RECLAMATION IN THE VIEW OF THE PROTECTION OF MARINE ENVIRONMENT UNDER THE ENVIRONMENTAL LAW AND THE LAW CONCERNING THE MANAGEMENT OF COASTAL AREAS AND SMALL ISLANDS

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Abstract
People view reclamation, both could bring positive and negative impacts to the environment and the human. Based on the pro and con statements, it is obvious that the role of laws and regulation is inevitable solving this matter and therefore the role of government is urgently needed to mediate the pro and con views on reclamation. In terms of legislation, the Government has passed several laws and regulations to regulate reclamation. This paper is intended to explore legal scheme to create a sustainable reclamation. The paper is also designed to describe the ways to create an environmentally sound or sustainable reclamation through a licensing scheme.

Keywords: Reclamation, environment, regulation, Indonesia

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I. INTRODUCTION

Reclamation, on the one side, is viewed by some people, especially property developers and entrepreneurs, as to bring an economically advantageous aspect because it may create a remarkably big business, and other positive economic impacts. In the other side, reclamation may cause detrimental impacts to the environment and its ecosystem, including negative impacts to the fishermen residing in around the reclaimed lands. Reclamation is believed to have degraded the quality of the marine

1 Based on the research done by Kompas, the price of reclaimed land may reach Rp 35,000,000 per square meter while the price of land in terrestrial area is only Rp 25,000,000 per square meter. Therefore, these statistical numbers show the enormously profitable business. See http://properti.kompas.com/read/2016/08/04/200000921/Harga.Lahan.Reklamasi.Pantai.Mutiara.Tembus.Rp.35.Juta.Per.Meter.Persegi, last visited 4 August 2016

2 Ollivianty Rellua, 2013, “Proses Perizinan dan Dampak Lingkungan Terhadap Kegiatan Reklamasi Pantai,” Lex Admistratum, Vol 1: 2, p. 165-166.

3 See Nono Sampono, Ari Purbayanto, John Haluan, Ahmad Fauzi, and Budy Wiryawan, 2012, Dampak Reklamasi Teluk Jakarta terhadap Kegiatan Penangkapan Ikan di Teluk Jakarta (Impact of Reclamation on Capture Fisheries in Jakarta Bay), Jurnal Perikanan dan Kelautan, Vol. II No. 2, p. 107-110.
Based on the pro and con statements mentioned above, it is obvious that the role of laws and regulation is inevitable solving this matter and therefore the role of government is urgently needed to mediate the pro and con views on reclamation. In terms of legislation, the Government has passed several laws and regulations to regulate reclamation. These include the Law No. 32 of 2009 concerning the Protection and Management of the Environment\(^4\), the Law No. 27 of 2007 concerning the Management of Coastal Areas and Small Islands\(^5\), as amended by the Law No. 1 of 2014\(^6\) and the President Regulation concerning reclamation in the Coastal Zone and Small Island.\(^7\) In accordance with the abovementioned laws and regulations, reclamation is not a forbidden thing to do but it must comply with them. Therefore, the duty of the government is to make sure that the reclamation projects are done in accordance with the existing laws and regulations.

Notwithstanding, many reclamation projects were undertaken in a wrong way which contradicts to the existing laws and regulations. For example, the reclamation executed by Jaya Anurya Karimun Ltd., in Karimun, Kepulauan Riau Province is contrary to the laws and regulations. In this case, the Government of Karimun conferred a location and reclamation permit without obliging the Director of Jaya Anurya Karimun Ltd to have an environmental impact assessment (EIA) and environmental permit.\(^8\) The study on Reclamation in Northern Coast of Batam undertaken by Alpano Priyandes, M. Rafiee Majid showed that reclamation activities changed the environment such as coastal morphology, hydro-oceanography, mangrove and coral reefs deterioration.\(^9\)

\(^4\) Indonesia. Law regarding the Protection and Management of the Environment. Law number 32 year 2009, SG.2009-140.
\(^5\) Indonesia. Law regarding the Management of Coastal Areas and Small Islands. Law number 27 year 2007, SG.2007-84.
\(^6\) Indonesia. Law regarding the Amendment to Law Number 27 Year 2007 regarding the Protection and Management of Coastal Areas and Small Islands. Law number 1 year 2014, SG.2014-2.
\(^7\) Indonesia. Presidential Regulation regarding reclamation in Coastal Zones and Small Islands. Presidential Regulation number 122 year 2012, SG.2012-267.
\(^8\) Elwi Danyl, Suka Andi Husin, dan Suhalizal, “Pendapat Hukum (Legal Opinion) terhadap Kasus Izin Reklamasi Lahan Pantai di Kelurahan Tebing Kecamatan Tebing Kabupaten Karimun Provinsi Kepulauan Riau”, Faculty of Law, Andalas University, Padang, p. 1-2014.
\(^9\) Alpano Priyandes and M. Rafee Majid, “Impact of Reclamation Activities on the
The reclamation in Jakarta Beach is another good example of how the reclamation is executed in a wrong way. The project has been proven to hinder the boats of the fishermen to get a direct access to the Angke Harbour. Thus, the fishermen have to spend more gasoline to reach the harbor. According to Mr. Rizal Ramli, the Maritime Coordinating Minister, the reclamation project in Island G was developed with improper way, thus, it causes detrimental effect to the environment, such as the killing of marine biota. At the end, the Government canceled the reclamation of Island G.\(^\text{10}\)

Those examples show that the negative ones override the positive impacts of reclamation. In order that the reclamation may not bring about negative impacts, it is absolutely important that every reclamation to obey the laws and regulations, which is known as sustainable reclamation and that the Government must play its pre-emptive role in forcing the business people to comply with the laws and regulations. This paper is intended to explore legal scheme to create a sustainable reclamation. The paper is also designed to describe the ways to create an environmentally sound or sustainable reclamation through a licensing scheme.

II. RECLAMATION: DEFINITION, IMPACTS, AND OBJECTIVES

Legally, reclamation can be defined as an activity committed by any person in an effort to intensify the use of land resources viewed from environmental and social-economic aspect by way of landfill and land drainage\(^\text{11}\). Based on academic view, reclamation means a work to make use of area or land which is relatively superfluous or still vacant and watery to become useful land through draining the land\(^\text{12}\).

Land reclamation, usually known as the process to create new land

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\(^{10}\) “Background of the Jakarta Reclamation Process”, available at: https://tirto.id/20160630-50/lakukan-pelanggaran-tiga-pulau-reklamasi-akan-dibongkar-255942.

\(^{11}\) Article 1 Point 23 of the Law regarding the Management of Coastal Areas and Small Islands. See note 7.

\(^{12}\) Wisnu Suharto, “Reklamasi Pantai dalam Perspektif Tata Air”, Semarang, Unika, Soegijapranata, p. 9, 1996.
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from sea or riverbeds. The land reclaimed is known as reclamation ground. The creation of new land was for the need of human activities.\textsuperscript{13}

Land reclamation can have detrimental effects on the marine environment. As this activity normally takes place along the coast, it mainly brings about negative impact on coastal and near shore marine habitats, like sandbanks, estuaries, mudflats, salt marshes and halophytic habitats, as well as species occurring in these habitats, e.g. gray seals, terns, and black sea ducks. Marine habitats are permanently lost where land is reclaimed from the sea. Land reclamation may also influence habitat types of coastal and terrestrial origin such as sand dunes or freshwater bodies. Since marine sand is usually used as construction material large-scale land reclamation, the impacts of sand extraction also have to be considered with regard to the overall impacts.

Reclamation in the coastal areas is utilized as a new land to accommodate various human’s activities with a high intensity, such as settlement, industrial sites, agriculture, mines, harbor, recreation and tourism, power plant, and natural resources conservation. But Reclamation showed obvious negative impacts on the physical-chemical environment, biological environment, and social aspects in the area. Physical-chemical effects include the change of bathymetry at the waters.\textsuperscript{14}

The reclamation activity had also suspended the functions of mangrove forests. Thereby, the high up-tide during the windy season would flood the fishermen’s estate along the coast around the reclamation area at the coast.\textsuperscript{15}

In accordance with its definition, the main objective of reclamation is to improve the decay, watery and useless land areas to become a better and more profitable one. In many big cities like Singapore, Jakarta, Dubai and many others, the new land areas are usually designated for costly apartment buildings and business areas. It is also meant to be expansion areas of the city, of which population growth is very high and thus the need for the land areas increase significantly. But the land

\textsuperscript{13} Albert Cheng Ting Ning, et. al., “Towards A Sustainable Reclamation for Hong Kong,” \textit{Environmental Paper Award} 2010, p. 3, 2010.

\textsuperscript{14} Alpano Priyandes and M. Rafee Majid, \textit{op. cit.}, p. 33.

\textsuperscript{15} \textit{Ibid.}.
availability in the mainland of the big cities is getting less and less.\textsuperscript{16} The reclamation in Jakarta bay, known as “Giant Sea Wall,”\textsuperscript{17} is one of the examples where the property developers and the Government of Jakarta use the reclamation as a solution to the shortage of the land in mainland Jakarta.\textsuperscript{18} The maps below show that there are 16 (sixteen) projects of reclamation in Jakarta Bay.

The maps below show that there are 16 (sixteen) projects of reclamation in Jakarta Bay.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{reclamation_map.png}
\caption{Source: The Spatial Planning of DKI Jakarta, 2010.}
\end{figure}

The objectives of reclamation are to improve vacant and useless areas to become areas that can be utilized for urban activities and to create new expensive areas. According to Max Wagi, as quoted by Alfania Riski Oktavia, et. al.,\textsuperscript{19} the objectives of reclamation projects

\begin{itemize}
\item \textsuperscript{16} I\textit{bid.}, p. 45-46.
\item \textsuperscript{17} “News Article regarding the Impact of the Giant Sea Wall”, available at: http://www.koran-jakarta.com/reklamasi-dan-giant-sea-wall-bakal-timbulkan-masalah-baru/, Accessed on 23 September 2016.
\item \textsuperscript{18} Moch. Choirul Huda, “Pengaturan Perizinan Reklamasi Pantai Terhadap Perlindungan Lingkungan Hidup,” \textit{Perspektif}, Volume XVIII No. 2 Tahun 2013 Edisi Mei, p. 126, 2013.
\item \textsuperscript{19} Alfania Riski Oktavia, Fauzia Fadila, Irma Chintiana, and Nungky Kusumawardani, “\textit{Analisis Peraturan Presiden No. 51 tahun 2014 mengenai Reklamasi Teluk Be-
are as follows:

a. To regain the lost lands as a result of sea wave and sea water tides;
b. To gain new land areas in front of coastlines to build buildings which will function as fortress protection for the coasts; and
c. To erect building constructions in a big scale for the sake of economic reason. ²⁰

III. LEGAL ASPECT OF RECLAMATION

A. SUSTAINABLE RECLAMATION

The Law No. 32 of 2009 concerning the Protection and Management of the Environment is framework law to protect and manage the environment in an effort to create sustainable development. Under the virtue of the Law No. 32 of 2009, all activities which cause a significant and important impact on the environment is obliged to get an environmental license, which can be conferred by the Government if the Environmental Impact Assessment (EIA) or the Environmental Impact Management and Monitoring Program (hereinafter cited as UKL/UPL) of the activity has been approved by the EIA Commission.

²⁰Ibid., p. 5.
Then the Environmental License becomes a prerequisite condition to obtain operational license. Therefore, before commencing reclamation project, one must have both environmental license and reclamation license. This procedure is believed to create sustainable reclamation.

In relation to the protection of the environment, the Law No. 32 of 2009 functions as a general law (*lex generalis*). It means that all laws relating to the use of the environment may not be contrary to the Law No. 32 of 2009. Human’s activities concerning reclamation fall under the jurisdiction of the Law No. 27 of 2007 as amended by the Law No. 1 of 2014. To this end, the Law No. 27 of 2007 as amended by the Law No. 1 of 2014 is a special law (*lex specialis*) of the Law No. 32 of 2009 in terms of the protection of the environment. Therefore, it can be concluded that the norms in the Law No. 27 of 2007 may not contradict to the Law No. 32 of 2009 and that the ruling of reclamation falls under the jurisdiction of *lex specialis*.

As mentioned above that reclamation activity constitutes an act which falls under the jurisdiction of the Law No. 27 of 2007 concerning the Management of Coastal Areas and Small Islands. Under this Law, reclamation is not a forbidden thing to do but it must comply with the statutory requirements. In order to create sustainable reclamation, the Law No. 27 of 2007, reclamation is allowed only if it will increase the benefit and/or added value of the coastal areas, judged from technical, environmental and socio-economic point of view. The emphasis on the increase in the benefit and added value of the coastal areas is a keyword as a legal ground for the government to issue a reclamation permit. By the virtue of Article 34 of the Law No. 27 of 2007, the proponent of the reclamation project must pay attention to the following considerations:

a. The sustainability of lives and the society source of living;

b. The balance between the need to make use of land and the needs to conserve the environmental function of coastal areas and smaller island; and

c. The technical requirement for the method of landfills, and landfill materials.

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21 Article 34 of the Law regarding the Management of Coastal Areas and Small Islands. See note 7.
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The discussion about sustainable reclamation cannot be separated from the definition of sustainable development. UN Conference on Environment and Development (UNCED) defined sustainable development as “development that meets the needs of the present without compromising the ability of the future generations to meet their own needs”. There are at least four elements or principles which must be encompassed in the implementation of sustainable development. These include (1) the conservation of natural resources for the benefit of future generations; (2) the exploitation of natural resources in a manner which is prudent; (3) the equitable use of natural resources; and (4) the integration of environmental considerations into economic and other development plans, programs and projects.

According to Punter as cited by Loures and Panagopoulos, sustainable reclamation must have a landscape reclamation design which should “integrate five fundamental principles: (1) protect and conserve quality landscapes; (2) develop a clear vision and strategy for an area; (3) apply collaborative design principles; (4) allow resources for long-term aftercare of new landscapes; and (5) enhance biodiversity, social stability and economic development.” Therefore, every reclamation project is subject to make a thorough planning which consider the historic and cultural significance of the landscape and to understand how “landscape ecology and design can invent alternative forms of relationships between people, place, and cosmos so that landscape architectural projects become more about invention and programs rather merely corrective measures of restoration.”

Since the Law No. 27 of 2007 as amended by the Law No. 1 of 2014 has only one provision regulating reclamation, it does not specify

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22 The World Commission on Environment and Development, “Our Common Future”, Oxford University Press, New York, 1987; See also Maurice Sunkin, David M. Ong and Robert Wight, Sourcebook on Environmental Law, Cavendish Publishing Limited, London, p. 25, 1997.
23 Philippe Sands, “Principles of International Environmental Law: Frameworks, Standards and Implementation”, Vol. 1, Manchester University Press, Manchester, p. 253, 1995.
24 L. Loures & T. Panagopoulos, “Sustainable Reclamation of Industrial Areas in Urban landscapes,” WIT Transactions on Ecology and the Environment, Vol 102, p. 793, 2007.
25 Ibid.
the method to realize the sustainable reclamation. The details rulings about sustainable reclamation can be found in the President Regulation concerning reclamation in the Coastal Zone and Small Island.26 The President Regulation No. 122 of 2012 somehow embraces the thought of Loures and Panagopoulos concerning sustainable reclamation. This President Regulation obliges that the government and the proponent of the reclamation to have a planning before the commencement of the project. The planning should be based on location determination, master plan, feasibility study, and detailed plan.27 With regard to the location determination, reclamation can only be executed if the government has publicized the Zoning Plan for coastal areas and small islands, known as RZWP-3-K.28 In addition, the location determination must take into account environmental considerations,29 such as sea waters and ground water quality, air quality, the condition of coastal ecosystem (mangrove, coral reef, etc.) terrestrial fauna and flora and aquatic life as well.30

B. LICENSING SCHEME TO CREATE SUSTAINABLE RECLAMATION

Under Indonesian legal system, there are at least 4 (four) permits that corporation must have in order that it is allowed to undertake reclamation. These include environmental license, environmental protection, and management license, site license, and reclamation license. The legal ground for those licenses are stipulated in the Law No. 32 of 2009, the Law No. 27 of 2007 as amended by the Law No. 1 of 2014, the Government Regulation No. 27 of 2014,31 and the President Regulation No. 122 of 2012.

The Law No. 32 of 2009 is generally designated to create sustainable development, including sustainable reclamation. For this purpose,

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26 Presidential Regulation regarding reclamation in Coastal Zones and Small Islands. See note 8.
27 Ibid., Article 3 (1) and (2).
28 Ibid., Article 4 (1).
29 Ibid., Article 4 (3).
30 Ibid., Article 8.
31 Indonesia. Government Regulation regarding Environmental License. Government Regulation number 27 year 2014, SG.2014-48.
Article 40 promulgates that environmental license is a pre-requisite requirement to get an operational license, such as reclamation permit. This results in legal consequence that reclamation permit cannot be conferred by the government if the proponent of the reclamation does not have the environmental license in one side. In the other side, the revocation of environmental license automatically causes the cancellation of the reclamation permit.

The procedure to obtain an environmental license is not set forth in the Law No. 32 of 2009. It is stipulated in the Government Regulation No. 27 of 2014. Under the Government Regulation No. 27 of 2014, any person, that will carry out an activity which must have EIA and UKL/UPL, is obliged to obtain an environmental license.\(^{32}\)

Besides the environmental license, the proponent of the activity, which must have EIA and UKL/UPL, is also obliged to obtain Environmental Protection and Management License.\(^{33}\) The difference between Environmental License and Environmental Protection and Management License lies in the time to get the license. The environmental license must be obtained before the issuance of the reclamation permit while the environmental protection and management license is issued after the operation of the reclamation.\(^{34}\)

To get an environmental license, the proponent of the activity must send a written application form to the Minister of the Environment and Forestry, governor, or Bupati/Mayor. The application form must enclose forms of EIA or UKL/UPL, deed of establishment of the company; and company or activity profile\(^{35}\). The environmental license must contain the requirement and obligation which are set forth in environmental feasibility study or the recommendation of UKL/UPL; the requirements and obligations which are prescribed by the Minister of the Environment and Forestry, governor, or Bupati/Mayor; and the due date of the environmental license.\(^{36}\)

Based on Article 53 (1) the Government Regulation No. 27 of 2014,

\(^{32}\) *Ibid.*, Article 1 Point (1) Jo. Article 2 (1).

\(^{33}\) *Ibid.*, Article 33 (2).

\(^{34}\) Olivianty Rellua, *op. cit.*, p. 160-161, 2013.

\(^{35}\) Article 43 of Government Regulation regarding Environmental License. See no.32.

\(^{36}\) *Ibid.*, Article 48 (1).
the holder of environmental license is obliged to comply with the requirement and obligation outlined in the environmental license; to write and submit to Minister, governor, or Bupati/Mayor the report concerning the realization of the requirement and obligation in the environmental license; and to allocate guarantee fund for rehabilitation of environmental function in accordance laws and regulation.

Both the Law No. 32 of 2009 and the Government Regulation No. 27 of 2014 are legal tools to accommodate the creation of sustainable reclamation through a licensing system. The licensing system is based on the study of EIA and UKL/UPL which review the reclamation project through a comprehensive examination. Various factors are taking into considerations for the benefit of not only the business people but also the community as well as the environment and its ecosystem. Such an examination is, if consistently implemented, believed to be able to create sustainable reclamation.

Another law, which is involved in creating sustainable development, is the Law No. 27 of 2007 and the President Regulation No. 122 of 2012. The Law No. 27 of 2007 emphasizes the effort to create sustainable reclamation on the planning. For example, the reclamation project may only be allocated in an area/zone which has been decided as the Zoning Plan for coastal areas and small (RZWP-3-K), which must be harmonized with the Spatial Planning (RTRW). In addition, the reclamation in coastal areas and smaller islands must be aimed at increasing the benefit and the added value of the reclaimed area for not only the business people but also the community living in and around the areas, including. The Law No. 27 of 2007 forbids all activities which may cause negative influence to the environment and its ecosystem, such as coral reef mining, sand mining, using explosive materials, conversion of mangrove, oil drilling, etc. 37

The further ruling on reclamation is stipulated in the President Regulation No. 122 of 2012. Based on Article 15, any person, including the government, local government, and corporation that want to undertake reclamation, must have two kinds of permits, notably location permit and reclamation permit. According to Article 18 (1) the President Regulation No. 122 of 2012, reclamation permit can be conferred only if

37 Ibid., Article 35
the proponent of the reclamation project has previously obtained environmental license and location permit. The government can revoke the reclamation permit if the reclamation project contravenes the environmental license and the reclamation plan. In order that sustainable reclamation can be achieved, Article 27 of the President Regulation No. 122 of 2012 qualifies that the reclamation proponent: to facilitate the people with the access to the beach; to maintain the income of the people who are dependent upon sea products; to give compensation to the society who suffer the negative impacts of the reclamation; to prepare and facilitate the resettlement of the people residing in the relocation area; and to empower the people suffering the negative impacts of the reclamation.38

C. CRITICAL ANALYSIS

Based on what has been discussed above, we may say that the existing laws and regulations concerning reclamation in conjunction with the protection of marine environment, coastal areas as well as small islands have accommodated the provisions creating sustainable reclamation. The protection of the environment stipulated in the existing laws and regulations gives emphasis on the careful planning and the implementation of environmental impact and risk assessment. The existing laws and regulations have been well written to lead the government and private sector to achieve the sustainable reclamation.

However, quite a few of government officers and the business people do not have environmental and sustainable views in their everyday business behavior. Most of them prefer to have economic advantages rather than environmental values. They regard that the environment and its ecosystem as object of development they embrace the transcendentalism or homocentric39 view in their effort to achieve civilization and profit. This way of thinking leads them to think only about economic

38 Article 27 of the President Regulation regarding reclamation in the Coastal Areas and Small Islands. See note 8.
39 Transcendentalism is the fathom where the followers believe that human civilization can only be reached by economic development with emphasis on the human’s interests (homocentric). According to the fathom, development must go on although it will ruin the environment and its ecosystem. See Sukanda Husin, “Pembangunan Berwawasan Lingkungan dan Penegakan Hukum”, A paper presented in the Seminar on Sustainable Development held by Bapedalda Padang on 17 December 2001. p. 1.
advantages and sacrifice the environment and the local community.

The reclamation of the Island G in Jakarta Bay describes how low the environmental awareness of the Government and the business people. The Administrative Court of Jakarta has ceased the reclamation in the Island G. The Court has seen that the reclamation cause negative impacts on the fishery and fishermen and thus the Court banned the reclamation project in the Island G. Under the leadership of former Coordinating Minister of Maritime Affairs, the reclamation of island G was canceled due to significant willful misconduct. However, Luhut Binsar Pandjaitan, the new Coordinating Minister for Maritime Affairs, disobeyed the Decision of the Administrative Court of Jakarta and the findings of the Joint Committee on the Reclamation of Jakarta Bay. He decided that the reclamation of the Island must go on because it is the Government’s program to create Giant Sea Wall. The reclamation of the Island G is obviously unsustainable because the Project does not take into account environmental considerations.

The decision of the Coordinating Minister for Maritime Affairs to continue the project and to neglect the Court Decision infers that the Government does not practice the good governance principle, demanding effectiveness, efficiency, and responsiveness. The Government does not also obey the good sustainable development governance as an international obligation stipulated in the World Summit on Sustainable Development.

The Reclamation in Karimun is another good example on how bad the environmental perception of the government and the business people towards the environment. The Local Government of Karimun has issued the location and reclamation permits although the proponent of the project did not have environmental license. The absence of environmental license in this project renders the environmental and public interests left unconsidered. The worst of all, if the project causes environmental disaster, the government will find difficulty in enforcing the law especially administrative law because all the requirements and obligations of the company are set forth in the environmental license.
IV. CONCLUSION AND RECOMMENDATION

A. CONCLUSION

Based on what has been explained in Chapter C of this paper, it can be concluded that the existing laws and regulations have set up comprehensive protection for the marine environment and even the laws and regulations to further regulate the procedure of reclamation so as to reach sustainable reclamation.

The existing license scheme is remarkably complete. The reclamation project can only be undertaken if the proponent of the project has gain four kinds of license. These include environmental license, environmental protection, and management license, site license, and reclamation license. The licensing scheme, if consistently practiced, may be successful to create sustainable reclamation.

B. RECOMMENDATION

Looking at the current experience of reclamation in Indonesia, it is suggested that the government show the leadership in environmental protection by practicing laws and regulation in a consistent manner. The Government must become the pioneer to spearhead the environmental protection.

Due to the environmental disobedience of the business people, the government is suggested to be preemptive to enforce the law, especially the administrative law which is deemed to be able to prevent the occurrence of pollution and the gradation of the environmental quality in any reclamation project.

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