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The Role of Islamic Banking Through Green Investment in Increasing Economic Growth in Indonesia

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ABSTRACT

Research Aims: This study aims to explore how much potential Islamic banks in Indonesia have in contributing through environmental improvement.

Methodology: This research uses the literature review method which is then supported by descriptive analysis.

Research Findings: The research shows that Indonesia has great potential regarding green economic opportunities, which in turn can contribute greatly to national economic growth.

Theoretical Contribution: The increasing trend in the green economy index in Indonesia and its correlation with progressive economic indicators contribute theoretically by suggesting that a green economy can coexist with economic growth

Research limitation and implication: This research has limitations, one of which is only finding out how the role of Islamic banking in Indonesia in participating in protecting the environment. as for the factors discussed in this study are also limited, namely only looking at the green investment or green financing of Islamic banks.

Keywords: Islamic Banking, Green Investment, Green Banking, Economy

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INTRODUCTION

Environmental degradation is one of the dilemmas that is haunting humanity today. Indonesia, which is the fourth most populous country in the world, with a population of 275 million in 2022 and an increase of 1.13% compared to the previous year. (BPS, 2020) certainly faces crucial problems related to environmental degradation. This is because large populations and high population growth have impacts on the environment such as resource consumption (land, food, water, air, fossil fuels and minerals) and waste from consumption such as air and water pollution, toxic materials and greenhouse gases. (Retnosuryandari,

2022). In addition, this can also occur because there will be exploitation of resources that are not environmentally friendly to support the acceleration of economic activities and fulfillment of needs. One of the damages that can be caused is the increase in Greenhouse Gas (GHG) emissions due to the increased use of fuel oil (BBM), gas, and coal. The following is the level of greenhouse gas emissions by type of fuel in Indonesia.

Table 1. Greenhouse Gas (GHG) Emission Rate by Fuel Type in Indonesia 2021-2022

Greenhouse Gas (GHG) Emissions by Fuel Type in Indonesia

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Year	BBM	Gas	Coal	
	(Million Ton CO2)	(Million Ton CO2)	(Million Ton CO2)	
2021	9	27.9	222.2	
2022	9.3	31.1	228.6	

Source: Dataindonesia.id, 2022

Based on the data above, greenhouse gas emissions in Indonesia have increased from 2021 to 2022. In 2021, national greenhouse gas emissions were 259.1 million tons of CO2 and increased to 269 million tons of CO2 in 2022. Based on the Electricity Supply Business Plan (RUPTL) of the State Electricity Company (PLN), national GHG gas emissions are projected to continue to increase. Therefore, a comprehensive mitigation is needed to reduce the rate of GHG emissions in Indonesia. (Rizaty, 2022).

Achieve its ambitious 29% emissions reduction target by 2030, Indonesia's NDC outlines key contributions: the energy sector taking on 314 million tons of CO2e and the forestry sector aiming for a remarkable 497 million tons. Meeting the GHG emission target in 2030 according to the NDC will cost at least USD 250 billion. (Press Release of the Coordinating Ministry for Economic Affairs, 2021). In order to achieve this target, an aggressive role is needed from all industrial sectors, including from bank financial institutions, which must work together to reduce greenhouse gas emissions and improve the environment in Indonesia.

In the past, the banking industry was largely excluded from the list of environmentally damaging industries and was considered to be an environmentally neutral industry. (Ilahi et al., 2023). However, today both directly and indirectly banks can also have an adverse impact on the environment. Directly, the adverse impact of bank operations on the environment is from the carbon footprint and daily resource use. Whereas indirectly, financing funded by banks to companies or industries that are not sustainable can make banks contribute to environmental damage. This means that banks must consider whether the businesses run by their debtors have a negative impact on the environment or not. This provision is then known and simultaneous with the term green banking.

Green banking is defined as the investment and provision of financial services that support environmentally friendly activities and help preserve the environment and reduce carbon dioxide. Green banking is also referred to as ethical banking, socially responsible banking, or sustainable banking. (Islam et al., 2014). In Indonesia, the emergence of the term green banking cannot be separated from the role of banking, both conventional and Islamic banks. In addition to carrying the concept of usury-free, Islamic banks also prioritize the concept of environmental conservation in accordance with Islamic law. Instead of focusing on achieving profits and contributing to economic improvement alone, Islamic banks also have duties that are oriented towards environmentally friendly activities. One form of

implementation of environmentally friendly activities that has been implemented by Islamic banking in Indonesia is green investment or green financing. Green financing has a broad scope of meaning that can refer to financial investments that flow into sustainable development projects and initiatives, environmental products and policies that encourage sustainable economic development. Meanwhile, green financing focuses on providing financing for projects or developments that pay attention to the balance between economy, social and environment. (Dewi, 2020). In other words, besides having a positive impact on environmental sustainability, the green financing program will also gradually have a positive impact on economic growth.

Based on the description above, this article would like to discuss more deeply the role of Islamic banks through green investment or green financing in Indonesia's economic development.

LITERATURE REVIEW

Theoritical Background

According to the Department of Islamic Banking (Syariah, 2012) green banking is quite easy to define, terminologically green banking means promoting environmentalfriendly practices and reducing the level of carbon emissions in banking activities carried out. Meanwhile, according to (Budiantoro, 2014), green banking is defined as a banking effort to prioritize the fulfillment of sustainability in lending or operational activities. Gupta (2015) and Department of Islamic Banking (2012) emphasize proactive steps banks can take to go green. Online banking, energy-saving practices, and eco-friendly products are not just trends, but tangible ways to contribute to environmental sustainability programs.

Studies that discuss green banking have been conducted in several studies with various perspectives. In research (Anwar, 2022) It is explained that the application of the green economy is able to encourage national economic recovery and problems in the multilateral sector. Furthermore, in order for the green economy to be realized for the country, policy makers must be supported by various parties so that a sustainable green economy is formed. The green economy also contributes to maintaining a healthy environment and shaping ecosystems appropriately for current and future generations.

Previous Study

In research conducted by Sari Yuniarti (2013), it is explained that Indonesia is in dire need of a green industrial revolution due to the depletion of energy resources, while energy consumption for business and household activities is increasing, accompanied by high CO2 emissions. It is further explained that the support of the banking industry through green banking in the form of active contribution to efforts to protect and manage the environment, there needs to be follow-up related to legal regulations, provision of information, implementation of education and socialization and joint research. This research is in line with the results of research from Diky et al. (2023) which also explains that the active contribution of banks in implementing green banking requires several follow-ups ranging from legal instruments to comprehensive research. Furthermore, Bintan Rahayu (2020) explained that green investment has not yet received comprehensive recognition in positive law. Although it does not yet have recognition in

positive law, the implementation of green financing can still be done. According to Fauwaz et al. (2022) policies that clearly and firmly regulate green sukuk (one of green financing) still donot exist, but in the draft EBT Bill there is a sentence "Other sources of financing and not contrary to legislation" can be used as a temporary policy basis in making green investments, especially through green sukuk.

Tyahya et al. (2022) show how banks can be green champions, putting their money where it matters for ecology, people, and culture. Yuwan et al. (2023) build on this idea, saying both regular and Islamic banks have a duty to go green for the good of everyone, now and in the future. The awareness of a green economy's vital role within the banking sector is gaining momentum, leading to its gradual implementation by several Indonesian banks. According to research by Elvady and Nova (2021) the financial sector in Indonesia, especially banking, in disclosing Sustainable Finance and Green Financing, has shown an increase since the issuance of POJK No.51/pojk.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies.

Regarding the effect of banking financing on economic growth, research conducted by Iwan Setiawan (2020) explains that conventional bank credit and Islamic bank financing significantly affect economic growth. In line with this, Dessy Anggraini (2020) explains that testing the estimation of the REM modelpanel data equation shows that simultaneously the role of financing for MSMEs has a significant effect on economic growth a very strong relationship with the level of economic growth in Jambi province. In line with the results of Dessy's research (2020), Syahfani et al's research (2021) also confirms that the role and contribution of Islamic banking and financial services is very influential on economic growth in Indonesia. In line with several previous studies, Muhkamat Anwar (2022) explains that the application of the green economy isable to encourage national economic recovery and problems in the multilateral sector. Furthermore, research by Dewi et al. (2023) strengthens the results of previous studies and explains that energy consumption, green investment, and green finance have a significant effect on gross domestic product. Data from Penny and Pretty (2023) provides compelling evidence of green investment's impact on national finances in Indonesia. A statistically significant positive correlation (p < 0.05) with a sizeable effect size (0.965) suggests that embracing the green economy can substantially boost state revenue.

In addition to having an impact on the national economy, the existence of a green economy, especially through green investment, also has an impact in opening up job opportunities in the green industry. According to research conducted by Rafika Dewi and Amar Ma'ruf (2017) states that with a green investment of 2%, it can result in the creation of 4,691 green jobs in the energy sector, 1,891,296 green jobs in the agriculture sector, and 2,313,479 green jobs in the forestry sector, which are spread across all types of green jobs, and with the creation of green jobs in Indonesia, it turns out to be a solution to two problems at once, namely labor problems and environmental problems.

According to Murjana Yasa (2010), the development of a green economy is the right decision in saving the environment. The consequence of implementing a green economy is that in the short term economic growth will slow down, but in the long term it will be very much in line with the awareness of the importance of improving environmental quality, and economic growth will also increase.

RESEARCH METHOD

Method

This research uses the literature review method which is then supported by descriptive analysis of secondary data. The secondary data used in this study are:

- 1. Data on the level of GHG emissions in Indonesia for the period 2021-2022
- 2. Sustainable Report Bank Syariah Indonesia 2021-2022
- 3. Sustainable Report of Bank Mega Syariah 2019-2022
- 4. Sustainable Report of Bank BCA Syariah 2021-2022
- 5. Sustainable Report of Bank Victoria Syariah 2019-2022
- 6. Green Growth Index 2019
- 7. Green Economy Index Indonesia 2011-2020

Data Collection Methods

The data collection method used in this research is the documentary method. In this study, researchers used secondary data obtained from websites and existing bank financial reports.

RESULTS AND DISCUSSIONS

Driven by the need for ethical and faith-based financial services, Islamic banks have emerged as a vibrant force in Indonesia's banking landscape. Law No. 10 of 1998 defines these institutions as those operating under Sharia principles, categorized as Islamic Commercial Banks (BUS), Islamic Business Units (UUS), and Islamic People's Financing Banks (BPRS). Their presence resonates with the aspirations of millions of Muslims in Indonesia, offering a welcome alternative that aligns with their values and beliefs. This growing popularity underscores the increasing demand for financial solutions that are not only economically sound but also guided by ethical and religious principles. However, navigating the Indonesian market necessitates adaptability. Islamic banks must balance the ever-evolving financial needs of their customers with the unwavering adherence to Sharia principles. This delicate dance requires creativity and innovation, ensuring that financial instruments and services comply with religious guidelines while addressing the dynamic demands of the Indonesian economy. The thriving presence of Islamic banks in Indonesia reflects a nation's embrace of financial inclusivity and ethical banking practices. It's a testament to the growing awareness of how faith and finance can seamlessly intertwine, offering individuals and businesses a unique and values-driven approach to managing their financial well-being.

Besides being synonymous with usury-free banks, another thing that makes Islamic banks unique when compared to conventional banks is that Islamic banks have a social function that exists (built in) in their operating system. (Editorial, 2011). This social function certainly seeks to support the benefit of the people, both the people of today and the people to come. Besides having an existing social function, Islamic banks also have a high awareness of the environment. This is because Islamic banks in their operations adhere to the Koran. In the Koran it is clearly stated that preserving the environment is an obligation that must be done. Furthermore, environmental conservation is one of the foundations for Islamic banks in order to maintain maqasid al-syariah. The basis of the argument is contained in Q.S Al-Baqarah (2): 205 and also Q.S Ar-Rum (30): 41 below:

Meaning: And when he turns away (from you), he endeavors to do evil. corruption in the earth, and destroy crops and cattle, and Allah loves no corruption. (Q.S Al-Baqarah (2): 205)

Meaning: "There is destruction on land and in the sea due to the actions of the people. Allah wills that they should taste some of the consequences of their deeds, that they may return to the right path. (Q.S Ar-Rum (30):41)

The above verse describes various environmental damages caused by human actions based on greed. As a profit-oriented institution, Islamic banks must be able to operate in a sustainable manner by paying attention to aspects that are friendly to the environment.

The discussion on environmental conservation has become one of the important focuses after a seminar entitled "Green Finance for Sustainable Development" was held in the framework of the IMF meeting in Bali in 2018. (Dewi, 2020). The IMF meeting was accompanied by the re-emergence of the terms green financing, green banking, and green investment in the Indonesian banking industry.

After the discussion on Green Finance for Sustainable Development at the 2018 IMF World Bank Group Annual Meeting, the Indonesian government began to actively discuss the issue of green finance, especially alluding to banking to play an active role in its implementation. Furthermore, the Islamic banking industry is also required not only to advance the economy but also to improve sustainable finance. Some of the objectives and functions of Islamic banking in advancing the economy include providing effective services, regulating currency stability, mobilizing and investing savings with a fair rate of return, equitable distribution of wealth and income to realize justice in the socioeconomic field, increasing economic prosperity, full employment rates and achieving optimum growth rates. (Rahmawati & Martika, 2018).

UU No. 10 of 1998 concerning amendments to Law No.7 of 1992 concerning Banking regulates Green Banking in the explanation of Article 8 (Hasanah & Hariyono, 2022). With this article, environmentally responsible investment becomes one of the responsibilities of the banking sector. The implementation of green investment in Indonesia itself is regulated in Law number 25 of 2007 concerning Investment. Article 3 paragraph (1) states that investment is carried out based on environmentally sound principles (the principle of investment carried out while paying attention to and prioritizing the protection and maintenance of the environment). The basic principle of green banking itself is an effort to strengthen the bank's risk management capabilities, especially related to the environment and encourage banks to increase their portfolio of environmentally friendly financing such as renewable energy, energy efficiency, organic agriculture, eco-tourism, environmentally friendly transportation, and various other ecolabel products. (Anggraini et al., 2020). Meanwhile, the main roles of sustainable finance or in the realm of banking are commonly known as green banking, including the following:

1. Greening the Banking System

The green banking concept should work with banks and consider environmental aspects in the loan or financing portfolio. This has an impact on pricing and environmental impact comparisons, which can increase borrowing costs for highly polluting businesses.

2. Greening the Bond Market

Green bonds, commonly referred to as green bonds, are a type of debt used to fund environmental projects. By offering an alternative green financing option to bank loans and equity financing, the green bond market benefits green initiatives as well as investors. The Asian Development Bank issues green bonds in Asia for issues including energy conservation, green transportation, and green cities.

3. Greening Institutional Investors

Institutional investors are very supportive of green investing, where the investment portfolio enables environmentally friendly outcomes and green development. (Rangkuty, 2023)

The crucial role of green banking has made the Islamic banking industry gradually begin to adopt green investment trends in the distribution of funds, especially through its financing portfolio. Green financing is financing consisting of green investment financing, green public policy financing and green financial systems. This definition clarifies the green investment fields of climate change adaptation, renewable energy, energy efficiency and other climate change mitigation, such as reforestation. Clarified components of the financial system specifically address green investments, such as green climate funds or financial instruments for green investments e.g. green bonds and structured green funds. (Ilahi et al., 2023). The following is the implementation of green investment through a financing portfolio that has been carried out by several Islamic banks in Indonesia:

Table 2. Bank Syariah Indonesia (BSI) Green financing 2021-2022

Year	Green Financing (In trillion Rupiah)	Percentage of Total Financing	
2021	46.15	26.95%	
2022	51.15	24.70%	

Source: Sustainable Report of Bank Syariah Indonesia 2021 and 2022

In 2021, where Bank Syariah Indonesia was only established as a result of the merger of three Islamic banks, namely Bank Rakyat Indonesia Syariah (BRIS), Bank Mandiri Syariah (BSM), and also Bank Negara Indonesia Syariah (BNIS), BSI has shown its support for the principle of sustainable finance (green financing). This is reflected in the distribution of financing to business actors in the Sustainable Business Activity Category (KKUB). In 2021, BSI bank's sustainable financing was recorded at IDR 46.15 Trillion. Thus, the composition of providing financing to KKUB reached 26.95% of total financing. Meanwhile, the total financing of bank BSI in 2021 amounted to IDR 171.29 Trillion. In the second year after its establishment as the largest Islamic bank in Indonesia, BSI channeled financing funds to KKUB amounting to IDR 51.15 Trillion. This amount increased when compared to the previous year. Although the percentage of KKUB sector financing in 2022 was not as large as

in 2021, which only amounted to 24.70% of total financing. Financing is given to environmentally friendly business sectors, including the palm oil industry that already has Indonesia Suistainable Palm Oil (ISPO) certification or Roundtable on Sustainable Palm Oil (RSPO) certificate.

Table 3. Bank Syariah Mega Syariah Green financing 2019-2022

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Year	Green Financing (In Million Rupiah)	Percentage of Total Financing		
2019	220.345	4%		
2020	265.719	5%		
2021	491.986	7%		
2022	546,320	8%		

Source: Sustainable Report of Bank Mega Syariah 2019-2022

From 2019-2022, Bank Mega Syariah was consistent in providing financing to sectors included in the Sustainable Business Activity Category (KKUB). In 2019, green financing invested by Bank Mega Syariah amounted to Rp 2020,345 Million, and increased in 2022 to Rp 546,320 Million.

Table 4. Bank Central Asia (BCA) Syariah Green financing 2021-2022

Year	Green Financing (In Trillion Rupiah)	Percentage of Total Financing		
2021	1.9	31.9%		
2022	2.6	34.2%		

Source: Sustainable Report of BCA Syariah 2021-2022

2021 is the second year BCA syariah bank has focused on green investment or financing. In 2021, the amount of BCA Syariah bank financing to sectors included in the KKUB category is IDR 1.9 Trillion with a total presentation of 31.9% of total financing. This year, BCA Syariah bank focuses on providing financing to sustainable sectors such as: Eco-efficient Products, Sustainable Natural Resources and Land Use Sector, Energy Efficiency, Pollution Prevention and Control, Water and Wastewater Management, MSME Activities and other environmentally sound business activities (KUB). In 2022, BCA Syariah's KKUB financing increased to Rp 2.6 trillion with a percentage of 34.2% of total financing. Slightly different from the previous year, in 2022 BCA Syariah's green investment focuses on several environmentally sound sectors such as: Eco-Efficient Products, Energy Efficiency, Sustainable Management of Biological Resources and Land Use, Sustainable Water and Wastewater Management, Climate Prevention and Control sector, and Climate Change Adaptation sector.

Table 5. Bank Victoria Syariah Green financing 2019-2022

Year	Green Financing	Percentage of Total	
	(In Millions Rupiah)	Financing	
2019	42.925	3.5%	
2020	40.773	3.5%	
2021	33.178	4.1%	
2022	24.829	4%	

Source : Sustainable Report Bank Victoria Syariah 2019-2022

Unlike some previous Islamic banks, the trend of green financing at Victoria Syariah bank has decreased every year. In 2019, the amount of financing disbursed by bank Victoria syariah to the KKUB sectors was IDR 42,925 million. Then it decreased in 2020 to IDR 40,773 million, and decreased again in 2021 to IDR 33,178 million and in 2022 it also decreased to IDR 24,829 million. Although the value of Victoria Syariah bank green financing during the 2019-2022 period has decreased, the presentation of green financing to total financing has fluctuated. In 2019 and 2020, the percentage of green financing to total financing was 3.5%, then increased to 4.1% in 2021, and decreased in 2022 to 4%.

Indonesian Islamic banks in 2022 didn't just paint the town green with their burgeoning green financing initiatives; they also saw their intermediation activities flourish, reaching new heights in the final quarter. This exciting trajectory paints a vivid picture of a sector embracing sustainability while solidifying its role as a financial cornerstone. Financing growth in Islamic banking as of December 2022 has increased by 20.1% (yoy) which is much higher when compared to the previous year which only amounted to 6.6% (yoy). (Bank Indonesia, 2022).

Islamic banks as intermediate finance institutions have a very important role related to economic growth in Indonesia. When the performance of Islamic banking is at a stage of increasing growth and accompanied by public interest to continue and want to use Islamic banking products, it indirectly has implications for the economic growth of a country. According to Baroroh (2012) in (Sofariah et al., 2022) there is a potential causeand-effect relationship between financial sector development and economic growth. The first potential called Demand Following Robinson contains that the financial sector is positively influenced by the macroeconomic sector. The second potential is named Supply-Leading Schumpeter which explains that the financial sector will positively influence the macroeconomic sector. Furthermore, the dynamics of banking development is a measure of a country's success. When the banking sector grows rapidly, there are more sources of financing that can be allocated to productive sectors. Thus, banking contributes positively to economic growth (Iryanto, 2018). The financial sector plays an important role in raising funds and channeling public funds and providing protection for the assets and economic activities of the community. Therefore, a financial sector, whether banking, capital markets, or insurance that grows healthily is one of the prerequisites for economic growth (House of Representatives, 2020).

Today, the role of banking, especially Islamic banks through green financing, also contributes to improving the national economy. On the side of improving the economy, the trend that is currently the world's concern is related to how a sustainable economy can be created. One of the reports that can be used and utilized in seeing and assessing the level or quality of a country's sustainable economy or green economy is the Green Growth Index (GGI) report. The GGI itself is an index that calculates the performance of countries in achieving sustainability, including the targets set in the SDGs, the Paris Agreement, and the Aichi Biodiversity Target. The Global Green Growth Institute (GGGI) measures GGI based on 4 dimensions, 16 indicator categories, and 36 indicators. (Wijayanto, 2022). Meanwhile, Indonesia's ranking in the Green Growth Index based on the green economy indicator category is as follows:

Table 6. Scores by Category of Green Economy Indicators of Countries in Asia 2019

	Doule	Green	Category by Indicator			
Country	Rank Asia	Economics	Green	Green	Green	Green
	Asia	Opportunity	Investment	Trade	Employment	Innovation
China	5	55.41	83.11	38.34	73.79	40.08
South Korea	6	54.06	83.01	43.03	88.35	27.05
Malaysia	2	51.03	70.51	48.16	73.79	27.05
Phillippines	3	48.34	94.61	41.05	51.96	27.05
Brunei	-	46.39	100.00	26.70	37.40	-
Singapore	1	42.88	100.00	36.22	66.51	14.03
India	9	40.31	81.29	23.11	51.96	27.05
Georgia	4	37.19	67.55	34.76	30.12	27.05
Sri Lanka	8	33.42	93.67	13.23	30.12	-
Japan	7	33.23	65.08	58.48	22.84	14.03
Oman	29	30.89	33.89	16.74	51.96	-
Myanmar	11	30.42	90.33	4.22	73.79	_
Azerbaijan	10	29.33	64.28	4.44	88.35	-
Lebanon	17	27.99	33.93	14.47	44.68	_
Pakistan	24	27.75	76.70	12.20	22.84	_
Israel	15	27.14	78.31	31.75	15.56	14.03
Saudi Arabia	26	24.35	70.58	9.49	37.40	14.03
Nepal	14	18.05	100.00	1.95	30.12	-
Turkey	18	17.71	71.11	26.63	51.96	1.00
Thailand	12	17.71	74.21	30.58	37.40	1.00
	12 19	14.20	74.21 74.73	30.36 18.06	30.12	1.00
Vietnam						1.00
Qatar	22	13.79	87.04	1.00	30.12	1.00
Cyprus	13	13.05	60.93	12.72	37.40	1.00
Jordan	28	12.71	62.43	13.89	30.12	1.00
Kyrgyzstan	20	12.68	62.64	11.03	37.40	1.00
Kuwait	31	12.42	66.26	3.49	8.28	1.00
Indonesia Armenia	16 21	12.30	74.06	13.52	22.84	1.00
		9.19	56.66	8.10	15.56	1.00
Kazakhstan	25	8.87	62.93	3.27	30.12	1.00
Hongkong	-	6.49	-	19.53	1.00	14.03
Cambodia	23	5.72	69.83	2.68	1.00	-
Tajkistan	30	3.98	63.25	-	1.00	1.00
Iraq	32	3.59	46.25	1.00	1.00	-
Mongolia	27	3.31	55.31	2.17	1.00	1.00
Bhutan	-	-	91.51	-	-	-
Iran	-	-	-	-	73.79	-
Bahrain	-	-	77.02	17.99	-	-
Bangladesh	-	-	91.12	2.46	-	-
Afghanistan	-	-	60.46	-	1.00	-
Laos	-	-	54.74	3.12	-	-
Timor Leste	-	-	24.68	4.59	-	-
Syria	-	-	-	-	8.28	-
UEA	-	-	-	6.20	-	-
Palestine	-	-	-	6.86	1.00	-
Yemen	-	-	-	4.66	1.00	-
Macao	-	-	-	1.07	-	1.00
Turkmenistan	-	-	-	-	1.00	-
Meldives	-	-	-	1.00	1.00	-
Uzbekistan	-	-	-	-	-	1.00

Source: Green Growth Index, 2019

Based on the 2019 Green Growth Index above, Indonesia is ranked 16th among Asian countries in terms of green economy opportunities per Indicator category. If the scope of the region is narrowed down to the Southeast Asia region, then in terms of green economic opportunities Indonesia is still far below Singapore, Malaysia, the Philippines, Myanmar and

Thailand, and Indonesia is 3 levels above Vietnam, 7 levels above Cambodia and several other Southeast Asian countries that are not included in the ranking such as Brunei Darussalam, Laos, and East Timor. Based on each category, Indonesia has opportunities through green investment with the highest score when compared to other categories, which is 74.06, followed by the green employment category with a score of 22.84, then green trade with a score of 13.52 and the last is green innovation with a score of 1.00. Meanwhile, the overall score of green economic opportunities in Indonesia is 12.30. This score puts Indonesia at a moderate level regarding green economy opportunities. Furthermore, here is Indonesia's green economy index from year to year:

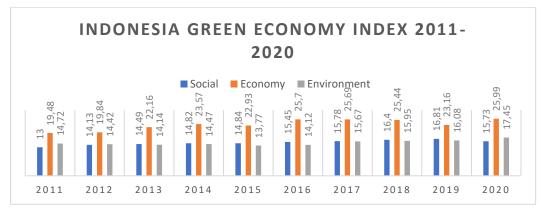


Figure 1. Indonesia Green Economy Index 2011-2020 Source: Bappenas, Green Economy Index 2022

From the graph above, we can see that over a ten-year period, Indonesia's overall GEI trend has increased. Indonesia's GEI composite score in 2020, which reached 59.17, indicates that green economic growth in Indonesia is getting better. Based on the existing indicators, it can be concluded that the economic indicator is one of the progressive indicators in contributing to Indonesia's green economy index. (Ministry of National Development Planning/Bappenas, 2020). Furthermore, the improved achievements shown by Indonesia's green economy index will also have an impact on national economic growth.

CONCLUSION AND RECOMMENDATION

Conclusion

- Green banking is a bank whose operational activities emphasize environmentally
 friendly and sustainable aspects. One of the green banking implementations that can
 be done by Islamic banks is through green financing or investment, where this green
 investment requires Islamic banks to provide financing to environmentally friendly
 sectors.
- 2. Indonesia's Islamic banking sector is making waves in the world of green finance, showcasing a surge in both the amount of green investments and the overall percentage of green financing within their portfolios. Leading the charge are notable players like Bank Syariah Indonesia (BSI), Bank Mega Syariah, and BCA Syariah Bank.
- 3. In contrast to Bank Syariah Indonesia (BSI), Bank Mega Syariah, and Bank BCA Syariah, Bank Victoria Syariah showed a downward trend in green investments from 2019-2022.

- 4. Indonesia is ranked 16th based on the category of green economic opportunity indicators among Asian countries with the green investment indicator being the highest contributor to the score of 74.06
- 5. The green economy index in Indonesia from 2011 to 2020 shows an increasing trend with economic indicators being one of the most progressive indicators.

Recommendation

To achieve ideal condition about green economy, Indonesia needs to develop internal capacity such as develop and strengthen regulations related to the green economy, maximize funding for sectors that play and important role in the green economy through public expenditure, private investment and others. Simplify licenses and procedures for industry player.

REFERENCES

- Anggraini, D., ARYANI, D., & Prasetyo, I. B. (2020). Analisis Implementasi Green Banking Dan Kinerja Keuangan Terhadap Profitabilitas Bank Di Indonesia (2016-2019). *JBMI (Jurnal Bisnis, Manajemen, Dan Informatika*), 17(2), 141–161. https://doi.org/10.26487/jbmi.v17i2.11264
- Anwar, M. (2022). Green Economy Sebagai Strategi Dalam Menangani Masalah Ekonomi Dan Multilateral. *Jurnal Pajak Dan Keuangan Negara (PKN)*, 4(1S), 343–356. https://doi.org/10.31092/jpkn.v4i1s.1905
- Badan Pusat Statistik (2020). Catalog: 1101001. *Statistik Indonesia 2020, 1101001,* 790. https://www.bps.go.id/publication/2020/04/29/e9011b3155d45d70823c141f/statistik-indonesia-2020.html
- Bank Indonesia. (2022). Laporan Kebijakan Moneter Triwulan IV Tahun 2022. Laporan Kebijakan Moneter Triwulan IV Tahun 2022. https://kelasips.com/contoh-kebijakan-moneter/
- Budiantoro, S. (n.d.). *Kata Pengantar*.
- Dewi, L. S. (2020). Peranan Perbankan Dalam Mendukung Green Economy Melalui Program Green Financing. *Strategi Pengembangan Kinerja Koperasi Dan UMKM*, 161–168.
- Dewi, R., & Ma'ruf, A. (2017). Analisis Penciptaan Green Jobs (Pekerjaan Hijau) di Indonesia Menggunakan Model Skenario Investasi Hijau. *Journal of Economics Research and Social Sciences*, 1(1), 53–64. https://host-pustaka.umy.ac.id/index.php/jerss/article/view/9059
- Hasanah, N., & Hariyono, S. (2022). *Analisis Implementasi Green Financing Dan Kinerja Keuangan Terhadap Profitabilitas Perbankan Umum Di Indonesia.* 12, 149–157.
- Ilahi, Y. F., Asnawi, N., & Lesmana, C. I. (2023). Hubungan Kinerja Green Banking Terhadap Perkembangan Pembangunan Ekonomi Negara Secara Berkelanjutan. *An-Nisbah*, *4*,

- 200-217.
- Iryanto, M. (2018). Analisis Kontribusi Pembiayaan Perbankan Syariah Terhadap Pertumbuhan Ekonomi di Indonesia. *Tesis*, 53(1), 1–8. http://www.tfd.org.tw/opencms/english/about/background.html%0Ahttp://dx.doi.org/10.1016/j.cirp.2016.06.001%0Ahttp://dx.doi.org/10.1016/j.powtec.2016.12.055 %0Ahttps://doi.org/10.1016/j.ijfatigue.2019.02.006%0Ahttps://doi.org/10.1016/j.matlet.2019.04.024%0A
- Islam, M. A., Hossain, K. F., Siddiqui, M. H., & Yousuf, S. (2014). Green-Banking Practices in Bangladesh-A Scope to Make Banking Green. In *International Finance and Banking* (Vol. 1, Issue 1). https://doi.org/10.5296/ifb.v1i1.5161
- Kementerian Koordinator Bidang Perekonomian Republik Indonesia (2021). *Peran Penting Perbankan Dalam Mengakselerasi Transisi Ekonomi Melalui Ekonomi Rendah Karbon*. https://ekon.go.id/publikasi/detail/3483/peran-penting-perbankan-dalam-mengakselerasi-transisi-ekonomi-melalui-ekonomi-rendah-karbon
- Kementerian PPN/Bappenas. (2020). Green Economy Index: A Step Forward to Measure the Progress of LBow Carbon and Green Economy in Indonesia. *Bappenas*, 39.
- Lumbanraja, P. C., & Lumbanraja, P. L. (2023). Analisis Variabel Ekonomi Hijau (Green Economy Variable) Terhadap Pendapatan Indonesia (Tahun 2011-2020) dengan Metode SEM-PLS. *Cendekia Niaga Journal of Trade Development and Studies*, 7(1), 61–73.
- Rahmawati, T., & Martika, L. D. (2018). Analisis Kontribusi Kinerja Keuangan Dan Kinerja Etis Perbankan Syariah Terhadap Pertumbuhan Perekonomian Indonesia. *Jurnal Inspirasi Bisnis Dan Manajemen*, 2(2), 177. https://doi.org/10.33603/jibm.v2i2.1597
- Rangkuty, D. M. (2023). PENGARUH GREEN FINANCE TERHADAP PERTUMBUHAN EKONOMI

 The Effect of Green Finance on Economic Growth. 2(2), 14–24.
- Redaksi, M. (2011). Bareng-Bareng. September, 1-8.
- Retnosuryandari. (2022). *Populasi*. Pusat Studi Lingkungan Hidup Universitas Gadjah Mada. https://pslh.ugm.ac.id/populasi/
- Rizaty, M. A. (2022). *Emisi Gas Rumah Kaca Indonesia Diproyeksi Terus Naik hingga 2030*.

 DataIndonesia. https://dataindonesia.id/varia/detail/emisi-gas-rumah-kaca-indonesia-diproyeksi-terus-naik-hingga-2030
- Sofariah, E., Hadiani, F., & Hermawan, D. (2022). Analisis Kontribusi Perbankan Syariah Terhadap Pertumbuhan Ekonomi Indonesia. *Journal of Applied Islamic Economics and Finance*, *2*(2), 363–369. https://doi.org/10.35313/jaief.v2i2.3002

- Syariah, D. P. (2012). Kajian Model Bisnis Perbankan Syariah. In *Departemen Perbankan Syariah*. Bank Indonesia.
- Wijayanto, A. (2022). Analisis Indeks Geo V. *Lemhannas.Go.Id*, 1–45. https://www.lemhannas.go.id/images/2022/MATERI_KUP/25072022_Launching_Le mhannas-CSIRT_LHN-CSIRT.pdf
- Yasa, I. G. W. M. (2010). Ekonomi Hijau, Produksi Bersih dan Ekonomi Kreatif: Pendekatan Pencegahan Risiko Longkungan Menuju Pertumbuhan Ekonomi Berkualitas di Pulau Bali. *Jurnal Bumi Lestari*, 10(2), 285–294.