

Chapter 1 INTRODUCTION

1. General Overview

Climate change is not merely a threat; its impact has been felt throughout the globe. For instance, the recent extreme weather events in Indonesia, including a longer dry season and a reduced frequency of rainy weather, demonstrate the tangible effects of climate change. A recent update from the NASA Global Climate Change website indicates that in 2021, human emissions of heat-trapping gases have contributed to a warming of the climate by nearly 1.1 degrees Celsius. It is predicted that these changes will affect many regions in the next few decades. Even now, at the year 2023, we have experienced unpredictable weather changes. This evidence demonstrates how the risk of climate change is increasing with each passing year.

The issue of environmental degradation has emerged as a significant global concern, particularly in the context of climate change, pollution, and resource depletion. These environmental challenges, if left unaddressed, have the potential to precipitate a range of natural disasters. Air pollution is a pervasive issue in urban areas, with motor vehicle fuel emissions representing a significant contributor. The prevalence of private vehicles, which are often powered by toxic fuel, has further exacerbated the problem. Furthermore, there are numerous instances where factories have exploited excessive resources and materials. Following the excavation of these resources, factories have failed to implement reforestation management.

In response to this issue, governments have enacted policies aimed at preventing and reducing the risk of climate change and environmental hazards. These policies encompass a range of initiatives, from community-level socialization programs designed to educate and engage residents in environmental stewardship to comprehensive national strategies for mitigating and adapting to environmental change. Further examples of the policies that the government has established include support for renewable energy consumption, forest conservation policy, and other innovative programs.

In addition to their contributions to the prevention of climate change and environmental degradation, bank departments are also engaged in the implementation of green banking policies. These policies include the transition to online transactions and the reduction of paper document usage, as well as the provision of loans for renewable energy programs such as residential solar power systems and the reduction of solar power usage. Green banking represents a novel environmentally conscious practice that encourages investment in environmentally beneficial activities. One such initiative is the installation of green décor within the bank premises, as well as the implementation of paperless communication and transactions. These are but a few of the ways in which a bank can operationalise green banking within its daily operations.

Banks have initiated the implementation of green initiatives within their operational environments. One such initiative is the installation of miniature gardens within the buildings, which serve to enhance the aesthetic appeal of the premises while also filtering and providing fresh air, thereby enhancing the comfort of bank customers. Additionally, bank staff have adopted the practice of decorating their work and administrative desks with potted plants, thereby further enhancing the natural aesthetic of the environment.

The implementation of paperless communication and transactions has become one of the most prevalent green banking products in numerous banks, with a high level of customer awareness and engagement in Indonesia. This product was first introduced in 2011 by BCA Bank, which released its mobile banking app and gained significant popularity during the initial stages of the Covid-19 pandemic, when online transactions became a prominent mode of communication between customers and sellers. Green banking represents one of the avenues through which banks and other financial institutions can contribute to the reduction of environmental damage.

It is explained in ‘Law of the Republic of Indonesia Number 32 year 2009’(UU no 32 year 2009) concerning environmental protection and management article 1 part 1, Environment shall be an integral space with all the things, resources, condition, and living creatures including humans and their behaviors that affect the

nature and the continuity of livelihood and the welfare of human beings and other living creatures. In section 8 article 42, In order to preserve the environment, Government and Local Government is obliged to develop and implement economic instruments of environment, this include; planning on development and economy activities, funding, and granting incentives.

In Indonesia, the government has initiated a series of measures with the objective of implementing a green economy and sustainable development. These include the preparation of a series of strategies for the use of new and renewable energy (EBT), as well as the issuance of green bonds with environmentally friendly projects in the financial industry. The Indonesian Financial Services Authority (OJK) has indicated that eight banks in the country have pledged to implement green banking practices in their operations. Some of the aforementioned banks are Bank Mandiri, Bank Rakyat Indonesia, Bank Central Asia, Bank Negara Indonesia, Bank Muamalat, and BRI Syariah.

Green banking is anticipated to serve as a catalyst for the development of a sustainable economy in Indonesia. The objective of green banking in Indonesia is to foster the growth of environmentally conscious financial institutions in Indonesia and to mitigate environmental risk in Indonesia. Furthermore, the introduction of green banking products may be perceived as a means of attracting customers to utilise the banking services offered by the institution, either for convenience or to participate in the sustainable economy.

Banks can serve as a pivotal indicator for the prevention of environmental pollution through the implementation of green banking practices. This is due to the fact that they provide funding to a diverse range of industrial and production organizations, which are responsible for a multitude of environmental harms. A research by Soheli(2018) investigates the extent of green banking practices in Dutch Bangla Bank, the study was conducted using secondary data, and the period of analysis spanned five years, from 2011 to 2015. The study indicates that Dutch Bangla Bank has implemented a substantial number of initiatives with the objective of promoting green banking in order to mitigate its internal liability. However, the implementation of green banking in Dutch Bangla Bank was found to be inadequate

and does not meet the proposed standard of how a bank was supposed to initiate green banking. Examples of this include the fact that only 0.20% of credit funds was used to invest in green companies and that only 9 of the 150 branches have been powered by solar energy.

The financial performance of the banking industry on a global scale, including that of Nigeria, is influenced by a multitude of factors, including economic instability and financial crises. A number of variables have been employed in different countries to improve the financial performance of deposit money banks. However, only a few have adopted green banking practices. A study by Masukujiman (2015) examined the effect of green banking practices on the financial performance (return on assets) of quoted deposit money banks in Nigeria. The findings indicated that green banking practices exert a significant influence on return on assets. Consequently, it can be concluded that green banking practices have enhanced the financial performance of quoted deposit money banks in Nigeria.

Another research by Ria and Fasa(2018) aims to analyze the progress of green banking implementation at Bank Muamalat. The intensifying competition within the business sector has led to a growing disregard for the natural environment, this has led to a growing awareness among corporate entities of the need to become more involved in activities that can have a positive impact on both the social and natural environment. The banking industry is also required to play a role in the suppression of environmental damage, it is considered necessary for the banking industry to adapt to the environment in a way that is interdependent, which is known as Green Banking. In order to ascertain the extent to which the green movement is being embraced by the banking and finance industry, Bank Muamalat was selected as the subject of this research. This study shows that to support the green banking movement Bank Muamalat has; prioritize finance distribution to corporate customers engaged in the palm oil sector, environmentally friendly organizations, and organizations that implement the concept of sustainability, has carry out green offices or green buildings movements by utilizing and managing energy efficiency, use of water, management and reduction of waste, and efficient use of paper (paperless), to minimize the risk of global warming.

An additional illustration of green banking implementation in banks can be observed in the research paper by Anita (2021) on BSI Mobile. BSI Mobile is a digital product from Bank Syariah Indonesia. Its objective is to facilitate customer transactions and provide information to customers through the features it offers, thereby implementing Green Banking at BSI. This research aims to determine the implementation of Bank Syariah Indonesia's digital products as a means of supporting paperless transactions and the realization of green banking. Additionally, the results of this research can provide information to the public regarding Bank Syariah Indonesia's digital products, namely BSI Mobile. The banking sector can serve as an intermediary between economic development and environmental protection, promoting investment in environmentally friendly and environmentally responsible activities. This kind of banking can be called "green banking" from a social perspective. In order to assist in the reduction of external carbon emissions, banks must provide financing for green technology and pollution reduction projects.

A number of initiatives have been implemented at BSI Bank with a view to promoting green banking. These include the introduction of paperless financial reports and digitization of finance, the provision of online bill payment facilities and the ability to make deposits directly without the need to visit the bank. The implementation of BSI Mobile will assist BSI Bank in achieving one of its strategic objectives, namely the integration of green banking principles into its operational framework. Unfortunately, the research does not provide data regarding the level of success of BSI Mobile among bank customers.

The findings of the research studies presented above provide a wealth of information regarding the implementation of green banking. A significant number of banks have prioritized the release of their own mobile banking services, with the objective of encouraging the transition to a paperless work environment and facilitating online transactions. Additionally, banks have played a role in encouraging businessmen to engage in environmentally-friendly business practices, such as those related to the agricultural sector and renewable energy.

It is regrettable that the implementation of green banking in some banks has been found to be inadequate, with only a few bank branches having implemented

green banking in their operational procedures. Indeed, numerous research findings indicate that green banking can exert a considerable influence on bank income. There are numerous reasons why banks were still inclined to propose green banking in their operations. These include the perception that green banking requires high costs, the concern that it is burdensome for banks to try new and different things, and the belief that there is a lack of demand for green banking products. The implementation of green banking is still underway, albeit at a relatively slow pace.

Currently, only eight banks in Indonesia have initiated participation in the green banking movements project. Among these are Bank BCA, which has enhanced its mobile banking product and reduced face-to-face meetings with customers, enabling them to conduct quick online meetings instead; Bank Muamalat, which has prioritized the distribution of environmentally friendly financing and loans; and Bank BSI, which has developed its own BSI Mobile.

To help in the assessment of green banking development in Indonesia, this research plans to use sample data from Singapore banks whom has implement green banking in their daily operation as a pinpoint. Known as the pioneer of green finance in east asia Singapore has implement green banking to most their banks and financial departments. Green finance, or the issuance of green bonds, has gained considerable momentum in Singapore.

This study by Youngho(2019) reviews the current state of green finance in Singapore and identifies existing barriers to its further development. Singapore, a well-established financial hub in Asia, has set its sights on becoming a hub for green finance in Asia. The Monetary Authority of Singapore (MAS), the central bank of Singapore, has established a network with seven other central banks around the globe, collectively known as the Central Banks and Supervisors Network for Greening the Financial System. This network's objective is to facilitate the sharing of experiences and best practices in green finance with other countries. In addition to establishing the network, the MAS has established a Green Bond Grant scheme with the objective of promoting and ensuring the issuance of green bonds in Singapore. The MAS has facilitated numerous financial institutions in Singapore to prioritize green finance funding and green banking implementation.

This research endeavors to ascertain the advancement of green banking implementation in Indonesian banks by utilizing the Singaporean banking sector as a benchmark. This approach aims to inform the progress of green banking implementation in Indonesia. What role have Indonesian banks played in the advancement of the green economy? What is the current position of Indonesia in the field of green banking in Southeast Asia? What is the perception of the bank customer regarding green banking, and how is the progress being made thus far? To answer these questions I proposed a title for my study “ **A Comparative Study of Green Banking Implementation between Indonesia Banks and Singapore Banks**”

1.1 Research Objective

The objectives hoped to be achieved in this research are:

1. To examine the progress made by Indonesia banks & Singapore banks in implementing Green banking
2. To find out how Indonesia banks and Singapore banks are implementing green banking product in their operational activities
3. To compare the progress of green banking implementation model between Indonesia banks and Singapore banks

1.2 Research Benefits

A. Theoretical Benefits

This research offers insights into the progress of green banking in Indonesia and Singapore, and the contributions of banks in this regard. Many of the green banking initiatives, such as paperless transactions and green loans for environmentally conscious businesses, have been well-documented. However, there is a lack of clarity regarding the extent to which the business and finance sectors have contributed to

green banking. It is unclear whether every bank has implemented green banking in their branch or whether they have prioritised marketing green banking to business owners or bank customers. The objective of this research is to uncover the development of green banking in Indonesia and Singapore, as well to assess its success rate.

Moreover, this research aims to investigate the extent to which Indonesia and Singapore is implementing green banking initiatives in line with the region's broader environmental and economic developments. By collecting data on green banking in Indonesia and conducting a similar data collection in Singaporean banks, it is possible to determine Indonesia' standing in South East Asia with regard to green banking and economic implementation and development. This paper also aims to provide data regarding Singaporean green banking development, as well as to demonstrate the actions taken by Singaporean financial sectors to contribute to green banking. The data collected from this research can be utilized for future research on green banking.

B. Practical Benefits

Spread theoretical data analysis of how green banking affects banks performance value, which can help update the current progress of green banking in Indonesia and how comparable it was with how Singapore banks perform and practice green banking, and could provide reference in finding out how efficient and effective it is to make banks sustainable in economy and environment healthy.

Using Singapore's achievement in carrying out green movement in the economic sector, can help Indonesia banks and financial sectors to find an effective ways to implement and run the green banking program in their operational system, so that it can be run every day with guaranteed safe profits and reasonable cost.