



Environmental Protection and Management Policies Based on Digital Transformation

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Abstract. This research aims: 1). Describe the environmental protection and management policies in Indonesia; 2). Describe the digital transformation-based environmental protection and management policy. This study, which takes a normative legal approach, looks at research objects from the perspectives of digital transformation and statutes. As a country that has recognized the existence of a good environment as part of human rights, Indonesia is currently faced with massive environmental damage, so it requires a comprehensive approach, one of which is digital-based technology as an effort to overcome and prevent environmental damage. Existing policies need to support environmental sustainability by following existing technological developments. It is hoped that the environmental protection orientation and management policies after the Job Creation Law passage is expected to be able to encourage the government by not only changing technical hardfiles to softfiles, but also encouraging the creation of a system that ensures environmental sustainability goes hand in hand with technological developments.

Keywords: Environmental Policy, Digital Transformation, Environmental Sustainability

1 Introduction

Indonesia is a country with an annual population growth rate (2010-2020) of 1.25% and the data states that the Java island has a population concentration spread of 55.10%, where the island of Java is 7% of the total area of Indonesia. According to the BPS (Central Statistics Agency) population census data, there would be 270.20 million people living in Indonesia as of September 2020 (Anjarwati & Rosmiati, 2022). It is clear that Indonesia is a country with a fast population growth rate.

The implications of population growth demand high management of natural resources, if population growth continues to increase, while the rate of economic growth is slow, then poverty will increase and will affect other social life (Utina & Baderan, 2013). The environment will have an impact because high population growth is not accompanied by good environmental education, which will have bad consequences for the environment (Hakim, 2019).

In addition to the high rate of population expansion, there are other factors pertaining to spatial planning. Due to the development application in relation to the environment and spatial planning, which has a propensity to be unplanned and unsustainable, the environment quality and function, including its natural resources, have

declined (Priyanta, 2015). Environmental quality declines as a result of resource exploitation that disregards the environment's capabilities and carrying capacity.

In relation to environmental degradation, Indonesia's environmental preservation is classified as poor on a global scale, even on an Asia Pacific regional scale. This is recorded in the 2022 Environmental Performance Index (EPI) report (Ahdiat, 2022). EPI measures the level of environmental sustainability of countries through dozens of indicators which are summarized in three big pillars, namely: 1). Climate Environmental Health 2). Climate change mitigation policies; 3). Greenhouse gas emissions, and 4). Ecosystem Viability. Responding to this, the Ministry of Environment and Forestry coordinated with local governments to allocate budgets for environmental protection. Of the 514 regencies/cities, it was found that the budget allocation for controlling pollution and environmental damage ranged from 0.01% -1.19% of the APBD, 168 regencies/cities whose human resources had received training relevant to controlling pollution and environmental damage, 316 regencies / city has carried out monitoring of environmental quality, and 223 districts / cities have carried out industrial supervision (Anugrah, 2022a).

Planning, use, control, maintenance, supervision, and law enforcement are all included in the systematic and integrated effort to preserve environmental functions and prevent environmental pollution and/or damage, as stated in Article 1 Point (2) of Law Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH). Environmental rules and environmental permit issuance have been synonymous up until now. If a company or activity already has an Environmental Impact Analysis (Amdal) or a UKL-UPL (Environmental Management Efforts and Environmental Monitoring Efforts), these permits are awarded. But since the Job Creation Law was passed, a number of regulations pertaining to environmental management and protection have also changed. The removal of environmental permits for commercial operations is one of them (Luhukay, 2021). However. Among the many tools used to stop pollution and environmental harm, environmental permits have a preventive purpose. Aside from that, the government will actually lose some authority if environmental permits are abolished.

The central government, especially the regions, needs to respond quickly to environmental problems that occur in their regions. Through legal instruments through Regional Regulations or instructions from the Regent/Mayor by issuing policies or programs that are environmentally sound. In implementing various kinds of environmentally friendly programs, the government also collaborates with schools and various elements of society. Apart from that, the government also carried out a persuasive approach by using billboards, posters, billboards and social media such as Facebook, Twitter and Instagram regarding campaigns for environmental management (Saputra, 2017).

The current environmental policies have in some ways been integrated with digital-based technologies. One of them is the acceleration of environmental approval services, which is a strategic move by the Ministry of Environment and Forestry as an implication of the issuance of Law 11 of 2020 and PP No. 22 of 2021. Even though there are new problems related to the environment after the issuance of the Job Crea-

tion Law, the government continues to carry out its duties by offering alternative programs that are expected to be able to solve environmental problems.

2 Methods

This essay is founded on normative legal study using a doctrinal approach, that is, legal research based on materials and statutory regulations. This research's methodology is more descriptive in nature since it aims to provide a clear description of a number of aspects pertaining to the subject of the study. The study's methodology combines a philosophical approach—digital transformation—with a statutory approach.

3 Result and Discussion

3.1 Life Protection and Management Policy in Indonesia

Law Number 32 of 2009 grants the government extensive powers, enabling ministers to collaborate with other organizations and utilize their full authority in the area of environmental management and protection. To achieve the objectives of the 1945 Constitution of the Republic of Indonesia, constructive synergistic cooperation is necessary for maintaining environmental sustainability and upholding the ideals of sustainable development for the benefit of all Indonesian citizens. The objectives of environmental protection and management are as follows, as stated in Article 3 of Law Number 32 of 2009: safeguarding the country against environmental pollution and/or damage; ensuring human life, safety, and health; ensuring the sustainability of ecosystems and the continuation of life; achieving harmony; and ensuring justice for future generations.

In environmental management, law is used to fulfill interests. Administrative law (*administratiefrecht*) is a growing discipline that covers a large part of environmental law. It cannot be divided into classical legal fields (public and private) because environmental law includes aspects of civil, criminal, tax, international and spatial planning law. Therefore, administrative, civil, and criminal environmental laws argue on the topic. Criminal law is considered as the last solution to improve human behavior. Mr. Modderman, the Dutch Minister of Justice, was the first to use the phrase *ultimum remedium* (Yakin, 2017).

Enforcement of environmental laws Law No. 32 of 2009 states that environmental law governs the use of administrative, civil, and criminal law to settle conflicts pertaining to the environment (Abidin et al., 2022). The procedures for resolving environmental conflicts apply regardless of their legal basis—administrative, civil, or criminal. Environmental law enforcement can be divided into three categories, as per Law Number 32 of 2009 concerning Environmental Management: 1) environmental law enforcement in relation to state administrative law; 2) environmental law en-

forcement in relation to civil law; and 3) environmental law enforcement in relation to criminal law.

Following the passage of the work copyright law, developments pertaining to environmental policy are currently undergoing modifications. The majority of the Job Creation Law's provisions are thought to lessen environmental law enforcement and protection. These provisions govern administrative law issues, like environmental permits, and civil matters, like absolute liability, since Law Number 32 of 2009 concerning environmental protection and management abolishes, modifies, and specifies new regulations related to business licensing (Amania, 2020). Law No. 11 of 2020 concerning the environment is regarded by many as a livelihood and a human right (HAM) when it comes to judicial review.

Environmental permits, which are granted if an activity or business already has an Amdal (Environmental Impact Analysis) or UKL-UPL (Environmental Management Efforts and Environmental Monitoring Efforts), have up until now been synonymous with government policies in the environmental sector. However, after the issuance of the Job Creation Law, several regulations related to environmental protection and management have also changed. One of them is the Elimination of Environmental Permits for Business Activities. Following are the fundamental changes to environmental permits after the passage of the Job Creation Law:

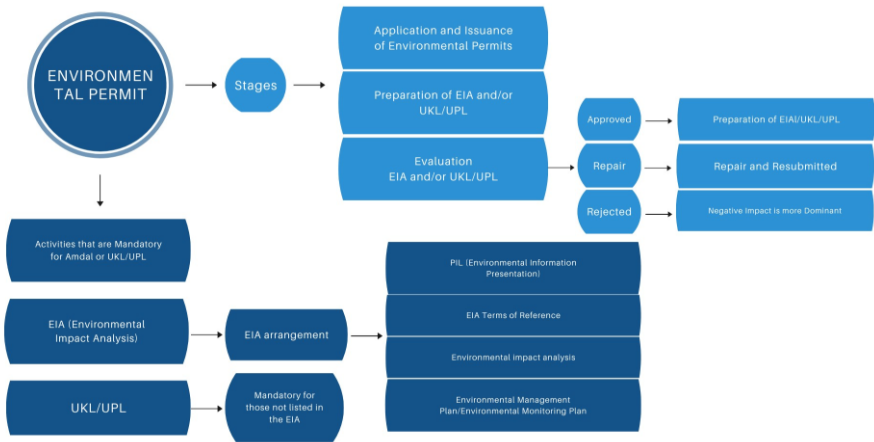


Figure 1. Environmental Permit Based on Law Number 32 of 2009 concerning Environmental Protection and Management

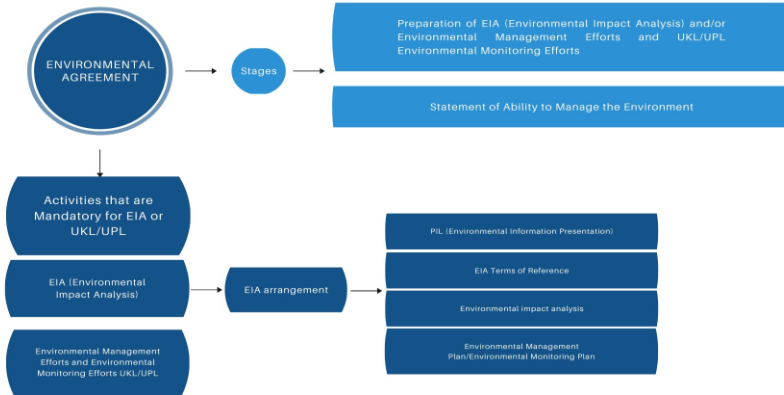


Figure 2. Environmental Approval Based on Law Number 6 of 2023 Stipulation of Government Regulation in lieu of Law Number 2 of 2022 concerning Job Creation to become Law

Law Number 32 of 2009 concerning Environmental Protection and Management, which accomplishes controlled, planned, and sustainable development, is actually one of the measures to conserve the environment (Wilda & Harris, 2022). Formulating policies is a crucial aspect of government. Broadly speaking, the process of formulating policies involves first identifying the problems that need to be solved in order to address current societal issues, followed by the creation of a policy agenda that enumerates the public issues that will be addressed. Once the public issues have been accurately defined, alternative policies are chosen to address the issues. good and added on the agenda for policy, and finally, the implementation of measures that guarantee the societal issues that currently plague society will no longer pose an issue.

In many respects, environmental regulations have diminished society's role since the passing of the Job Creation Law. One of them is that participation in the environmental permit procedure is prohibited for those who would be impacted, either directly or indirectly. Environmentalists and environmental advocacy organizations are unable to provide direct assistance to individuals.

3.2 Digital Transformation-Based Life Management and Protection Policy

In today's era, information is interactive, not one-way, so communication occurs. The nation's generation will quickly and easily respond to the information they get according to their understanding. The media cannot work alone because the media is one of the references for information centers that must present actual facts that are beneficial to the public. Each media must at least have news politics or reporting policies that have their own color (Hanief et al., 2019).

Environmental protection in Indonesia requires special attention, changing natural conditions affect climate and environmental conditions (Absori et al., 2020). Conventional approaches need to be transformed through digital. Digital transformation is not new at all. Introduced in the late 1990s and mentioned again in the mid

2000s (Anugrah, 2022b). As opposed to just enhancing and supporting traditional methods, Vezyridis et al. (2011) define digital transformation as the process of leveraging technology to fundamentally enable new kinds of creativity and innovation in particular domains.

To meet public expectations of the government's ability to deliver high-value real-time digital services and to achieve its goals, which are primarily transparency and citizen satisfaction, the government has modified its operational standards to improve public services and make them more effective and efficient. Within the public sector, digital transformation is understood as an organizational approach that encompasses more than just creating online forms or transforming analog public services to digital. The digital transformation process is heavily influenced by both internal and external parties, requiring constant modifications to services, products, and procedures in order to satisfy external demands (Mergel et al., 2019).

Indonesian government policies often have an impact on environmental protection. It begins with the issuance of laws or the granting of permits to companies that intersect with the environment. Nonetheless, the government responded to this policy by integrating the application of digital-based environmental approvals.

Digital government is a necessity that must be carried out in the management of forests and forest areas with all their potential natural resources, human beings and all assets in them, with the aim of reducing damage to forests and their ecosystems which have an impact on saving the earth, sustainable production and sustainable consumption. Sourced from forests and forestry businesses. The Ministry of Environment and Forestry has innovated to develop a digital application-based information service system including the Forest Product Administration Information System (SIPUHH), the On Line Non-Tax State Revenue System (SIMPONI) and the Timber Legality Information System (SILK). In addition, a Forestry Multi-Enterprise Policy has been released, the implementation of several business activities in one forest utilization permit (PBPH) (Anugrah, 2022b).

The acceleration of environmental approval services is a strategic step for the Ministry of Environment and Forestry as an implication of the issuance of Law 11 of 2020 concerning Job Creation and PP No. 22 of 2021. The development of an Environmental Document Information System in supporting the acceleration of Environmental Approval services is a digital transformation of the Environmental Approval process, as a government effort to provide facilitation and convenience in the Environmental Approval process for initiators, both business actors and the government (Anugrah, 2023b). The development of the Amdalnet Environmental Document Information System is a must as the backbone of the environmental approval process, which is very much needed by all initiators with business and/activity plans for Low, Medium Low, Medium High and High risk levels, where Environmental Approval becomes one of the basic requirements in fulfilling business licensing or government approval.

As an effort to maintain the continuity of environmental protection and management, the government is preparing a National Environmental Protection and Management Plan (RPPLH) 2025-2055 [20] (Anugrah, 2023a). The document serves as a blueprint for facing challenges in the future. These challenges include: (1) The Triple

Planetary Crisis: Climate, Biodiversity Loss & Environmental Pollution; (2) Global Risks; (3) Megatrends 2045; (4) SDGs (Ecology, Social & Economy); and (5) VUCA (Volatility, Uncertainty, Complexity, Ambiguity). Besides that, the increasing demand for Natural Resources (SDA) and competition for natural resources in the future will increase in line with the increase in world population, increased economic activity, and changes in lifestyle.

4 Conclusion

Law Number 32 of 2009 serves as the foundation for Indonesia's current environmental protection and management strategy. The policy's main body provides a description of criminal, civil, and administrative environmental legislation. After Law Number 6 of 2023 Stipulation of Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation was passed into law, a number of provisions were altered, particularly those pertaining to law enforcement. These included the removal of PTUN mechanisms, the deletion, modification, and establishment of new regulations pertaining to the environmental permit administration process, the field of criminal law regarding criminal sanctions, and the field of civil law regarding absolute responsibility.

The digital transformation-based environmental protection and management policy is one of the government approaches that is expected to be comprehensive, not just creating online forms or changing/transitioning from analog to digital in terms of public services. The policy for accelerating environmental approval services is a form of digital transformation in terms of necessity as the backbone of the environmental approval process, all of which are contained in the blueprint for the National Environmental Protection and Management Plan (RPPLH) 2025-2055.

Recommendation

Law Number 32 of 2009 concerning Environmental Protection and Management previously clearly regulated environmental protection through environmental permits. Even though currently the environmental permit has been replaced with an environmental approval after the passing of Law Number 11 of 2020 Concerning Job Creation and has also issued an environmental approval service application, this should not become a system that will accelerate environmental damage because the government is only focused on accelerating but as if forget about the substance of environmental protection.

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