# Green Banking: Investment Responsible in Banking Institutions

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Abstract---This study tries to dig deeper into how banks play their role as business institutions that are proenvironment. Most environmental damage is due to business activities. Banks as one of the key drivers of the country's economy certainly have responsibilities that cannot be separated from their function as transform assets. By using descriptive qualitative methodology approach, this study found that green banking is the answer to many environmental problems.

Keywords---Green Banking, Environment, Investment Responsible, Bank

#### I. Introduction

Forest management in Indonesia still leaves many complex problems from time to time that are slowly making degradation or deforestation of land in Indonesia, data from BAPPENAS (Ministry of National Development Planning) 2010 shows fundamental problems from the forestry sector, namely poor political order, unsynchronized spatial planning between central government and regional government, as well as unclear tenure rights and weak capacity in forest management which has destroyed law enforcement in Indonesia.Indonesia always incapable to reach their target of reducing carbon emissions, Indonesia's carbon emissions are increasingly worrying due to the rate of deforestation is increasingly out of control, according to FAO (Food Agriculture Organization) data in 1970 stated that Indonesia's deforestation rate reached 300 thousand per hectare, and in 1990 the deforestation rate increased dramatically by 1 million per hectare. The 2001 FWI and GFW analysis showed that the deforestation rate continued to increase, to 2 million hectares / year in the 1996-2000 period. Later on, it will become 1.5 million hectares / year for the 2001-2010 period and 1.1 million hectares / year in the 2009-2013 period. Although in the FWI's latest study only focused on 3 provinces, the rate of deforestation is still relatively high, which is around 240 thousand hectares / year for the 2013-2016 period, an increase compared to the previous period (2009-2013), which is around 146 thousand hectares / year (FWI, 2014 ) In total, the natural forests in North Sumatra, East Kalimantan and North Maluku have lost 718 thousand hectares for three years. The results of other analyzes found that 72% of the deforestation that occurred in the 3 provinces was within the area that had been burdened with management permits Activities within the concessions of HPH, HTI, oil palm plantations and mining are direct causes of deforestation. The rate of deforestation in North Maluku and East Kalimantan Provinces has increased significantly, compared to what happened in North Sumatra. In North Maluku, the deforestation rate has more than doubled compared to the previous period, from 25 thousand hectares / year to 52 thousand hectares / year. The same is the case with East Kalimantan where the deforestation rate has almost doubled from the previous period, from 84 thousand hectares / year in 2013 to 157 thousand hectares / year in 2016. The reality of deforestation question the actions of the Indonesian Government for the people who live in and around the forest. This includes realizing the seriousness of the Indonesian Government in reducing emissions, protecting the environment, preventing disasters and preserving natural resources. Facts show that 50% of all land in North Sumatra, East

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Kalimantan and North Maluku have been controlled by concession holders. Only 4% of the land area is allocated for community use in various forms of social forestry and customary forest programs. The fact also shows that forest degradation and deforestation in these provinces have caused environmental disasters: floods, landslides, droughts and loss of protected animal habitat. As a driver of the country's economy, viable banking provides optimal contribution. Banks need to adapt interdependently with the environment as a way to win market competition while also preserving the environment. Because banking cannot live without an adequate environment. Its concern is not ad-hoc or partial but becomes an integrated corporate "value" starting from the vision-mission to the business strategy. In short, the spirit of a banking business must join hands with sustainable development. However, banks cannot just walk away without Bank Indonesia regulations as guidance towards a sustainable and environmentally friendly business. Therefore this study seeks to dig deeper into how banks play their role as business institutions that are pro-environment.

## **II.** Literature Review

The main task of financial institutions is to raise funds from the public and channel these funds to borrowers and then use them to be invested in the production or investment sector, in addition to being used for buying goods and services so that economic activities can grow and develop and improve living standards. In practice, there is an aspect that is of concern to banking institutions in chaneling their funds [1]. The aspect is Environmental impact assessment. This aspect is an analysis of the environment, whether land or air, also includes human health if the project is implemented [2]. This analysis was carried out in depth before the funds were distributed, so that the funded projects would not experience pollution of the surrounding environment.

### **III.** Methodology

This study uses a descriptive qualitative research approach. This study is a study literature research as a tool to analyse the problem. The researchers studied books, available published literatures, journals, and magazines in this field in order to provide general insight, common knowledge in relation to how the role of banking institutions is pro-environment in carrying out its business activities[3].

#### **IV. Result and Analysis**

One important thing to note here is that KLHK (Ministry of Environment and Forestry of the Republic of Indonesia) calculates deforestation for inside and outside of the forest area. This is a very good step because accordingly, the KLHK also calculates the loss of natural forest cover that occurs in Areas of Other Uses or not in a forestry area that is administratively not under its control (but under the control of the regional government or the Ministry of Agrarian and Spatial / BPN). This increases the accuracy of the data on the actual area of forest cover loss and it is becoming more important because certain parties only wanting to account deforestation occurring within the forest area by ignoring the loss of forest cover outside the forestry area or in the Areas of Other Uses that has been made a concession on the grounds that these deforestations are a planned one. 5 appointment and designation of forest areas are for political and administrative actions and do not indicate the actual extent of forest cover because not all forest areas have forest cover and many forest cover outside the forest area in Indonesia (on land) reaches 120,423,800 hectares or about 60% of Indonesia's land area. This makes the Ministry of Environment and Forestry (formerly the Ministry of Forestry) one of the most powerful government institutions in Indonesia with all the land under its control. However, according to KLHK / MEF, Indonesia's actual forest cover area is only 93.6 million hectares. This is different from the data held by Forest Watch Indonesia where

Indonesia's forest cover is currently only 82 million hectares. 6 Meanwhile, based on the FREL (2016) document submitted by the government to the UNFCCC, there are around 7.48 million hectares of natural forest outside of the forest area (APL) in 2012, which can legally be deforested. In addition, of the 15.2 million hectares allocated as Convertible Production Forests or HPK (which are intended to be released into APL), around 7.24 million hectares are still in the form of natural forest in 2012.Calculating deforestation rates during the period of 2016-2017, the Directorate General of Forestry Planning and Environmental Management of the Ministry of Environment and Forestry compared 2016 land cover satellite images with 2017 land cover satellite imagery to then analyze changes that occurred in land cover conditions (parcels per parcel). KLHK calculates the area of gross deforestation (changes in forest cover to non-forest) and then reduces it by broadly reforestation / afforestation (changes in non-forest land cover to forest) which then produce clean deforestation rates. The government calculates deforestation in 7 main islands (Sumatra, Kalimantan, Maluku, Sulawesi, Bali-Nusa Tenggara, and Papua). The latest deforestation rate released by the Indonesian government in 2016-2017 is 479,000 hectares (July 2016 - June 2017). 8 If viewed from the deforestation baseline established in the NDC, this figure shows the success of reducing deforestation covering 441,000 hectares from the deforestation rate projected to occur in 2030 based on the BAU scenario (920,000 ha / year) which is FREL for deforestation until 2020. The figure is still slightly higher than the NDC target that wants to reduce deforestation to reach 450,000 ha / year alone by 2020 and press it further up to only 325,000 ha / year in the period 2020-2030 so that Indonesia can reduce emissions from forestry by 60% -91% from the BAU scenario in 2030. During the period from mid-2016 to mid-2017, the highest deforestation rates were recorded in Kalimantan (230,000 ha), followed by Sumatra (127,000 ha), Sulawesi (70,800 ha), and Papua (48,600 ha). Java and Bali have recorded a net increase of 20,000 ha of forest cover (negative deforestation). However, we have not been able to know the extent of primary and secondary forest loss in this period because 2017 forestry statistics have not been published (the KLHK has only displayed infographics and deforestation maps in JPEG format uploaded on the KLHK website). Nearly half (44%) of total deforestation in this period occurred in production forests (either in forest / mining concessions or in open areas / open access) and the second highest deforestation (36%) occurred outside forest areas (APL, including in the oil palm plantation concession). Meanwhile, 20% of deforestation still occurs in protected forests and conservation forests which are the remaining Indonesian primary forest guards. This study found that there are things that need to be considered by banking institutions in carrying out their business as institutions that are also pro-environment. Related to forestry, there is the term "greening" movement. This movement also began to occur in the banking sector with the term "Green Banking". Actually, the term "Green Banking" has a broader scope than just the green alias associated with environmental development. But, this term also includes community empowerment towards a better social life[4]. Bank Indonesia has a lot of regulations that regulate the banking business world but do not have complete regulations on aspects of environmental sustainability. The current regulations are not sufficient enough as a guide for banks to contribute to environmental conservation efforts. Making a kind of mapping of green projects including business potential in the maritime and biodiversity fields has clearer and more practical prospects so that banks have a clear direction to go to sustainable banks [5]. On the other hand, BI and the Government can form a kind of "sustainable banks" forum to bridge various opportunities and obstacles in sustainable business [6]. As a motivational step, BI does not need to be reluctant to create a kind of incentive for banks that are serious and consistently involved in sustainable business. According to the World Bank, Green banking is based on four elements of life, namely nature, well-being, economy and society. Green banking is a long-term business strategy that, besides aiming for profit, also prints benefits for sustainable environmental empowerment and preservation. The basic guide for international banks to implement Green Banking is The Equator Principle. The Equator Principle is a number of commitments to determine, assess and manage social and environmental risks in project financing and is voluntary. While Bank Indonesia takes responsibility for monetary policy

and macro prudential regulation OJK, newly created in 2011, took over the responsibility of regulating and supervising financial services, there by replacing the function of the Capital Market and Financial Institutions Supervisory Agency. OJK's objective is sustainability regarding the growth of the financial system. It gives institutions the authority to regulate the banking sector, the capital markets, and the insurance, pension fund, and other financial institution sector (Republic of Indonesia, 2011). Regulatory financial institutions in Indonesia have not yet issued green macroprudential regulation, but are engaging with the issue on different levels. According to Volz,67 there is general agreement among investors that the investments in environmentally damaging projects in Indonesia expose the financial system to E&S risks on a systemic level. Yet, since initiatives on E&S risk assessment are not mandatory in Indonesia, financial institutions are not engaging with the issue of systemic E&S risk, forcing OJK to consider green weightings on capital requirements.67 Furthermore, Bank Indonesia, as a macroprudential regulator in Indonesia, is considering, under the Roadmap for Sustainable Finance, to include E&S risk into its macroprudential framework in order to secure monetary and financial stabilityAn area where Bank Indonesia has shown some engagement with the issue of greening the financial system is capacity-building workshops for bankers that cover E&S risk assessment, risk mitigation of renewable energy investment, and green finance in general, which it organised in cooperation with the Ministry of the Environment in 2010.67 Bank Indonesia organised further discussion groups and seminars in 2011 to raise awareness of environmental issues as well as capacity-building workshops for commercial bank personnel on E&S risk assessment in cooperation with the UNEP Financial Inquiry and together with USAID on renewable energy financing. Further capacity-enhancing events for bankers were organised jointly with the Ministry of Environmental Affairs and Forestry in 2013 and in collaboration with the Ministry of National Development Planning, the Ministry of Environment, USAID, and the GIZ in 2014.67 In collaboration with the IFC and USAID, OJK also published a Clean Energy Handbook for Financial Service Institutions in 2015. According to Bank Indonesia Green Banking is defined as banking which is run in its business based on the principles of sustainable development. Especially in credit and financing, namely the existence of an ecological balance (environment), human welfare, and socio-cultural development of the community. From this definition, the words "empowerment" and "sustainability" appear to be key. Green banks are financial institutions that give priority to sustainability in business practices. In the future, world business will not be able to work without applying environmental principles, because banks will not want to support such businesses. Green banking must be understood as a stream of global business style[7]. With increasing business complexity and risk profile, banks need to identify problems arising from bank operations[8]. Future banking is banking that is integrated with environmental maintenance. If the company cannot manage waste, its reputation will be bad in the media. Moreover a research in Indonesia, also found that presence of female executives would positively affects Bank's environmental related disclosure [9]. Assessing the most recent efforts by Bank Indonesia and OJK, to promote green finance and growth based on the institutions' annual flagship publications appears to be rather difficult. After releasing the Roadmap in December 2014, OJK did not engage with green finance in its annual report for 201570 and does not mention any green credit or bond initiatives, E&S risk management, or provide any data on any green finance. Furthermore, the report does not list any green or environmental regulatory initiative on the provided list of all initiatives for 2015. Regarding the support for priority sectors, a topic that featured prominently in the *Roadmap*, the report mentions in its outlook for 2016 that in the context of promoting the maritime sector, OJK would support inter-bank working groups on renewable energy In regard to flows of green finance, in 2011, banks were investing IDR6.4 trillion (US\$480 million) or 1.19% of their lending portfolio in green projects, slowly increasing the share to 1.29% and IDR9.3 trillion (US\$697 million) in 2012 and 1.37% and IDR10.2 trillion (US\$765 million) in 2013 and investing the biggest share in 2012 in renewable energy projects, with 26.1% in mini hydro projects and 26.7% in geothermal projects When banks lend money to debtors who do not comply with national and international

regulations, the international world will negatively assess the bank. In addition, to support capability in channeling loans or loans to natural resource-based projects, banks must implement a type of management tools such as ESRM (Environmental and Social Risk Management). This ESRM is one of the guidelines for credit feasibility through the classification of the risks and impacts of a project that will be funded by banks for environmental and social-community sustainability. In the economy and business world the role of banks has become a chain that is symbiotic with other business industry players, because in general banking activities include: (a) raising funds from the community (Funding), (b) channeling funds to the community / industry (FInancing), (c) providing other banking services to the community / industry (Service). For the financing sector of environmentally friendly projects, banks can start on developing renewable energy, for example anticipating electricity consumption. Even so in terms of third party fund collection, banks can create green savings creations for the environmental community, students and students as an environment-based target market. In addition, the provision of banking services such as paperless, e-billing, ebanking is a type of service that helps reduce paper consumption levels. In addition, a green lifestyle must be part of the daily life of a green bank such as the use of energy-saving lamps in banking-hall, reduction of carbon foot print for official travel, provision of live plants in the workspace, back and forth printing, provision of specific bins (wet, dry, plastic-paper).

# V. Conclusion

Green banking is the concept of banking support for protection, environmental management and social development of the community. As an important link in the economy, banks have an obligation to function as a business institution that must also be pro-environment. Green Banking as a solution can be implemented by banking institutions by controlling the flow of investment by analyzing the projects to be financed. Furthermore, collaboration from various parties including government, banking, entrepreneurs and all stakeholders is needed to achieve it.

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