

Legal and Political Advocacy in Renewable Energy Governance: Strengthening Policy Effectiveness in Indonesia

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Abstract

Legal advocacy and political policy influence on every decision-making related to renewable energy in the government have implications for whether or not the targets and objectives of the policy are achieved to answer the problems and needs that exist in society. In encouraging the development of New Renewable Energy (NRB), Indonesia reflects through the NRB Bill and its derivative regulations. The effectiveness of this policy is influenced by Indonesia's political direction to seek to reduce emissions. Political policies that are implemented based on the effectiveness of renewable energy governance in the form of good governance can encourage Indonesia to achieve targets and efforts in producing energy from NRB in 2030. This effort also encourages the government to achieve the national NRB target of 34% or an increase of 10.6% from the previous target. Legal

advocacy efforts encourage the fulfilment of people's rights to obtain, access and benefit from the management of natural resources for renewable energy in the form of the implementation of government policies related to renewable energy.

Keywords

Legal Advocacy, Policy Effectiveness, Renewable Energy

A. Introduction

Climate change vulnerability is increasing due to the main source of rising global temperatures, which is global fossil fuels. Fossil fuels, which produce carbon dioxide emissions, are the main cause of global warming and climate change.¹ Globally, with increasing populations and growing economies, the demand for energy, which is currently dependent on natural resources in the form of fossil fuels, is increasing.²

Legal developments on climate change have now reached the development of litigation and state legal policies in achieving emission reduction targets pursued globally through the Paris Agreement.³ The urgent situation on climate change shows the development of legal policies that are transforming rapidly and systematically. One of them is the need for advocacy on climate change policy in fulfilling people's rights in preventing climate change. This relates to climate justice as a form of social inequality from the existence of errors in the climate change framework as structural violence. Climate justice is a growing area where environmental NGOs are linked to human rights and climate justice debates that often focus on the distributional

¹ Munir Ahmad and Yiyun Wu, "Household-Based Factors Affecting Uptake of Biogas Plants in Bangladesh: Implications for Sustainable Development," *Renewable Energy* 194 (July 1, 2022): 858–67, <https://doi.org/10.1016/J.RENENE.2022.05.135>.

² Jiannan Wang and Waseem Azam, "Natural Resource Scarcity, Fossil Fuel Energy Consumption, and Total Greenhouse Gas Emissions in Top Emitting Countries," *Geoscience Frontiers* 15, no. 2 (March 1, 2024), <https://doi.org/10.1016/J.GSF.2023.101757>.

³ Benoit Mayer, "Climate Change Mitigation as an Obligation under Human Rights Treaties?," *American Journal of International Law* 115, no. 3 (2021): 409–51, <https://doi.org/10.1017/ajil.2021.9>.

nature of climate change with evidence of disproportionate impacts on vulnerable communities such as the poor and coastal communities.⁴

Energy demand is a basic need for human life in the era of technology and leads to globalisation growth. Based on projections of Indonesia's energy needs in 2023, it has increased by 5.4% or equivalent to 130 to 137 tonnes equivalent from the previous year. Projections on the increase in energy demand in Indonesia also refer to economic growth factors that significantly increased, by 5.3% and population growth of 0.9%.⁵ In addition, this increase in energy demand is predicted to continue to grow in the following year. so that energy needs are increasing and important to support people's lives, especially in Indonesia. On the other hand, the increase in energy demand also causes problems, namely the current energy availability produced in Indonesia has not been in favour of the provision of new renewable energy. The industrial revolution is increasing globally with the need for energy as a basic necessity, causing other problems such as increased carbon emissions from energy sources derived from fossil fuels which will have an impact on climate change.⁶

New renewable energy is defined as energy produced from energy sources that are cleaner and safer and inexhaustible compared to conventional energy such as fossil energy. Such energy is sourced from wind power, tidal waves, solar, geothermal, and biomass.⁷ As an institution that manages

⁴ Libby Porter et al., "Climate Justice in a Climate Changed World," *Planning Theory and Practice* 21, no. 2 (2020): 293–321, <https://doi.org/10.1080/14649357.2020.1748959>.

⁵ "Indonesia Needs to Overhaul Strategy to Pursue 23% Renewable Energy Mix in 2025 – IESR," accessed October 2, 2023, <https://iesr.or.id/en/indonesia-needs-to-overhaul-strategy-to-pursue-23-renewable-energy-mix-in-2025>.

⁶ Mikalai Filonchyk et al., "Greenhouse Gases Emissions and Global Climate Change: Examining the Influence of CO₂, CH₄, and N₂O," *Science of The Total Environment* 935 (July 20, 2024): 173359, <https://doi.org/10.1016/J.SCITOTENV.2024.173359>.

⁷ Nicholas Apergis and James E. Payne, "Renewable Energy, Output, CO₂ Emissions, and Fossil Fuel Prices in Central America: Evidence from a Nonlinear Panel Smooth Transition Vector Error Correction Model," *Energy Economics* 42 (2014): 226–32, <https://doi.org/10.1016/j.eneco.2014.01.003>.

electrical energy in Indonesia, PT Perusahaan Listrik Negara/PLN (Persero) has the responsibility for the management of electricity intended for the needs of the community in order to improve the welfare and prosperity of the people which is carried out fairly and equitably. This is based on Article 33 of the 1945 Constitution of the Republic of Indonesia (*Undang-Undang Dasar Negara Republik Indonesia/UUDNRI*) that states that the state has a stake in managing natural resources for the greatest welfare and prosperity of the community, including the management of natural resources for new and renewable energy.⁸ So it is necessary to make efforts to provide electricity from upstream to downstream so that all people get access to energy fairly and evenly. PT PLN (Persero) is also obliged to develop electricity from both fossil and renewable primary energy sources.⁹

Policies regarding efforts to produce energy from renewable energy in 2030 encourage the government to achieve a national NRB target of 34% or an increase of 10.6% from the previous target. On the other hand, the national target in 2025 is 23%, which is also based on Government Regulation No. 79 of 2014 concerning the National Energy Policy.¹⁰ But in reality, based on a report from the Ministry of Energy and Mineral Resources which assesses that the portion of NRB in 2023 is still at the level of 12%, or at least the primary energy mix has only increased by 0.1% from 2022. Of course, the efforts made by the government need to be stronger to achieve its target in 2030.

Government policies that are inconsistent in efforts to develop NRB and promotional efforts are also considered slow, and will hinder the increase in the development of new renewable energy.¹¹ For example, solar energy, despite being a

⁸ Riswandha Imawan and Rehulina, "Legal Aspects of Indonesia's Obligation to Use Renewable Energy," *Jambe Law Journal* 5, no. 2 (2022): 229–49, <https://doi.org/10.22437/jlj.5.2.229-249>.

⁹ Handoko Bayu and Jaka Windarta, "Tinjauan Kebijakan Dan Regulasi Pengembangan PLTS Di Indonesia," *Jurnal Energi Baru Dan Terbarukan* 2, no. 3 (2021): 123–32, <https://doi.org/10.14710/jNRB.2021.10043>.p 126

¹⁰ PT. PLN (PERSERO), "Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) PT PLN (Persero) 2021-2030.," *Rencana Usaha Penyediaan Tenaga Listrik 2021-2030*, 2021, 2019–28.

¹¹ Randy Maulana Nasir and Rinaldy Dalimi, "Evaluation of the Strategy for the Implementation of Solar Power Plants in Indonesia Using SWOT

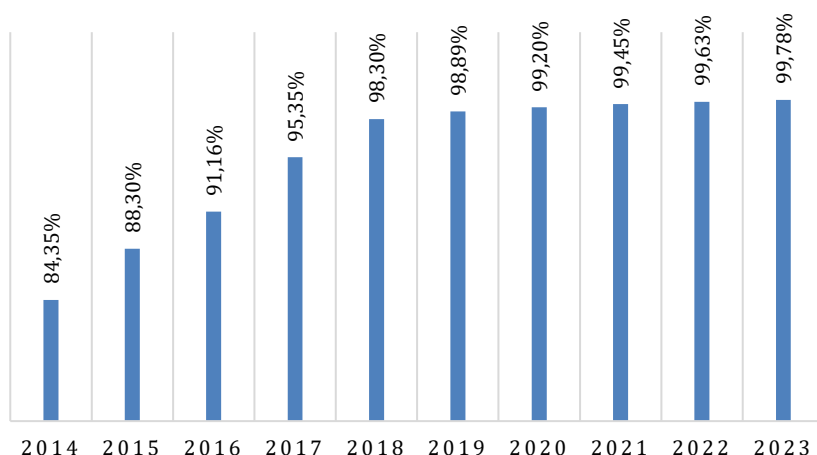
projection and government programme to reduce emissions to meet the Paris Agreement, as well as efforts to increase the share of energy to replace fossil energy is still at a minimal stage of development. In addition, the development of alternative energy in other power sources such as wind and water power is considered to hinder the growth of the solar energy market in the period 2021 to 2030 because it reduces the use of solar energy in the NRB mix in Indonesia.

In 2022, Solar Power Plants (*Pembangkit Listrik Tenaga Surya/ PLTS*) experienced a decrease in energy production, this was due to PLN in the policy of issuing restrictions on on-grid Solar Power Plants which resulted in the community only being able to install solar panels with a capacity of 10-15% of the installed electricity. This limitation policy is considered to reduce the attractiveness of the community in using electrical energy from Solar Power Plants, besides that it is also not in line with the Minister of Energy and Mineral Resources Regulation 26 of 2021 concerning Rooftop Solar Power Plants where the efforts of the policy encourage the use of Rooftop Solar Power Plants for every household. On the other hand, the Indonesian government needs to make extra efforts to achieve the NRB target of 34% by 2030.¹² This target can be achieved in several ways, one of which is a strong and firm commitment to government policy towards the prohibition of the re- construction of Steam Power Plants, and gradually phasing out coal coal-fired power plant. Furthermore, the development of renewable energy through increasing Solar Cells as an effort to improve the economy can also reduce emissions in order to achieve Indonesia's National Determined Contribution (NDC) which was increased at the COP 27 meeting at the Paris Agreement event.

FIGURE 1 Population with access to electricity in 2012-2021

Analysis" 2021 (2021): 13-24,
<https://doi.org/10.11594/nstp.2021.1202.p18>

¹² "Berita Terkini Ekonomi Dan Bisnis Indonesia - Katadata.Co.Id," accessed October 5, 2023, <https://katadata.co.id/>.



Source: Statista

The challenge of spreading the population of people who can access energy in Indonesia is getting bigger. This is certainly because Indonesia has an area that is spread across more than 17,000 islands so that there are still many communities that are isolated and cannot be reached by electricity. In 2021, Indonesia's electrification rate reached 99.45%. This figure does not exceed the target of 100% in the year that has been set.¹³ Government plans to increase the use of renewable energy in rural areas continue to be carried out and the use of mini PV power grids as the cheapest alternative to meet electrical energy needs. This research conceptualises how the use of solar cells will be the cheapest alternative and can be done individually or through third parties.

Questions on renewable energy issues arise more often than answers in achieving a sustainable energy transition. Questions about how the state regulates and implements renewable energy policies through advocacy and the role of government, private sector, and society? How the effectiveness of renewable energy policies will be implemented and supervision and related dispute resolution as a form of legal certainty in encouraging the increase of renewable energy? If the Indonesian government cannot achieve each of the renewable

¹³ "Indonesia: Electrification Rate 2021 | Statista," accessed October 2, 2023, <https://www.statista.com/statistics/865133/indonesia-electrification-rate/>.

energy targets, then the role of legal advocacy as a hearing to ensure compliance with renewable energy policies will be neglected. Given that energy needs are central to today's modern economy and part of the basic structure of society, there is a need for governance in the system of energy management and use in the face of the threat of climate change.

B. Political Law, Policy and Legal Advocacy towards Good Governance in the Development of New Renewable Energy

The energy transition is an important part of addressing climate change and it is the government that is responsible for increasing renewable energy in the energy mix through its policies and political decisions. The energy mix is considered one of the best strategies to reduce the utilisation of non-renewable energy and thereby help boost the economy while achieving the Paris Agreement and sustainable development goals (SDGs). In this regard, technological innovation and good governance not only help in stimulating the supply of green energy but also improve resource efficiency to achieve the goals. At the same time, careful long-term policies are needed to embed some progress in achieving the Paris Agreement and SDGs for climate safety. Thus, factors such as good governance, technological innovation, trade openness and economic growth can be addressed within one framework.¹⁴

Although the Paris Agreement is not legally binding, it underlines the importance of the agreement's strong political will to reduce greenhouse gases with "the principle of common ownership but differentiated responsibilities and capabilities". The agreement also supports the continuation of the Kyoto Protocol and the establishment of the "Copenhagen Climate Fund" to support efforts to reduce greenhouse gas emissions (UNFCCC, 2009). As a result, countries that ratified the treaty

¹⁴ Chin Hui Hao, "Does Governance Play Any Role in Energy Transition? Novel Evidence from BRICS Economies," *Environmental Science and Pollution Research* 30, no. 19 (2023): 55158–70, <https://doi.org/10.1007/s11356-023-25881-1>.

included their emission pledges, including Indonesia, in their Nationally Determined Contribution (NDC).¹⁵

Indonesia has submitted its Enhanced Nationally Determined Contributions (NDCs) document by increasing its greenhouse gas (GHG) emissions reduction target by only around 2%. The Institute for Essential Services Reform (IESR), a member of the Climate Action Tracker (CAT), a consortium of three think tanks monitoring and assessing climate change policies in 39 countries and the European Union, found that the slight increase in Indonesia's NDC target is still insufficient to prevent a 1.5°C global temperature rise. In the Enhanced NDC, the unconditional emission reduction target increases from 29% in the Updated NDC to 31.89% by 2030, and with international assistance (conditional) from 41% to 43.2%. IESR and CAT believe that Indonesia should have set a more ambitious target, especially after the release of Presidential Regulation (*Peraturan Presiden/Perpres*) No 112 Year 2022 on Accelerating the Development of New Renewable Energy for Electricity Supply.¹⁶

According to Mahfud MD in the book *Politics of Law in Indonesia*, legal politics is a legal policy or official line (policy) about the law that will be enforced either by making new laws or by replacing old laws, in order to achieve state goals. The definition of legal politics according to Padmo Wahjono, is a basic policy that determines the direction, form, and content of the law to be formed. More clearly, Padmo Wahjono explained that legal politics is a policy of state administrators about what is used as a criterion for forming a law that includes the formation, application, and enforcement of law. Based on the assumption that politics determines law so that law is a political product, Mahfud MD's thesis or theory about legal politics in Indonesia is that a democratic political configuration will give birth to responsive or populist law. Vice versa, authoritarian political

¹⁵ Elisa Wahyuni, "Challenges Facing Indonesia's Energy Commitment," *Indonesia Post-Pandemic Outlook: Strategy towards Net-Zero Emissions by 2060 from the Renewables and Carbon-Neutral Energy Perspectives*, no. 2022 (2022): 23–40, <https://doi.org/10.55981/brin.562.c3>.

¹⁶ "Kontribusi Penurunan Emisi GRK Nasional, Menuju NDC 2030 - Direktorat Jenderal Pengendalian Perubahan Iklim," accessed July 3, 2022, <http://ditjenppi.menlhk.go.id/berita-ppi/3150-kontribusi-penurunan-emisi-grk-nasional-menuju-ndc-2030.html>.

configurations will give birth to conservative or orthodox or elitist legal products.

Furthermore, Satjipto Rahardjo in the book *Legal Science* defines legal politics as an activity to choose certain social goals. Politics is a field that deals with the goals of society. Meanwhile, the law deals with the need to make choices about the goals or means that will be used to achieve these community goals. Thus it can be concluded that legal politics is a policy on law that determines the direction, form and content of law which includes the formation, application and enforcement of law in order to achieve legal political goals, namely certain social goals / state goals. Thus, it can be concluded that legal politics is a policy on law that determines the direction, form and content of law which includes the formation, application and enforcement of law in order to achieve legal political goals, namely certain social goals / state goals.

Energy transition requires a legal framework to achieve sustainable energy. One way to achieve justice in the energy transition process can be done through legal advocacy if there are risks that threaten the equitable energy transition. On the other hand, the litigation process regarding climate justice has not been fully regulated in the realm of law in Indonesia in the absence of a special law on climate change. The development of litigation in Indonesia has included criminal offences in environmental and civil crimes that are included in Indonesian courts.¹⁷ However, in its development, advocacy is needed in obtaining community rights in the energy sector in an effort to transition energy to prevent climate change. One of the rights is the availability and affordability of renewable energy.

Energy justice is one of the concepts to refer to the fair distribution of energy production and consumption movements of various communities and individuals.¹⁸ Basically, to achieve energy justice and the achievement of renewable energy targets, oversight mechanisms and monitoring systems are needed as

¹⁷ Linda Yanti Sulistiawati, "Climate Change Related Litigation in Indonesia," *Communications Earth and Environment* 5, no. 1 (2024): 1–9, <https://doi.org/10.1038/s43247-024-01684-1>.

¹⁸ Esmat Zaidan and Imad Antoine Ibrahim, "Achieving Energy Justice: The Role of Supervisory and Compliance Mechanisms in Global Frameworks and the International Community," *Energy Strategy Reviews* 52, no. February (2024): 101335, <https://doi.org/10.1016/j.esr.2024.101335>.

well as law enforcement as a form of compliance that is part of the principles of energy justice.¹⁹ Advocacy appears in lawsuits related to climate change such as lawsuits on coal power plants, lawsuits on damage caused by coal mining, and lawsuits due to illegal logging.²⁰

Based on existing developments, there is not much case literature that shows specific advocacy of renewable energy policy challenges in Indonesia. Most cases are about implementation such as the case of Solar Public Street Lighting (*Penerangan Jalan Umum Tenaga Surya /PJUTS*) at the Ministry of Energy and Mineral Resources and the case in decision No. 374/Pdt.G/LH/2019/PN.Jkt.Pst. related to air pollution in Jakarta filed by the public through the Jakarta legal aid agency as a plaintiff to the Indonesian government as a defendant or often referred to as “Citizen lawsuit”.²¹ One of the claims is that the contribution of energy from coal-fired power plants and vehicles that do not pass emission tests has contributed to air pollution in Jakarta. The plaintiffs also want the government, in this case as defendant, to ‘...immediately adjust stricter and safer emission quality standards for all coal-fired power plants, which are one of the sources of air pollution, and accelerate the transformation from dirty power plants to clean and renewable energy.’

Policy implementation gaps in the implementation of renewable energy targets and other actions that exacerbate climate change have led to new forms of litigation. One form of public awareness is the State of the Netherlands vs Urgenda litigation case, which highlights the non-functioning of human

¹⁹ Karen Bickerstaff, Gordon Walker, and Harriet Bulkeley, “Energy Justice in a Changing Climate,” *Energy Justice in a Changing Climate: Social Equity and Low-Carbon Energy*, January 1, 2013, 1–234.

²⁰ Andri G. Wibisana and Conrado M. Cornelius, “Climate Change Litigation in Indonesia,” *Climate Change Litigation in the Asia Pacific*, November 6, 2020, 234–60, <https://doi.org/10.1017/9781108777810.011>.

²¹ Humaira Khoirunnisa, Shafa Amalia Choirinnisa, and Raden Muhammad Arvy Ilyasa, “Quo Vadis: Penerapan Citizen Lawsuit Sebagai Upaya Perlindungan Terhadap Lingkungan Hidup,” *LITRA: Jurnal Hukum Lingkungan, Tata Ruang, Dan Agraria* 1, no. 1 (2021): 117–37, <https://doi.org/10.23920/litra.v1i1.587>. See also Francisca Rachel Alicia, “Implementation of Environmental Pollution and Damage Prevention Instruments in Indonesia: Issues and Challenges.” *Indonesian Journal of Environmental Law and Sustainable Development* 3, no. 1 (2024): 125–156.

rights as the basis for the state to fulfil its obligations to reduce greenhouse gas emissions. In this case, the Urgenda foundation and 900 Dutch citizens sued the government and demanded increased efforts to address climate change. The Dutch court ruling ordered the Dutch government to commit to an emissions reduction target of at least 25% compared to previous projections of 14-17%.²²

Based on its influence, the country's goals and targets in shaping policy direction regarding new renewable energy have implications for the effectiveness of the policies formed. This is done by involving stakeholders and those who are authorised and understand renewable energy development. The energy transition will involve various planning and strategies, development, investment and time. Good governance in the energy sector has urgency for the sustainability of plans to reduce emissions in each country. Commitment to net-zero carbon will be determined by good governance to attract stakeholders and companies that work together to progress the use of renewable energy to be more competitive and sustainable.²³ Strategic impotence, political interests that are not in favour of the people, and inefficient energy governance will affect developing countries against a catastrophic energy crisis amidst poor environmental conditions due to increased greenhouse gas emissions.²⁴

The government's effort to continue to encourage the energy transition by using NRB is by drafting and immediately passing the NRB Bill to support the green industry and improve the economy. In addition, draft of law NRB can also help the government's target of achieving Net Zero Emission by 2060 as

²² Grantham Research Institute on climate change and the Environment, "Urgenda v State of the Netherlands: Lessons for International Law and Climate Change Litigants," 2019, <https://www.lse.ac.uk/granthaminstitute/news/urgenda-v-state-of-the-netherlands-lessons-for-international-law-and-climate-change-litigants/>.

²³ "Why Good Governance in the Energy Sector Is Important in 2023," accessed October 4, 2023, <https://www.ocorian.com/insights/why-good-governance-energy-sector-2023-more-important-ever>.

²⁴ Sakib B Amin, Tauhid Irteza Ali, and Umme Marzana, "The Dynamics of Good Governance in Promoting Energy Security: The Case of Bangladesh," *Relationes Internationales* 10, no. 1 (2017): 61–78.

well as the NDC pledge in the Paris Agreement.²⁵ Although the NRB Bill has not yet been passed, the government has issued Presidential Regulation No. 112 of 2022 concerning Acceleration of Renewable Electric Energy Development for Electricity Supply. The purpose of the Perpres is to accelerate the mix in new renewable energy as part of national energy and the government's efforts to reduce GHG emissions. In addition, Presidential Regulation No. 112 of 2022 has also prohibited the construction of new power plants. On the other hand, there are inconsistencies with this Perpres, that coal-fired power plant that has been included in the Electricity Supply Business Plan (Rencana Usaha Penyediaan Tenaga Listrik /RUPLT) before the enactment of the Perpres is allowed by fulfilling the applicable requirements and this Perpres is considered only as a political action to get funding for energy transition from abroad.²⁶ If new coal-fired power plants are allowed to be built as included in the RUPTL, then Indonesia's dream of stepping into an early retirement of coal or fossil fuel power plants will be increasingly difficult to implement.

In Article 12 letters m and n of Government Regulation No 79 of 2014 regarding the process of utilising national energy resources by maximising and increasing one of them from the use of solar cells sourced from sunlight. The encouragement of the use of solar power plants (PLTS) can be both on-grid and off-grid.²⁷ The role of local governments in this case should be able to help efforts to achieve national targets by encouraging use in industry and households as well as in the transport sector. For example, the role of the government in remote areas in Indonesia can encourage the use of solar power plants in off-grid systems.

²⁵ "Evaluasi Regulasi 2022: Lambatnya Pembahasan RUU NRB Jadi Perhatian Serius," accessed October 6, 2023, <https://www.hukumonline.com/berita/a/evaluasi-regulasi-2022--lambatnya-pembahasan-ruu-nrb-jadi-perhatian-serius-lt63ac483633282/>.

²⁶ "Evaluasi Regulasi 2022: Lambatnya Pembahasan RUU NRB Jadi Perhatian Serius"

²⁷ Daryanti and Albertus Sentot Sudarwanto, "Legal Enforcement of Individual Behavior in the Context of Environmental Policy," *Indonesian Journal of Social Sciences* 16, no. 2 (December 13, 2024): 93-101-93-101, <https://doi.org/10.20473/IJSS.V16I2.55387>.

On the other hand, the inconsistency in the form of new power plant construction in Presidential Regulation No. 112 of 2022 also affects the achievement target of increasing renewable energy which is rolled out in Government Regulation No. 79 of 2014 concerning National Energy Policy to reach 23% in 2025 which should be increased, so it is likely not implemented. This will show that Indonesia's political policy does not encourage the acceleration of energy transition from fossil fuels to renewable energy in an equitable manner.

Renewable energy policy ambiguity is an issue that arises with the fact that the Indonesian government chose to lower the target beyond the mission in Government Regulation No. 79/2014 on National Energy Policy to reach 23% by 2025. Based on the results of the Draft Government Regulation on National Energy Policy (*Rancangan Peraturan Pemerintah tentang Kebijakan Energi Nasional /RPP KEN*) by the National Energy Council (Dewan Energi Nasional/DEN), the renewable energy mix target was lowered from 23% to 17-19% by 2025. Meanwhile, the renewable energy target for 2050 was increased from 30% to 58-61% and in 2060 by 70-72%. Based on the opinion of the Institute for Essential Services Reform (IESR), the government's effort to lower the target in 2025 shows a weak policy commitment in carrying out the energy transition and shows that it is full of interests in maintaining fossil fuel energy.²⁸ This will show that Indonesia's political policy does not encourage the acceleration of the energy transition from fossil fuels to renewable energy in an equitable manner.

The above is a challenge for renewable energy development in Indonesia where there are policy barriers. Some of these challenges arise when a) dependence on fossil energy; b) commitment from the government and State Electricity Company (Perusahaan Listrik Negara /PLN) in providing clean energy is still late; c) regulatory uncertainty that often changes can hamper renewable energy investment and infrastructure barriers;²⁹ d) limited technology development and innovation in

²⁸ IESR, "RPP KEN Pangkas Target EBT Menjadi 19 Persen Di 2025," 2024, <https://iesr.or.id/rpp-ken-pangkas-target-ebt-menjadi-19-persen-di-2025/>.

²⁹ Indonesia Business Post, "Renewable Energy Development Hampered by Regulation and Infrastructure: House," 2024,

renewable energy; e) overlap in the Electricity Supply Business Plan (*Rencana Usaha Penyediaan Listrik /RUPTL*) and the State Energy General Plan (*Rencana Umum Energi Negara /RUEN*).³⁰

On the other hand, PLN is the electricity provider and has a large monopoly on energy supply in Indonesia. PLN has distributed 98 per cent of households over the years. In addition, Indonesia's economic growth has fuelled high energy demand.³¹ In total, by 2025 Indonesia's energy target will only be achieved at 17% of the national primary energy mix. The involvement of independent power producers according to Bridle's research can support government policies in promoting renewable energy.³² This research also illustrates that there are gaps in areas that are difficult to reach by renewable energy is also a consideration for determining an equitable policy direction system. From several studies, it shows that PLN and the government do not have a strong commitment to stimulate renewable energy expansion efforts for independent power producers, especially the reason for direct competition with the interests of PLN.³³

<https://indonesiabusinesspost.com/3377/energy-and-resources/renewable-energy-development-hampered-by-regulation-and-infrastructure-house>.

³⁰ IESR, "Kebijakan Energi Terbaru Di Indonesia Tumpang Tindih," 2020, https://iesr.or.id/kebijakan-energi-terbaru-di-indonesia-tumpang-tindih/?utm_source=chatgpt.com. See also Ridoan Karim, Farahdilah Ghazali, and Abdul Haseeb Ansari. "Renewable Energy Regulations in Indonesia and India: A Comparative Study on Legal Framework." *Journal of Indonesian Legal Studies* 5, no. 2 (2020): 361-390; Christian Imanuel Nainggolan, "International Law and Dispute Resolution in the Context of Renewable Energy Development: A Review of the Case of Downstreaming of Nickel Ores by Indonesia." *International Law Discourse in Southeast Asia* 2, no. 2 (2023): 221-250.

³¹ Indri Dwi Apriliyanti et al., "To Reform or Not Reform? Competing Energy Transition Perspectives on Indonesia's Monopoly Electricity Supplier Perusahaan Listrik Negara (PLN)," *Energy Research and Social Science* 118, no. October (2024): 103797, <https://doi.org/10.1016/j.erss.2024.103797>.

³² Richard Bridle et al., "Missing the 23 Per Cent Target: Roadblocks to the Development of Renewable Energy in Indonesia" (<bound method Organization.get_name_with_acronym of <Organization: International Institute for Sustainable Development>>, 2018).

³³ James Guild, "Feed-in-Tariffs and the Politics of Renewable Energy in Indonesia and the Philippines," *Asia and the Pacific Policy Studies* 6, no. 3 (2019): 417-31, <https://doi.org/10.1002/app5.288>.

If we learn from the renewable energy directive adopted by countries in the European Union in 2030, it is expected to increase by a minimum of 42.5%, which shows the seriousness that more than 75% of the European Union's greenhouse gas emissions come from the energy sector.³⁴ EU legislators are transforming the EU's climate legislation with a "Fit for 55" measure that refers to a 55% climate target by 2030. Domestic litigation is growing as governments challenge their commitments and file lawsuits if they fail to implement the policies outlined in their national plans. For example, the *France vs Notre Affaire à Tous et al* case argued that the French government had created environmental harm by failing to implement policies to meet France's 2020 emissions target.³⁵

In the EU, litigation can arise if a member state fails to introduce a climate policy framework as per EU Regulation 2019/199 on the Union Governance of Energy and Climate Action. In 2022, the European Commission issued formal notices against Poland, Bulgaria, Romania and Ireland for failure to publish Long-Term Strategies to address climate issues. These offences are heard by the European Court of Justice (CJEU) and civil society groups can file suit if countries fail to comply with the governance regulation.³⁶

EU regulations also indicate that there are opportunities for citizens to act as energy producers, consumers or prosumers. Prosumers (combined producers and consumers) of renewable energy can take the form of communities active in the use of renewable energy that use themselves or sell excess energy produced. In the European Union it is regulated in the Renewable Energy Directive (Directive (EU) 2018/2001) or RED II and (Directive (EU) 2019/944) or ED. Article 2.16 of RED II defines a

³⁴ European Commission, "Renewable Energy Targets," 2023, https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-targets_en.

³⁵ Climate Change Litigation Databases, "Notre Affaire à Tous and Others v. France - Climate Change Litigation," 2018, <https://climatecasechart.com/non-us-case/notre-affaire-a-tous-and-others-v-france/>.

³⁶ Paul Cairney et al., "How to Conceptualise Energy Law and Policy for an Interdisciplinary Audience: The Case of Post-Brexit UK," *Energy Policy* 129, no. May 2018 (2019): 459–66, <https://doi.org/10.1016/j.enpol.2019.02.022>.

“Renewable Energy Community/ REC” as a legal entity in the form of an SME, a municipality or a natural or non-corporate person that aims at economic, social and environmental outcomes beyond financial returns.³⁷ Meanwhile, energy policy in the UK encourages energy lawyers to bridge the audience between government policies and people's rights.³⁸ One focus is because energy policy is a driver of changes to energy law that is often neglected on economic assumptions without consideration of environmental sustainability.

C. Policy Implementation Through Anthony Allott's Theory of Effectiveness in New Renewable Energy Policy

International efforts to address global warming and the threat of an energy crisis are evidenced by various policies in the form of climate change laws relating to energy use, management and control. The role of energy policy in the renewable energy transition process has been shown to increase in countries with strong legal systems.³⁹ Policy effectiveness in achieving increased renewable energy transition is a form of state credibility on carbon emission pledges.

Legal policy interventions in achieving renewable energy transition targets play an important role.⁴⁰ Motivation can be done through policies to support and facilitate compliance and accelerate the energy transition. China has enacted the 14th Five-Year Plan policy on renewable energy, which plays an important role in regulating the system and developing strategies for energy transition. This is not only because China is the world's largest greenhouse gas emitter, but also because China's energy

³⁷ Campos Inês et al., “Regulatory Challenges and Opportunities for Collective Renewable Energy Prosumers in the EU,” *Energy Policy* 138, no. April 2019 (2020), <https://doi.org/10.1016/j.enpol.2019.111212>.

³⁸ Cairney et al., “How to Conceptualise Energy Law and Policy for an Interdisciplinary Audience: The Case of Post-Brexit UK.”

³⁹ Ying Liu and Chao Feng, “Promoting Renewable Energy through National Energy Legislation,” *Energy Economics* 118, no. January (2023): 106504, <https://doi.org/10.1016/j.eneco.2023.106504>.

⁴⁰ Anis Omri and Sami Ben Jabeur, “Climate Policies and Legislation for Renewable Energy Transition: The Roles of Financial Sector and Political Institutions,” *Technological Forecasting and Social Change* 203 (2024), <https://doi.org/10.1016/j.techfore.2024.123347>.

demand structure is increasing. The 14th Five-Year Plan policy by the National Development and Reform Commission (NDRC) in achieving the non-fossil energy target of 20% by 2025.⁴¹

Professor Anthony Allott (Allot), famous for his theory of the Effectiveness of Law, is a jurist from the University of London. With his book entitled, "Essays in African Law: (1960), Allot became the first pioneering jurist to assess the impact of the acceptance of European law on local legal systems. This condition was the result of his research in Africa. According to Allot, the purpose of law is to regulate or shape the behaviour of members of society, either by determining what is allowed or prohibited through the establishment of institutions and processes in the law, to carry out the functions of law to be more effective. Allot states as follows:⁴²

"The purpose of the laws is to regulate or shape the behavior of the members of the society, both by prescribing what is permitted or forbidden, and by enabling them, through the establishment of institutions and processes in the law, to carry out functions more effectively (Anthony Allot, 1981: 233)."

Legal effectiveness according to Allot is how the law can realise its purpose or in other words how the law can fulfil its purpose. However, assessing or measuring legal effectiveness is difficult. Allot stated:

"...A general test of the effectiveness of a law (a particular provision of a legal system) is therefore to see how far it realizes its objectives, ie. fulfills its purposes. There are two difficulties here. The first is that, even in a society with express law-making (through legislation or otherwise), the purpose of a particular law may not be clearly stated by its maker or emitter. What is more, as the law acquires a

⁴¹ Baohong Jiang and Muhammad Yousaf Raza, "Research on China's Renewable Energy Policies under the Dual Carbon Goals: A Political Discourse Analysis," *Energy Strategy Reviews* 48, no. June (2023): 101118, <https://doi.org/10.1016/j.esr.2023.101118>.

⁴² Anthony Allott, "The Effectiveness of Laws," *Valparaiso University Law Review* 15, no. 2 (June 3, 2011): 229-42, <https://scholar.valpo.edu/vulr/vol15/iss2/1>.

history, those who apply it, follow it, or disregard it re-shape both the law and its purposes to correspond to their power and their influence. A law lives and develops. Most normative statements are not originated by those who propound them; but to the recipient of the legal message, what counts is not what the originator of the norm may have intended, but what the current emitter of it intends (Anthony Allot: 1981:233)"

The first reason it is difficult to test the effectiveness of the law is that with the rapid process of making legal products in society (through laws or other forms), sometimes the purpose of the law is not clearly stated by the maker or drafter. Therefore, effectiveness will be difficult to measure. Especially when the law is made in the past, but applied in the future, there will be difficulties in its application. This is because the law is alive and evolving, and those who apply it, follow it, or ignore it, reshape both the law and its purpose to suit their changes and influences. Law is alive and evolving. Most normative statements do not come from those who put them forward, but to the recipient of the legal message, what counts is not what the inventor of the norm intended, but what the current legislator intended.⁴³

The second reason it is difficult to test the effectiveness of the law is because there are communities that have laws but do not regulate them in written laws and regulations or are only partially regulated because they are already regulated in customary law. This condition will be difficult to measure its effectiveness because its purpose is not explicitly stated. How to measure the effectiveness of customary law? It is very difficult to do. Allot states as follows:

"Secondly, there are societies and laws (both of them highly significant juristically and numerically in the perspective of comparative law) which place little or no emphasis on expressly promulgated law, and which are claimed to be regulated by customary law. How can laws which apparently develop from the habitual practices of the

⁴³ Diana Tantri Cahyaningsih and Menurut Allot, "Mengurai Teori Effectiveness of Law Anthony Allot," 2020.

people be said to have a purpose, or indeed to achieve such a purpose effectively?"

In various studies that discuss the effectiveness of rules from compliance and outcomes will encourage individual behaviour in achieving the 'spirit of the law' through effective, understandable and acceptable policy approaches.⁴⁴

Global warming and increasing environmental degradation have become important global concerns in the last 3 decades. Due to the increase in house gases as greenhouse gases (GHGs) are a global problem, countries around the world are seeking solutions at the global level by holding meetings such as the "UN Conference on Climate Change in 1992" and the "Paris Conference in 2015". The Kyoto Protocol in 1997 and the Paris Agreement in 2016, which are two important agreements resulting from these conferences, aim to mitigate GHG emissions and keep the global average temperature rise well below 2°C. Under the agreement, each country must design a specific plan to fight global warming.⁴⁵ In addition, to ensure security of energy supply and mitigate environmental damage, the United Nations (UN) adopted a universal call to ensure "access to affordable, reliable, sustainable and modern energy for all" (Sustainable Development Goal 7 SDGs).

Renewable energy has become an alternative to fossil fuels and nuclear energy; however, there are also controversial arguments on whether or not renewable energy production should be encouraged through policy and, if so, which incentive instruments should be used. In this regard, it is important to analyse the effectiveness of renewable energy policies implemented in increasing the installed capacity of renewable energy.

The effectiveness of renewable energy policies can certainly be implemented in the form of energy justice. One of the

⁴⁴ Nicoletta Rangone, "Making Law Effective: Behavioural Insights into Compliance," *European Journal of Risk Regulation* 9, no. 3 (September 1, 2018): 483–501, <https://doi.org/10.1017/ERR.2018.51>.

⁴⁵ Qiang Wang, Jiaqi Guo, and Rongrong Li, "Official Development Assistance and Carbon Emissions of Recipient Countries: A Dynamic Panel Threshold Analysis for Low- and Lower-Middle-Income Countries," *Sustainable Production and Consumption* 29 (2022): 158–70, <https://doi.org/10.1016/j.spc.2021.09.015>.

important roles of advocacy or legal aid institutions for vulnerable or marginalised communities related to access rights to renewable energy.⁴⁶ In 2022, at least 760 million people in the world still live without access to electricity. Energy rights for the poor and disadvantaged are listed in Sustainable Development Goals (SDGs) 7 related to the right to access affordable and sustainable energy. A justice approach to the issue of energy poverty also needs to be carried out broadly. One of them is to increase access to low-carbon energy by involving public participation.⁴⁷

Furthermore, an important issue that needs to be considered in an effort to weigh the effectiveness of a policy on renewable energy implementation is the encouragement of technological innovation to encourage the development of supporting tools for renewable energy producers. Renewable energy technology innovation will help improve the efficiency of fossil fuel use in Indonesia and gradually avoid dependence on fossil fuels for energy generation.⁴⁸

The challenges that Indonesia will face from non-compliance with renewable energy policies will affect increasingly complex environmental issues. On the other hand, the management of natural resources for renewable energy should be developed such as geothermal to help close the gap in the energy transition process. Policy effectiveness is realised through the control of stakeholders or authorised government agencies in each sector such as the Ministry of Environment, Ministry of Forestry, Ministry of Energy and Mineral Resources, and other agencies such as PT Pertamina in geothermal management.⁴⁹

⁴⁶ IEA, "Access and Affordability – Topics," 2024, <https://www.iea.org/topics/access-and-affordability>.

⁴⁷ Abidah B. Setyowati, "Mitigating Inequality with Emissions? Exploring Energy Justice and Financing Transitions to Low Carbon Energy in Indonesia," *Energy Research and Social Science* 71 (2021): 101817, <https://doi.org/10.1016/j.erss.2020.101817>.

⁴⁸ Xihui Haviour Chen et al., "Assessing the Environmental Impacts of Renewable Energy Sources: A Case Study on Air Pollution and Carbon Emissions in China," *Journal of Environmental Management* 345, no. April (2023): 118525, <https://doi.org/10.1016/j.jenvman.2023.118525>.

⁴⁹ Richard Dutu, "Challenges and Policies in Indonesia's Energy Sector," *Energy Policy* 98 (November 1, 2016): 513–19, <https://doi.org/10.1016/J.ENPOL.2016.09.009>.

This research highlights that policy effectiveness and the influence of political decisions can have an effect on accelerating the energy transition. Based on the Climate Council's monitoring of countries with increasing renewable energy policies, 11 countries exceeded their renewable energy targets including China, New Zealand, Germany and Norway. Although China is the world's largest greenhouse gas emitter, it is driving the renewable energy transition by getting on track with utility-scale solar and wind power by surpassing the target five years ahead of the 2030 target of 1,200GW.⁵⁰

D. Dispute Resolution and the Effectiveness of Political and Legal Policies in Encouraging the Increase of New and Renewable Energy in Indonesia

Legal policies that emphasise energy diversification efforts as well as efforts to avoid dependence on fossil energy in Law No. 30/2007 on Energy also call for sustainable management of new and renewable energy and improved supply. The current global perspective shows that energy is the cornerstone of progress for some countries, where lack of energy sources or unstable conditions affect the condition of a country and hinder economic development. a a counry's Like Nigeria, Indonesia has yet to fully capitalise on the vast potential of its natural resources for sustainable growth.⁵¹ In addition to the challenge of maintaining energy supply, there is also the dilemma of emphasising low-carbon energy sources. Several studies explain that Indonesia is currently no better off than countries that have made efforts to make the energy transition such as France, Spain, China and Brazil.⁵² One of them is the

⁵⁰ Climate Council, "11 Countries Leading the Charge on Renewable Energy," 2022, <https://www.climatecouncil.org.au/11-countries-leading-the-charge-on-renewable-energy/>.

⁵¹ Olusola Joshua Olujobi et al., "Legal Responses to Energy Security and Sustainability in Nigeria's Power Sector amidst Fossil Fuel Disruptions and Low Carbon Energy Transition," *Heliyon* 9, no. 7 (2023): e17912, <https://doi.org/10.1016/j.heliyon.2023.e17912>.

⁵² Theresia B. Sumarno, Parulian Sihotang, and Widhyawan Prawiraatmadja, "Exploring Indonesia's Energy Policy Failures through the JUST Framework," *Energy Policy* 164, no. March (2022): 112914, <https://doi.org/10.1016/j.enpol.2022.112914>.

consideration of fossil fuel subsidy (FFS) policy.⁵³ This shows that fossil fuel subsidies help increase greenhouse gas emissions in Indonesia and hinder the economic transition to decarbonisation.

Energy security and affordability have long been central issues for all countries in the world. However, growing energy use, CO2 emissions and air quality issues have raised concerns about the way countries produce and consume energy. Many countries are taking action to move away from fossil fuels and move towards an environmentally friendly energy future. The path to this goal is often referred to as the clean energy transition. But the path we're on today still falls short of ambition. Economies and markets can play a role, but policymakers will play a central role. Energy policy has been effective in some sectors and countries and delivered some important results so far, for example for cars, household appliances, lighting, wind and solar power generation, but more needs to be done.⁵⁴

Indonesia's renewable energy policy climate is still not favourable to renewable energy. Researchers and experts see an overlap between the State Energy General Plan (*Rencana Umum Energi Negara* /RUEN) and the Business Plan Electricity Supply (*Rencana Usaha Penyediaan Tenaga Listrik* /RUPTL) made by PT PLN.⁵⁵ The energy transition often faces inertia as it consists of complex socio-technological processes with power interactions between many actors, making a technological perspective alone inadequate. This is particularly the case in Indonesia, where the development of the Law and Presidential Regulation on renewable energy (a regulatory policy signed by the House of Representatives and the President) has been stalled in recent years, thus not providing the country with a legal umbrella for sustainable energy.

⁵³ Assia Elgouacem, "Designing Fossil Fuel Subsidy Reforms in OECD and G20 Countries: A Robust Sequential Approach Methodology," *Oecd*, no. 168 (2020): 1-37.

⁵⁴ Giacomo Luciani, *The Impacts of the Energy Transition on Growth and Income Distribution, Lecture Notes in Energy*, vol. 73, 2020, https://doi.org/10.1007/978-3-030-39066-2_13.

⁵⁵ "Renewable Energy Policy in Indonesia Is Overlapping - IESR," accessed December 4, 2023, <https://iesr.or.id/en/renewable-energy-policy-in-indonesia-is-overlapping>.

For a long time, the absence of these legal preconditions has tacitly signalled the politically unstable state of renewable energy development in Indonesia. While the recently released “Energy Transition Net Zero” roadmap partially rectifies these issues, it still neglects to address root causes that may hinder efforts towards sustainable structural change, including more focus on local capacity and vulnerable communities that will be impacted by the transition.⁵⁶

The political effectiveness of the results of the policies taken will affect the success of the country's goals and targets in efforts to reduce greenhouse gas emissions. Regarding the effectiveness of political policies taken by a country, there are several political scopes that need to be understood for each policy taken. The scope or scope of legal politics are:

- a) State policy on laws to be enacted or not enacted in order to achieve state goals;
- b) Political, economic, social, cultural background of the birth of legal products; and
- c) Law enforcement in field reality.

Meanwhile, according to Satjipto Rahardjo, the political aspects of law as material for study include:⁵⁷

- a) The goals to be achieved by the existing legal system;
- b) The means chosen to determine which is best for achieving the goal. For example, the choice of decentralisation or centralisation;
- c) When a regulation or law needs to be changed and through what means the change should be made;
- d) Can a well-established pattern be formulated for selecting goals as well as ways to achieve those goals?

The concept of policy effectiveness reflects the main principle of contemporary policy science, namely problem solving. This means that the fundamental purpose of public policy is to address or solve community problems or improving

⁵⁶ Annisa Sekarintias, Brunilde Verrier, and Jennifer Cronin, “Untangling the Socio-Political Knots: A Systems View on Indonesia’s Inclusive Energy Transitions,” *Energy Research and Social Science* 95, no. December 2022 (2023): 102911, <https://doi.org/10.1016/j.erss.2022.102911>.

⁵⁷ Andi Nuzul, “The Melting Pot of Legal Systems in Indonesia (Reading the Legal Politics of Indonesian Islamic Law),” *Mimbar Hukum - Fakultas Hukum Universitas Gadjah Mada* 25, no. 2 (2013): 327–37, <https://jurnal.ugm.ac.id/jmh/article/view/16088/10634>.

policy outcomes through a deliberative process.⁵⁸ Therefore, if public policy is fundamentally about problem solving, then policy design is fundamentally about developing policy solutions in a deliberate way to achieve that goals.⁵⁹

An important factor in the effective implementation of renewable energy policies is supported by law enforcement from relevant institutions such as the Ministry of Energy and Mineral Resources which functions as a formulator and sets policies, the National Energy Council, the central government and local governments, the Ministry of Environment and PT PLN Indonesia. Based on Article 20 Paragraphs (2) and (4) of Law No. 30/2007 on Energy, the government and/or local government (through the Regional Energy General Plan) are obliged to increase the availability of renewable energy. On the other hand, the current weakness does not deny that renewable energy policies do not simultaneously encourage increased technological innovation to manage natural resources that produce renewable energy such as solar power plants.⁶⁰

The absence of a clear monitoring process to audit, verify violations is part of the transparency and effectiveness of renewable energy policies. In the process of developing the energy transition, it is inseparable from the role of investors for the development of new renewable energy which is a vital object of the state. On the other hand, in Indonesian legal policy, the government should also look forward to dispute resolution in the field of renewable energy, for example with Alternative Dispute Resolution (ADR).⁶¹ Currently, there are not many references that become specific jurisprudence related to community rights to access renewable energy and problems related to renewable

⁵⁸ B. Guy Peters et al., "Designing for Policy Effectiveness: Defining and Understanding a Concept," *Elements in Public Policy*, March 22, 2018, <https://doi.org/10.1017/9781108555081>.

⁵⁹ Michael Howlett, and Ishani Mukherjee, eds. *Routledge handbook of policy design*. (London: Routledge, 2018).

⁶⁰ Daryanti Daryanti and Albertus Sentot Sudarwanto, *Good Governance in the Policy on Using Solar Cells as Efforts to Reduce Emissions in Indonesia* (Atlantis Press SARL, 2024), https://doi.org/10.2991/978-2-38476-218-7_74.

⁶¹ Mustafa Oğuz. Tuna, *Alternative Dispute Resolution in Energy Industries* (Routledge, 2024), <https://www.routledge.com/Alternative-Dispute-Resolution-in-Energy-Industries/Tuna/p/book/9781032181080>.

energy development in Indonesia. Whereas the development of international law related to subsidies on renewable energy has entered into trade and environmental disputes at the World Trade Organisation (WTO) which raises the issue of discrimination against renewable energy support.⁶²

For renewable energy lawyers or advocates who represent the interests of both Independent Power Producers and individuals as a society, the importance of alternative dispute resolution mechanisms in renewable energy cases or other efforts in handling climate change is used because the mechanism is more practical and acceptable to the parties. Unfortunately, neither Presidential Regulation No. 112 of 2022 nor Law No. 30 of 2007 nor other regulations related to energy specifically regulate ADR mechanisms, but are emphasised for legal certainty based on Law No. 30 of 1999 on ADR. ADR mechanisms such as mediation, negotiation, conciliation or arbitration are used as a more effective and less time-consuming system.⁶³ The rules for ADR for renewable energy disputes should be set out in written law formed from the specific characteristics of the sector. One of the important reasons is that the energy sector and the country's struggle to achieve Net Zero Emission will be influenced by international energy relations, transactions, renewable energy projects, and increasingly complex legal developments.⁶⁴

As based on Godwin Omoaka's research on the importance of alternative dispute resolution in Nigeria in renewable energy project disputes, arbitration has the potential to promote investment and development in renewable energy projects. This will relate to dispute resolution on renewable

⁶² Henok Asmelash, "The First Ten Years of WTO Jurisprudence on Renewable Energy Support Measures: Has the Dust Settled Yet?," *World Trade Review* 21, no. 4 (2022): 455–78, <https://doi.org/10.1017/S1474745622000180>.

⁶³ J. Alkhayer, N. Gupta, and C. M. Gupta, "Role of ADR Methods in Environmental Conflicts in the Light of Sustainable Development," *IOP Conference Series: Earth and Environmental Science* 1084, no. 1 (2022), <https://doi.org/10.1088/1755-1315/1084/1/012057>.

⁶⁴ Peter D Cameron, "International Arbitration and Energy Disputes1," <https://doi.org/10.3366/Gels.2022.0065> 3, no. 1 (January 30, 2023): 1–17, <https://doi.org/10.3366/GELS.2022.0065>.

energy contracts, bilateral investment agreements in governance, environmental and social considerations.⁶⁵

The Indonesian government's political will is key to developing new renewable energy to realise the national energy mix target. This intention must be expressed in policies related to taxation and incentives. In addition, community involvement and all stakeholders are also needed. As of 2020, the role of renewable energy in the national energy mix in Indonesia is still 11.5 per cent or half of the target of 23 per cent by 2025. In the power generation sector, the role of fossil energy, especially coal, is still very dominant, at 66.3 per cent. Natural gas and fuel oil account for 20.47 per cent. Thus, the contribution of new renewable energy is only about 14 per cent.⁶⁶

Based on Law No. 30/2007 on Energy does not show optimism in the transition of renewable energy in the electricity sector.⁶⁷ Other important things also show that the existing regulation should clearly regulate and be binding for all interests such as government, private sector, or society. The political will of the government determines the direction of energy policy-making in Indonesia. The role of advocacy and lawyers in ensuring that renewable energy policies are followed is a new history in the energy transition. Legal consequences for the government regarding ambiguity in policy implementation also need to be applied.

Related to renewable energy prices regulated in Chapter II Article 5 of Presidential Regulation No 112 of 2022 in providing legal certainty related to renewable energy prices is also an important part for renewable energy investment in Indonesia. Electricity tariffs from new renewable energy are set with a feed in tariff scheme, which requires electricity companies to buy electricity from renewable energy power plants that have

⁶⁵ Godwin Omoaka, "Renewable Energy Disputes and Arbitration in West Africa: Nigeria, The Case Study," 2024, 1-25, https://doi.org/10.1007/978-3-030-96183-1_55-1.

⁶⁶ PT. PLN (PERSERO), "Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) PT PLN (Persero) 2021-2030."

⁶⁷ Herman Bakir and Charles Marpaung, "Renewal of Energy Law (Law No. 30 of 2007) for Indonesia in the Energy Transition Era (Transition from Fossil Energy to Renewable Energy)" 2007, no. 30 (2023), <https://doi.org/10.4108/eai.28-10-2023.2341808>.

met the requirements. In the United States, the scheme guarantees a payment system for each unit of energy produced over a specified period of time such as 15-20 years.⁶⁸ One of the cases that can occur and become an obstacle to the development of renewable energy in Indonesia is the issue of Power Purchase Agreement (PPA) and the inefficient renewable energy procurement process. Dispute resolution in the case of a solar power plant project with a Power Purchase Agreement (PPA) scheme if there is a dispute between the independent power producer and PLN regarding electricity tariffs or delays in payment by PLN will usually lead to alternative dispute resolution arbitration.

Law enforcement, supervision and financing of renewable energy development are important parts for the government to improve the energy transition system.⁶⁹ Energy transition trends around the world show that global energy players are at the forefront of building solutions to these challenges. The effectiveness of political policy towards the success of renewable energy development targets in Indonesia requires the government's consistent attitude towards the targets and goals in the Nationally Determined Contribution (NDC).

E. Conclusion

Accelerating the scale-up of renewable energy will depend on state commitment, private sector involvement and public awareness of the importance of the energy transition. Pollution from fossil fuels is one of the causes of environmental damage in the form of pollution and increasing earth's temperature due to climate change. The role of legal aid or advocacy organisations as an audience for people's rights to obtain sustainable energy and affordability of clean energy access will correlate with the effectiveness of government policies in achieving Net Zero Emission. Amid the development

⁶⁸ Monica Greer, "U.S. Electric Markets, Structure, and Regulations," *Electricity Marginal Cost Pricing*, January 1, 2012, 39-100, <https://doi.org/10.1016/B978-0-12-385134-5.00003-X>.

⁶⁹ IESR, "Policy Assessment : Renewable Energy Development in Indonesia's Power," 2024.

of litigation on climate change, the need for climate change legislation as legal reform is a benchmark for commitment to one of the policies in the form of increasing the use of new renewable energy to reduce greenhouse gas emissions. Political policies in determining the direction of the country's targets and goals in reducing emissions through the implementation of new renewable energy will have strong implications, especially for the success of these goals and targets. The success of the implementation of NRB development will depend on the implementation system of good governance resulting from legal politics. The policy climate for new renewable energy in Indonesia is considered still not supportive of new renewable energy, so that regulations in the form of laws and regulations under them such as the ratification of the NRB Bill are needed to encourage the state to develop NRB such as energy sourced from solar power, wind power, tidal waves, solar, geothermal, and biomass. Political policy effectiveness can be created by involving all stakeholders in building comprehensive and inclusive NRB.

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All authors declared that this work is original and has never been published in any form and in any media, nor is it under consideration for publication in any journal, and all sources cited in this work refer to the basic standards of scientific citation.

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