

PRELIMINARY STUDY OF JURIDICAL ASPECTS OF RENEWABLE ENERGY DRAFT LAW IN INDONESIA: AN ACADEMIC PERSPECTIVES

Rosyid Ridlo Al Hakim^{1*}, Eko Ariyanto¹, Yanuar Zulardiansyah Arief², Aming Sungkowo¹, Trikolos¹

¹ *Department of Electrical Engineering, Faculty of Engineering and Computer Science, Jakarta Global University (JGU), Depok, Indonesia*

² *Department of Electrical and Electronics, Faculty of Engineering, Universiti Malaysia Sarawak (UNIMAS), Sarawak, Malaysia*

* Correspondence: rosyidridlo@student.jgu.ac.id

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Abstract

Energy is an absolute necessity used in the survival of daily human life. The need for electrical energy in Indonesia continues to increase with economic growth and population increase. Indonesia's electricity demand is projected to increase more than seven times to 1,611 TWh in 2050. Through Commission VII of the House of Representatives of the Republic of Indonesia (DPR RI), the Indonesian government is drafting a Renewable Energy (RE) Bill. This rule provided a more detailed and in-depth explanation of the rules in terms of developing New and Renewable Energy (NRE) in Indonesia. This study critically reviews the formal juridical or regulatory aspects of Indonesia's Renewable Energy law (called RUU-EBT). This writing methodology is based on a literature review and data collected from relevant regulations and proposes the conclusion from relevant and expected regulations.

Keywords: *Constitution; Law; Policy; RUU EBT; the House of Representatives.*

Abstrak

Energi merupakan kebutuhan mutlak yang digunakan dalam kelangsungan hidup manusia sehari-hari. Kebutuhan energi listrik di Indonesia terus meningkat sejalan dengan pertumbuhan ekonomi dan pertambahan jumlah penduduk. Kebutuhan listrik Indonesia diproyeksikan meningkat lebih dari 7 kali lipat menjadi 1.611 TWh pada tahun 2050. Pemerintah Indonesia melalui Komisi VII Dewan Perwakilan Rakyat Republik Indonesia (DPR RI) saat ini sedang menyusun RUU Energi Baru dan Terbarukan (EBT). Aturan ini dibuat untuk memberikan penjelasan yang lebih detail dan mendalam tentang aturan dalam hal pengembangan EBT di Indonesia. Kajian ini memberikan tinjauan kritis terhadap aspek yuridis formal atau regulasi dari undang-undang Energi Baru dan Terbarukan (disebut RUU-EBT) di Indonesia. Metodologi penulisan ini didasarkan pada tinjauan pustaka (*review paper*) yang berkaitan dengan tujuan studi ini, serta data yang dikumpulkan dari peraturan

hukum yang relevan dan mengusulkan kesimpulan dari peraturan hukum yang relevan dan diharapkan.

Kata-kata Kunci: *Konstitusi; Hukum; Kebijakan; RUU EBT; DPR RI.*

Introduction

Energy is an absolute necessity used in the survival of daily human life.¹ One of the energies that are widely used is fuel and electricity. Fuel comes from non-renewable energy sources and will run out in time if renewable energy alternatives are not sought. In addition, the need for electrical energy in Indonesia continues to increase with economic growth and population increase. Indonesia's electricity demand is projected to increase more than seven times to 1,611 TWh by 2050.² Besides, other energy sources such as oil-fueled and coal are the highest energy used nationally, as these energies are not renewable or sustainable.³

Meanwhile, electricity production grows by an average of 6% per year. The increase in electricity demand makes electricity demand per capita reach 4,902. kWh in 2050, an increase of almost six times compared to 2016 (846 kWh/capita).⁴ Therefore, Indonesia is an ASEAN country that is included in the waste in electricity use category compared to other ASEAN countries. The important thing is that this electricity is sourced from power plants that utilize non-renewable and renewable energy. As much as 60% of the electricity supply in Indonesia still comes from oil-fueled energy sources.⁵ This condition makes the government make various efforts to meet this efficient energy's needs and anticipate the need for energy used in the future nationally. These efforts include increasing the number of existing power plants, both in the form of conventional energy such as PLTU (steam power plant) and PLTA (hydro electric power plant), as well as from new and renewable energy sources (RE).⁶

¹ Al Hakim et al., "Perancangan Media Interaktif Energi Baru Terbarukan Berbasis Android," in *Seminar Nasional Hasil Riset Dan Pengabdian Ke-III* (2021), 144–150.

² Al Hakim et al., "Analisis Kenaikan Tagihan Listrik Selama Pandemi Covid-19 Berdasarkan Perilaku Konsumtif Energi Listrik di Indonesia," *Jurnal CAFETARLA* 2, no. 1 (2021): 25–35.

³ Saiful Manan, "Energi Matahari, Sumber Energi Alternatif yang Efisien, Handal dan Ramah Lingkungan di Indonesia," *Gema Teknologi*, 2009, 31–35.

⁴ Kementerian ESDM, "Handbook Of Energy & Economic Statistics Of Indonesia 2018 Final Edition," *Ministry of Energy and Mineral Resources* (Jakarta, 2018); Yanuar Zulardiansyah Arief et al., "Tinjauan Aspek Yuridis Dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia," in *Seminar Nasional Energi, Telekomunikasi dan Otomasi (SNETO 2019)*, (2019), 24–33.

⁵ Al Hakim et al., "Analisis Kenaikan Tagihan Listrik Selama Pandemi Covid-19 Berdasarkan Perilaku Konsumtif Energi Listrik di Indonesia," *Jurnal CAFETARLA* 2, no. 1 (2021): 25–35.

⁶ Arief et al., "Tinjauan Aspek Yuridis dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia."

Indonesia is also a country that uses a high value of oil-fueled energy.⁷ The sources of oil-fueled energy were unrenewable and coal-based, respectively, but these energies still existed due to energy consumption nationally.⁸ Renewable energy sources were not stable and in a lower value. Nevertheless, the Indonesian government still increased the value of conversion energy to renewable energy sources through the Ministry of Energy and Mineral Resources.⁹ Besides, the Indonesian government, through Commission VII of the House of Representatives (DPR) of the Republic of Indonesia, is drafting a Renewable Energy (RE) regulation (called *Rancangan Undang-Undang*; RUU) for the next quoted RE Bill. This regulation provided a more detailed and in-depth explanation of the rules regarding developing NRE in Indonesia¹⁰. This RE Bill is part of 248 Bills (RUUs) included in the Medium-Term National Legislation Program (2020-2024).¹¹ According to several experts with academic backgrounds, highlighting the points of the RE Bill that is being drafted, there are still pros and cons to the RE Bill,¹² such as the call from the Indonesian Civil Society Coalition for Clean Energy which hopes that there are articles related to the use of nuclear energy and new fossil-based energy to be removed from this RE Bill.¹³ On the other hand,¹⁴ there are often various controversies in the formation of bills, including the RE Bill, so it is necessary to have views and recommendations from various parties, one of which is from the point of view of academics or researchers.¹⁵

⁷ Kementerian ESDM, "Handbook Of Energy & Economic Statistics Of Indonesia 2018 Final Edition."

⁸ Rosyid Ridlo Al Hakim, "Model Energi Indonesia, Tinjauan Potensi Energi Terbarukan Untuk Ketahanan Energi Di Indonesia: Sebuah Ulasan," *ANDASIH Jurnal Pengabdian Kepada Masyarakat* 1, no. 1 (2020): 11–21.

⁹ KESDM RI, "Dirjen EBTKE: Kami Siap Dukung RUU EBT, Dorong Realisasi Percepatan Energi Bersih," February 22, 2021, <https://ebtke.esdm.go.id/post/2021/02/23/2807/dirjen.ebtke.kami.siap.dukung.ruu.ebt.dorong.realisasi.percepatan.energi.bersih>.

¹⁰ KESDM RI; CNN Indonesia, "RUU EBT Ditargetkan Rampung Dibahas Oktober 2021," January 29, 2021, <https://www.cnnindonesia.com/ekonomi/20210129064108-85-599786/ruu-ebt-ditargetkan-rampung-dibahas-oktober-2021>; ICEL, "Urgensi Pembentukan RUU Energi Baru Terbarukan Dipertanyakan – ICEL," August 21, 2019, <https://icel.or.id/berita/icel-dalam-berita/urgensi-pembentukan-ruu-energi-baru-terbarukan-dipertanyakan/>.

¹¹ Arbain, "Rekomendasi Penyusunan RUU EBT - Open Parliament," OpenParliament.id, November 16, 2020, <https://openparliament.id/fungsi/politic/role-of-parliament/legislative/rekomendasi-terhadap-penyusunan-ruu-energi-baru-dan-terbarukan/>.

¹² Filemon Agung, "Akademisi Menyoroti Poin-Poin Dalam RUU EBT, Khususnya Soal PLTN," Kontan, December 1, 2020, <https://industri.kontan.co.id/news/akademisi-menyoroti-poin-poin-dalam-ruu-ebt-khususnya-soal-pltn>.

¹³ IESR, "Pembahasan Draf RUU EBT: Koalisi Masyarakat Menyerukan Agar DPR Fokus Pada Energi Terbarukan - IESR," September 19, 2020, <https://iesr.or.id/pembahasan-draf-ruu-ebt-koalisi-masyarakat-menyserukan-agar-dpr-fokus-pada-energi-terbarukan>.

¹⁴ Arbain, "Rekomendasi Penyusunan RUU EBT - Open Parliament."

¹⁵ Arie Widiarto, "Pembahasan RUU EBT Terima Masukan Dari Kalangan Akademisi," AyoSemarang.com, February 28, 2019, <https://www.ayosemarang.com/read/2019/02/28/38275/pembahasan-ruu-ebt-terima-masukan-dari-kalangan-akademisi>.

Another relevant study that critically researched several regulations was also expected. The polemic of the proposed Pancasila Ideology Bill (*HIP* Bill) also was discussed.¹⁶ Besides, others studied the Indonesian Law of Information and Transactions (*UU ITE*) critically.¹⁷ In addition, others studied drafting land law in Indonesia (*RUU Pertanahan*).¹⁸ Others studied the new state capital of Indonesia law (*UU IKN*) critically.¹⁹ Besides, related research studied the draft law on land acquisition for development purposes.²⁰ In addition, others studied criticism of the legal principle of *pacta sunt servanda* in the oil and gas cooperation contract clause as an international contract law literacy with a positive and sharia legal perspective in Indonesia.²¹

On the other hand, a critique of Indonesian omnibus law from a tolerant perspective in *kehilafiyah* also was studied.²² Besides, others studied based on sharia law for the criminalism of burning land in Indonesia.²³ However, unfortunately, there are limited studies on the Indonesian RE Bill.

Methods

This study critically reviews the formal juridical or regulatory aspects of Indonesia's Renewable Energy (RE) regulation (RUU) based on academic perspectives. This writing methodology is based on a literature review (review paper) related to the purpose of this paper, as well as data collected from relevant regulations, and proposes the conclusion from relevant and expected regulations.

¹⁶ Ningsih Susilawati, "Polemik Pengusulan Rancangan Undang-Undang Haluan Ideologi Pancasila (RUU HIP)," *Politika: Jurnal Politik Islam* 3, no. 2 (2020): 213–226.

¹⁷ Wahyu Agus Winarno, "Sebuah Kajian Pada Undang-Undang Informasi dan Transaksi Elektronik," *Jurnal Ekonomi Akuntansi Dan Manajemen X*, no. 1 (2011): 43–48.

¹⁸ Yudi Kornelis and Wini Rosalya, "Kajian Hukum Pasal Kontroversial dalam Rancangan Undang-Undang Pertanahan di Indonesia," *Jurnal Pendidikan Kewarganegaraan Undiksha* 9, no. 3 (2021): 812–821.

¹⁹ Clara Amanda Musu et al., "Undang-Undang Ibu Kota Negara Baru: Perdebatan Kecacatan Formil dan Materil pada Aturannya," *IBLAM Law Review* 2, no. 2 (2022): 79–97.

²⁰ Imam Koeswahyono, "Mengkritisi Rancangan Undang-Undang Pengadaan Tanah untuk Kepentingan Pembangunan, Suatu Catatan Kritis," *Jurnal Hukum & Pembangunan* 41, no. 2 (2011): 243–257.

²¹ Indah Cahyani and Endang Samsul Arifin, "Critism of the Legal Principle of Pacta Sunt Servanda in the Clause of the Oil and Gas Cooperation Contract as An International Contract Law Literacy with A Positive and Sharia Legal Perspective," *DE JURE Critical Laws Journal* 2, no. 2 (2021): 28–42.

²² Firman Adi Candra, "Kritisi Omnibus Law dalam Perspektif Toleran dalam Khilafiyah," *Res Justitia: Jurnal Ilmu Hukum* 1, no. 1 (2021): 70–113.

²³ Laila Hasanah, "Perspektif Hukum Pidana Islam Terhadap Tindak Pidana Pembakaran Lahan," *ADLIYA: Jurnal Hukum Dan Kemanusiaan* 12, no. 1 (2018): 85–106.

Results and Discussion

The primary legal or regulatory basis in the Renewable Energy draft law (RE Bill) relating to the critical optimization, development, and utilization of RE in Indonesia is described in the five chapters below.

Chapter I - Chapter V

In CHAPTER I of the RE Bill, general provisions are explained, such as definitions of energy, new energy, renewable energy, new and renewable energy, energy sources, new energy sources, renewable energy sources, non-renewable energy sources, renewable energy portfolio standards, business entities, permanent establishments, business licenses related to energy in general.²⁴ The articles in this section are a re-elaboration as described in Law (called *Undang-Undang; UU*) No. 30 of 2007 on Energy.²⁵

CHAPTER II of the RE Bill discusses the principles, objectives, and scope of new and renewable energy in Indonesia. According to CHAPTER II of this RE Bill, the implementation of RE is based on benefits, efficiency, economic justice, sustainability and sustainability, energy security, energy sovereignty and independence, accessibility, participation, and integration.²⁶ Regarding the use of RE, it is hoped that it must be initiated on a small scale so that it will be able to protect the environment, support sustainable development, and support national energy security;²⁷ this is in line with the points of each article in CHAPTER II of the RE Bill.

CHAPTER III of the RE Bill examines the control of new energy sources and NRE.²⁸ If examined more carefully, Article 5 Paragraph 1 explains that the use of new energy sources and RE must be controlled for the livelihood of the people and controlled by the state and used for the greatest prosperity of the people; this is as stated in the constitution (called *Undang-Undang Dasar; UUD*) Republic of Indonesia 1945 Article 33 paragraphs 2 and 3.²⁹ The hope is that what is stated in Chapter III of the RE Bill is fully utilized and intended for the wider community, not depending on foreign parties.

²⁴ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan (2021).

²⁵ Sekretariat Negara Republik Indonesia, "Undang-Undang No. 30 Tentang Energi," 2007.

²⁶ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

²⁷ Al Hakim, "Model Energi Indonesia, Tinjauan Potensi Energi Terbarukan Untuk Ketahanan Energi Di Indonesia: Sebuah Ulasan."

²⁸ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

²⁹ MKRI, "Undang-Undang Dasar Negara Republik Indonesia 1945" (Lembaran Negara Republik Indonesia, No. 75, 1959, 1959).

CHAPTER IV of the RE Bill discusses new energy sources, namely nuclear.³⁰ One thing that is interesting in this chapter is that it discusses its relation to nuclear energy explicitly, covering: the general meaning of nuclear to development affairs (Article 7), discussion of nuclear power supervisory agencies (Article 8), nuclear-related business entities (Article 9), activities related to nuclear (Article 10), sustainable storage of nuclear waste (Article 11), the establishment of a Nuclear Power Plant Advisory Council (Article 12), nuclear-related licensing and exploitation (Article 13-21), supply and utilization of nuclear energy (Articles 22-25). Article 8 is under the mandate of Law (UU) No. 10 of 1997 concerning Nuclear Energy, namely the establishment of a non-ministerial government agency. Efforts to increase the benefits of nuclear energy are carried out by the National Nuclear Energy Agency (BATAN).³¹ If Article 12 of the RE Bill does occur, it will overlap with the stipulation on Nuclear Power Advisory Council (BAPETEN) by Law (UU) No. 10 of 1997 concerning Nuclear Energy. It may raise dualism or confusion about the main functions of both institutions unless the new law gives a more detailed explanation regarding the mandate of the establishment of the Nuclear Power Advisory Council, as well as what distinguishes it from BAPETEN. As reported from the news portal,³² nuclear development in Indonesia should reflect on Germany, where Germany will gradually stop nuclear use until 2022. This fact needs to be considered in Chapter IV of the RE Bill, which is very concerned about nuclear development in Indonesia.

Law (UU) No. 10, 1997 concerning Nuclear Energy, 10 April 1997, consists of 10 chapters and 48 articles on nuclear energy in Indonesia. Considering that nuclear concerns the life and safety of the community, general considerations need to be increased in the form of a deliberative assembly to consider the aspirations of the community in their view of nuclear power if the construction of a nuclear power plant (PLTN) and providing a sustainable waste site.³³ If seen from this statement, then the existence of CHAPTER IV of the draft RE Bill has fulfilled the establishment of a non-structural and independent institution consisting of experts and community leaders, which is tasked with providing advice and considerations regarding the use of nuclear power (Nuclear Power Plant Consideration Council) and the availability of sustainable waste collection sites from nuclear waste. However, nuclear is not a renewable energy source. Nuclear is categorized only as a new energy source. In other words, if the principle enforced in the national energy policy (KEN) is

³⁰ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

³¹ BAPETEN, "Badan Pengawas Tenaga Nuklir - Profil BAPETEN," 2021, <https://www.bapeten.go.id/berita/profil-bapeten-113414?lang=id>.

³² Agung, "Akademisi Menyoroti Poin-Poin Dalam RUU EBT, Khususnya Soal PLTN."

³³ Arief et al., "Tinjauan Aspek Yuridis Dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia."

sustainability, then nuclear is not under that principle.³⁴ It should also be noted that the operation of nuclear power plants requires more expensive inspections, maintenance, and repairs, which leads to increased costs, forcing more nuclear power plants to be permanently closed.³⁵

CHAPTER V of the RE Bill discusses renewable energy covering renewable energy sources, licensing and exploitation, supply and utilization.³⁶ In this chapter, there is controversy regarding establishing a particular state-owned enterprise (BUMNK). As reported from the news portal,³⁷ if BUMNK has been formed, it is hoped that there will be no more supervisory board, as stated in CHAPTER V of the RE Bill.

Chapter VI – Chapter X

In CHAPTER VI, the RE Bill details environmental management, occupational safety, and health (OSH).³⁸ Interestingly, what is meant by environmental management and OSH is specifically intended for business entities that organize RE, as referred to in CHAPTER V of the RE Bill. It also explained the sanctions imposed by business entities if they did not comply with environmental management and OSH as stated in Article 45 in CHAPTER VI of the RE Bill.

CHAPTER VII of the RE Bill describes RE's research and development (R&D) in Indonesia. In this chapter, the government is required to fulfill all R&D facilities related to RE to create an independent and sustainable national energy industry.³⁹ If this is true, the government's efforts to prioritize R&D in the NRE sector will improve academic quality and research results among universities and professions related to R&D because every level of society must carry out NRE research and development. These actions also create awareness in the community regarding RE.⁴⁰

With the high public awareness of NRE, this will be under KEN's objectives, namely the creation of independence and national energy security. Thus, the preferred energy choice for R&D is, of course, the abundant energy sources available in Indonesia and can be managed by the Indonesian people independently in terms of planning, operation, waste management, research, and development.

³⁴ Benny D Setianto, *Benturan UU Dalam Pendirian PLTN*, 2010; Arief et al., “Tinjauan Aspek Yuridis Dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia.”

³⁵ Arief et al., “Tinjauan Aspek Yuridis Dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia.”

³⁶ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

³⁷ Agung, “Akademisi Menyoroti Poin-Poin Dalam RUU EBT, Khususnya Soal PLTN.”

³⁸ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

³⁹ Sekretariat Negara Republik Indonesia.

⁴⁰ Al Hakim et al., “Perancangan Media Interaktif Energi Baru Terbarukan Berbasis Android.”

Energy sources with fuel that depend on foreign nations, technology originating from abroad, and waste processing of, which is still uncertain, require expertise from foreign nations and hopefully can be a last resort or even not be chosen.⁴¹

CHAPTER VIII of the RE Bill examines the price of NRE, starting from the cost of production, the market index price of biofuels mixed with fuel, distribution costs, processing costs of biofuels, and state subsidies.⁴² This chapter is related to the buying and selling price of electricity originating from renewable sources. Electrical energy comes from power plants that utilize both non-renewable and renewable energy sources.⁴³ This stipulation is important because PLN, as the state-owned enterprise (BUMN), entirely manages electricity in Indonesia.

CHAPTER IX of the RE Bill discusses the provision of incentives by the government concerning business entities operating energy in Indonesia. CHAPTER X The RE Bill discusses the sources of NRE funding in Indonesia.⁴⁴ These two chapters have been explained quite clearly and in detail.

Chapter XI - Chapter XIV

CHAPTER XI of the RE Bill discusses the development and supervision of the implementation of RE in Indonesia.⁴⁵ This chapter is quite detailed. CHAPTER XII of the RE Bill discusses public participation in the implementation of RE in Indonesia.⁴⁶ In this chapter, the government hopes that all levels of society can be involved in RE, either by providing input, filing objections to the implementation of RE regulations or policies, provision, R&D, utilization of RE, and monitoring and evaluating the implementation of RE regulations or policies in Indonesia. According to Al Hakim *et al.*,⁴⁷ the importance of providing knowledge and increasing public awareness of the importance of RE will create national energy independence and security. CHAPTER XIII and CHAPTER XIV of the RE Bill are detailed regarding the transitional and closing provisions of all the rules and policies in this RE Bill.⁴⁸

⁴¹ Arief *et al.*, “Tinjauan Aspek Yuridis Dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia.”

⁴² Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

⁴³ Al Hakim *et al.*, “Analisis Kenaikan Tagihan Listrik Selama Pandemi Covid-19 Berdasarkan Perilaku Konsumtif Energi Listrik Di Indonesia.”

⁴⁴ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

⁴⁵ Sekretariat Negara Republik Indonesia.

⁴⁶ Sekretariat Negara Republik Indonesia.

⁴⁷ Al Hakim *et al.*, “Perancangan Media Interaktif Energi Baru Terbarukan Berbasis Android”; Al Hakim *et al.*, “Analisis Kenaikan Tagihan Listrik Selama Pandemi Covid-19 Berdasarkan Perilaku Konsumtif Energi Listrik Di Indonesia.”

⁴⁸ Sekretariat Negara Republik Indonesia, Rancangan Undang-Undang Republik Indonesia tentang Energi Baru dan Terbarukan.

Discussion

According to Arief,⁴⁹ per the mandate of the Republic of Indonesia Development Direction for 2005-2025, it is necessary to develop energy diversification for coal and gas-based power plants on a limited and medium-term basis so that they can replace the use of fuel oil and in the long term will prioritize renewable energy, especially renewable energy. Bioenergy, geothermal, hydropower, wind, solar, and nuclear power are considered safety factors. With the draft of the RE Bill, it is hoped that it will not completely abandon non-renewable energy sources because it takes time to transition from non-renewable energy sources to renewable energy sources.

On the other hand, the benefits or income obtained from these natural resource groups can be directed towards accelerating economic growth. This acceleration can be done by: investing in other productive sectors, as well as for reclamation, conservation, and strengthening funding in the search for alternative energy sources that serve as bridges, from fossil energy to renewable energy, such as energy that utilizes nuclear and geothermal energy or renewable substitute materials such as biomass, biogas, micro-hydro, solar energy, ocean currents, and environmentally friendly wind power. The development of alternative energy sources is adapted to the community's conditions while considering environmental sustainability.⁵⁰ Considering this aspect, the potential of RE use in Indonesia will remain optimal under the direction of the national energy policy (KEN) as stated in the articles of the RE Bill. However, attention is needed to reclamation, conservation, and the environment because all of this is an inseparable unit.

According to Arief,⁵¹ which refers to the Presidential Regulation of the Republic of Indonesia (Perpres RI) Number 22 of 2017 concerning the General Plan of National Energy (RUEN), which consists of 7 Articles, it is explained that National Energy Management Policy and Strategy, explained to achieve independence and national energy security, energy development priorities are based on the following principles.

First, "Maximizing the use of renewable energy by taking into account the economic level."

The economic level is not only seen from the price but also the impact on other things, including the environment, increased economic activity, and employment. Thus, future renewable energy development must remain a top priority by not only considering the economic aspect alone.

⁴⁹ Arief et al., "Tinjauan Aspek Yuridis Dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia."

⁵⁰ Arief et al.

⁵¹ Arief et al.

The suggestion that nuclear is used as a last resort will be prepared in the road map for the implementation of nuclear power plants by preparing aspects of technology, type of fuel, location, safety, funding, and readiness of human resources, accompanied by a multi-criteria analysis⁵². Compared to nuclear, coal can be a mainstay to support the national energy supply, as stated in the Presidential Regulation of the Republic of Indonesia (Perpres RI) Number 22 of 2017 concerning the Indonesian General Plan of National Energy (RUEN) as follows.

Fourth, "Using coal as the mainstay of national energy supply."

After maximizing the use of renewable energy, minimizing the use of petroleum, and optimizing the utilization of natural gas and new energy, the shortage of domestic demand is met with coal, especially by using clean technology. Indonesia has immense potential for coal resources.

Regarding the business entity proclaimed in the RE Bill, it should be delegated to PLN as a state electricity company of an Indonesian state-owned enterprise (BUMN) engaged in electrical energy management. It would be better for PLN to be fully involved in the implementation of RE in Indonesia because it is closely related to the production, buying, and selling of electricity in this country, rather than the establishment of a business entity or other institution that organizes RE in Indonesia.⁵³ Especially with the increasing development of nuclear power plants as a new energy source in Indonesia.

The business entities referred to in the RE Bill are more directed towards a better investment climate. As reported on the website of the Director-General of the Indonesian Ministry of Energy,⁵⁴ business entities or investors will be involved in NRE auctions and so on as regulated in the RE Bill, especially in the development of nuclear as a new energy in Indonesia. As an alternative, the government should focus more on developing renewable energy instead of new energy (nuclear is one of them). The potential of renewable energy sources in Indonesia is abundant, including solar, water, wind, bioenergy, and geothermal. This policy is vital for the energy transition towards a clean and green energy system and sustainability.⁵⁵

As reported on the IESR,⁵⁶ Wira Dillon, a researcher at the Indonesia Cerah Foundation, explained the reason why nuclear should be removed from the RE Bill because, according to him, the existence of nuclear as a new policy being promoted in the RE Bill, is contrary to the basic principles and objectives

⁵² Arief et al.

⁵³ Agung, "Akademisi Menyoroti Poin-Poin Dalam RUU EBT, Khususnya Soal PLTN."

⁵⁴ KESDM RI, "Dirjen EBTKE: Kami Siap Dukung RUU EBT, Dorong Realisasi Percepatan Energi Bersih."

⁵⁵ IESR, "Pembahasan Draf RUU EBT: Koalisi Masyarakat Menyerukan Agar DPR Fokus Pada Energi Terbarukan - IESR."

⁵⁶ IESR.

of the drafting of the RE Bill, namely the principles of sustainability, resilience, sovereignty, and independence. According to Arief et al.,⁵⁷ PLTN (nuclear power plant) construction costs and the economical price of nuclear power plants tend to be higher compared to other power plants such as PLTU (steam power plant) and PTLG (gases power plant), and to power plants from renewable energy sources such as PLTS (solar power plant) and PLTB (wind power plant). Thus, the urgency of developing nuclear power plants in Indonesia is not significant; this agrees with research⁵⁸ which states that constructing nuclear power plants takes longer and is very expensive.

According to research,⁵⁹ the draft of the RE Bill should focus on fully renewable energy. It is also necessary to make a Renewable Energy Law (called *UU EBT*) that can balance the existence of this RE Bill later. In the latest report, 20 parties provided input on the RE Bill from September to October 2020. The RE Bill that the Indonesian House of Representatives discussed had received input from academics as of 28 February 2019. These inputs can be considered as prioritizing renewable energy compared to new energy. In addition to being environmentally friendly, renewable energy is abundantly available in Indonesia, even being ranked the second largest in the world after the United States in geothermal energy sources.⁶⁰ The draft of this RE Bill hopes to achieve the national energy mix target of 23% by 2025.⁶¹ In other words, there is a need for further studies from the aspect of RE research and development in the RE Bill so that it does not focus only on new energy development; on the other hand, the development of renewable energy has more potential to be processed and managed by the state.⁶²

Conclusion

Critical studies related to the juridical aspects of the New and Renewable Energy (RE) draft-law (RUU) in Indonesia have been presented in this paper. The lack of focus on optimizing renewable energy sources in Indonesia while still including new energy in the rules contained in this RE Bill makes it necessary for further studies from aspects of research and development related to new and renewable energy considering the potential of renewable energy sources which are very abundant in Indonesia—compared to new energy sources. So, based on this study can be conducted that there is a need for more

⁵⁷ Arief et al., “Tinjauan Aspek Yuridis Dan Tekno-Ekonomi Rencana Pembangunan Pembangkit Listrik Tenaga Nuklir (PLTN) Di Indonesia.”

⁵⁸ IESR, “Pembahasan Draf RUU EBT: Koalisi Masyarakat Menyerukan Agar DPR Fokus Pada Energi Terbarukan - IESR.”

⁵⁹ Arbain, “Rekomendasi Penyusunan RUU EBT - Open Parliament.”

⁶⁰ Widiarto, “Pembahasan RUU EBT Terima Masukan Dari Kalangan Akademisi.”

⁶¹ CNN Indonesia, “RUU EBT Ditargetkan Rampung Dibahas Oktober 2021.”

⁶² ICEL, “Urgensi Pembentukan RUU Energi Baru Terbarukan Dipertanyakan – ICEL.”

research and development in the RE Bill so that it does not rely solely on new energy growth; on the other hand, renewable energy development has a more significant potential to be processed and managed by the state.

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