

THE URGENCY OF THE NEWEST RENEWABLE ENERGY LAW IN INTERNATIONAL LAW PERSPECTIVE

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Info Artikel

|Submitted: 28-10-2023

|Revised: 17-11-2023

|Accepted: 19-11-2023

How to cite: Muhamad Haikal Mujamil, Fahmi Fathurrohman, Restu Gusti Monitasari, "The Urgency of the Newest Renewable Energy Law in International Law Perspective", *Tirtayasa Journal of International Law*, Vol. 2 No. 2, (December, 2023)", hlm. 177-186.

ABSTRACT:

The research results indicate that global society's culture desires the use of sustainable energy, as evidenced by numerous international agreements on renewable energy and environmental management. It is important for Indonesia to create a conducive legal framework for the use of sustainable energy and environmental management while fulfilling its obligations as a member of international law. The research problem is that the energy demand in Indonesia is currently increasing due to significant economic growth. The increasing energy demand, on the other hand, requires Indonesia to comply with the ratification of sustainable energy use and environmental management. One of the main obstacles is the lack of strong and consistent regulations. This research uses a normative juridical method with secondary data. Secondary data was collected through searches and literature studies based on primary, secondary, and tertiary legal materials, and qualitative data analysis techniques were used to help researchers understand the phenomena being studied and describe various perspectives descriptively.

Keywords; Sustainable energy; Global society; International agreements.

A. Introduction

Indonesia is one of the countries endowed with abundant renewable energy resources (RE)¹ with a total energy potential of 418 gigawatts, derived from sources such as

¹ Yasir Arafat, 2022, "Potensi dan Tantangan Pengembangan Energi Terbarukan di Indonesia", <https://money.kompas.com/read/2022/05/31/140338526/potensi-dan-tantangan-pengembangan-energi-terbarukan-di-indonesia>, accessed on 7 November 2023.

geothermal, wind, water, and solar energy, in addition to its rich reserves of metallic mineral resources needed to facilitate the transition towards a sustainable green economy.²

As a member of the Group of Twenty (G20) with notable economic growth, ranking third in the second quarter of 2023 among G20 member states according to Trading Economics data, Indonesia's energy demands have grown rapidly in tandem with increased production and consumer consumption.³ This positions Indonesia as a potential major player in the global energy market due to its vast natural resources.

Financial constraints and a lack of technical capacity present significant challenges in the development of renewable energy in Indonesia. In response to these issues, the Indonesian government has introduced several policies and programs to support the development and utilization of renewable energy, including increased investments and the development of supporting infrastructure. However, as noted by Valencia Wijaya, the regulatory framework for renewable energy projects has undergone frequent changes in recent years, making it less attractive to potential investors. This is exemplified by the regulations governing tariffs for Independent Power Producers (IPPs) in the renewable sector.⁴

In addition to regulatory challenges, the current environmentally unfriendly energy consumption practices contribute to environmental alterations. While long-term shifts in climate patterns and intensities have historically been considered natural phenomena,⁵ the current climate change is primarily a result of excessive human energy consumption, leading to a climate crisis. To address this issue, an international convention has been established as the most suitable response to the need for climate change mitigation. The United Nations

² The statement by President Jokowi as quoted by Firman Hidranto, 2022, "Kolaborasi Mewujudkan Ekonomi Hijau", <https://indonesia.go.id/kategori/editorial/4023/kolaborasi-mewujudkan-ekonomi-hijau>, accessed on October 29, 2023.

³ Cindy Mutia Annur, 2023, "Pertumbuhan Ekonomi Indonesia Tertinggi ke-3 di Kelompok G20", <https://databoks.katadata.co.id/datapublish/2023/08/08/pertumbuhan-ekonomi-indonesia-tertinggi-ke-3-di-kelompok-g20>, Accessed on 29 October 2023.

⁴ Valencia Wijaya as quoted by Hukumonline, 2023, "Dari Potensi, Isu, dan Regulasi PLTS Fotovoltaik di Indonesia", <https://www.hukumonline.com/berita/a/dari-potensi--isu--dan-regulasi-plts-fotovoltaik-di-indonesia-lt64777d086d172/>, Accessed on 29 October 2023.

⁵ Sharon Easter Baroleh, Cornelis Dj. Massie, Natalia L. Lengkong, Implementasi Konvensi Internasional Paris Agreement Tentang Mitigasi Perubahan Iklim Di Indonesia", *Lex Privatum*, 2023, p. 1.

Framework Convention on Climate Change (UNFCCC) was created to address the ongoing climate crisis.⁶

Considering the presentation, it is expected that this research will provide a better understanding of the significance of renewable energy legislation in fostering state responsibility and awareness in managing energy resources prudently. Furthermore, it aims to enhance public awareness regarding the necessity of sustainable development and utilization of RE resources to preserve the environment.

B. Research Method

The research method employed in this journal is normative juridical. This method involves an examination of legal principles, legal systematics, the level of legal synchronization, legal history, and comparisons of legal frameworks.⁷ In the context of this journal, the normative juridical research method will be utilized to analyze international legal regulations relevant to the regulation of Renewable Energy Sources (REB) in Indonesia. The data used in this study is of a secondary nature. Secondary data is collected through document retrieval and literature review, drawing from Primary Legal Materials, which include legal regulations, Secondary Legal Materials such as literature books, guidebooks, research findings, assessments, and other references relevant to the study in progress. Tertiary Legal Materials serve as supporting legal materials that strengthen the presented arguments and ideas. Qualitative data analysis techniques are employed to aid the researcher in comprehending the phenomena under investigation and to describe various perspectives descriptively.

C. Discussion

Public policy in the context of legislation has a significant impact on building a sustainable and progressive future. Public policy plays a crucial role in governing and facilitating the development of ecosystems that promote and drive innovation while considering sustainability, and it must also preserve and conserve natural resources.⁸

International environmental law is the set of agreements and principles that reflect the world's collective effort to manage our transition to the Anthropocene by resolving our most

⁶ *Ibid.* p. 2.

⁷ Peter Mahmud Marzuki, *Penelitian Hukum*, Kencana Prenada, Jakarta, 2010, p. 35

⁸ Ardhana Januar Mahardhani, "The Role of Public Policy in Fostering Technological Innovation and Sustainability", *Journal of Contemporary Administration and Management (ADMAN)*, 2023, p. 50.

serious environmental problems, including climate change, ozone depletion and mass extinction of wildlife. More generally, international environmental law aims to achieve sustainable development—i.e., development that allows people to have a high quality of life today without sacrificing the quality of life of future generations. International environmental law is thus critical both for addressing specific environmental threats and for integrating long-term environmental protection into the global economy.⁹

1. The global societal culture that promotes the regulation of the use of new renewable energy and environmental protection.

Indonesia has ratified numerous international conventions related to energy and the environment to protect nature and support the transition to energy usage. The following is an elaboration of these conventions:

- a. The Minamata Convention on Mercury of 2013 has been ratified through Law Number 11 of 2017 concerning the Ratification of the Minamata Convention on Mercury. This convention aims to safeguard the health of living creatures and ecosystems by reducing sources of heavy metal mercury pollution and regulating all forms of human activities related to industries that use or produce mercury-containing products.¹⁰ The implementation of Law Number 11 of 2017 concerning the Ratification of the Minamata Convention on Mercury requires strict oversight by both the central and local governments concerning the mining industry in Indonesia. Past cases of waste management in the mining industry should serve as lessons to prevent further environmental pollution incidents. Criminal sanctions should also be applied, if necessary, in cases of mercury waste pollution to ensure that mining companies responsibly manage their waste disposal and do not harm the environment.¹¹ Energy transition cannot be immediately implemented due to the previous dependence on non-renewable energy sources. Therefore, the solution is to regulate energy management while considering energy mix adjustments.
- b. The United Nations Convention on the Law of the Sea (UNCLOS) governs the use and protection of the sea and its maritime resources¹², as does Article 2 of the United Nations Conference on Environment and Development (UNCED) which emphasizes a nation's duty to protect and regulate natural resources and the environment. UNCLOS and the United Nations Conference on Environment

⁹ David Hunter, 2021, "International Environmental Law: International treaties and principles protect the environment and guard against climate change", https://www.americanbar.org/groups/public_education/publications/insights-on-law-and-society/volume-19/insights-vol--19---issue-1/international-environmental-law/, accessed on 7 November 2023.

¹⁰ Ahmad Rayhan, Widya Ayu Pramesty, "Implementasi Minamata Convention On Mercury Terhadap Kasus Pencemaran Merkuri Dan Arsen Di Teluk Buyat Indonesia", *Tirtayasa Journal Of International Law*, 2023, p. 60.

¹¹ *Ibid.* p. 68.

¹² Hadi Wijaya, Putri Tamara Maukura, "Penegakan Hukum Terhadap Pencemaran Laut Bintang Dalam Mengimplementasikan Pasal 192-237 Unclos 1982", *Tirtayasa Journal Of International Law*, 2023, pp. 165.

and Development require each nation to take necessary and appropriate steps to regulate the use of new renewable energy sources to mitigate the negative impact on human health and the environment.¹³ The concept of International Law Related to New Renewable Energy encompasses policies, public interest, and power distribution. This concept encourages the use of renewable energy to reduce environmental impacts and improve social well-being. Public interest must also be considered in decision-making about renewable energy, prioritizing social and environmental values.

Indonesia, as a country with natural resources along its coastline, has the potential for offshore renewable energy. Public policies to promote the offshore renewable energy sector, a sufficient regulatory framework, investment in research and development, the establishment of specialized technological centers, and the deployment of full-scale prototypes are necessary to commercialize renewable energy systems. Exchanging ideas and experiences with other countries through the establishment of an integrated governmental program can accelerate technological advancements in this sector.¹⁴

The crucial power distribution in managing renewable energy requires balanced contributions from governments, private organizations, and other private entities in energy regulation. In other words, government control functions will be more effective when any deviations or incidents under the law can be prevented or addressed promptly, using applicable legal provisions to uphold rules, justice, and rule certainty¹⁵ in the context of renewable energy management. In the context of moving toward carbon neutrality, various alternative fuels and energy sources have been used for ship propulsion in practice. However, the relevant international legal framework seemingly fails to catch up with the pace of alternative fuel application in practice, and it has several shortcomings and insufficiencies in dealing with the potential pollution of the marine environment caused by alternative-fuel-powered ships.¹⁶

- c. The Kyoto Protocol, as an international legal framework governing advanced nations (Annex I) and developing countries in efforts to reduce greenhouse gas emissions, and the Paris Agreement, implemented from November 30 to December 12, 2015, in Le Bourget, France, by 196 countries. Indonesia is expected to participate in strengthening international legal regulations concerning the improvement of quality of life through emissions reduction, as stipulated in the UNFCCC 1992, the Kyoto Protocol 1995, and the Paris

¹³ *Ibid.*

¹⁴ Shadman et al., "A Review of Offshore Renewable Energy in South America: Current Status and Future Perspectives", *Sustainability* 15, no. 2: 1740. p. 25.

¹⁵ Yogi Muhammad Rahman, Redo Noviansyah, "Pentingnya Mengadopsi Ketentuan Lembaga Pre-Trial Chamber Pada International Criminal Court Dalam Sistem Peradilan Pidana Indonesia", *Tirtayasa Journal Of International Law*, 2023, p. 42.

¹⁶ Wang Qiuwen, Zhang Hu, Huang Jiabei, Zhang Pengfei, "The use of alternative fuels for maritime decarbonization: Special marine environmental risks and solutions from an international law perspective", *Journal Frontiers in Marine Science*, Volume 9, 2023, p. 9.

Agreement 2015. Therefore, it is necessary for the nation to implement various forms of positive legal regulations applicable to all. Indonesia's initial step towards this is the ratification of the Paris Agreement through Law Number 16 of 2016 concerning the Paris Agreement on the United Nations Framework Convention on Climate Change.¹⁷

In accordance with several conventions, Indonesia has ratified them as an initial step towards the implementation of these conventions for the preservation and management of the environment and energy resources. The role of the state, through its national policies, currently requires reinforcement. Strengthening the state's role can take the form of enhancing its domestic legal framework.¹⁸

2. Green Legislation as an effort to Increase Awareness of Sustainable development and the utilization of resources.

Green legislation represents a harmonious elaboration of each legal regulation that must support the green concept. This has been concretely realized in Article 44 of Law Number 32 of 2009 concerning Environmental Protection and Management (Environmental Law) which, in broad strokes, obliges the preparation of legal regulations at both national and regional levels to consider the functions and principles of environmental protection and management within said laws. This elucidation demonstrates that green legislation must be implemented comprehensively and in harmony between rules, both vertically and horizontally.¹⁹

An example highlighting the importance of harmonizing legislation is the enforcement of law and sovereignty regarding unauthorized foreign civil ships. It is indicative of the disharmony in legal regulations concerning the enforcement of airspace violations committed by foreign aircraft without permission, involving the Indonesian Air Force and the Ministry of Transportation. The non-enforcement of sanctions, mandated by the Aviation Law and Regional Government Regulation on Aviation, has resulted in budget disparities and discrepancies in the preservation of aerial sovereignty.²⁰ In this context, the ratification

¹⁷ Sharon Easter Baroleh, et al. op cit. p. 2.

¹⁸ Dewi Indah Purnamasari, "Tindakan Bom Bunuh Diri (Suicide Terrorism) Sebagai Bagian Dari Terorisme Ditinjau Dari Hukum Humaniter Internasional", *Tirtayasa Journal Of International Law*, 2023, p. 42.

¹⁹ Abel Parvez, Reyhana Nabila Ismail, Sifa Alfyyah Asathin, Agus Saputra, "Reformulasi Rancangan Undang-Undang Energi Baru Terbarukan Sebagai Transisi Menuju Energi Ramah Lingkungan Berbasiskan Green Legislation", *IPMHI LAW JOURNAL*, 2023, p. 106

²⁰ Chandra Muliaawan, Syofia Gayatri, Hendi Gusta Rianda, "Kedaulatan Wilayah Udara Indonesia Dalam Aspek Hukum Nasional Dan Internasional (Studi Kasus Pesawat Sipil Tanpa Izin dan Pesawat Tempur di Wilayah Zona Ekonomi Eksklusif Indonesia)", *Tirtayasa Journal Of International Law*, 2023, p. 16.

of various international agreements is crucial for elaborating comprehensive legislation on renewable energy.

A legal approach to addressing environmental issues in sustainable development is a crucial component in our efforts to protect our planet, promote justice, and achieve sustainable development goals. However, this approach is confronted with several complex challenges. Some findings and conclusions from the assessment of these legal challenges and prospects include:²¹

1. Challenges in the Legal Approach to Environmental Issues: Environmental Complexity, Enforcement Delays, Resource Limitations, National and International Legal Differences, Political Policy Shifts, Prospects for Strengthening the Legal Approach to Environmental Issues, Environmental Regulation Strengthening, Enhanced Human Rights Related to the Environment, Environmental Legal Innovation.
2. The use of legal innovations such as carbon trading and tax incentives for renewable energy can expedite the transition to a sustainable economy: Enhanced Community Participation, Robust International Environmental Law, Improved Environmental Legal Education, Cross-Sector Collaboration, and Effective Environmental Courts.

Recognizing these challenges and strengthening the legal approach to addressing environmental issues can move us toward a more sustainable society and protect our planet for future generations. The legal approach is a vital instrument in this journey, and continuous efforts are required to enhance and fortify its role in sustainable development.

Research conducted in China, for example, shows that respondents have a strong interest and a positive attitude towards renewable energy. Most respondents' express concerns about environmental issues and state that, compared to conventional electricity, renewable energy offers numerous benefits, such as environmental protection from carbon emissions and improvements in the energy structure. Therefore, renewable energy has significant consumer demand potential. However, the research results also indicate that citizens are more influenced by economic factors, such as price, than environmental factors.²²

²¹ Dede Kurniawan, Wawan Hermawan, Isep Sunandi, Sabrina Zidni Fadhila, "Pendekatan Hukum terhadap Isu-isu Lingkungan dalam Pembangunan Berkelanjutan: Tantangan dan Prospek", *Journal on Education*, 2021, p. 651

²² Madad Alia, Muhammad Irfanb, Ilknur Ozturkcand Abdul Rauf, "Modeling public acceptance of renewable energy deployment: a pathway towards green revolution", *Economic Research-Ekonomska Istraživanja*, 2023, p. 15.

It is revealed that high costs, lack of awareness, limited subsidies, social norms, and confusing renewable energy policies are the main obstacles to purchasing renewable electricity. All stakeholders should work to enhance public awareness of renewable energy in a coherent and integrated manner. The government should consider launching subsidy programs to increase local citizen participation. Additionally, clear and transparent policies will play a crucial role in increasing public willingness towards renewable energy and garnering long-term public support. There is an urgent need to emphasize the adverse impact of conventional energy on the environment and advocate the positive benefits of renewable energy to the government, non-governmental organizations (NGOs), and policymakers. This can be achieved by building ecological awareness activities that emphasize the importance of reducing greenhouse gas emissions, conserving energy, and implementing environmentally friendly energy generation methods.²³

Building a strong relationship between the government and the industry is essential to ensure that the government's policy objectives in integrating renewable energy into the overall national energy mix are achieved. For the full commercialization of environmentally friendly energy technology, businesses need to adapt their strategies by adopting new business strategies. In this aspect, the initial low costs for such technologies may be advantageous. The global cultural shift towards sustainable new energy usage has prompted Indonesia to continually adapt to various ratified agreements. However, regulations concerning renewable energy remain fragmented across different sectors, often leading to regulatory inconsistencies in Indonesia. The lack of harmony in regulations hinders various existing institutions from working in an integrated manner. Based on the changing global cultural landscape that cannot be accommodated by existing institutions in Indonesia in regulating renewable energy, there is a need for renewable energy legislation.

D. Conclusion

In the face of a global community increasingly supportive of sustainable energy use and environmental protection, Indonesia is confronted with a significant challenge of establishing a legal framework that supports these objectives. There are numerous international agreements governing renewable energy and environmental management, strengthening Indonesia's obligations as a member of the international legal community.

²³ Ibid. p. 14.

However, the significant increase in Indonesia's energy needs driven by economic growth demands serious efforts to comply with these international obligations. One of the main barriers is the lack of strong and consistent regulations, which need to be addressed to achieve sustainable energy use and environmental management goals.

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