

IDEAS OF GREEN BUILDING LAWS AND REGULATIONS IN REALIZING SUSTAINABLE BUILDINGS IN INDONESIA

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Abstract

Sustainable development in building facilities raises strategic issues. One of which is the construction of green buildings that pay attention to and uphold environmental aspects. The current development has not fully implemented aspects of green building construction. The legal basis and obligation to implement weak laws and regulations are some of the factors that have not enabled the growth of productive green buildings in Indonesia. Therefore, this scientific paper examines the idea of regulating the construction of green buildings in the context of laws and regulations as a binding legal basis for realizing sustainable buildings in Indonesia. The method used to analyze the subject matter in this scientific paper was normative legal research methods, by examining and exploring the idea of green building arrangements in-laws and regulations in Indonesia as the embodiment of sustainable buildings that uphold environmental aspects. Eventually, this scientific paper can reveal the ideal concept in the regulation of green building laws in Indonesia's formulation of laws and regulations.

Keywords: *Ideas, Laws and Regulations, Green Buildings, Sustainable Buildings*

I. INTRODUCTION

The development of community social activities in addressing life's demands is influenced by the community's growing population, which continues to expand today. That results in more complicated issues. Environmental difficulties will be one of the issues faced as the population grows. The number of facilities required for living infrastructure will rise as the population grows. As a result, a balance must be maintained between fulfilling human needs and providing infrastructure for community activities while maintaining the integrity of a healthy and sustainable environment. Sustainable Development, in essence, is an understanding of the interaction between nature and society, which is carried out the sustainability related to the human basic human needs. It means that there must be commitment

from the community and the government in protecting the environment and keeping it away from pollution and environmental damage. [1]

This control certainly requires a regulatory rule that ensures the balance of human life and the environment in a strong legal formulation and binds the community to implement it properly. The *law* comes from the word “*Iuris*”, a plural form of the word “*Ius*”, which is interpreted as a series of guidelines for achieving justice in Indonesian. The term “*Iustitia*” came from “*Ius*”, which indeed means “*Justice*”. In addition to “*Ius*”, in Latin, there is the word “*Lex*”, which means law in the Indonesian language, which is a set of rules of behavior to regulate public order. [2]

In line with the study of this scientific paper, the regulation as a law that binds the community is the formulation of laws and regulations as positive laws in Indonesia. *The positive law* is the whole principle and rules that govern human relations in society. When elaborated further, the human relations in this society means the relationship between humans, the relationship between humans and society, and *vice versa*, the relationship of society with human members of society itself. Concretely, it can be defined that the law is a basic device and rules that govern human relations in society, whether it is a kinship, a village, a country, or a continent. [3]

In the Law No. 15 of 2019 concerning Amendments to Law No. 12 of 2011 concerning the Establishment of Laws and Regulations, it is explained that laws and regulations are written regulations that contain legal regulations that are generally binding and are formed or determined by state institutions or authorized officials through the procedures stipulated in the Laws and Regulations.[4] Following the strategic issues in the study of this scientific paper, it is related to the regulation of environmental control in the context of the construction of infrastructure facilities for community activities, namely the construction of buildings that apply the integration of technical, economic, social, and environmental aspects effectively to maintain the environmental sustainability. The government has formulated laws and regulations to formulate ministerial regulations governing it. The ministerial regulation is the Regulation of the Minister of Public Works and Public Housing Number 21 of 2021 concerning the Assessment of the Performance of Green Building.

In the Regulation of the Minister of Public Works and Public Housing Number 21 of 2021 concerning the Assessment of the Performance of Green Buildings, a building is defined as a

physical form of construction work that is fused with its position, partly or completely above and in the ground and water, which serves as a place for humans to carry out their activities, whether for residential, religious, business, socio-cultural, and special activities that meet the Technical Standards of Buildings and have a significantly measurable performance in saving energy, water, and other resources through the application of green building principles according to the functions and classifications in each stage of its implementation. [5]

As a result of construction work, green building is intended to realize sustainable construction. In the Regulation of the Minister of Public Works and Public Housing of the Republic of Indonesia Number 9 of 2021 concerning Guidelines for the Implementation of Sustainable Construction, it is an approach to carrying out the series of activities needed to create a physical facility that meets current and environmental goals in the present and the future.[6]

In short, green building is intended to realize sustainable buildings. Sustainable buildings are buildings that achieve high performance during the full life cycle in aspects such as minimizing natural resource consumption, minimizing emissions that negatively impact our indoor environment and planetary atmosphere, minimizing the disposal of solid waste and liquid waste such as demolition and occupant waste, minimal negative impact on ecosystems, as well as the maximum quality of the living space environment, including air quality, thermal quality, lubrication, acoustics, and visual aspects to provide comfortable human physiological and perception. [7]

Sustainable development is one solution to how buildings are responsive to the impacts of climate change. Green buildings are part of the realization of sustainable development that focuses on applying the principles of green architecture to buildings. According to World Green Building Council a green building is a building that, in its design, construction and operation, reduces or eliminates negative impacts and can create positive impacts, on our climate and natural environment. Green buildings are expected to be efficient in energy utilization, minimize adverse impacts on the environment, support the sustainable availability of natural resources and improve the quality of human life as users. [8]

Thus, this scientific paper will be examined and reveal the study of the laws and regulations related to green building to be known and understood related to the legal politics of the laws and regulations that govern and can produce ideas for the formulation of

improvements and refinements of laws and regulations related to green building on the evaluation of applicable regulations. Therefore, it can contribute to realizing sustainable building construction in Indonesia.

II. METHODS

Formulating laws and regulations is a norm used as a foundation in community activities to create a constructive life order following applicable values and morals. Thus, in this scientific paper, the research method used was normative legal research by reviewing and studying laws and regulations related to green building as a legal basis used as a foundation in realizing sustainable construction buildings. The normative legal research in this scientific paper is in line with the study of the main issues that will be discussed in this scientific paper. This is because what will be studied is the dynamics of the implementation of laws and regulations relating to green buildings in Indonesia

III. RESULTS AND DISCUSSION

National development to advance the general welfare as contained in the 1945 Constitution is essentially the development of the Indonesian community as a whole and the development of all Indonesian communities, which emphasizes the balance of development, external prosperity, and inner satisfaction in an advanced and socially just Indonesian community based on Pancasila. Buildings as a place for humans to carry out their activities have a very strategic role in forming character, productivity, and human identity. Therefore, the implementation of buildings needs to be regulated and built for the sake of continuity and improvement of people's lives and livelihoods and to realize buildings that are functional, reliable, self-deprecating, harmonious, and in harmony with the environment.

One of the sectors that contribute positively to national development is the construction of green buildings, which are seen as pillars of sustainable development. The Green building is becoming a popular practice globally, primarily due to the increased attention given to environmental issues and the role that construction must play in reducing greenhouse gas emissions. [9] To uncover the extent to which green building buildings in Indonesia have been regulated through laws and regulations and ideals such as what can be proposed to evaluate

green building arrangements. It must first be investigated concerning legal foundations and evaluative studies to bring up the ideal ideas on green building laws and regulations.

A. Juridical Review of Green Building Arrangements

The United States Green Building Council (USGBC) Research Committee (2007) notes that *Green buildings depend on the continuous improvement of building processes, technologies and performance to minimise negative environmental or health impacts and contribute to environmental restoration and sustainable resource management. Objectives of green buildings include climate conditions decoupled from human activities; stable, sustainable energy supplies; clean, renewable and sufficient water resources; restorative use of land for the long-term sustainability of habitats; restorative use of materials and assemblies that account for life-cycle impacts; and enhanced human safety, health and productivity in the built environment.* [10]

Green building is an integral part of building in general in Indonesia. It can be said that green building is a more specific aspect of building and has a sense of destruction compared to building in general. The implementation of building in Indonesia is carried out based on Law No. 28 of 2002 concerning Building. Some provisions in this law have undergone changes in Law Number 11 of 2020 concerning Job Creation. [11] Law No. 28 of 2002 concerning Buildings explains the aspects of the building that are actualized in the context of development in Indonesia. This law only regulates buildings in general and does not regulate substance matters related to green building. Nevertheless, this law firmly stipulates that in organizing buildings, they must consider aspects of green open space. Therefore, environmental aspects are still considered in this law.[12]

To implement Law No. 28 of 2002 concerning buildings that have changed several provisions through Law No. 11 of 2020 concerning job creation, Government Regulation No. 16 of 2021 concerning the Implementation of Law No. 28 of 2002 concerning Buildings is formulated.

The most essential thing in the provisions of Government Regulation No. 16 of 2021 concerning the Implementation of Law No. 28 of 2022 concerning Buildings-related to the application of green building principles is that the technical standards of a building must be met. In this case, the standards for planning and designing buildings, the standards for the implementation and supervision of building construction, building utilization standards, and

building demolition standards apply.[13] Green buildings formulated after the green construction are energy efficient with low emission of toxic gases with less conservation of natural resources and make environment healthy. Hence, green construction practices make environment healthy and build better climate through environment protection with less degradation. [14]

In particular, green building has a specific legal basis, namely the Regulation of the Minister of Public Works and Public Housing No. 21 of 2021 concerning the Assessment of Green Building Performance. This ministerial regulation was born as a rule that implements the provisions of Article 123 of Government Regulation No. 16 of 2021 concerning the Implementation of Law No. 28 of 2002 concerning Building which mandates that technical regulations further related to the assessment of the performance of green buildings are regulated through ministerial regulations.

Regulation of the Minister of Public Works and Public Housing No. 21 of 2021 concerning the Assessment of the Performance of Green Building regulates all provisions for the implementation of buildings subject to the requirements of Green Building, which includes new buildings, existing buildings, community green dwellings, new green areas, and existing green areas.[15]

To optimize the implementation of the assessment of the performance of green buildings as well as realize the implementation of green buildings that meet the technical standards of green buildings, the Ministry of Public Works and Public Housing issued Circular Letter Number 01/SE/M/2022 concerning Technical Instructions for the Performance Assessment of Green Buildings, which is intended as technical instructions for the performance assessment of green buildings covering new buildings, existing buildings, community green dwellings, new green areas, and existing green areas. This circular aims to realize the implementation of green buildings that meet the technical standards of green buildings following laws and regulations. [16]

These regulations are at least used as a legal basis in implementing green buildings in Indonesia to welcome sustainable national development by considering sustainable environmental aspects.

B. Ideas on the Evaluation of Green Building Arrangements in Laws and Regulations

Based on the studies that have been outlined, we can understand that, in the context of the legal basis, green building in its specific arrangement is still regulated to the extent of the Ministerial Regulation. Further technical arrangements are regulated in the Ministerial Circular Letter. In this case, there is a diversity of arrangements because the arrangement of green buildings is only regulated through ministerial regulations, which in the implementation of technical instructions are carried out through circular letters. It gives the impression of a weakness in the legal position in regulating green buildings in Indonesia. Because the regulation of new green buildings is formulated through Government Regulation No. 16 of 2021 concerning the Implementation of Law No. 28 of 2002 concerning Buildings, which is an update to Government Regulation No. 36 of 2005 concerning the Implementation Regulation of Law No. 28 of 2002 concerning Buildings. Even in the previous government regulation, Government Regulation No. 36 of 2005 concerning The Implementation Regulation of Law No. 28 of 2002 concerning Buildings does not discuss the formulation of the implementation of green buildings in its arrangements. After being updated through Government Regulation No. 16 of 2021 concerning the Implementation of Law No. 28 of 2002 concerning Buildings, formulate arrangements related to the implementation of green buildings.

The rules of technical implementation are also regulated only to the extent in the Minister's Circular Letter, namely Circular Letter Number 01/SE/M/2022 concerning Technical Instructions for Assessment of Green Building Performance. It resulted in weak legal power to implement the provisions in this letter because of the circular letter's position, which is still being debated in the context of legislation. Legislation is a written regulation that contains legal norms that are generally binding and are formed or established by state institutions or authorized officials through the procedures set out in the laws and regulations. A circular letter is not a law (*regeling*) nor a state administrative decision (*beschikking*) but a policy regulation, including in policy regulations (*beleidsregel*) or pseudo-laws (*pseudo wetgeving*). [17] It gives uncertainty over the enactment of a circular letter. It generates the impression that Circular Letter Number 01/SE/M/2022 concerning Technical Guidelines for the Performance Assessment of Green Building Performance seems not binding to be implemented.

In the context of legislation, the green building should be regulated in the legal order earlier, which creates the concept of delegation, namely the distribution of authority to form laws and regulations by higher laws and regulations to lower laws and regulations. It is intended to avoid the dominance of power by one branch of power, namely the executive or legislative, and is feared not to create the principle of checks and balances of power. The arrangement of green buildings is formulated in government regulations to be implemented through Ministerial Regulations with a Ministerial Circular Letter as a technical guideline for implementation. It is feared that there will be termination of power by the executive. Because substantively, the three regulations are implementing regulations.

In addition, the non-formulation of a green building law provides awareness for violations that occur. Because there are no criminal sanctions that regulate if the building obligations must be carried out in the development process in Indonesia. It resulted in a high level of urgency for the regulation of laws that regulate green buildings. Substantively, the regulation of green buildings that have been stated in Government Regulation No. 16 of 2021 concerning the Implementation of Law No. 28 of 2002 concerning Buildings, Regulation of the Minister of Public Works and Public Housing No. 21 of 2021 concerning Assessment of the Performance of Green Buildings, as well as the Minister's Circular Letter, namely Circular Letter Number 01/SE/M/2022 concerning Technical Guidelines for Assessment of Green Building Performance, has a complete formulation and detailed. However, in the context of the hierarchy of regulations, it is still not appropriate to be implemented and binding in organizing green buildings in Indonesia.

CONCLUSION

Based on the analysis and study outlined, it can be concluded that there is the indecision of formulated legal products contained in the laws and regulations regarding the arrangement of green building construction. It is because the green building does not have an arrangement in the formulation of the Law. Nowadays, the Law used is Law No. 28 of 2002 concerning buildings, as amended by Law No. 11 of 2020 concerning job creation. The Law is not specifically related to green buildings that are regulated. The Law only explains the implementation of building construction in general in Indonesia. The regulations for the construction of green buildings were

formulated in Government Regulation No. 16 of 2021 concerning the Implementation of Law No. 28 of 2002 on Buildings, which was implemented in more detail through the Regulation of the Minister of Public Works and Public Housing No. 21 of 2021 concerning Assessment of the Performance of Green Buildings and technically assessed through Circular Letter Number 01/SE/M/2022 concerning Technical Instructions for Performance Assessment of Green Buildings. In general, the substance of the arrangement of green buildings has been formulated in detail. However, the arrangement still does not provide ideal legal certainty for formulating existing laws and regulations.

As a recommendation for the study in this scientific paper related to the idea of green building arrangements in the formulation of laws and regulations, there should be legislation in advance to regulate green buildings. In this case, the government, both legislative and executive, can formulate laws relating to green buildings which are used as the basis for implementing green buildings in Indonesia. so that further implementing regulations on laws can be systematically compiled by related institutions that have the authority to regulate green buildings. Although the Law is only abstract in its arrangement, in the order of Law, the formulation of regulations will be more philosophical in their arrangement according to the nation's ideals. In addition, there is a substance of arrangements that should be regulated by law to provide legal certainty, namely those related to criminal sanctions for implementing green building projects in Indonesia. The formulation of the Law is also intended for the realization of the separation of powers between the legislature and the executive in the arrangement of green buildings, and they will correct each other so that there is no dominance of power by one of the authorities of both the executive and the legislature. It is feared that there are arbitrary arrangements in their substance because the green building is explicitly regulated in government regulations and ministerial regulations that are executive powers.

Based on the conclusions from the descriptions that have been presented and the recommendations that have been proposed, further scientific works can be used to complement the study of this scientific paper in greater depth to discuss the potential, challenges and big goals in the implementation of green buildings in Indonesia in order to provide more knowledge. for the importance of implementing green buildings in order to realize sustainable development in Indonesia

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REFERENCES

- [1] Sandy Kurnia Christmas, Aminah, "The Principles of Environmental Based Development in International Law and Sustainable Development Goals" *Novelty.*, Vol. 10, No. 2, 2019, pp. 101.110.
- [2] Marzuki, Peter Mahmud, *Pengantar Ilmu Hukum*. Jakarta : Kencana, 2017. 8-9.
- [3] Kusumaatmadja, Mochtar dan Arief Sidharta, *Pengantar Ilmu Hukum – Suatu Pengenalan Pertama Ruang Lingkup Berlakunya Ilmu Hukum*. Bandung : Penerbit Alumni, 2021. 4.
- [4] Undang-Undang Nomor 15 Tahun 2019 Tentang Perubahan Atas Undang-Undang Nomor 12 Tahun 2011 Tentang Pembentukan Peraturan Perundang-Undangan menjelaskan bahwa Peraturan Perundang-Undangan
- [5] Peraturan Menteri Pekerjaan Umum Dan Perumahan Rakyat Nomor 21 Tahun 2021 Tentang Penilaian Kinerja Bangunan Gedung Hijau
- [6] Peraturan Menteri Pekerjaan Umum Dan Perumahan Rakyat Republik Indonesia Nomor 9 Tahun 2021 Tentang Pedoman Penyelenggaraan Konstruksi Berkelanjutan
- [7] Utami, Sentagi Sesotya. et.al, *Menuju Bangunan Zero Energy Di Indonesia*. Yogyakarta : Gadjah Mada University Press, 2021. 7-8
- [8] Ni Wayan Meidayanti Mustika and Ngakan Ketut Acwin Dwijendra, "Preliminary Study of Green Material for Green Building in Bali" *International Journal of Engineering and Emerging Technology.*, Vol. 6, No. 2, January - June 2021, pp. 15-21.
- [9] Dat Tien Doan¹, Hamish Wall¹, Ali Ghaffarian Hoseini¹, Amirhosein Ghaffarianhoseini¹, Nicola Naismith, "Green Building Practice in the New Zealand Construction Industry: Drivers and Limitations" *International Journal of Technology.*, Vol. 12, No. 5, 2021, pp. 946-955
- [10] George Ofori, "Green Concept In Building Construction" *Architecture & Environment.*, Vol. 12, No. 2, Oct 2013, pp. 145-166
- [11] Undang-Undang Nomor 11 Tahun 2020 Tentang Cipta Kerja
- [12] Undang-Undang Nomor 28 Tahun 2002 Tentang Bangunan Gedung
- [13] Peraturan Pemerintah Nomor 16 Tahun 2021 Tentang Pelaksanaan Undang-Undang Nomor 28 Tahun 2002 Tentang Bangunan Gedung.
- [14] Ubaid ur Rehman, Muhammad Shafiq, Hasan Ali³, Mohammad Abdullah, "Green and sustainable construction practices impact on Organizational Development" *European Journal of Social Impact and Circular Economy.*, Vol. 1, No. 2, Oct 2020, pp. 1-26
- [15] Peraturan Menteri Pekerjaan Umum Dan Perumahan Rakyat Nomor 21 Tahun 2021 Tentang Penilaian Kinerja Bangunan Gedung Hijau
- [16] Surat Edaran Nomor 01/SE/M/2022 Tentang Petunjuk Teknis Penilaian Kinerja Bangunan Gedung Hijau
- [17] Anggono, Bayu Dwi; (Janurai, 2015). Surat Edaran, "Kerikil" Dalam Perundang-Undangan. *HukumOnline*. <https://www.hukumonline.com/berita/a/surat-edaran--kerikil-dalam-perundang-undangan-lt54b1f62361f81>