



# Carbon Credit Project Financing through Productive Waqf and Corporate Social Responsibility

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## Abstract

**Purpose** - This study aims to develop an alternative financing model that integrates productive waqf and CSR to support sustainable carbon credit projects as a response to the climate crisis.

**Method** - The study adopts a qualitative descriptive approach using a literature review. Data are analyzed through thematic analysis, SWOT analysis, and meta-synthesis to identify key patterns, strategic positioning, and conceptual integration of carbon credit financing.

**Result** - The findings indicate that Indonesia's carbon credit ecosystem has substantial growth potential, particularly for NbS projects. Carbon credit projects can be classified based on their characteristics and emission reduction capacity. Integrating productive waqf instruments, such as CWLS and CWLD, with CSR funding offers a sharia-compliant and sustainable financing model. Although challenges remain, including bureaucratic complexity and public trust issues, strong government support and Indonesia's large waqf potential provide significant implementation opportunities. From a sharia perspective, the application of *ba'i al-huquq al-ma'nawiyah* supports the permissibility of carbon trading.

**Implication** - This model offers strategic guidance for governments, CSR-oriented firms, financial authorities, and nazir institutions to mobilize Islamic social finance for environmental protection and climate mitigation.

**Originality** - This research proposes a carbon credit financing model by uniquely integrating productive waqf with CSR in a practical and sustainable ecosystem.

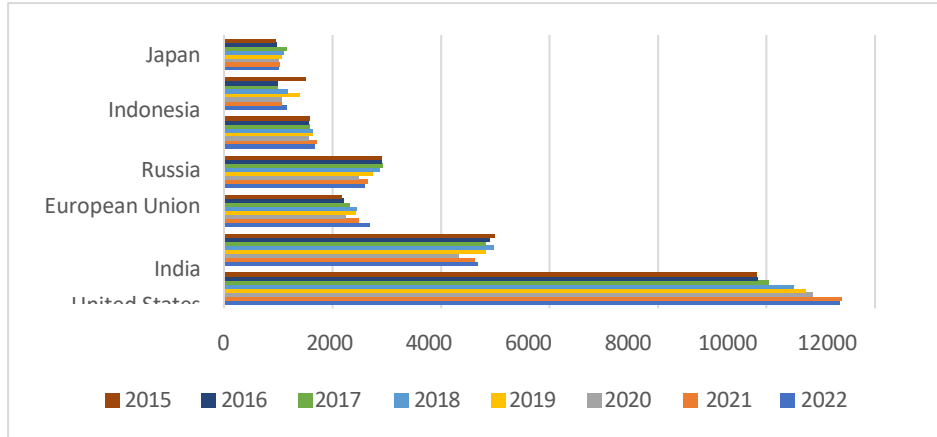
**Keywords:** Carbon Project, Productive Waqf, Corporate Social Responsibility, Finance



### Introduction

Today, the world is facing an increasingly urgent environmental crisis. According to the Intergovernmental Panel on Climate Change (IPCC), the average global temperature has risen by one degree Celsius (N. K. Putri & Pandin, 2025). The Carbon Dioxide Information Analysis Centre (CDIAC) states that carbon dioxide emissions, which constitute the largest contributor to the greenhouse effect, have been released into the atmosphere by nearly 400 billion metric tons since 1751 (Amaliyah & Solikhah, 2019). Indonesia itself, based on Climate Watch (2021), is recorded as the sixth-largest carbon-emitting country in the world (Novitasari et al., 2021). These facts serve as a serious warning that climate crisis mitigation cannot be delayed and must be supported not only by technological instruments, but also by ethical and social ones.

**Figure 1. Largest Carbon-Emitting Countries in the World (2015–2022)**



Source: Climate Watch, 2025 (Processed by the Author)

The Government of Indonesia has taken strategic steps by formulating the 2031–2035 Nationally Determined Contribution (NDC) and launching the



country's first carbon exchange in 2023 in collaboration with the Indonesia Stock Exchange (IDX Carbon) (Farhan et al., 2025). This carbon market mechanism enables the trading of carbon emission rights (carbon credits) and simultaneously creates economic incentives for industrial sectors to become more environmentally responsible (Vidi et al., 2025). However, accelerating decarbonization requires more than market incentives alone. Inclusive financing support is needed that does not burden the state and that encourages public participation.

In this context, although the Government of Indonesia has established regulatory frameworks and market mechanisms such as the Nationally Determined Contribution (NDC) and carbon trading through IDX Carbon, these initiatives alone are insufficient to fully address the financing needs of large-scale environmental projects. The limitations of public budgets, coupled with the need for broader societal participation, highlight the urgency of alternative and complementary financing sources. Islamic financial instruments, particularly waqf, therefore hold significant potential as community-based financing schemes. With the majority of Indonesia's population being Muslim and considering the substantial economic potential of waqf, positioning waqf as a funding source for green projects becomes highly relevant. This approach enables the mobilization of socially driven capital to complement state-led initiatives while enhancing public participation in climate action. According to the Indonesian Waqf Board, the utilization of waqf for environmental preservation is aligned with the objectives of *maqashid* sharia and the SDGs (Rahayu Ningsih et al., 2022). Returns generated from productive waqf instruments, such as Retail CWLS, even reached IDR 27.8 billion in 2023 (DJPPR, 2023), demonstrating that religious philanthropic funds can be managed in a modern and professional manner.

Nevertheless, clean energy and environmentally friendly technology projects often require high capital and involve risks due to fluctuating carbon valuations (Adebayo et al., 2023). Therefore, such financing can be strengthened with Corporate Social Responsibility (CSR) funds from



companies. The integration of these two financial instruments, namely productive waqf and CSR, can form a financing model that supports environmental projects. These environmental projects will generate carbon credits that can be traded in the carbon exchange to create sustainable funding flows. This model addresses funding challenges and broadens public participation in public policy initiatives.

This concept enriches the discourse on Islamic finance by expanding its function into market-based climate action instruments. As highlighted by Rahmatullah (2025) and Asiah & Munandar (2025), the potential of carbon trading in Indonesia will only be optimized if supported by an adaptive regulatory and financing framework. Therefore, the financing model proposed in this paper is expected to serve as part of an institutional solution within the Islamic economic system that supports sustainability.

Through these objectives, this research offers a novel contribution by developing an integrative financing framework that explicitly links productive waqf instruments (CWLS/CWLD), CSR funds, and carbon market mechanisms within a unified ecosystem. Unlike previous studies that discuss waqf, CSR, or carbon trading in isolation, this study proposes a structured model that connects Islamic social finance with market-based environmental instruments, particularly in the context of Indonesia's carbon exchange (IDX Carbon). This integrative approach not only expands the functional role of waqf beyond traditional social sectors but also introduces a sustainable financing loop capable of generating recurring environmental and economic value.

## Literature Review

### Market-Based Instrument Theory

The Market-Based Instruments (MBI) Theory explains that environmental protection can be achieved through economic incentives that encourage companies to reduce emissions efficiently. Stavins (2003) and Tietenberg and Lewis (2018) emphasize that instruments such as carbon markets, carbon



taxes, and cap-and-trade systems operate by assigning a price to environmental externalities, making environmentally friendly actions a financially rational choice. In this study, the MBI framework is relevant because the integration of CSR, green waqf, and IDX Carbon forms a mutually reinforcing market mechanism. CSR directed toward green waqf projects can generate environmental services that are converted into carbon credits on the IDX Carbon platform. Consequently, companies are encouraged to participate because they gain economic benefits while simultaneously generating ecological impact.

### **Green Waqf**

Green waqf refers to the utilization of waqf assets for environmental conservation purposes. The allocation of green waqf assets is focused on environmental activities, tree planting, the provision of solar panels, and other environmentally friendly projects. Green waqf carries a mission to rehabilitate 14 million hectares of critical land with a vision centered on renewable energy (Rahayu Ningsih et al., 2022). However, the implementation of green waqf in Indonesia remains limited to the development of mosques and educational institutions that are generally non-productive. Initiatives such as mangrove forest planting represent an effort to conserve biodiversity. Green waqf has significant potential to support funding for green environmental projects capable of generating carbon emission reductions.

### **Corporate Social Responsibility**

Corporate Social Responsibility (CSR) in Indonesia is understood as a company's commitment to contributing ethically to social and environmental welfare. Hasan and Aryana (2024) emphasize that CSR represents a strategic obligation for companies in supporting community well-being through social and environmental programs. The study by Nurcahyani, Ifan, and Jalaludin (2024) shows that CSR is now positioned as a component of management strategy rather than merely philanthropy. Similarly, Gressy and Setiawan



(2024) find that CSR implementation in Indonesia is grounded in sustainability principles and stakeholder interests. Overall, CSR reflects corporate responsibility to manage social and environmental impacts in a sustainable manner. In this study, CSR becomes relevant when directed toward environmental waqf, as it enables corporations to deliver long-term ecological benefits through activities such as nature restoration, coastal rehabilitation, or emission-reduction programs.

### **Carbon Credit Projects**

Carbon credit projects are part of the carbon trading scheme. In this scheme, carbon credit projects generate carbon credits by reducing greenhouse gas (GHG) emissions (Avanarius et al., 2018). The idea behind carbon projects is to compensate communities for not cutting down their forests and for restoring ecosystems through the sale of carbon credits. Governments, corporations, and individuals can purchase and trade credits to increase their emission reductions, with the revenue provided to communities as an incentive to preserve standing forests. As a result, credit buyers offset a portion of their carbon footprint, while forests remain intact to absorb carbon that contributes to global warming (International, 2025). Based on this explanation, carbon credit projects are nature-based solutions that can reduce greenhouse gas emissions. These projects may take the form of environmental initiatives or renewable energy projects. In this study, carbon credit projects refer to community-driven initiatives that generate carbon credits to be traded on the carbon exchange.

### **Carbon Trading Scheme**

Carbon trading is a market-based process for trading carbon emissions. Companies that have surplus carbon emission allowances may sell them to companies that are short of emission allowances. The price of carbon is determined through bargaining interactions occurring in the market (Yu et al., 2020). According to Presidential Regulation 98/2021, carbon trading consists



of two mechanisms: cap-and-trade and emission offset. The cap-and-trade system allocates a specific carbon emission quota to each company and allows companies that exceed their quota to cover the excess by purchasing carbon allowances from companies whose emissions remain below the designated limit. Meanwhile, emission offset refers to the generation of carbon emission reductions through projects that can lower carbon emissions (A. Putri & Zakiyah, 2023). Green projects, such as mangrove planting, mangrove rehabilitation, and clean energy initiatives, can produce measurable carbon emission reductions (Setia et al., 2025). The resulting emission reductions are converted into carbon credits, which can then be traded by companies that require additional emission allowances.

However, existing literature on carbon trading predominantly focuses on regulatory mechanisms, market efficiency, and emission reduction outcomes, with limited attention to the integration of alternative financing instruments. In particular, the linkage between carbon trading schemes and Islamic social finance instruments, such as productive waqf, as well as corporate funding mechanisms like CSR, remains underexplored. This gap indicates that while carbon markets provide economic incentives for emission reduction, their effectiveness is still constrained by the availability of sustainable and inclusive financing sources.

Therefore, this study positions carbon trading not merely as a market mechanism, but as part of a broader financing ecosystem by integrating it with waqf and CSR instruments. This approach aims to strengthen the practical relevance of carbon trading in supporting environmentally sustainable projects while expanding its accessibility through socially driven and faith-based financial resources.

## Methods

This study utilizes a qualitative descriptive approach to facilitate an in-depth exploration and conceptual interpretation of the integration between Islamic social finance and carbon market mechanisms. This approach is



suitable for analyzing interpretations, phenomena, issues, and events occurring in the field. Based on the explanation above, the qualitative method is a research approach used to explore a phenomenon through an in-depth understanding derived from perceptions obtained through data analysis. In this study, the objects examined are alternative financial instruments, namely productive waqf and CSR funds. These objects were selected based on their beneficial value that has been perceived by the public over the past several periods.

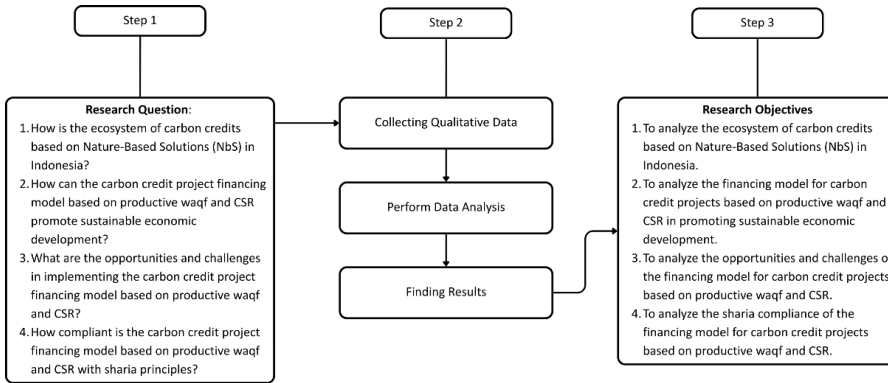
The data in this research were collected using the literature study technique. Theoretical studies and references related to norms, values, and cultures that develop within the social situation being examined are included within the scope of a literature study (Sugiyono, 2020). The data were collected from sources relevant to the research problem, including books, journals, articles, and official documents available in trusted institutions, such as reports from Islamic Banks, reports from the Directorate General of Financing and Risk Management, the Indonesian Waqf Board, and other official documents.

The collected data were analyzed using several integrated approaches. Thematic analysis was applied to explain the ecosystem of carbon credit projects in Indonesia, including an overview of carbon credit projects, technical schemes of carbon trading, and the classification of carbon credit projects. Next, this research employed a meta-synthesis approach to integrate various findings from previous studies into a complete conceptual framework model. Through this synthesis, the researcher was able to formulate new narratives based on the integration of prior research.

Furthermore, this study used the SWOT analysis technique to evaluate the internal and external factors of the proposed financing model implementation. Lastly, descriptive analysis was used as a method to process and interpret the collected data in analyzing compliance with sharia principles. The combination of these approaches helped in understanding the context, patterns, and relationships among essential elements obtained. The collected data were analyzed systematically through the stages of data reduction, data presentation, and conclusion drawing.



**Figure 2. Research Framework**



Source: Processed by Authors (2025)

## Results and Discussion

### Carbon Credit Ecosystem in Indonesia

The carbon credit ecosystem in Indonesia has grown rapidly with the presence of binding regulations, an integrated registry, and an official trading platform through IDX Carbon. This system provides a mechanism for emission compensation and opens access to environmental financing for various mitigation projects. Carbon credit projects are fundamentally mitigation projects that generate measurable, recorded, and verified emission reductions. In Indonesia, carbon credit projects are based on a binding regulatory framework through Presidential Regulation of the Republic of Indonesia Number 98 of 2021 concerning the Implementation of Carbon Economic Value. Carbon credit projects based on carbon economic value are defined as environmental-based activities that generate economic value as a countervalue for emissions produced.

The main objective of carbon credit projects is closely related to Indonesia's commitment to the Nationally Determined Contribution (NDC), which represents the national orientation to significantly reduce emissions.



These projects provide a concrete pathway for government and private sector participation toward achieving this target through market mechanisms. In addition, carbon credit projects open opportunities for conservation and environmental management activities that previously lacked long-term financing sources. In many regions, especially forested areas such as Sumatra, Kalimantan, and Papua, carbon projects serve as a means to preserve forests, restore peat ecosystems, and reduce the risk of deforestation

With the existence of IDXCarbon, the economic value of carbon credit projects can be monetized through market mechanisms and form a trading ecosystem aligned with environmental agendas. Since 2023, the exchange has operated two main schemes: the Allowance Market, which sets emission limits through PTBAE-PU and requires business actors exceeding their quota to purchase additional allocations from others, and the Offset Market, which produces SPE-GRK or carbon credit units generated from environmental projects to be compensated against emissions. Through these two schemes, business actors can expand their participation in emission mitigation and support the achievement of Indonesia's NDC target of 31.89 to 43.20 percent by 2030 (Sihotang, 2025).

In addition to market schemes, IDXCarbon also categorizes decarbonization projects based on the type of output generated, namely Nature Based Solutions, which emphasize field practices and rely on natural ecosystems, and Technology Based Solutions, which are carbon credit projects based on technology or industrial processes capable of reducing emissions from energy residues or waste, such as energy efficiency, replacement of renewable fuels, and technologies supporting environmentally friendly energy transition (Meilani & Wuryandani, 2025).

Classification of carbon credit projects is needed to provide a structured overview of the types of mitigation activities that can be integrated into carbon trading. The projects focus on the amount of emissions that can be minimized and are mapped according to the characteristics of each region. Factors such as the magnitude of environmental benefits and economic value are highly



considered. The following are several projects that have been implemented and the mapping of regions that are potential for implementation.

**Table 1. Carbon Credit Project Classification Data**

Project Standard Name	Standard Definition	Project Instrument
Indonesia Nature Based Solution (IDNBS)	NBS SPE-GRK project with IDXCarbon certification	-
Indonesia Nature Based Solution Authorized (IDNBSA)	NBS SPE-GRK project with authorization for international trading	-
Indonesia Nature Based Solution International Standard (IDNBSI)	NBS SPE-GRK project with international standard certification	-
Indonesia Technology Based Solution (IDTBS)	TBS SPE-GRK project with IDXCarbon non-renewable energy standard	Construction of Muara Karang CCPP
Indonesia Technology Based Solution Renewable Energy (IDTBS-RE)	TBS SPE-GRK project with a special function for renewable energy	Lahendong Project and PT Pertamina Geothermal Energy Tbk
Indonesia Technology Based Solution Authorized (IDTBSA)	TBS SPE-GRK project authorized nationally for non-renewable energy	Operation of Priok Block 4 CCPP; Conversion of Muara Tawar CCPP
Indonesia Technology Based Solution Authorized Renewable Energy (IDTBSA-RE)	TBS SPE-GRK project authorized nationally for renewable energy	Operation of Gunung Wugul Mini Hydropower Plant
Indonesia Technology Based Solution International Standard (IDTBSI)	TBS SPE-GRK project certified by international institutions	-



Indonesia Nature Based Solution (IDNBS)	NBS SPE-GRK project with IDXCarbon certification	-
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Source: processed by Authors from IDXCarbon (2025)

The project instruments operating on IDXCarbon in 2025 are still dominated by technology-based solutions (TBS), and the data indicates that the carbon credit scheme needs to be continually expanded, especially toward environmentally based projects (NBS) that have direct impacts. Nevertheless, data from the National Registry System for Climate Change (SRN-PI) recorded a mitigation of 607.94 million tons of CO<sub>2</sub>e in 2023, indicating a positive response to the presence of IDXCarbon as a platform strengthening national environmental efforts.

According to Rahmatika et al. (2025), the implementation of NBS projects as a carbon offsetting strategy has a positive influence on decarbonization goals in Central Kalimantan, particularly on peatland areas. With a total area of 157,875 hectares, this project is capable of generating 7.5 million carbon credits. In addition, based on research by Hafli et al. (2025), the mangrove forest area in Central Tapanuli, which spans 6,931 hectares, is also considered capable of absorbing carbon emissions massively, reaching 7.95 tons of CO<sub>2</sub>e per hectare. This demonstrates that environmental absorption potential and optimization can achieve significant valuation figures and have positive environmental impacts.

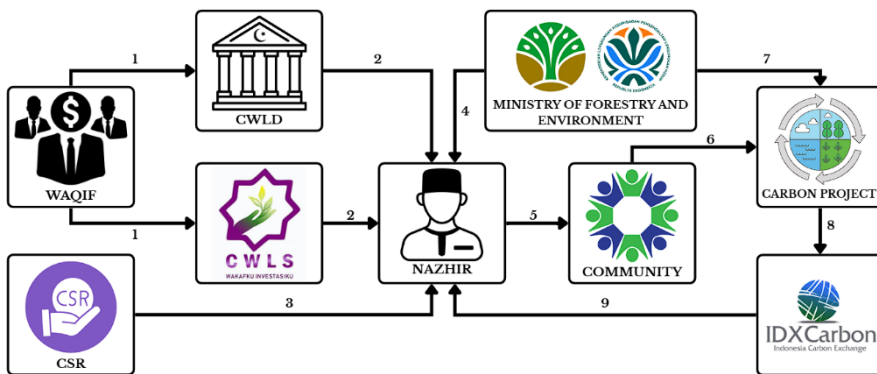
### **Carbon Credit Project Financing Model**

The development of Islamic social finance instruments such as Cash Waqf Linked Sukuk (CWLS) and Cash Waqf Linked Deposit (CWLD) demonstrates significant potential in supporting the financing of sustainable projects in Indonesia (Fauziah et al., 2021). However, their utilization has so far remained limited to direct fund distribution to beneficiaries (mauquf 'alaih). In fact, CWLS and CWLD can be applied in environmental financing schemes that



generate greater impact. To move toward a low-carbon economy, the carbon trading mechanism can be integrated into environmental projects based on waqf (Ali et al., 2025). Nevertheless, relying solely on the returns from CWLS and CWLD is insufficient to finance low-carbon environmental projects. Therefore, companies can participate in covering the funding gap through CSR instruments.

**Figure 3. Proposed Model of Carbon Credit Project Financing**



Source: Processed by Authors (2025)

Financing of environmental projects begins with the fundraising process by the Nazhir through various Islamic financial channels. (1) Waqifs, whether individuals or institutions, deposit their waqf funds through the Islamic Financial Institutions Receiving Cash Waqf (LKS-PWU). This deposit may take the form of the purchase of CWLS products issued by the Ministry of Finance and CWLD products issued by Islamic Banks. (2) The returns from CWLS and CWLD are distributed to the Nazhir to be managed as productive waqf.

(3) At the same time, companies channel CSR funds to the Nazhir. These CSR funds serve as financial instruments that complement the funding needs in financing environmental projects. (4) Then, the Ministry of Forestry and Environment identifies the needs of environmental projects that can offset carbon emissions. This identification includes the number of carbon credits



required and the areas where the project will be carried out. After the identification, the Ministry of Forestry and the Ministry of Environment may deliver this information to the Nazhir appointed to raise funds.

(5) The Nazhir, who has obtained the list of environmental project requirements and the funds collected, appoints an implementing partner for the project to be carried out. The implementing partner may consist of community groups that are accustomed to carrying out environmental activities. These communities are selected based on the qualifications and professionalism of the work they have previously performed. (6) In this way, the environmental project implemented can truly meet the project needs and generate carbon credits. (7) The project that has been implemented will certainly be assessed by the Ministry of Forestry and the Ministry of Environment to determine the quality of work of the project and evaluate the number of carbon credits produced.

However, ensuring project sustainability requires continuous monitoring and verification. This process functions as a feedback mechanism within the financing model, influencing future funding decisions by the Nazhir, including partner selection and risk mitigation. Therefore, a robust monitoring system is essential to maintain the credibility and sustainability of the waqf-CSR-based financing ecosystem. (8) If the project successfully generates carbon credits according to the requirements, the carbon credits will be traded on the Carbon Exchange (IDX Carbon). (9) The proceeds from the sale of carbon credits in the Carbon Exchange will be returned to the Nazhir. The Nazhir manages the proceeds from the sale to finance the next project. This can become a circular ecosystem that supports sustainability. In addition, the activity of the Carbon Exchange will certainly be aligned with efforts to achieve Indonesia Net Zero Emission (NZE) 2060.

Meanwhile, this financing model for carbon credit projects based on productive waqf and CSR is inseparable from the role of various stakeholders. Based on the Pentahelix Collaboration model, the following is the distribution of roles among stakeholders in the implementation of this model.

**Table 2. Stakeholder Mapping**

No.	Stakeholder	Role
<b>Government</b>		
1.	Ministry of Environment and Forestry	Determines project needs and locations, and evaluates carbon absorption outcomes
2.	Indonesia Stock Exchange	Provides the trading platform and regulates carbon trading activities under the supervision of the Financial Services Authority (OJK)
3.	Ministry of Finance	Issues, allocates, and supervises CWLS as a funding source
4.	Indonesian Waqf Board	Supervises and ensures the legality of waqf and provides certification for Nazhir
5.	Indonesian Ulema Council	Issues halal compliance proof for the model and ensures the project aligns with sharia principles
<b>Business</b>		
1.	Islamic Bank	Provides CWLS products as funding sources and distributes them to the Nazhir
2.	LKS-PWU	Provides cash waqf certificate forms and receives cash waqf on behalf of the Nazhir
3.	Company	Channels Corporate Social Responsibility (CSR) funds to the Nazhir
<b>Community</b>		
1.	Islamic Bank	Provides CWLS products as funding sources and distributes them to the Nazhir
2.	LKS-PWU	Provides cash waqf certificate forms and receives cash waqf on behalf of the Nazhir
3.	Company	Channels Corporate Social Responsibility (CSR) funds to the Nazhir
<b>Academic</b>		
1.	Research Institution	Conducts research to evaluate the socioeconomic impact of environmental projects and the financial model
<b>Media</b>		



- |    |                   |  |
|----|-------------------|--|
| 1. | Information Media | Increases public awareness, facilitates transparency of the project, and expands wakif participation |
|----|-------------------|--|

Source: Processed by Authors (2025)

### Opportunities and Challenges of Implementation

To ensure that the waqf and CSR model based on carbon trading can be implemented effectively, an in-depth assessment of various factors influencing its success is required. One approach that can be used is SWOT analysis, which helps evaluate strengths and weaknesses as well as opportunities and threats. Understanding internal and external dynamics becomes the foundation for formulating a more adaptive implementation strategy. This approach also enables the formulation of more targeted policies.

**Table 3. SWOT Analysis**

No.	Analysis
<b>Strengths</b>	
1.	Provides long-term impact on the environment and development.
2.	Has diverse and sustainable funding sources.
3.	Supported by the government in terms of financing and project continuity.
4.	A unique model that creates differentiation in the green financing sector.
5.	Already has trusted sharia certification and reputation.
<b>Weaknesses</b>	
1.	Mechanism complexity in licensing, verification, and certification aspects.
2.	Vulnerable to greenwashing practices that can damage the model's reputation.
3.	Dependence on government policies and support.
4.	Limited technical and managerial capacity of project managers at the local level.
5.	Relatively high operational and initial investment costs.



### Opportunities

1. Potential to enter the international carbon market.
2. Alignment with SDGs and ESG principles that attracts global investor interest.
3. Increasing public literacy and participation through green waqf education.
4. Support toward government targets for emission reduction (NDC).
5. Real contribution to reducing carbon emissions in a measurable way.

### Threats

1. Macroeconomic instability affecting investment and operations.
2. Overlap or lack of synchronization of regulations across sectors.
3. Risk of natural disasters that may disrupt project continuity.
4. Global geopolitical conflicts that affect the carbon market and investment flows.
5. Public skepticism toward new schemes based on Islamic social finance.

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Source: (Alam et al., 2023; Faizi et al., 2024; Raimi & Bamiro, 2025; Taghizadeh-hesary & Yoshino, 2020; Widiastuti et al., 2022)

Based on the identification of internal and external factors, the financing model for carbon credit projects demonstrates both strategic potential and implementation challenges. In this regard, one of the main challenges faced is the application of sharia principles within the model. Therefore, an in-depth assessment of sharia compliance in the implementation of this financing model is required. In addition, the formulation of a comprehensive strategy is needed to maximize strengths, manage weaknesses, and respond to opportunities and threats proportionally.

### Sharia Compliance



In Islamic economics, the implementation of a financing model for environmental projects that generate carbon credits must ensure that the contracts involved comply with Islamic economic principles. As stated in the Qur'an, Surah Al-Maidah verse 1: "O you who believe, fulfill all contracts." This implies that the implementation of an economic model must align with Islamic economic concepts that emphasize justice. In this complex model, multiple sharia contracts and principles are integrated.

The financing model for carbon credit projects employs several *tabarru'* contracts. The *waqf* contributions from society through CWLS and CWLD products are based on the cash *waqf* contract. Cash *waqf* has been declared permissible (*jawaz*) under Fatwa of the Indonesian Ulema Council (MUI) Number 2 of 2002. In this model, cash *waqf* refers to funds endowed by the *waqif* into the CWLS and CWLD system. The *Nazhir* utilizes these funds to carry out sustainable environmental projects that generate carbon emission reductions.

The reduction of carbon emissions is materialized through the creation of carbon credits that can be traded on the carbon exchange. Carbon trading itself applies the contract of *ba'i al-huquq al-ma'nawiyah*, which refers to the sale of intangible rights such as carbon credits within the carbon market scheme. The implementation of this project is also in line with the command of Allah SWT in the Qur'an, Surah Al-A'raf verse 56 which states:

وَلَا تُفْسِدُوا فِي الْأَرْضِ بَعْدَ إِصْلَاحِهَا وَادْعُوهُ خَوْفًا وَطَمَعًا إِنَّ رَحْمَتَ اللَّهِ قَرِيبٌ مِّنَ الْمُحْسِنِينَ

The meaning: "Do not cause destruction on the earth after it has been set in order. Pray to Him with fear and hope. Indeed, the mercy of Allah is near to the doers of good."

The verse explains that the Qur'an commands not to cause damage on earth, thus environmental projects are consistent with the command of Allah SWT. The process of carbon trading using the *ba'i al-huquq al-ma'nawiyah* contract in Islam aligns with Islamic values, particularly the value of balance.



The implementation of this value implies that carbon trading can stimulate the economy while remaining mindful of environmental aspects.

Meanwhile, the financing of carbon credit projects is also supported through CSR by companies. Companies, whether they generate negative externalities or not, have an obligation to pay attention to environmental and social aspects (Praneta & Winingrum W A, 2024). In this context, companies can fulfill their obligation by channeling CSR funds to the Nazhir for further management in financing the carbon credit project. The distribution of CSR funds to the Nazhir uses the *hibah* contract, meaning that the funds are fully given to the Nazhir without expecting any return.

In the three main financial elements of the carbon credit project funded through CSR, CWLS, and CWLD, the implementation is based on the *tabarru* contract in the form of cash waqf. Additionally, the process also involves the *muabbad* and *hibah* contracts, which are likewise aligned with the command of Allah SWT in the Qur'an, Surah Al-Hasyr verse 7 which states:

مَا أَفَاءَ اللَّهُ عَلَى رَسُولِهِ مِنْ أَهْلِ الْقُرَىٰ فَلِلَّهِ وَالرَّسُولِ وَلِذِي الْقُرْبَىٰ وَالْيَتَامَىٰ وَالْمَسْكِينِ وَابْنِ السَّبِيلِ لِي لَا يَكُونَ دُولَةً بَيْنَ الْأَغْنِيَاءِ مِنْكُمْ وَمَا تَهَكَّمُوا مِنْكُمْ فَاغْتَبُوا وَاتَّقُوا اللَّهَ إِنَّ اللَّهَ شَدِيدُ الْعِقَابِ

The meaning: “Whatever spoils of war Allah has bestowed upon His Messenger from the inhabitants of the towns belong to Allah, the Messenger, the Messenger’s relatives, the orphans, the poor, and the travelers. (Thus) so that wealth does not circulate only among the rich among you.”

The verse explains that wealth must be distributed so that it does not circulate only among the wealthy. Through the financing of carbon credit projects, the five main elements of *maqasid* sharia can be integrated, namely *Hifz al-Din* (protection of religion), *Hifz al-Nafs* (protection of life), *Hifz al-Aql* (protection of intellect), *Hifz al-Nasl* (protection of lineage), and *Hifz al-Mal* (protection of wealth). These five elements become the basis for determining whether carbon project financing is consistent with the principles of Islamic economics.



The process of collecting waqf and *hibah* funds that are later managed by the Nazhir in the form of a green economic project represents the integration of *Hifz al-Mal*. For example, an environmental project such as mangrove planting that can reduce emissions represents the integration of *Hifz al-Nasl*, *Hifz al-Nafs*, and *Hifz al-'Aql*. A healthy environment protects future generations from diseases caused by greenhouse gas emissions, so the impact of carbon credit financing projects can provide peace of mind, healthy descendants, and ease of thinking.

In addition, carbon financing projects are also closely related to *Hifz al-Din*. The use of waqf and *hibah* instruments is an embodiment of the command of Allah SWT in Surah Ali-Imran verse 92, which means: "You will never achieve righteousness until you spend in charity from that which you love. And whatever you spend, indeed Allah knows it well." Thus, it can be concluded that the mechanism of carbon credit and carbon trading fulfills sharia principles and is feasible to be implemented.

## Conclusion

This study addresses its main objectives by examining the carbon credit ecosystem in Indonesia and formulating an integrative financing model based on productive waqf and CSR. The findings indicate that Nature-Based Solutions projects, such as mangroves, peatlands, and forest rehabilitation, have strong potential as carbon credit generators within the IDX Carbon framework. These projects provide measurable environmental benefits while opening opportunities for sustainable financing mechanisms. In this context, the study confirms the relevance of integrating Islamic social finance into climate mitigation efforts.

Furthermore, this study identifies the opportunities and challenges associated with the proposed financing model. The integration of CWLS/CWLD returns and CSR funds is capable of supporting environmental projects through a circular and sustainable funding mechanism. However, the model also faces challenges, including technical complexity, greenwashing



risks, and dependence on regulatory frameworks. Despite these constraints, the model remains feasible and adaptable within the Indonesian context.

In addition, this study evaluates the compliance of the model with sharia principles. The findings confirm that the overall mechanism, from cash waqf contracts to *ba'i al-huquq al-ma'nawiyah* in carbon trading, aligns with maqasid sharia. This alignment strengthens the legitimacy of the model as an innovative Islamic green financing instrument. Future research should focus on empirical testing, governance strengthening, and policy support to ensure effective implementation and long-term sustainability.

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