotes some basic conditions of economy and social welfare. Moreover, the 1945 Constitution not only fundamentally organizes the political policies but also does the economic ones. Thus, it can be simply stated that the 1945 Constitution is not just a political document but also an economic one, meaning that it also applies to the economic constitution.²⁰

16 Depri Liber Sonata, Metode Penelitian Hukum Normatif Dan Empiris: Karakteristik Khas Dari Metode Penelitian Hukum, *Fiat Justitia: Jurnal Ilmu Hukum*, Vol. 8, No. 1, Januari-Maret 2014, page. 25–27

17 Jimly Asshiddiqie, *Gagasan Konstitusi Sosial: Institusionalisasi dan Konstitusionalisasi Kehidupan Sosial Masyarakat Madani*, LP3ES, Jakarta, 2014, page. 29

18 Indah Dwi Qurbani & Ilham Dwi Rafiqi, Prospective Green Constitution in New and Renewable Energy Regulation, *Legality: Jurnal Ilmiah Hukum*, Vol. 30, No. 1, 2022, page. 68–87

19 Udiyo Basuki, Hukum, Ekonomi Dan Kesejahteraan: Telaah Yuridis Atas Dinamika Pengaturan Dan Implementasinya Pasal 33 UUD 1945, *Jurnal Al-Mazahib*, Vol. 2, No. 1, Juni 2014, page. 105

20 Jimly Asshiddiqie, *Konstitusi Ekonomi*, Penerbit Buku Kompas, Jakarta, 2010, page. 213

Moreover, the ultimate goal of the economic constitution is to elevate economic and social welfare to relatively optimum points. The pledge of economic welfare is done by ensuring the acknowledgments and declaration of economic rights in the constitution. The insertion of economic conditions in the basic law assures individual freedom as well as defining the limits of freedom in the economic sector. In other words, such a procedure significantly contributes to the formation of a holistic economic system.²¹

A constitution approach in the economic sector is developed due to the high uncertainty that happens to the economy. The uncertainty has something to do with the definition included in the concept of economic system and constitution.²² The uncertainty, according to John Maynard Keynes in his book entitled *The General Theory of Employment, Interest, and Money*, is defined as an aspect that naturally influences incomes, prosperity levels, or degrees of social welfare as the ultimate function of money.²³

According to Timea Drinoczi in research entitled "An introduction to the Economic Constitution(s) in Europe" as cited by Jimly Asshiddiqie, the concept of the economic constitution was originally developed under the economics, and it continued to be included in legal studies, especially regarding the concept of the state constitution. The economic constitution is quite related to the constitutional norms in the economic sector.²⁴ To be specific, the economic constitution is defined as a study of the operation and significance of particular sectors. In addition, it is also referred to as a set of regulations that exist in a community as the fundamental law of the constitution so that the economic constitution is rather relevant to the stable pattern of rules about the structure and its influences on the social economy and interactions.²⁵

The essence of the 1945 Constitution as the economic constitution is to actualize the economic welfare and security of the people. Any regulations that will be designed in describing Article 33 of the 1945 Constitution about the economy are prohibited to contradict the philosophical requirements that, in advance, have been formulated. Moreover, the economic constitution highlights the state policies, including any aspects related to principles or guidelines that lead to the economic policy before being constitutionally developed.²⁶ Therefore, the economic constitution values will become the basis for policymaking as

21 Ibid., page. 64

22 Jimly Asshiddiqie, Memperkenalkan Gagasan Konstitusi Ekonomi, *Jurnal Hukum PRIORIS*, Vol. 3, No. 2, 2013, page. 4

23 Kukuh Fadli Prasetyo, Politik Hukum Di Bidang Ekonomi Dan Pelembagaan Konsepsi Welfare State Di Dalam Undang-Undang Dasar 1945, *Jurnal Konstitusi*, Vol. 9, No. 3, September 2012, page. 500

24 Jimly Asshiddiqie, Memperkenalkan Gagasan., *Op.Cit.*, page. 10

25 Geoffrey Brennan and Alan Hamlin, Constitutional Economics, in *The New Palgrave Dictionary of Economics and The Law*, ed. Peter Newman, Micmillan Press, London, 1998, page. 2

26 Jimly Asshiddiqie, *Konstitusi Keadilan Sosial (Serial Gagasan Konstitusi Sosial Negara Kesejahteraan Indonesia)*, Penerbit Buku Kompas, Jakarta, 2018, page. 5

well as the control over the national economy with all its activities in the energy sectors.

2. The Dynamics of Energy Control in Indonesia

The paradigm of energy control began after Dutch colonialism, and it has been many times changing all this time. Laws that govern any issues of energy in Indonesia are the results of the continuation of the former ones that applied before the independence era. Regulations that governed energy in Indonesia were initially transmitted in the time of Dutch colonialism, specifically *Indische Mijnwet (Staatsblad 1899 No. 214)*.²⁷ In the regulations, there was one that organized mineral and coal, oil, and gas mining. *Indische Mijnwet (Staatsblad 1899 No. 214)* also governed the classification of minerals and mining factories.²⁸ In 1906, the Constitution was amended by the insertion and change of *Mijnordonantie (Mining Ordination)*.²⁹ In the constitution, it was stated that the Government took control over the petroleum and mining licenses, especially for metallic minerals, coals, diamonds, and other precious minerals. Meanwhile, any devalued minerals, i.e., limestones, sands, and clays were organized by the local stakeholders.³⁰

In addition to mining regulations as stipulated in *Indische Minjwet 1899*, the constitution also governed electricity effective from September 13, 1890 by the release of Ordonnance (*Staatblads* of 1890 No. 190) about the requirements of installing and using the electric lightning and power transfer in Indonesia. The ordonnance became the key basis to electricity procurement in Indonesia, initiated by a power company of *Nederlanche Indische Electricitiet Maatschappij (NIM/ a Dutch power company)*. All of the power companies in Dutch era complied with the Ordonnance of September 13, 1890 to carry out the electricity business. Nonetheless, as the time went by, the legal needs turned more complex, and the Ordonnance was modified for several times. The last Ordonnance was ratified on February 8, 1934 (*Staatblad* of 1934 No. 63) and valid until World War I. During Dutch and Japanese colonialism, the control over energy was only limited to the mining of minerals and coal, oil, gas, and electricity.

15 years after the independence, Indonesia began to form two regulations on mining, i.e., the Act No. 37 of 1960 concerning Minerals Mining. The Law annulled *Indische Mijnwet* since the regulations were considered impersistent with the characteristics of Indonesia and national interests at the mining sector.³¹ However, the previous mining rights that were still found in line with *Indische Mijnwet* were conditionally valid, with the stakeholders having to rapidly adapt with the

27 Otong Rosadi, *Pertambangan Dan Kehutanan Dalam Perspektif Cita Hukum Pancasila*, Thafa Media, Yogyakarta, 2012, page. 34

28 Ahmad Redi, *Op.Cit.*, page. 64

29 Ibid., page. 30

30 Sutaryo Sigit, *Sepenggal Sejarah Perkembangan Pertambangan Indonesia*, Penerbit Yayasan Minergy Informasi Indonesia, Jakarta, 2004, page. 99-100

31 Otong Rosadi, *Op.Cit.* page. 39

procedures to meet the stipulated requirements stated in the Act No. 37 of 1960. The grace period would be determined by the Government Regulations, and the rights would be no longer valid when the period was outdated.³²

Besides the mining, the Act No. 44 of 1960 was also ratified concerning Oil and Gas. Since then, a number of regulations were continued; one of which was remarked by the release of the Government Regulation No. 3 of 1961 about the Establishment of Oil Company of Indonesia (Pertamina). The National Company Pertamina's mining business included exploration, exploitation, refining and processing, transporting, and selling. In the end of the reign of President Soekarno, there was still a regulation released, which was the Government Regulation No. 19 of 1965 about the Dissolution of the General Governing Body of the State Power Company and the establishment of the State Power Company (PLN) and the State Gas Company (PGN).

Moreover, in the time of New Order under the reign of President Soeharto, some important laws were ratified, i.e., the Act No. 1 of 1967 concerning Foreign Investment and No. 11 of 1967 about Basic Mining Terms. Both of the constitutions remarked the beginning of the regime of work agreement. The Act No. 11 of 1967 included several terms as follows:

- a. The control over natural sources persistent with Article 33 of the 1945 Constitution, in which natural resources are fully controlled by the state and used for the greatest prosperity of the people;
- b. Mineral processing separated into three strands, strategical, vital and non-strategical;
- c. Mining companies under the authority of the state or the state companies, while the private/foreign companies acting as the contractors of the state companies or State-Owned Enterprises (BUMN).

The authority of running the mining business is granted based upon the mining power, not consensus (as governed in *Indische Mijnwet*) because the consensus has granted the consensus holders with too excessive and powerful rights.³³

Moreover, the Act No. 8 of 1971 was also released, governing Oil and Gas Mining under the State Companies. In this constitution, strategic procedures in the management of oil and gas companies, with all their rights and responsibilities, were also organized. Further, in the electricity sector, the *Ordonnance* of 1890 was still valid (*Staablads* of 1890 No. 190). Following the order, the Government Regulation No. 36 of 1979 concerning Electricity Business was also ratified. Referring to this

32 Ira Fadilla Rohmadanti, Febriansyah Ramadhan, and Ilham Dwi Rafiqi, Disharmony of Domestic Refining Provisions for Mineral and Coal in Indonesian Laws and Regulations, *Pandecta: Jurnal Penelitian Hukum*, Vol. 17, No. 1, 2022, page. 1–17

33 Nike K. Rumokoy, Pelanggaran Hukum Terhadap Penggunaan Minyak Dan Gas Bumi (Migas) Yeng Terkandung Di Dalam Wilayah Hukum Pertambangan Indonesia Oleh Pihak Yang Tidak Berwenang, *Jurnal Hukum Unsrat*, Vol. 22, No. 5, Januari 2016, page. 42–43

Government Regulation, the electricity business was run by the private sectors and cooperation due to the need of huge capital that could not be fully funded by the Government. As a matter of the fact, the Act No. 15 of 1985 concerning Electricity was ratified, and the Ordinance of 1890 was no longer valid. Besides, following the dynamics of post-reformation thoughts to present, the Act No. 11 of 1967 is considered irrelevant with the current political economy the Government would like to run.

The development and change of laws and regulations in oil and gas sectors, with the enactment of the Act No. 22 of 2001, have denoted its importance on the national economy.³⁴ The establishment of the Act No. 22 of 2001 was preceded by the Act No. 8 of 1971 concerning Pertamina that was considered irrelevant with the development of oil and gas mining business.³⁵ In addition, oil and gas investment is also deemed crucial in support of economic growth and state treasury incomes through the paid taxes and royalties that will be distributed for the greatest prosperity of the people.³⁶ In the consideration, the Act No. 22 of 2001 is meant to create oil and gas mining business activities in the sense of independency, transparency, competitiveness, and environmentally-mindedness. In addition, the Law is also to encourage the development of national potentials and roles.³⁷

In 2002, the Indonesian Government together with the House of Representative had designed the Act No. 20 of 2002 regarding the Electricity in the replacement of the Act No. 15 of 1985. The law was meant to legally explain the political trends of the Government upon the electricity. In 2003-2004, a group of Civil Society filed a lawsuit over the Act No. 3 of 2002 concerning the Electricity for a Judicial Review to the Constitutional Court.³⁸ In the last court, specifically when it almost came to the final decision of the Judicial Review case of the Act No. 20 of 2002 (concerning the Electricity), an extraneous proof was discovered. It validated the fact that the reason why the Indonesian Government applied liberalization in the electricity sector was actually persistent with the essence of the constitution. Adding to that, a letter of intent (loi) was issued in the beginning of 1998, with Point 20 mentioning about the liberalization of electricity sector in Indonesia.³⁹ However, the law was

34 Indah Dwi Qurbani, Analisis Perubahan Atas Undang-Undang Nomor 22 Tahun 2001 Tentang Minyak Dan Gas Bumi, *Jurnal Hukum Lingkungan*, Vol. 1, Issue 1, Januari 2014, page. 138

35 Indah Dwi Qurbani, Politik Hukum Pengelolaan Minyak Dan Gas Bumi Di Indonesia, *Jurnal Arena Hukum*, Vol. 6 No. 2, Agustus 2012, page. 118

36 Ibid.

37 Ilham Dwi Rafiqi, Pembaruan Politik Hukum Pembentukan Perundang-Undangan Di Bidang Pengelolaan Sumber Daya Alam Perspektif Hukum Progresif, *Bina Hukum Lingkungan*, Vol. 5, No. 2, 2021, page. 320–21.

38 Febriansyah Ramadhan & Ilham Dwi Rafiqi, Study of Constitutional Court Decisions Cancelling All Norms In The Law, *Legality: Jurnal Ilmiah Hukum*, Vol. 29, No. 2, 2021, page. 232.

39 Paryono, Perkembangan Hukum Energi Ketenagalistrikan Di Indonesia, in Absori, et.al., (ed.), *Hukum Transendental: Pengembangan Dan Penegakan Hukum Di Indonesia* Genta

aborted by the decision of the Constitutional Court with the Number of 001-021-022/PUU-I/2003.

After the law was aborted, the Government designed a new concept of Law to govern the electricity in the replacement of the Act No. 20 of 2002, which was the Act No. 30 of 2009. Alluding to the Law, the provision of electricity was controlled by the state and local government, and its administration was based upon the principles of the regional autonomy, officiated by the State-Owned (BUMN) and Regional-Owned Enterprises (BUMD). Nevertheless, foreign and private, cooperation, and nongovernmental enterprises could still participate at the electricity provision venture.⁴⁰

Moreover, a number of crucial issues rose, and they might hinder the geothermal development as it had not been governed in the Act No. 27 of 2003, such as: cross-sectoral and multidimensional issues especially due to licensing of forest activities; fiscal and non-fiscal incentives for the developers; direct use; roles of the Local Government; decision of the steam selling price; exploration funding; and any institutional issues.⁴¹ Soon after, the Act No. 21 of 2014 concerning the Geotherm was issued to substitute the Act No. 27 of 2003 about the Geotherm. It very much confirmed the political intention of the state in the geothermal development as a nationally-admitted and alternative power resource. In its practice, the mandate of the Law had a strong contact point with the establishment of the national electricity⁴². Through this state-of-the-art legal framework, the geothermal development offered a strong commitment to overcoming the crash program in the establishment of the 10,000-Megawatt power plant at Stage I and II, and of 35,000-Megawatt project. For that reason, the legal framework of the Law was deemed strategic for the energy security and national electricity development.

Referring to Mining, the Act No. 4 of 2009 was ratified, which remarked the invalidation of the Act No. 11 of 1967 as it was considered impersistent with the political trends of economy intended by the Government, especially in mining sectors. Also, it denoted a new era in mining as there were new terms that indicated a renewal on the mineral and coal resource management system. To be specific, the Act No. 4 of 2009 contained the following points as follows:⁴³

Publishing bekerjasama dengan Program Doktor (S3) Ilmu Hukum Sekolah Pascasarjana Universitas Muhammadiyah Surakarta, Yogyakarta, 2018, page. 508

40 Paryono, Politik Hukum Industri Ketenagalistrikan Berbasis Nilai-Nilai Transendental, *Jurnal Law and Justice*, Vol. 3, No. 1, April 2018, page. 34

41 Hariyadi, Optimalisasi Peran Panas Bumi Dalam Kerangka Undang-Undang Panas Bumi, *Jurnal Kajian*, Vol. 20, No. 4, Desember 2015, page. 368

42 Ilham Dwi Rafiqi, Criticisms toward the Job Creation Bill and Ethical Reconstruction of Legislators Based on Prophetic Values, *Legality: Jurnal Ilmiah Hukum*, Vol. 29, No. 1, 2021

43 Paragraf 4 penjelasan Undang-Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral dan Batubara, Lembaran Negara Republik Indonesia Tahun 2009 Nomor 4, Tambahan Lembaran Negara Republik Indonesia Nomor 4959.

- a. Minerals and coals, as non-renewable resources, are controlled by the state, and its development and empowerment are done by the Government and Local Government as enterprise owners;
- b. The Government gives opportunities to any business entities equipped with Indonesian legal entity, cooperation, individuals, and local people to run mineral and coal business in respect of licensing and regional autonomy granted by the Government and/or Local Government based upon their respective powers;
- c. In terms of decentralization and regional autonomy, mineral and coal mining management system is run according to the principles of externality, accountability, and efficiency, involving the Government and Local Government;
- d. Any mining businesses shall provide economic and social benefits to the prosperity of Indonesian people;
- e. The mining businesses shall be effective in accelerating the regional development and encouraging the economic activities of any micro-and macro-businesses that support the development of helping industries for the mining sector;
- f. In order to build a sustainable development, mining businesses shall be done in respect of the principles of environmental-mindedness, transparency, and social participation.

Moreover, in 2020, the revision draft of the Act No. 3 of 2020 about minerals and coals was ratified, in which the law itself had many changes on its terms. The terms were concerned on some aspects, namely the division of authority between the Government and Local Government, licensing, concept of mining legal area, and other issues that reaped pros and cons in the communities. Moreover, in the same year, the Government also ratified the Act No. 11 of 2020 that also governed energy and mineral resources. In fact, the law itself did not have significant changes compared to the Act No. 3 of 2020. The difference only took place at the highlight of business actors' interests in the massive investment at mineral and coal mining.⁴⁴

To date, there has been some adjustments in the laws that still apply to the energy sector, such as:

- a. The Act No. 22 of 2001 concerning Oil and Gas;
- b. The Act No. 30 of 2009 concerning Electricity;
- c. The Act No. 21 of 2014 concerning Geotherm;
- d. The Act No. 30 of 2007 concerning Energy;
- e. The Act No. 4 of 2009 concerning Mineral and Coal Mining;
- f. The Act No. 3 of 2020 concerning Changes on the Act No. 4 of 2009 concerning Mineral and Coal Mining;
- g. The Act No. 11 of 2020 concerning Job Creation.

44 Indah Dwi Qurbani dan Muhammad Rafid Zuhdi, Analysis of the Energy and Mineral Source Regulation in the Formulation of Job Creation Law (Omnibus Law), *Administrative and Environmental Law Review*, Vol. 1 No. 2, 2020, page. 85

Conceptually speaking, the policies regarding national energy are deemed complete already. In RPJMN 2015-2019, the actualization of energy security has been designed by the improvement of production and diversification on energy to uplift the resource management system and its added value. Even the infrastructure of the laws and regulations that govern energy has been inserted in the Act No. 30 of 2007 concerning Energy. Still, the Law cannot help Indonesia be prepared for the transition to the future energy development. Moreover, the Law is not yet strategically organized in terms of renewable energy. To date, the Draft Renewable Energy Bill is still in the review by the House of Representatives.

Furthermore, the Draft Bill is intended to give a legal framework concerning policymaking, management, provision, and use of New and Renewable Energy so as to make the implementation more structured and directed, both nationally and locally. The stipulated projection is on the acceleration of EBT development to substitute the use of fossil-generated energy as the major energy used to fulfil the industrial and power plant needs. It means that there is a mandate to turn the Draft EBT Bill as a legal-formal document to explain primary points in an attempt to face with the transition to cleaner energy. However, the draft bill is still substantially problematic as it cannot help Indonesia move to using carbon-free energy. The following table shows the differences between the Law of energy and the Draft EBT Bill:

Table. 1
The Comparison of the Law of Energy and the Draft EBT Bill

No	Substances	The Law of Energy	The Draft EBT Bill
1	General Terms	Containing definitions/general settings, with the Law of Energy 's definition more complex that of the Draft Bill	
2	Principles, Goals, and Scopes	General Settings	General Settings
3	Authority	Officiated by the Government based on laws and regulations	Not explicitly mentioned who is really responsible for the authority, whether the Government solely or together with the Local Government
4	New Energy	The terms about nuclear as new energy have not been explained to the details. It is only stated that nuclear will be set as new energy. This Law governs new energy resources in general.	Energy control over nuclear as new energy exists in details; even it is exclusively organized in Chapter IV, Part 2. Nuclear will be set as the state foundation in the energy transition of Indonesia despite its highly serious risk.
5	Renewable Energy	Some information is described in details, such as: the	Only limited information is mentioned related to the

		descriptions about renewable energy; the provision of the renewable energy in developing, remotest, and countryside areas; the statement of the roles of the Government and Local Government in providing the energy; the statement the enterprises' roles in providing the energy; the permanent form of business; and that individual can obtain the facilities and/or incentives.	renewable energy resources, and no legitimate controls are set as a legal basis for renewable energy development. Instead, the control over the renewable energy resources is converted as the draft bill under the supremacy of the Law. In short, the draft bill cannot be set as the great breakthrough for Indonesia in the case of transition to carbon-free energy.
6	Policies on energy	The controls over general plans of national energy are designed by the Government based on the national policies on energy, involving the Local Government and people's aspiration. In addition, general plans of local energy are governed by the Local Government.	Not set
7	Business Licensing	Not set	Licensing is granted by the Government and/or Local Government to enterprises in the business of new and renewable energy. Further terms shall be decided to be included in the Government Regulations.
8	Government and Local Government Authorities	The arrangements of authority division in the energy sector among the Government, Provincial Government, and Local Government are governed.	Not set
9	Organization	National Energy Council is set, which shall meet the criteria of nationalism, independency, stability, and responsibility for national energy.	Not set
10	Energy Conservation	Special articles are set to exclusively govern the energy conservation that has been shared responsibilities among the Government, Local	Not set

		Government, business actors, and communities.	
11	New and Renewable Energy Prices	The prices are normally set based upon the principles of fair economy and subsidy.	The controls are more complex than the Law of Energy, e.g., the stipulation of electricity selling price generated from renewable energy. The prices of New and Renewable Energy are set by the Government based on the fair economic principles with the consideration of reasonable turnover for the enterprises. In the draft bill, the policies on New and Renewable Energy are made the same, whereas, for now, more serious attention and effective breakthroughs are needed in the renewable energy development so as to accelerate the progress and make it the primary energy source in the future.

3. The Ideal Concept of Energy Control in Indonesia from the Economic Constitution Perspective

Some regulations in the energy sector designed by policymakers are basically aimed at actualizing the greatest prosperity for the people as stated in Paragraph 4 at the Preamble of the 1945 Constitution, referring to "Social Welfare". The regulations govern several such aspects as businesses, training, supervisory, sanctions, state revenues, and other contents that support the actualization of social welfare. Furthermore, some regulations in the energy sector are referred to as guidelines for the whole parties in organizing the life of nation and state. These guidelines, therefore, serve as a social order to run any interests in the energy sector.

The goals of policies on energy in Indonesia are consistent with the 1945 Constitution, specifically on Article 33 Verse (2), that it shall be used for the greatest prosperity of the people. Thus, to meet such a goal, setting targets for qualified public and legal policies is needed to succeed in the establishment of renewable energy projects so that possible obstacles can be potentially tackled. In addition, it is also aimed to ensure that the use of renewable energy does not violate the state goals, e.g., to elevate social welfare and prosperity. Therefore, a legal form for policymaking on the energy issues becomes so vital since it constitutes a guideline to succeed in the development and establishment of renewable energy; by doing so, the administration can be run

effectively as substantial discrepancies of legal perception, technical, and finance remain vanished.⁴⁵

As the time goes by, Indonesia needs to get prepared to keep up with the transition era from fossil fuels to renewable energy. The very basic aspect to highlight is the regulation. It means a lot since any kinds of activities that have been planned and done have to acquire legal certainty, legal protection, and obviously a vision to uplift the economy and social welfare.

In the economic sector, the renewable energy development in Indonesia is still faced with some inhibiting factors. To begin with, the investment cost is fairly expensive due to the rarity of the components so that they must be imported. In addition, costs for maintenance and care have also become the other challenge. The factor that makes fossil-generated energy, especially coal, most attractive to the investors is the price that is relatively cheap and the energy generated that is greater than that of renewable energy. As a consequence, renewable energy is relatively harder to get advanced in this country. Furthermore, the stipulation of the benchmark price on the electric power generated by renewable energy (from the investors) is somewhat high when it is distributed to the State Electricity Company. Subsequently, in order to intensify the electricity construction using renewable energy, consumers pay much expensive unless the Government gives the subsidy to the construction.

Furthermore, the investors tend to get more interested in taking low-risk projects but with big amounts of benefits. Tracing back to the conditions and challenges in a case of renewable energy development, many aspects are needed serious attention and careful consideration from the investors in establishing renewable energy in Indonesia, i.e., equipment prices, technological support, warranties of primary raw materials for power plant (in this case bioenergy). The current state policies are seen so in-conducive by the investors that they are quite disinterested in the investment at the renewable energy sector; one of which is regarding lack of intensiveness for the investors and inconsistent policy dynamics. To investors, policy certainty is a critical factor to attain bank funding and long-termed business protection.

Indeed, Indonesia is sure to still have a great mission to urge carbon-free economic transition through the optimalization and use of renewable energy while limiting the use of fossil-generated energy. Currently, Indonesia is designing the Draft Bill of New and Renewable Energy as a step to prepare for sustainable economy. Philosophically, the creation of regulations on new and renewable energy cannot be separated from the heart of Article 33 of the 1945 Constitution, namely:

a. The economy shall be organized as a common endeavor based upon the principles of the family system;

45 Widjajono Partowidagdo, *Migas Dan Energi Di Indonesia Permasalahan Dan Analisis Kebijakan*, Development Studies Foundation, Bandung, 2009, page. 238

- b. Sectors of production which are important for the country and affect the life of the people shall be under the powers of the State;
- c. The land, the waters, and the natural resources within shall be under the powers of the State and shall be used for the greatest benefit of the people;
- d. The organization of the national economy shall be conducted on the basis of economic democracy upholding the principles of togetherness, efficiency with justice, continuity, environmental perspective, self-sufficiency, and keeping a balance in the progress and unity of the national economy.

Doing the national economic activities and using the energy resources shall be aimed to guarantee the collective interests of the community and to get the greatest benefit for the people, under the powers and controls of the State over the strategical sectors of production (affecting the life of the people).⁴⁶ If the criteria are neglected, therefore, any of Laws cannot precisely legitimate Article 33 of the 1945 Constitution as the legal basis.

Say that renewable energy serves as an important sector of production affecting the life of the people, the utilization of the sector shall involve and be under the powers of the State. Also, the state is supposed to consider the five functions: policy (*beleid*), organization (*bestuursdaad*), control (*regelendaad*), management (*beheersdaad*), and supervisory (*toezichthoudensdaad*). The authority rights owned by the state is basically protection and warranty for the greatest benefit of the people.⁴⁷

In the use of renewable energy, the expected outcomes are not only energy resources that are environmentally-friendly and usable but also the ones that can benefit the national economy development, with the involvement of the Government, State-Owned Enterprises, private sectors, and community⁴⁸. In line with Article 33 Verse (4), the national economy is organized based on economic democracy. The goals of economic democracy are ultimately to guarantee the life of the people and to create social justice, which personifies the state of prosperous society. Referring to the perspective, economic democracy is defined as a kind of democracy that is conceptualized based in the facts about the common perspectives of Indonesia, which typifies collective, non-individual, and non-liberal senses. For that reason, renewable energy is expected to be able to collectively elevate the national economy and to

46 Aisyah Lailiyah, Penggunaan Pasal 33 UUD NRI Tahun 1945 Sebagai Dasar Hukum Mengingat Dalam Undang-Undang (Analisis Terhadap Undang-Undang Nomor 4 Tahun 2008 Tentang Informasi Geospasial; Undang-Undang Nomor 31 Tahun 2009 Tentang Meteorologi, Klimatologi Dan Geofisika, *Jurnal RechtsVinding*, Maret 2017, page. 5

47 Indah Dwi Qurbani, Prinsip Hukum Perimbangan Dana Bagi Hasil Minyak Dan Gas Bumi, *Jurnal Yuridika*, Vol. 9, No. 1, 2014, page. 117

48 Mohamed Yayah Jalloh Nabila Aulia Rahman, Zainal Arifin Mochtar, Ilham Dwi Rafiqi, Legal Politics of Environmental Licensing Governance After Job Creation Law, *Hang Tuah Law Journal*, Vol. 6, No. 2, 2022, page. 123–34.

secure the people from any environmental damages that are getting more massive in this modern era.

The inclusion of the terms "efficiency with justice" in Article 33 Verse (4) of the 1945 Constitution is aimed to make Indonesia's economy more friendly to the target markets, but still in line with the family system asserted in Article 33 Verse (1) of the 1945 Constitution, that "The economy shall be organized as a common endeavor based upon the principles of the family system".⁴⁹ Moreover, the legal consequence of the regulation in the constitution is that any of laws that govern any aspects of the national economy shall be organized based on economic democracy in addition to the concept of "efficiency with justice".⁵⁰ Also, in the creation of the Draft Bill of New and Renewable Energy, any of the crucial aspects shall be based on the legal basis so that the final regulations that are formed do reflect the sense of economic constitution.

The development, use, and transition of conventional energy to the renewable one as the primary resources are deemed relevant to the actualization of economic welfare and security of the people, which upholds the core essence of economic constitution. Reminiscing the inhibiting factors of energy transition, special strategies are needed to elevate the economy, such as:

- a. Running 'feed in tariff' system on the existing renewable energy for the investors, with the help of subsidized cost for the renewable-energy-generated electricity by the Government to the consumers until the basic provision cost is reached, which allows the subsidy of the electricity to get withdrawn;
- b. Enacting carbon-dioxide (CO₂) emission taxes to the fossil-generated power plant companies, as devotion to the state on the world's agreement of emission reduction, and to establish an environmentally-friendly energy development in Indonesia;
- c. Annuling import taxes on renewable energy equipment and encouraging the local equipment by means of tax exemption scheme and direct financial support;
- d. Using other potential resources of renewable energy that can normally be acquired in Indonesia (e.g., solar power, wind power, water power, bioenergy power, and geothermal power), which may be effective in heightening the capacity of the installed power plants, electrification ratio, and gas emission reduction from greenhouses – it

49 Tim Penyusun Naskah Komprehensif Proses dan Hasil Perubahan UUD 1945 (b), *Naskah Komprehensif Perubahan Undang-Undang Dasar Negara Republik Indonesia Tahun 1945: Latar Belakang, Proses Dan Hasil Pembahasan 1999-2002, Buku VII: Keuangan, Perekonomian Nasional, Dan Kesejahteraan Sosial*, Edisi Revisi, Sekretariat Jenderal dan Kepaniteraan Mahkamah Konstitusi, Jakarta, 2010, page. 506-513

50 Adhi Anugroho, Ratih Lestarini, dan Tri Hayati, Analisis Yuridis Terhadap Asas Efisiensi Berkeadilan Berdasarkan Pasal 33 Ayat (4) UUD 1945 Dalam Peraturan Perundang-Undangan Di Bidang Ketenagalistrikan, *Jurnal Hukum & Pembangunan*, Vol. 47, No. 2, 2017, page. 183-210

is due to the building power of power plants that needs increases from 4 to 6 GW/year, and gradually to 12 GW/year.

- e. Providing extra investment costs 20%-30% out of the whole budget in the construction of power plants generated renewable energy, which is aimed at preserving the interest in the renewable energy development in Indonesia.

More than that, in support of the renewable energy development, there are some crucial concepts that must be seriously considered. Firstly, the details of renewable energy indicators must be set as clear as possible. In other words, the key focus and orientation of substituting fossil-generated energy with renewable one in some sectors (i.e., residential, commercial, industrial, and transportation) and regions (i.e., countryside/urban, Java, and non-Java areas) need to be readjusted. Considering the regional conditions that differ one from the others, distinctive models are needed to adjust with the conditions. Secondly, the connection between renewable energy and determining indicators, i.e., availability, technological development and efficiency, obtainability, continuity, and management system, must be defined into details. Thirdly, the interrelatedness between the potentials of renewable energy and its prospective regions shall be described clearly so as to avoid blurry understanding of which kind of renewable energy is going to be used and where it is supposed to be used, and thus, the priority scale will be easily defined. At last, the roles of important parties, i.e., the Government and Local Government in the construction of renewable energy must be set and defined as transparent as possible so that any acts and conducts meet the legal protection.

D. CONCLUSION

According to the aforementioned discussion, it is blatant that energy control in Indonesia has undergone dynamics, especially on the shift regarding energy control regulations that used to be dominantly generated from the legal product after colonialism but now turning to sovereign energy control that has been nationally massive. The real challenge faced by Indonesia is actually not the absence of natural resources, but rather how the use and management of energy can significantly contribute to the social welfare. The energy transition, targeted by the Government, to renewable energy trends needs good supervisory and control, starting from planning, controlling, managing, and other activities that are crucial. The spirit of economic constitution stated in Article 33 of the 1945 Constitution has become an ideal concept to outline and govern energy control in the future. By doing so, the national economy can be constitutionally done for the greatest benefit of the people. In addition, detailed descriptions of economic constitution values can be indicated through special economic strategies and conceptions regarding the energy sector.

BIBLIOGRAPHY

Books:

- Ahmad Redi., 2020, *Hukum Energi: Konsep, Sejarah, Asas, Dan Politik Hukum*, Rajawali Pers, Jakarta;
- Ali, Zainuddin., 2016, *Metode Penelitian Hukum*, Sinar Grafika, Jakarta;
- Agus Sugiyono., 2015, Permasalahan Dan Kebijakan Energi Saat Ini. In *Prosiding Peluncuran Buku Outlook Energi Indonesia 2014 & Seminar Bersama BPPT Dan BKK-PPI*, Jakarta;
- Armia, Muhammad Siddiq., 2018, *Konstitusi Keadilan Sosial (Serial Gagasan Konstitusi Sosial Negara Kesejahteraan Indonesia)*, Penerbit Buku Kompas, Jakarta;
- Asshiddiqie, Jimly., 2014, *Gagasan Konstitusi Sosial: Institusionalisasi Dan Konstitusionalisasi Kehidupan Sosial Masyarakat Madani*, LP3ES, Jakarta;
- . 2010, *Konstitusi Ekonomi.*, Penerbit Buku Kompas, Jakarta;
- . 2018, *Konstitusi Keadilan Sosial (Serial Gagasan Konstitusi Sosial Negara Kesejahteraan Indonesia)*, Penerbit Buku Kompas, Jakarta;
- Hamlin, Geoffrey Brennan and Alan., 1998, Constitutional Economics, In *The New Palgrave Dictionary of Economics and The Law*, edited by Peter Newman, 2. Micmillan Press;
- Maryuani Sutikono., 2006, *Ekonomi Sumber Daya Alam*, Badan Penerbit Fakultas Ekonomi, Universitas Brawijaya, Malang;
- Paryono., 2018, *Perkembangan Hukum Energi Ketenagalistrikan Di Indonesia*, In *Hukum Transendental: Pengembangan Dan Penegakan Hukum Di Indonesia*, Genta Publishing, Yogyakarta, bekerjasama dengan Program Doktor (S3) Ilmu Hukum Sekolah Pascasarjana Universitas Muhammadiyah Surakarta;
- Partowidagdo, Widjajono., 2009, *Migas Dan Energi Di Indonesia Permasalahan Dan Analisis Kebijakan*, Development Studies Foundation, Bandung;
- Rosadi, Otong., 2012, *Pertambangan Dan Kehutanan Dalam Perspektif Cita Hukum Pancasila*, Thafa Media, Yogyakarta;
- Sugiyono, Agus., 2015, *Permasalahan Dan Kebijakan Energi Saat Ini*, In *Prosiding Peluncuran Buku Outlook Energi Indonesia 2014 & Seminar Bersama BPPT Dan BKK-PPI*, Jakarta;
- Sutaryo Sigit., 2004, *Sepenggal Sejarah Perkembangan Pertambangan Indonesia*, Penerbit Yayasan Minergy Informasi Indonesia, Jakarta;
- Sutikono, Maryuani., 2006, *Ekonomi Sumber Daya Alam*, Badan Penerbit Fakultas Ekonomi, Universitas Brawijaya, Malang;

Tim Penyusun Naskah Komprehensif Proses dan Hasil Perubahan UUD 1945 (b), 2010, *Naskah Komprehensif Perubahan Undang-Undang Dasar Negara Republik Indonesia Tahun 1945: Latar Belakang, Proses Dan Hasil Pembahasan 1999-2002, Buku VII: Keuangan, Perekonomian Nasional, Dan Kesejahteraan Sosial*. Edisi Revi. Sekretariat Jenderal dan Kepaniteraan Mahkamah Konstitusi, Jakarta;

Widjajono Partowidagdo., 2009, *Migas Dan Energi Di Indonesia Permasalahan Dan Analisis Kebijakan*, Development Studies Foundation, Bandung;

Journals:

Abduh, Syamsir., Pengelolaan Dana Ketahanan Energ, *Jurnal Mineral & Energi, Badan Penelitian Dan Pengembangan Energi Dan Sumber Daya Mineral*, Vol. 12, No. 2, 2016;

Adhi Anugroho, Ratih Lestarini, dan Tri Hayati., Analisis Yuridis Terhadap Asas Efisiensi Berkeadilan Berdasarkan Pasal 33 Ayat (4) UUD 1945 Dalam Peraturan Perundang-Undangan Di Bidang Ketenagalistrikan, *Jurnal Hukum & Pembangunan*, Vol. 47, No. 2, 2017;

Armia, Muhammad Siddiq., The Role of Indonesian Constitutional Court In Protecting Energy Security, *Jurnal Konstitusi*, Vol. 13, No. 2, 2016;

———., Memperkenalkan Gagasan Konstitusi Ekonomi, *Jurnal Hukum Prioris*, Vol. 3, No. 2, 2013;

Basuki, Udiyo., Hukum, Ekonomi Dan Kesejahteraan: Telaah Yuridis Atas Dinamika Pengaturan Dan Implementasinya Pasal 33 UUD 1945, *Jurnal Al-Mazahib*, Vol. 2, No. 1, 2014;

Elinur, et, al., Perkembangan Konsumsi Dan Penyediaan Energi Dalam Perekonomian Indonesia, *Indonesian Journal of Agricultural Econimics (IJE)*, Vol. 2, No. 1, 2010;

Faisal., Urgensi Pengaturan Pengembangan Energi Terbarukan Sebagai Wujud Mendukung Ketahanan Energi Nasional." *Ensiklopedia Social Review*, Vol. 3, No. 1, 2021;

Febriananingsih, Nunuk., *Tata Kelola Energi Terbarukan Di Sektor Ketenagalistrikan Dalam Kerangka Pembangunan Hukum Nasional*. Pusat Analisa dan Evaluasi Hukum Nasional, BPHN Kemenkumham RI: Majalah Hukum Nasional Nomor 2 Tahun 2019;

Febriansyah Ramadhan, Ilham Dwi Rafiqi., Study of Constitutional Court Decisions Cancelling All Norms In The Law, *Legality: Jurnal Ilmiah Hukum*, Vol. 29, No. 2, 2021;

- Hariyadi., Optimalisasi Peran Panas Bumi Dalam Kerangka Undang-Undang Panas Bumi, *Jurnal Kajian*, Vol. 20, No. 4, 2015;
- Indah Dwi Qurbani., Analisis Perubahan Atas Undang-Undang Nomor 22 Tahun 2001 Tentang Minyak Dan Gas Bumi, *Jurnal Hukum Lingkungan*, Vol. 1, No. 1, 2014;
- ., Politik Hukum Pengelolaan Minyak Dan Gas Bumi Di Indonesia, *Jurnal Arena Hukum*, Vol. 6, No. 2, 2012;
- ., Prinsip Hukum Perimbangan Dana Bagi Hasil Minyak Dan Gas Bumi, *Jurnal Yuridika*, Vol. 9, No. 1, 2014;
- Indah Dwi Qurbani dan Muhammad Rafid Zuhdi., Analysis of the Energy and Mineral Source Regulation in the Formulation of Job Creation Law (Omnibus Law), *Administrative and Environmental Law Review*, Vol. 1, No. 2, 2020;
- Indah Dwi Qurbani, Ilham Dwi Rafiqi., Prospective Green Constitution in New and Renewable Energy Regulation, *Legality: Jurnal Ilmiah Hukum*, Vol. 30, No. 1, 2022;
- Jaelani, Aan., Renewable Energy Policy in Indonesia: Scientific Signs of the Qur'an and Its Implementation in Islamic Economics." *Munich Personal RePEc Archive Paper*, No. 83314, 2017;
- Kementrian Energi dan Sumber Daya Mineral., Mengarusutamakan EBT Sebagai Energi Masa Depan., *Jurnal Energi: Media Komunikasi Kementrian Energi Dan Sumber Daya Mineral*, Vol. 2, 2016;
- Lailiyah, Aisyah., Penggunaan Pasal 33 UUD NRI Tahun 1945 Sebagai Dasar Hukum Mengingat Dalam Undang-Undang (Analisis Terhadap Undang-Undang Nomor 4 Tahun 2008 Tentang Informasi Geospasial; Undang-Undang Nomor 31 Tahun 2009 Tentang Meteorologi, Klimatologi Dan Geofisika, *Jurnal Rechts Vinding*, 2017;
- Mostofa, Mohammed Galal Abdallah, The Impact of Energy Subsidy Reform on Economic Growth in Egypt Over the Period from 2013 to 2020, *International Journal of Energy Economics and Policy*, Vol. 11, No. 4, 2021;
- Mulyana, Imam., Indonesia's Regulation and Policy in the Energy Sector: Urgency to Promote Energy Efficiency in Urban Areas, *Journal Yustisia*, Vol. 7, No. 2, 2018;
- Nabila Aulia Rahman, Zainal Arifin Mochtar, Ilham Dwi Rafiqi, Mohamed Yayah Jalloh, Legal Politics of Environmental Licensing Governance After Job Creation Law, *Hang Tuah Law Journal*, Vol. 6, No. 2, 2022;
- Nabila, Farah., Menjaga Kedaulatan Energi Dengan Reformasi Kebijakan Diversifikasi Sumber Daya Energi, *Jurnal Hukum Dan Pembangunan*, Vol. 4, No. 1, 2016;

- Nike K. Rumokoy., Pelanggaran Hukum Terhadap Penggunaan Minyak Dan Gas Bumi (Migas) Yang Terkandung Di Dalam Wilayah Hukum Pertambangan Indonesia Oleh Pihak Yang Tidak Berwenang, *Jurnal Hukum Unsrat*, Vol. 22, No. 5, 2016;
- ., Politik Hukum Industri Ketenagalistrikan Berbasis Nilai-Nilai Transendental, *Jurnal Law and Justice*, Vol. 3, No. 1, 2018;
- Prasetyo, Kukuh Fadli., Politik Hukum Di Bidang Ekonomi Dan Pelembagaan Konsepsi Welfare State Di Dalam Undang-Undang Dasar 1945, *Jurnal Konstitusi*, Vol. 9, No. 3, 2012;
- Purba, Zen Umar., Kepentingan Negara Dalam Industri Perminyakan Di Indonesia: Hukum Internasional, Konstitusi Dan Globalisasi." *Jurnal Hukum Internasional*, Vol. 4, No. 2, 2007;
- Pusat Data dan Teknologi Informasi ESDM. *Implementasi Kebijakan Ekonomi Dan Energi Nasional*. Jakarta: Sekretariat Jenderal Kementerian Energi dan Sumber Daya Mineral, 2015.
- Rafiqi, Ilham Dwi., Criticisms toward the Job Creation Bill and Ethical Reconstruction of Legislators Based on Prophetic Values." *Legality: Jurnal Ilmiah Hukum*, Vol. 29, No. 1, 2021;
- ., Pembaruan Politik Hukum Pembentukan Perundang-Undangan Di Bidang Pengelolaan Sumber Daya Alam Perspektif Hukum Progresif, *Bina Hukum Lingkungan*, Vol. 5, No. 2, 2021;
- Rohmadanti, Ira Fadilla, Febriansyah Ramadhan, and Ilham Dwi Rafiqi, Disharmony of Domestic Refining Provisions for Mineral and Coal in Indonesian Laws and Regulations, *Pandecta: Jurnal Penelitian Hukum*, Vol. 17, No. 1, 2022;
- Sonata, Depri Liber., Metode Penelitian Hukum Normatif Dan Empiris: Karakteristik Khas Dari Metode Penelitian Hukum, *Fiat Justisia: Jurnal Ilmu Hukum*, Vol. 8, No. 1, 2014.