



## The Influence of Island Group Development on the Fulfillment of Equitable Energy

Nasarudin Tianotak<sup>1</sup>, Merry Tjoanda<sup>2</sup>, Adonia Ivonne Laturette<sup>3</sup>, Barzah Latupono<sup>4</sup>

<sup>1,2,3,4</sup> Faculty of Law, Universitas Pattimura, Ambon, Indonesia.

@ : [ti4not4kudin@gmail.com](mailto:ti4not4kudin@gmail.com)

Corresponding Author\*



### Abstract

Article 18A paragraph (1) of the 1945 Constitution also stipulates that: The authority relationship between the central government and provincial, district and city regional governments, or between provinces and districts and cities, is regulated by law taking into account regional specificities and diversity. Seeing the importance of marine areas above, the Indonesian government should have a legal policy for developing marine areas. One of the island groups that can be found in Indonesia is located in Maluku. However, this goal of being a state cannot be fully realized, because a number of regions in the archipelagic region do not receive fair and harmonious treatment with other regions. To answer legal issues, researchers use normative juridical research. The research approaches used are the Legislation Approach, Comparative Approach, Conceptual Approach. The development of island groups towards the fulfillment of equitable energy in archipelagic provinces is carried out by formulating national energy policies which include energy availability for national needs, energy development priorities, utilization of national energy resources and national energy buffer reserves, energy supply policies and priorities for energy and reserve development. National Energy Administration is directed at ensuring the security of the national Energy supply through the proportional use of Energy Resources, both non-fossil Energy Resources such as geothermal, biomass, water flow and waterfall power, solar power, wind power, nuclear power, movement power and temperature differences in sea layers, as well as fossil Energy Resources such as petroleum, coal, natural gas, coal methane gas.

**Keywords:** *Development; Island Group; Equitable Energy.*

## INTRODUCTION

Indonesia is the largest *archipelagic state* in the world with a very strategic geographical position. The number of islands in Indonesia that are officially recorded reached 16,056 islands. The certainty of this number was determined at the *United Nations Conferences on the Standardization of Geographical Names (UNCSGN)* and the *United Nations Group of Experts on Geographical Names (UNGEGN)* which took place on August 7-18, 2017 in New York, United States. The Indonesian coastline is 99,093 km<sup>2</sup>.<sup>1</sup> Its land area reaches about 2.012 million km<sup>2</sup> and the sea is about 5.8 million km<sup>2</sup> (75.7%), 2.7 million square kilometers of which are included in the Exclusive Economic Zone (EEZ).

The Indonesian Sea, which is 2.5 times the size of the mainland, certainly has enormous potential, both in terms of natural resources and environmental services that can be used to support economic development at the local, regional and national levels. The Unitary State of the Republic of Indonesia is also a coastal *state* whose national territory components consist of land, oceans and airspace). Two-thirds of Indonesia's total territory is in the form of oceans. Indonesia can also be called an archipelagic state, with evidence of 16,056 islands.

<sup>1</sup> Badan Informasi Geospasial, BIG Sediakan Data dan Informasi Geospasial untuk Mendukung Industri Bahari, <http://www.bakosurtanal.go.id/big-sediakan-data-dan-informasi-geospasial-untuk-mendukung-industri-bahari/>

Approximately 6 million km<sup>2</sup> of Indonesia's territory is in the form of the sea which greatly affects the climate and weather of the entire region. Viewed from the natural nature, Indonesia's marine environment shows an integral nature between the elements of the sea (water) and land (land).

Ecologically, this is a scientific and natural basis for the concept of archipelago insight as a manifestation of geographical unity, which is the basis for political, economic, cultural, defense and security unity.<sup>2</sup> Related to *archipelagic states*, the word archipelago is often translated as "archipelagic state" which is a collection of islands separated by the surface of the seawater. There is actually a fundamental difference between the archipelago and the archipelago. Archipelago is defined as a collection of islands while the term archipelago comes from the Latin "archipelagus" which means "main sea."<sup>3</sup> The original meaning of the word archipelago is not a "group of islands", but a sea in which there is a group of islands.<sup>4</sup> The concept of archipelagic state (according to layers) developed by Indonesia which refers to the meaning of archipelagic states "must be replaced with the concept of a maritime state", namely a sea state that has many islands.<sup>5</sup> The country of Indonesia is flanked by two continents and two oceans. In this regard, Indonesia is directly bordered both by land and by land with several surrounding countries, including the sea border with Australia, the Philippines, India, Malaysia, Singapore, Timor Leste, Thailand, and Vietnam. According to Hall, there were five commercial zones in Southeast Asia in the XIV and early XV centuries.

*First*, the Bay of Bengal zone which includes South India, Sailan, Burma and the North Coast of Sumatra. *Second*, the Malacca area. *Third*, the South China Sea area which includes the east coast of Peninsular Malaysia, Thailand, and South Vietnam. *Fourth*, the Sulu region which includes the West Coast, Luzon, Mindoro, Cebu, Mindanao, and the north coast of Kalimantan. *Fifth*, the Java Sea area. The Java Sea area was formed due to the trade of spices, agarwood, rice, and so on between the west and east involving South Kalimantan, Java, Sulawesi, Sumatra and Nusa Tenggara.<sup>6</sup> Jimly Asshiddiqie wrote: Both in the research of Oppenheimer and Arysio Santos and friends, it is illustrated that the nation that now calls itself as the Indonesian nation actually has a very long history in prehistoric times. The history of Indonesia does not only begin with the history of small kingdoms in Sumatra, Java, Kalimantan and Sulawesi. Although since the time of the Srivijaya Kingdom, which is known as a respected maritime kingdom in the world, but since long before, in this archipelago there has grown and developed a great civilization in the history of mankind in the past, which is then known as the legend of the Continent of Atlantis or Eden (paradise) in the East.<sup>7</sup>

In line with this, there is a lot of evidence of Indonesian maritime since ancient times, including: (1) The existence of 10 reliefs of high-masted sailing ships carved in Borobudur Temple, Central Java (VII and VIII centuries); (2) During the heyday of the Srivijaya kingdom (683-1030 AD), the international trade routes in the Straits of Malacca and Palembang were very busy, so Srivijaya based its politics on the control of shipping routes and trade routes

---

<sup>2</sup> Mochtar Kusumaatmadja, *Bunga Rampai Hukum Laut*, (Jakarta: Bina Cipta, 1987), p. 78.

<sup>3</sup> Safri Burhanuddin, et al, *Sejarah Maritim Indonesia: Menelusuri Jiwa Bahari Bangsa Indonesia Dalam Proses Integrasi Bangsa (Sejak Jaman Prasejarah Hingga Abad XVII)*, (Jakarta: Pusat Riset Wilayah Laut dan Sumber Daya Non-Hayati Badan Riset Kelautan dan Perikanan/Departemen Kelautan dan Perikanan, 2003), p. 1.

<sup>4</sup> P. Tangsubkul, *The Southeast Asian Archipelagic State: Concepts, Evolution, and Current Practice*, (Research Report No. 15, February 1984; East-West Environment and Policy), p. 2-3.

<sup>5</sup> A.B Lapijan, *Laut, Pasar, dan Komunikasi Antar-Budaya*, Makalah Disampaikan pada Kongres Sejarah Nasional, Jakarta, (1996), p. 1.

<sup>6</sup> K.R. Hall, *Maritime Trade and State Development in Early Southeast Asia*, (Honolulu, Hawaii: University of Hawaii Press, 1985), p. 20-25.

<sup>7</sup> Jimly Asshiddiqie, *Aktualisasi Nilai-Nilai Pancasila dan Tantangan Revolusi Biru Indonesia*, Makalah, Tanpa Tahun, p. 5.

and control important areas; (3) The Singasari Kingdom had a mainstay naval fleet, with King Kertanegara positioning himself on an equal footing with King Khubilai Khan of China, so he did not want to submit to the influence of the Chinese emperor; (4) The Majapahit Kingdom which is famous for the Palapa oath and is highly respected by the kings of the archipelago; and (5) The number of accomplished sailors (Bugis, Wajo, Banten, Madura, Ambon, Ternate/Tidore, Sangir Talaud, Riau/Malay). However, the purpose of this state has not been fully realized, because a number of areas in the archipelago do not receive fair treatment and are in harmony with other regions.

## METHODS OF THE RESEARCH

Answering legal issues, the researcher uses a type of normative juridical research. Normative legal research is legal research that lays down a system of building a norm system consisting of various aspects such as norm provisions, legal principles, laws and regulations, conventions, agreements, and doctrines related to the problems to be studied and researched. The research approaches used are the *Staute approach*, *Comparative approach*, and *Conceptual approach*.<sup>8</sup>

## RESULTS AND DISCUSSION

### A. The Development of Island Clusters Towards the Fulfillment of Equitable Energy

Hundreds of inhabited islands such as in Maluku Province (92.6 percent of the ocean area), Riau Islands Province (96 percent of the sea area), East Nusa Tenggara Province (80.8 percent of the sea area), Bangka Belitung Province (79.9 percent of the sea area), and North Sulawesi Province (95.8 percent of the sea area), there are difficulties in fulfilling the welfare of the people and quality public services. The twenty main problems faced are the wide and heavy coverage of public services, which are spread across a number of islands, but do not receive special treatment from the (central) government. Based on the mandate of Article 18, Article 18A, Article 18B, and Article 25A of the 1945 Constitution of the Republic of Indonesia implicitly contains the substance of the state's recognition of the specificity of the regulation of the archipelagic regions. As a unitary country with archipelagic characteristics, Indonesia adheres to the principle of decentralization, where regional heads are given the authority to regulate and manage their own households.

This is reflected in Article 18 paragraph (1) of the 1945 Constitution of the Unitary State of the Republic of Indonesia (1945 Constitution) stipulates that: The Unitary State of the Republic of Indonesia is divided into provincial areas and the provincial area is divided into districts and cities, each province, district, and city has a local government, which is regulated by law. Furthermore, Article 18A paragraph (1) and Article 18B paragraph (1) of the 1945 Constitution of the Republic of Indonesia emphasize that the regional autonomy that is carried out still pays attention to the specificity, privileges and diversity of each region. Article 18A paragraph (1) of the Constitution of the Republic of Indonesia of 1945 reads in full: The relationship of authority between the central government and the local governments of provinces, districts, and cities, or between provinces and districts and cities, is regulated by law by taking into account the specificity and diversity of regions. Seeing the importance of the marine area above, the government of the Republic of Indonesia should

---

<sup>8</sup> Peter Mahmud Marzuki, *Penelitian Hukum*, (Jakarta: Prenada Media Group, 2004), p. 156.

have a legal policy for the development of marine areas in the context of borders because it concerns the territorial area in a country. the island group that can be found in Indonesia is located in Maluku. This island cluster was formed for the development process of the Maluku region. It can be said that the geographical location between these island groups is not too far away, there are 12 forms of island groups in Maluku, namely: Buru Island, West Seram Island, East Seram Island, North Seram Island, South Seram Island, Banda Ambon Island, and Lease Island, Kei Island, Aur Islands, Tanimbar Islands, Babar Islands, Southern Island Islands.

Regarding the 12 island clusters, the development of the archipelago cluster in Maluku, of course, if we build from one point alone, it cannot be because regional economic growth is based on the strength of the potential of Natural Resources in the 12 island clusters, Based on data, the potential of natural resources in the 12 Maluku Island clusters is very abundant and diverse. Some of the leading 12 island clusters in Maluku, namely the fisheries, agriculture, tourism and mining sectors, there is a fisheries sector in Maluku that has high fisheries potential, with fishery production of 3.9 million tons per year, which is worth around IDR 117 trillion.

Then Maluku has considerable agricultural potential, especially for commodities such as nutmeg and cloves, Maluku also has a huge tourism potential, with natural beauty and unique cultural richness such as in Banda Neira Central Maluku or Tual Southeast Maluku. Not only that, Maluku also has a perennial gas mining area, namely the Masela Block which will start operating in the next few years. With the diverse potential of natural resources owned, of course, it must be accompanied by the quality of qualified Human Resources. Therefore, to maximize the existing potential, integrated and sustainable efforts are needed. Some of the efforts that can be made include infrastructure development such as roads, ports, and airports that can help improve accessibility and ease of transportation in Maluku.

Then the development of technology that can help increase efficiency and effectiveness in managing Human Resources in Maluku. There are at least 11 marine economic sectors that can be developed, including: (1) capture fisheries; (2) aquaculture fisheries; (3) fishery product processing industry; (4) marine biotechnology industry; (5) mining and energy; (6) marine tourism; (7) forestry; (8) sea transportation; (9) the resources of small islands; (10) maritime services industry; and (11) non-conventional natural resources. Furthermore, the value of marine economics from the main maritime fields, namely:<sup>9</sup> 1) The economic value of fisheries including capture, aquaculture, and processing fisheries is USD 47 billion per year; 2) The economic value of marine tourism reaches USD 29 billion spread across 241 districts/cities; 3) The economic value of renewable energy reaches USD 80 billion per year consisting of marine current, tidal energy, waves, algae biofuels, marine heat; 4) The economic value of marine biopharmaceuticals reaches USD 330 billion per year which is supported by the high abundance and biodiversity of Indonesia's marine for the development of the biotechnology industry of food, medicines, cosmetics and bioremediation; 5) The economic value of sea transportation reaches USD 90 billion per year supported by the potential of national and international sea transportation networks, the strategic position of Indonesia and ALKI; 6) The economic value of offshore petroleum and gas reaches USD 68 billion per year. Where as much as 70 percent of oil and gas production

---

<sup>9</sup> Marsetio, *Aktualisasi Peran Pengawasan Wilayah Laut dalam Mendukung Pembangunan Indonesia sebagai Negara Maritim yang Tangguh*, (2015), p. 20-21

comes from the coast and 40 of the 60 potential basins containing oil and gas are offshore, 14 on the coast and only 6 on land. *Mineral seabed* reaches USD 256 billion per year and maritime industry and services reach USD 72 billion per year; 7) The economic value of industrial salt reaches USD 28 billion per year. The Preamble to the Constitution of the Republic of Indonesia (Constitution of the Republic of Indonesia) in 1945 has formulated several state objectives, including (1) protecting the entire Indonesian nation and all Indonesian bloodshed; and (2) advancing the general welfare. However, the purpose of this state has not been fully realized, because a number of areas in the archipelago do not receive fair treatment and are in harmony with other regions. Hundreds of inhabited islands such as in Maluku Province (92.6 percent of the sea area), Riau Islands Province (96 percent of the sea area), East Nusa Tenggara Province (80.8 percent of the sea area), Bangka Belitung Province (79.9 percent of the sea area), and North Sulawesi Province (95.8 percent of the sea area), there are difficulties in fulfilling the people's welfare and quality public services. The main problem faced is the wide and heavy coverage of public services, which are spread across a number of islands, but do not receive special treatment from the (central) government.

Based on the mandate of Article 18, Article 18A, Article 18B, and Article 25A of the 1945 Constitution of the Republic of Indonesia implicitly contains the substance of the state's recognition of the specificity of the regulation of the archipelagic regions. As a unitary country with archipelagic characteristics, Indonesia adheres to the principle of decentralization, where regional heads are given the authority to regulate and manage their own households. This is reflected in article 18 paragraph (1) of the Constitution of the Republic of Indonesia of 1945 which reads: "The Unitary State of the Republic of Indonesia is divided into provincial areas and the provincial area is divided into districts and cities, each of which has a local government, which is regulated by law"

Furthermore, Article 18A paragraph (1) and Article 18B paragraph (1) of the 1945 Constitution of the Republic of Indonesia emphasize that the regional autonomy that is carried out still pays attention to the specificity, privileges and diversity of each region. Article 18A paragraph (1) of the Constitution of the Republic of Indonesia of 1945 reads in full: "The relationship of authority between the central government and the local governments of provinces, districts, and cities, or between provinces and districts and cities, is regulated by law by taking into account the specificity and diversity of regions. Article 18B paragraph (1) of the 1945 Constitution of the Republic of Indonesia reads: "The State recognizes and respects special or special local government units regulated by law". Furthermore, the main juridical basis for the reality that Indonesia is an archipelagic country, so it is necessary to regulate the specificity of the archipelagic area is found in Article 25A of the 1945 Constitution which states: "The Unitary State of the Republic of Indonesia is an archipelago state characterized by an archipelago with a territory whose boundaries and rights are determined by law".

The various constitutional provisions that have been described above show that the archipelago needs to be regulated separately because of their specificity. The Archipelago has specific differences with other regions, especially related to: 1) Different characteristics so that the development model must be different from the general model; 2) Government administration management must be island-based; 3) Community services must be directed to the islands because the people of the archipelago live on isolated islands; 4) The average community in the archipelago is late in infrastructure development; 5) The outermost small

island needs a *prosperity and security approach* at the same time.<sup>10</sup> Furthermore, the Constitution's mandate regarding the development of the specificity of the archipelago is also in line with Law Number 17 of 2007 concerning the National Long-Term Development Plan (RPJPN) 2005-2025. In the RPJPN, one of Indonesia's development visions is formulated, namely an independent, advanced, fair and prosperous Indonesia, to realize this vision, 8 (eight) national development missions have been determined. The seventh mission is aimed at realizing Indonesia as an independent, advanced, strong, and national-interest-based archipelagic country. Based on the vision and mission of the RPJPN 2005-2025, Indonesia's future has been agreed and formulated together, namely by optimizing its potential as a maritime country. This is emphasized by Jimly Asshiddiqie, who argues that Indonesia's development paradigm should not only be based on land as practiced so far, but must also be sea-oriented. Through the concept of an interconnected island (*interconnectivity*), development can be started from land as a unit of island by island that is interconnected in an integrated manner with the surrounding islands. In the end, it is hoped that the large main islands with the surrounding islands will become an integrated economic unit.<sup>11</sup>

The vision of the archipelago that is still *das sollen*, over time has attracted the attention of many parties to realize it. The importance of the archipelagic state principle to be adopted and elaborated gained momentum at the meeting in Ambon which ultimately resulted in the Ambon Declaration. On August 10, 2005, seven Governors and Chairmen of the Regional People's Representative Council from the Archipelago Province met in Ambon and produced the Ambon Declaration. This declaration is motivated by the following thoughts: 1) The affirmation of the unity of land and sea (homeland) is the philosophy and view of the Indonesian nation regarding the sea as a link that gave birth to the principle of an archipelagic state; 2) The conception of an archipelagic state in the 1982 Convention on the Law of the Sea, championed by the Indonesian government and people, has made the territory of the archipelago province as a benchmark for the recognition of the principle of an archipelagic state; 3) The recognition of the principle of the archipelago state should be implemented into a regional principle (archipelago province); 4) Natural resources in the sea in the archipelago province are able to make a very large contribution to the development of Indonesian society, but do not receive a proportionate reward for the development of the region that prospers the community.<sup>12</sup>

At the end of the meeting, the participants who attended through the Ambon Declaration emphasized that "ordering the Indonesian government to realize juridical recognition of the Archipelago Province through various regulations needed to accelerate the process of regional development, for the realization of the people's welfare."<sup>13</sup> Motivated by the urgency and urgency of various parties, it is very important to make a Bill on Archipelago Regions. Until now, existing laws and regulations have not provided a solid foundation for the implementation of government in the archipelago in particular, which mainly concerns authority, budget, jurisdiction, and *road map* to achieve strategic goals in managing their regions. Furthermore, a comprehensive analysis of all Laws shows that there is a legal vacuum that regulates the management authority of the regions in the marine area and there

---

<sup>10</sup> Kotan Y. Stefanus, "Daerah Kepulauan sebagai Satuan Pemerintahan Daerah yang Bersifat Khusus", *Jurnal Dinamika Hukum* 11, no. 1, (2011), p. 100.

<sup>11</sup> Jimly Asshiddiqie, *Negara Kesatuan Republik Indonesia, Negara Kepulauan yang Berciri Nusantara*, (Jakarta: 2011), p. 1.

<sup>12</sup> Johanis Leatemia, "Pengaturan Hukum Daerah Kepulauan," *Mimbar Hukum* 23, no. 3, (2011), p. 634.

<sup>13</sup> *Ibid.*, p. 634-635.

is also no law that regulates the utilization, management, and administration of government in the archipelagic areas. Law Number 23 of 2014 concerning Regional Government also does not meet the principle of legal certainty for the management of marine areas and the implementation of government in archipelagic areas.

High political *will* to develop the archipelago requires coherence and synergy of laws that accommodate the idea of advancing the archipelago. Nawacita's political conception that emphasizes "building Indonesia from the periphery" requires the fulfillment of the principle of legal certainty in the management and administration of government in the archipelago. There are at least 3 main problems in the regulation of archipelago regional law, namely (1) legal harmonization; (2) legal reform; and (3) legal characteristics.<sup>14</sup> These three problems need to be solved immediately, so that the sea, which is a national asset in which there is Indonesian sovereignty over the ecosystem, resources used as energy sources, food sources and acts as a medium of transportation between islands, trade areas, socio-cultural exchanges and acts as a media of defense areas as well as a medium to build influence on foreign parties can be used optimally for the welfare of the community.

In terms of quality of life, disparities and gaps between the mainland and the archipelago, the Human Development Index (HDI) data between the Western Region of Indonesia (Java, Sumatra, Bali) which is generally characterized by the mainland and the Eastern Region of Indonesia (Kalimantan, Sulawesi, Nusa Tenggara, Maluku, and Papua) which is generally characterized by archipelago. Territory is one of the cumulative elements of the formation of a state. There is no country in the world that does not have a territory that it controls. A territory is a space where citizens or residents of the country live and carry out all their activities. With respect to the sovereignty of the State over its territory, Rebecca M Wallace provided that the definition of territory is a tangible attribute of statehood and within the particular geographical area in which it is located, a State enjoys and exercises sovereignty.<sup>15</sup> Seeing the importance of the marine area above, the government of the Republic of Indonesia should have a legal policy for the development of marine areas in the context of borders because it concerns territorial areas within a country. Indonesia's marine potential is indeed rich in abundant natural resources and is in a strategic geographical position.

However, the majority of the population in Indonesia still cannot control what they have. Indonesia says it "has" abundant natural resources, but in reality (*de facto*) those who "control" the natural resources are the owners of capital or capitalists from other countries. It would be appropriate if the paradigm of "owning" was also balanced with the paradigm of "control". Dominating here is certainly not in the sense of being authoritarian, arbitrary towards nature motivated by lust, but "dominating" in the context of power or being able to hold the mandate as a representative of God on earth who is committed to acting fairly in managing natural resources as best as possible, especially the ocean.<sup>16</sup>

The revival of the Indonesian nation's maritime spirit was increasingly triggered by the establishment of the Ministry of Marine Affairs and Fisheries in the era of awareness of the importance of equitable energy must touch community groups that are often forgotten. Often, justice is misunderstood or deliberately misunderstood so that public perception is

---

<sup>14</sup> *Ibid.*, p. 635.

<sup>15</sup> Mahendra Putra Kurnia, *Hukum Kewilayahan Indonesia: Harmonisasi Hukum Pengembangan Kawasan Perbatasan NKRI Berbasis Teknologi Geospasial*, (Malang: UB Press, 2011), p. 1.

<sup>16</sup> Mustafa Lutfi, "Revitalisasi Paradigma Kebijakan Pembangunan Sektor Kelautan (*Ocean Oriented Policy*)", *Jurnal Transisi Media Penguatan Demokrasi Lokal* 6, no. 2, (2010), p. 45.



distorted. Therefore, in understanding justice, awareness of the existence of a variety of social, cultural, ethnic, and racial and gender diversity views is also needed. The realization of energy justice must be done in a neutral manner and involves all stakeholders indiscriminately. All interested parties (Indonesian people) should be involved in decision-making and their participation should be taken into account. In addition, the contribution, fairness, and transparency of the government and industry, as well as an appropriate and prudent approach are also needed, to be able to get out of double energy poverty, there needs to be cooperation between village governments, state-owned enterprises that provide energy, and the private sector in providing continuous energy benefits.

The village government can synergize with the State Electricity Company as an electric energy provider, Pertamina as a clean energy supplier for. Energy management has so far placed energy resources as an export commodity to generate foreign exchange. This results in the domestic energy supply not being properly guaranteed, increasing added *value* not running optimally and the loss of new job creation which is one of the obstacles to economic growth.

Therefore, the energy management paradigm needs to be implemented by making energy as the capital of national development, the hope obtained is to increase added value that provides state revenue from the energy sector and *multiplier effects* or positive impacts of the paradigm can be used by the community, such as the creation of added value in the country and the absorption of labor and can encourage the development of the energy sector, among others. through the discovery and improvement of new reserves of fossil energy, the development of New Renewable Energy, the restoration of post-mining environmental functions and maximizing the conservation of energy resources.

Energy management in Indonesia based on the National Energy Policy has three basic principles, namely fairness, sustainability and environmental insight with a focus on development capital for the greatest prosperity of the people, by optimizing its use for national economic development, creating added value in the country and absorbing labor, in the National Energy Policy it is also explained the objectives of providing and utilizing primary energy and *final energy* as follows, namely (1) the fulfillment of the provision of primary energy in 2025 of around 400 MTOE and in 2050 of around 1,000 MTOE, (2) the achievement of per capita primary energy utilization in 2025 of around 1.4 TOE and in 2050 of around 3.2 TOE, (3) the fulfillment of the provision of power generation capacity in 2025 of around 115 GW and in 2050 of around 430 GW and (4) the achievement of per capita electricity utilization in 2025 of around 2,500 KWh and in 2050 around 7,000 KWh.

Furthermore, for the fulfillment of energy supply and energy utilization, it is necessary to achieve the goals of the National Energy Policy, including the achievement of an electrification ratio of 85 percent in 2015 and close to 100 percent in 2020 and the achievement of an optimal primary energy mix by 2025, the role of New Energy and Renewable Energy at least 23 percent and in 2050 at least 31 percent as long as the economy is fulfilled. in Indonesia's Vision 2045, which is sovereign, advanced, fair and prosperous, which is described in the pillars of development where one of the pillars of development is sustainable economic development. Indonesia is a developed country and one of the largest economies in the world driven by investment and trade, industry, tourism, maritime, and services, and is supported by reliable infrastructure and strong food, energy, and water security.



Commitment to the environment continues to be maintained for sustainable development. (Bappenas, 2018). In fact, Indonesia's Vision 2045, especially the pillar of sustainable economic development with increased energy in line with the National Energy Policy. Energy as development capital through increasing the role of NRE through (1) the role of NRE will be increased to 30 percent by 2045, (2) electricity generation will be increased to more than 430 GW, (3) the electrification ratio will be 100 percent since 2020 and the energy supply per capita will be 7 thousand per kWh, (4) the development of electricity infrastructure applying the archipelago concept and (5) the fulfillment of energy needs paying attention to the impact on the environment.

## **B. Fulfillment of Equitable Energy in the Archipelago Province**

Regulations related to the process of equitable energy fulfillment in the archipelago are specifically regulated in Article 23 paragraph (3) of Government Regulation Number 79 of 2014 which norms that the development of energy infrastructure pays attention to the geographical conditions of Indonesia, which mostly consists of sea waters, by strengthening the infrastructure of exploration, production, transportation, distribution, and transmission in the archipelago. Energy resources are strategic natural resources and are very important for the livelihood of many people, especially in increasing economic activities, job opportunities, and national security, so energy resources must be controlled by the state and used for the greatest possible prosperity of the people as mandated in Article 33 of the 1945 Constitution. Energy management, which includes its provision, utilization, and business, must be carried out in a fair, sustainable, rational, optimal, and integrated manner in order to provide added value to the economy of the nation and the Unitary State of the Republic of Indonesia. The provision, utilization, and exploitation of energy that is carried out continuously to improve people's welfare in its implementation must be in harmony, harmony, and balance with the function of the environment. Given the importance of energy resources, the Government needs to develop an energy management plan to meet national energy needs based on long-term energy management policies. Based on the above-mentioned hal, it is necessary to establish the Law on Energy as a legal basis and guidelines in the context of regulation and management in the energy sector.

Law Number 30 of 2007 on Energy then regulates the supply, utilization, and exploitation of energy, as well as the conservation of energy resources. This law aims to ensure sustainable, equitable, and optimal energy availability. The following are the important points of Law Number 30 of 2007 concerning Energy, namely: 1) Energy Regulation: This Law regulates all aspects of energy management, including the supply, utilization, and exploitation of energy; 2) Energy Supply: The government and local governments have the obligation to provide energy, including new and renewable energy, and ensure the availability of sustainable energy; 3) Energy Diversification: The Law encourages the diversification of energy sources to reduce dependence on one type of energy source and improve energy security; 4) Energy Conservation: The government, local governments, entrepreneurs, and communities have the responsibility to carry out energy conservation, including energy use efficiency and alternative energy development; 5) National Energy Council: This law establishes the National Energy Council which is in charge of designing national energy policies; 6) Research and Development Funding: Governments and local governments facilitate funding for energy research and development, including new and renewable energy; 7) Energy Independence: This Law aims to achieve energy independence

by making optimal use of the potential of domestic energy resources; 8) Authority of Governments and Local Governments: This law regulates the authority of governments and local governments in energy management, including the making of regulations, policy setting, and standards; 9) Role of Community: Communities have rights and roles in energy management, including in energy conservation and alternative energy development.

Arrangements related to the process of fulfilling equitable energy in the archipelago should be subject to and comply with the principles stipulated in Article 2 of Law Number 30 of 2007 concerning Energy, namely: 1) The principle of usefulness is a principle in energy management that must meet the needs of the community; 2) The principle of equitable efficiency is a principle in energy management that must achieve equal access to energy at an economical and affordable price; 3) The principle of increasing the value of the land is a principle in energy management that must achieve optimal economic value; 4) The principle of sustainability is a principle in energy management that must ensure the supply and utilization of energy for current and future generations; 5) The principle of community welfare is a principle in energy management that must capture the welfare of the community as much as possible; 6) The principle of preserving environmental functions is a principle in energy management that must ensure a better quality of environmental function; 7) The principle of national security is a principle in energy management that must achieve national capabilities in energy management; 8) The principle of integration is a principle in energy management that must achieve integrated energy management between sectors.

The authority of the Government and Regional Governments in the energy sector, including: 1) making regulations and laws; 2) the establishment of national policies; 3) setting and enforcing standards; and 4) the detainees, procedures. The authority of the provincial government in the energy sector, among other things: (a) the making of provincial regulations; (b) coaching and supervision of business across districts/cities; and (c) the determination/management policy across districts/cities. The authority of the regency/kora government in the energy sector, including: (a) making regency/city regional regulations; (b) business development and supervision in districts/cities; and (c) the determination of management policies in the city district. The authority of the provincial and regency/city governments is carried out in accordance with the provisions of laws and regulations.

Related to coaching are energy resource management, energy sources, and energy activities carried out by the Government and local governments. Supervision is the management of energy resources, energy sources and energy activities carried out by the Government, local governments, and the community. In addition, the government is also obliged to conduct research and development of ilrnu knowledge and technology, the provision and maintenance of energy must be facilitated by the Government and local governments in accordance with their authority. Research and development are directed mainly to the development of new energy and renewable energy to support the development of an independent national energy industry. Funding for research and development activities is facilitated by the Government and local governments in accordance with their authority.

Funding for research and development activities in energy science and technology, among others, is sourced from the State Revenue and Recreation Budget, the Regional Revenue and Expenditure Budget, and from private funds. The development and utilization of research results on new and renewable energy is financed from state revenues derived from non-

renewable energy. Provisions regarding funding, as referred to are further regulated by Government Regulations. National energy conservation is the responsibility of the Government, local governments, entrepreneurs, and the community. National energy conservation covers all stages of energy management. Energy users and energy-saving equipment manufacturers who carry out energy conservation are given facilities and/or incentives by the Government and/or local governments. The use of energy sources and the use of energy that does not carry out energy conservation are disincentivized by the Government and/or local governments. Further provisions regarding the implementation of energy conservation and the provision of youth, incentives, and disincentives are regulated by Government Regulations and Regional Regulations.

Regulations related to the process of fulfilling equitable energy are further regulated in Government Regulation of the Republic of Indonesia Number 79 of 2014 concerning National Energy Policy (Government Regulation Number 79 of 2014) which explains that energy has an important and strategic role for the achievement of social, economic, and environmental goals in sustainable national development. Energy demand is expected to continue to increase as a consequence of economic growth and population growth. Therefore, Energy Management is carried out as well as possible in order to meet the guarantee of energy supply for both current and future needs. Energy management, especially energy resource management, has not been carried out optimally to meet energy needs in the country. Part of Primary Energy is still allocated for export to generate the country's foreign exchange and a source of revenue in State Revenue and Expenditure. As a result, the need for energy in the country, both as fuel and industrial raw materials, is still not optimally met as mandated in the provisions of Article 33 of the 1945 Constitution.

In addition, there are also a number of problems faced by the Energy sector, including: 1) the use of Energy is not efficient; 2) Energy subsidies that are not on target; 3) Energy prices have not reached economic prices; 4) low investment interest; 5) the dependence on fossil energy that is still high is not balanced by an increase in the provision of reserves; 6) limited energy infrastructure; 7) The development of Energy infrastructure has not been supported by a strong and independent national industry; 8) budget limitations; 9) Emphasis on partiality towards domestic technology products; 10) Energy research development has not been well integrated; 11) low mastery of energy technology; 12) there has been no determination of energy development priorities; 13) access for the community to energy is still low; 14) Energy Management has not fully implemented sustainable principles; and 15) the added value of Energy Management has not been optimal, by paying attention to the current energy conditions and a number of problems faced in the Energy sector, the Government needs to carry out Energy Management appropriately both on the supply side and on the utilization side (*demand side management*) in order to realize Energy Independence and National Energy Security.

## CONCLUSION

The development of island clusters for the fulfillment of equitable energy in the archipelago provinces is carried out by developing national energy policies which include the availability of energy for national needs, energy development priorities, the utilization of national energy resources and national energy buffer reserves, energy supply policies and energy development priorities and reserves. National Energy Maintenance is directed to

ensure the security of national energy supply through the proportional use of Energy Resources, both non-fossil Energy Resources such as geothermal, biomass, flow and waterfall power, solar power, wind power, nuclear power, movement power and temperature differences in the ocean layer, as well as fossil energy resources such as petroleum, coal, natural gas, coal-bed *methane gas*. Meanwhile, the policy of utilizing Energy Resources is directed at the optimal and efficient use of Energy in all user sectors. The Energy Management paradigm that has been running places Energy Resources as an export commodity to generate foreign exchange. This condition results in the domestic energy supply not being properly guaranteed, the increase in added value is not optimal, and the loss of opportunities for new jobs to create new jobs so that it becomes one of the sources of economic growth. The energy management policy paradigm needs to be changed by making energy as the capital of national development. With the above paradigm change, it is hoped that it can increase state revenue from the Energy sector which can partly be used to encourage the development of the Energy sector, among others, through the search and increase of fossil energy reserves, the development of New Energy and Renewable Energy, the restoration of environmental functions, and the conservation of energy resources.

## REFERENCES

- A B Lopian, *Laut, Pasar, dan Komunikasi Antar-Budaya*, Makalah Disampaikan pada Kongres Sejarah Nasional, Jakarta, (1996).
- Badan Informasi Geospasial, BIG Sediakan Data dan Informasi Geospasial untuk Mendukung Industri Bahari, <http://www.bakosurtanal.go.id/big-sediakan-data-dan-informasi-geospasial-untuk-mendukung-industri-bahari/>.
- Jimly Asshiddiqie, *Aktualisasi Nilai-Nilai Pancasila dan Tantangan Revolusi Biru Indonesia*, Makalah,
- Jimly Asshiddiqie, *Negara Kesatuan Republik Indonesia, Negara Kepulauan yang Berciri Nusantara*, Jakarta: 2011.
- Johanis Leatemia, "Pengaturan Hukum Daerah Kepulauan," *Mimbar Hukum* 23, no. 3, (2011).
- K.R. Hall, *Maritime Trade and State Development in Early Southeast Asia*, (Honolulu, Hawaii: University of Hawaii Press, 1985).
- Kotan Y. Stefanus, "Daerah Kepulauan sebagai Satuan Pemerintahan Daerah yang Bersifat Khusus", *Jurnal Dinamika Hukum* 11, no. 1, (2011).
- Mahendra Putra Kurnia, *Hukum Kewilayahan Indonesia: Harmonisasi Hukum Pengembangan Kawasan Perbatasan NKRI Berbasis Teknologi Geospasial*, (Malang: UB Press, 2011).
- Marsetio, *Aktualisasi Peran Pengawasan Wilayah Laut dalam Mendukung Pembangunan Indonesia sebagai Negara Maritim yang Tangguh*, 2015.
- Mochtar Kusumaatmadja, *Bunga Rampai Hukum Laut*, Jakarta: Bina Cipta, 1987.
- Mustafa Lutfi, "Revitalisasi Paradigma Kebijakan Pembangunan Sektor Kelautan (*Ocean Oriented Policy*)", *Jurnal Transisi Media Penguatan Demokrasi Lokal* 6, no. 2, (2010).
- P. Tangsubkul, *The Southeast Asian Archipelagic State: Concepts, Evolution, and Current Practice*, (Research Report No. 15, February 1984; East-West Environment and Policy, 1984).

Peter Mahmud Marzuki, *Penelitian Hukum*, Jakarta: Prenada Media Group, 2004.

Safri Burhanuddin, et al, *Sejarah Maritim Indonesia: Menelusuri Jiwa Bahari Bangsa Indonesia Dalam Proses Integrasi Bangsa (Sejak Jaman Prasejarah Hingga Abad XVII)*, Jakarta: Pusat Riset Wilayah Laut dan Sumber Daya Non-Hayati Badan Riset Kelautan dan Perikanan Departemen Kelautan dan Perikanan, 2003.