

Drivers and Barriers to Carbon Credit Market Development in Vietnam: A Force Field Analysis Approach

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Abstract

Low-emission development is set to become a major trend among countries today, aiming for a green and sustainable economic development. Vietnam, one of the countries heavily affected by climate change and greenhouse effect, faces both opportunities and challenges in this transition. Applying desk research method and Force Field Analysis (FFA) approach, this study analyzes driving factors and barriers of establishing a carbon credit market in Vietnam within the context of the Net Zero 2050 commitment. The paper identifies four primary driving forces for carbon market development in Vietnam such as natural resources, strong international commitments, global partnerships, and legal foundation. However, these drivers are currently outweighed by several key barriers, including legal limitations, technical infrastructure, market structure, unfavorable conditions of international carbon credit trading, and limited engagement of business-community. The paper recommends completing a synchronized legal framework, improving and standardizing the MRV system, establishing a mechanism of transparent benefit-sharing, and strengthening the role of private sector in order to develop a sustainable carbon credit market aligned with Net Zero 2050 strategy.

Keyword: Carbon credit market, Drivers and barriers, Sustainable development, Forcefield analysis, Legal framework, MRV system.

Research purpose

This study aims to analyze the driving factors and barriers to establishing a carbon credit market in Vietnam within the context of the country's Net-Zero 2050 commitment. By applying a desk research approach combined with Force Field Analysis (FFA), the research seeks to identify both the opportunities and challenges for developing a sustainable carbon market in Vietnam during the 2025–2030 period.

Research Motivation

Vietnam is one of the countries most heavily affected by climate change and greenhouse gas emissions. While the country possesses significant natural resources, strong international commitments, and a legal foundation for climate action, it faces numerous structural, technical, and institutional barriers that could hinder the development of a functional carbon credit market. Understanding these dynamics is essential for informing policy and facilitating effective market mechanisms that contribute to sustainable economic development.

Main Findings

The study identifies four primary driving factors for carbon market development in Vietnam: (1) abundant natural resources, (2) strong national and international climate commitments, (3) active international cooperation, and (4) an established legal foundation. However, these drivers are currently outweighed by several key barriers, including: (1) lack of a synchronized legal framework, (2) technical infrastructure not yet standardized to international levels, (3) underdeveloped market structure, (4) Vietnamese carbon credits not fully eligible for international trading, and (5) limited engagement of businesses and communities. The national Net-Zero 2050 commitment and existing ERPA agreements with the World Bank provide a strong foundation, but the absence of clear legal recognition for carbon credits, underdeveloped MRV systems, and fragmented institutional coordination remain critical constraints.

Practical/Managerial Implications

To develop a sustainable carbon credit market in Vietnam, it is essential to establish a clear legal framework, standardize MRV systems with international-compliant verification, adopt transparent benefit-sharing and digital monitoring, engage the private sector through incentives, and promote high-quality forest and renewable energy projects. These measures will strengthen the voluntary carbon market, support ESG strategies, attract green finance, and ensure environmental integrity.

Keywords: Carbon credit market, Drivers and barriers, Forcefield analysis, Sustainable development, Legal framework, MRV system

1. INTRODUCTION

Vietnam is among the countries most severely affected by climate change and the greenhouse effect. Vietnam signed the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and ratified it in 1994; signed the Kyoto Protocol in 1998 and ratified it in 2002; and established the National Steering Committee for the implementation of the UNFCCC¹ and the Kyoto Protocol. These actions demonstrate Vietnam's commitment and efforts in responding to climate change and conducting greenhouse gas (GHG) inventories.

Low-carbon development will be the dominant trend of nations today, moving towards a green and sustainable economy. Vietnam has been, is, and will continue to follow the global development trajectory, alongside economically advanced and technologically capable countries. Vietnam's commitment to achieving net-zero emissions and joining the Global Methane Pledge has sent a strong signal to the international community, thereby opening access to global finance for low-carbon development (Vu Phong, 2021)

Therefore, this study applies the Force Field Analysis (FFA) method to examine the fundamental factors that drive the development of the carbon credit market², as well as the barriers to sustainable market growth. Identifying these factors will enable Vietnam to mobilize sufficient resources and necessary conditions, thereby preparing for the establishment of an effective transferable emissions trading market in the future. This will align with the national strategies on greenhouse gas mitigation, digital economy, and green economy development, ultimately aiming toward net-zero emissions by 2050.

2. LITERATURE REVIEW

2.1 Emission market and classification of emission market

2.1.1 Emission market

An emission market is a market-based mechanism in which emission units are traded as a commodity through transferable emission permits.

A transferable emission permit (also known as a cap-and-trade system) is an environmental management tool used to reduce emissions. This system allows enterprises to buy and sell emission permits, thereby creating incentives for emission reduction.

An emission market refers to the transfer of emission permits or emission credits among different sources. It assigns an economic value to emissions and enables actors to buy, sell, and transfer emission rights in order to optimize abatement costs at both national and global scales.

The emission market promotes emission reduction in a more efficient and flexible manner compared to administrative measures. It provides financial incentives for enterprises to innovate technology and adopt green production, encourages fairness and benefit-sharing between emitters and absorbers, and serves as an instrument supporting the achievement of net-zero strategies and sustainable development. The emission market is a flexible and effective tool for allocating emission reduction costs within a market economy. Its development and operation hold not only environmental significance but also represent a smart financial and policy solution for countries to achieve sustainable development, green growth, and carbon neutrality.

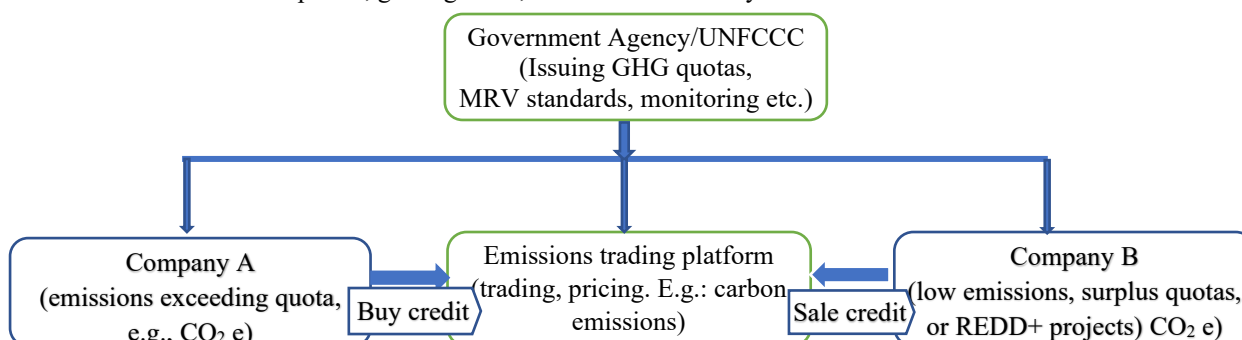


Figure 1. Flowchart of the emissions trading market

Company A: purchases carbon credits to offset excess emissions; Company B: sells credits generated from emission reductions or absorption projects (forests, renewable energy, etc.); Exchange: may be operated by the government or an independent organisation (Verra, Gold Standard, etc.); MRV: The measurement, reporting, and verification system ensures transparency in transactions.

2.1.2 Classification of emission markets

- *Classification by participation mechanism (mandatory or voluntary)*

¹ UNFCCC: United Nations Framework Convention on Climate Change

² Vietnam's carbon market is being established with the pilot phase starting in 2025, focusing on developing regulations and establishing a domestic carbon credit exchange. A draft decree, expected to be issued around mid-2025, aims to outline the trading framework, including provisions for managing carbon credits, setting up the exchange with the Hanoi Stock Exchange (HNX), and real-time settlement mechanisms. The initiative builds on Decree No.06 of 7th January 2022 and is a crucial step towards meeting Vietnam's net-zero commitments.

The compliance market: participation is mandatory under legal regulations, typically associated with emission allowance systems such as the EU ETS³, CORSIA⁴, or national cap-and-trade schemes.

The voluntary market: enterprises or individuals are not legally obliged but participate voluntarily in order to achieve carbon neutrality or to improve ratings and enhance their ESG⁵ profile. This classification reflects the legal nature or the degree of obligation in the participation mechanism.

◦ *Classification by type of traded commodity*

Over the past decades, several models of emission markets have been developed, including the emission allowance market and the carbon credit market (CCM).

The emission allowance market is the fundamental form of an emission market. It is an economic mechanism that allows the trading of emission rights (allowances/permits). This market operates under the approach whereby regulatory authorities set an overall emissions cap and allocate emission rights to polluters in the form of permits.

The carbon credit market (CCM) is an economic mechanism that enables countries, organizations, or enterprises to trade carbon credits, which represent the amount of greenhouse gases (GHGs) reduced, absorbed, or avoided (usually measured in tonnes of CO₂ equivalent – tCO₂e). In this market, one carbon credit is equivalent to one tonne of CO₂e.

Table 1. Summary of similarities and differences between two markets

No.	Content	Licensing market	Credit market
1	Programme name	Permit Market	Emissions Reduction Market
2	Trading Unit Name	Permits	Credits
3	Emissions Limit	Total emissions	Baseline emissions
4	Programme scope	Restrictions on the participation of businesses and industrial facilities.	The programme is open to emitters
5	Programme management costs	Low	High

Source: Author's compilation, 2025

2.2 Carbon credits and the carbon credit market

2.2.1 Carbon credits

A carbon credit is a tradable certificate representing the right to emit a certain amount of carbon dioxide (CO₂) or an equivalent amount of other greenhouse gases (GHGs) expressed as tonnes of CO₂ equivalent (tCO₂e). In its broadest sense, a carbon credit can be considered a form of “permit,” allowing its holder to emit carbon dioxide (CO₂) or other GHGs equivalent to the amount of credits they own. One carbon credit equals one tonne of carbon dioxide (CO₂) or one tonne of another GHG converted into one tCO₂e.

Carbon credits are tradable “permits,” comparable to licenses, that represent the right to emit one tonne of carbon dioxide or equivalent GHGs into the atmosphere. They are created and issued by regulatory authorities responsible for implementing and supervising a compliance market within a given jurisdiction. In its simplest interpretation, a carbon credit embodies the right to emit a specific amount of greenhouse gases.

2.2.2 Carbon credit market

The Carbon Credit Market (CCM) is an economic mechanism that enables countries, organizations, or enterprises to trade carbon credits, which represent the amount of GHGs reduced, absorbed, or avoided (usually measured in tCO₂e). Participation in this market is voluntary and based on the model of the emissions trading system. Carbon credits are generated when companies take measures to reduce emissions below a baseline, which may be calculated in various ways, commonly using average emission levels. Each carbon credit constitutes a tradable unit within an unlimited pool of sources.

The primary purpose of carbon credit trading is to reduce emissions in a cost-effective manner by creating tradable permits for GHG emissions. This is the overarching objective of the international carbon market established under the Kyoto Protocol and all emerging national carbon trading systems. However, for carbon markets to achieve these objectives, they must be supported by appropriate and coherent legal frameworks.

Currently, there are two main types of carbon markets: (i) *The compliance carbon market* arises from the commitments of countries under the UNFCCC, where member states are legally bound to implement regulations; (ii) *The voluntary carbon market*, on the other hand, operates on the voluntary issuance, purchase, and sale of carbon credits among organizations, companies, or countries. In addition, a simpler model involves carbon credits being listed on an exchange platform.

Within the carbon market, two types of commodities are traded:

Firstly, GHG emission allowances – allocated by governments, giving enterprises the right to emit within their quota. If they wish to emit beyond their allocation, they must purchase allowances from other enterprises.

Secondly, Voluntary carbon credits – generated when enterprises invest in emission-reduction activities such as afforestation. Once verified and approved by competent authorities, these reductions are issued as carbon credits.

³ EU ETS: European Union Emissions Trading System

⁴ CORSIA: Carbon Offsetting and Reduction Scheme for International Aviation

⁵ ESG: Environmental, Social, and Governance

Because they are voluntary in nature, prices range from USD 1 to 15 per tonne, depending on the technology type and investment scale.

2.3 Roles of carbon emissions trading markets

Emissions trading systems are considered one of the most effective tools for reducing greenhouse gas (GHG) emissions. Emissions trading is a market-based instrument designed to lower GHG emissions. By setting an overall emissions cap for an industry, a country, or a group of countries, firms may emit more or less than their assigned quota and can trade allowances accordingly (Dales, 1968). Compared with traditional climate policies, emissions trading systems offer cost-effectiveness, environmental protection, flexibility, transparency, and incentives for innovation (Ackerman & Stewart, 1985; Hahn & Stavins, 1991; Stavins, 1997).

The cap-and-trade system plays a vital role in climate policy by enabling countries to achieve GHG reduction targets more efficiently. To achieve long-term, sustainable carbon mitigation, countries need to balance current policies with long-term measures to address climate change impacts (Aldy, 2016). Pollution markets can function and deliver benefits in developing countries if designed in line with local contexts. However, to ensure sustainability and effectiveness, these programs require close integration of economic, political, and social dimensions, along with strengthened monitoring mechanisms and greater enterprise participation. Firms may refrain from participating if compliance costs are perceived as too high or overly complex (Micheal Greenstone et al., 2023). Allocating emissions permits through auctions rather than free allocation (“grandfathering”) generally delivers greater economic and environmental benefits, and is widely applied in cap-and-trade programs (Cramton & Kerr, 2002).

Carbon markets are regarded by governments worldwide as pillars of climate policy. Their foundations derive from international commitments and national reduction targets, which are codified through binding legislation. To establish and operate a domestic carbon market, Viet Nam must adopt relevant policies such as a dedicated carbon market decree; establish roadmaps and strategies for market development; define institutional and operational structures; and build national and sectoral-level MRV (Measurement, Reporting and Verification) systems (Mai, K.L et al., 2020). Carbon markets have proven to be important mechanisms with positive impacts at national, regional, and global levels, serving as effective tools to support emission reduction commitments.

3. CURRENT STATUS OF VIETNAM’S CARBON CREDIT MARKET

In Viet Nam, according to the Law on Environmental Protection 2020, “a carbon credit is a tradable certificate representing the right to emit one ton of CO₂ or one ton of CO₂ equivalent.”

Currently, Viet Nam has not yet established a mandatory carbon credit market. To achieve the target of net-zero emissions by 2050, Viet Nam has been promoting the formation and development of a carbon credit trading market in recent years.

Decision No. 1775/QĐ-TTg of the Prime Minister dated 21 November 2012 was the first legal document laying the foundation for the establishment of a carbon market in Viet Nam, namely the “Approval of the Scheme on the management of greenhouse gas emissions and management of carbon credit trading activities in the global market.” The Law on Environmental Protection 2020 and its guiding decrees (2022–2025) inherited and further developed this Decision, particularly through the plan to establish a carbon credit exchange in 2028.

The draft “Scheme for Developing the Carbon Market in Viet Nam,” based on Decree No. 06/2022/NĐ-CP dated 7 January 2022 of the Government on the reduction of greenhouse gas emissions and the protection of the ozone layer, sets out several goals to be achieved by 2027. These include finalizing regulations on carbon credit management and greenhouse gas emission quota trading; establishing operational rules for the exchange; piloting mechanisms for trading and offsetting in sectors with potential; providing guidance on the implementation of both domestic and international trading mechanisms to ensure alignment with international treaties; and piloting the operation of a carbon exchange by 2025.

From 2028, Viet Nam will officially operate the carbon credit trading market, including rules for linking and exchanging carbon credits domestically as well as with regional and global carbon markets.

Because Vietnam has no a mandatory carbon credit market, therefore, the transfer of emission reduction outcomes is carried out through bilateral negotiation agreements among stakeholders under the voluntary market (Do Huong, 2024). Specifically, for the forest carbon credit market in Viet Nam, two agreements have been concluded by the Ministry of Agriculture and Rural Development (MARD):

The first is the North Central Region Emission Reductions Payment Agreement (ERPA), signed on 22 October 2020 between MARD and the World Bank, acting as trustee of the Forest Carbon Partnership Facility (FCPF), including 3 phases. This agreement transfers 10.3 million tons of CO₂ emission reductions in the North Central Region for the period 2018–2024, at a unit price of USD 5 per ton, equivalent to USD 51.5 million. Approximately 95% of the transferred results will be allocated back to Viet Nam to contribute to its Nationally Determined Contribution (NDC) on greenhouse gas emission reduction (World Bank, 2023).

Phase 1 (2018–2019): The emission reduction result of the first monitoring period in the North Central Region reached 16.21 million tons of carbon (verified by the WB). Viet Nam completed the transfer of 10.3 million tons of carbon to the WB and received USD 51.5 million. For the remaining 5.91 million tons, the WB agreed to purchase an additional 1 million tons. The surplus of 4.91 million tons was reported by MARD to the Prime Minister for consideration and decision.

Phase 2 (2020–2022): Continued collaboration with the WB for measurement and verification of credits.

Phase 3 (2023–2024): Sought new partners interested in purchasing credits to negotiate transfers, ensuring national benefits and mobilizing additional resources for forest protection and development in the North Central Region.

The second is the South Central and Central Highlands ERPA. On 31 October 2021, at COP26 and witnessed by Prime Minister Pham Minh Chinh, Minister of Agriculture and Rural Development Le Minh Hoan signed a Letter of Intent with the Emergent Forest Finance Accelerator, the trustee of the LEAF Coalition (Lowering Emissions by Accelerating Forest Finance).

Under this agreement, Viet Nam will transfer to LEAF/Emergent 5.15 million tons of forest-based emission reductions in the South Central and Central Highlands regions during 2022–2026. LEAF/Emergent will pay a minimum of USD 10 per ton of carbon, amounting to a total value of USD 51.5 million. The registered forest area for emission reduction services is 4.26 million hectares, of which 3.24 million hectares are natural forests and 1.02 million hectares are plantation forests (Do Huong, 2024).

At present, Viet Nam (MONRE) has completed the registration dossier for credit issuance under the TREES standard (The REDD+Environmental Excellence Standard). Concurrently, technical negotiation sessions with Emergent are being conducted to finalize the negotiation scheme.

Participants in the Viet Nam carbon market are defined in Decree No. 06/2022/NĐ-CP, including: (i) Greenhouse gas-emitting facilities subject to government-mandated greenhouse gas inventories; (ii) Entities participating in the market under domestic and international carbon credit trading and offsetting mechanisms, in compliance with national legislation and international treaties to which Viet Nam is a party; (iii) Individuals and organizations engaged in investment and business activities related to the trading of greenhouse gas emission quotas or carbon credits on the market.

Viet Nam is considered a country with significant potential for carbon credit market development. As of November 2022, Viet Nam had 276 projects generating nearly 29.4 million carbon credits certified under the Clean Development Mechanism (CDM) (PanNature, 2023). In addition, the country has developed multiple other carbon credit projects aligned with different international standards.

According to the Department of Climate Change, Viet Nam’s voluntary carbon credit trading with international partners has been implemented since the early 2000s by enterprises through CDM programs and projects. More than 300 programs and projects have registered to conduct carbon credit trading and offsetting. Among them, over 150 projects have been issued 40.2 million carbon credits, which have been traded on the global carbon market. Viet Nam is one of the four countries (alongside China, India, and Brazil) with the largest number of registered CDM projects; it ranks ninth among 80 countries with the highest number of recognized CDM projects and issued carbon credits. The establishment and operation of a carbon credit market will contribute to strengthening Viet Nam’s competitiveness in exports, particularly to markets with strict environmental standards such as the European Union, and will enhance its capacity to attract foreign direct investment in the context of “greening” investment activities (Nguyen The Binh, 2024).

Although the carbon credit market has been identified as an effective solution to incentivize enterprises to reduce emissions, cut carbon output, and move towards adopting green, clean, and low-carbon technologies, further work is required before this market becomes fully operational in Viet Nam. Technical regulations and standards governing trading mechanisms must continue to be completed to ensure compatibility and alignment with international frameworks and standards to which Viet Nam is a party.

The creation and operation of the carbon credit market will serve as an essential condition for parties to the United Nations Framework Convention on Climate Change, including Viet Nam, to fulfill their climate commitments and move towards sustainable development goals. Despite its significant potential, effective operation of this market in Viet Nam requires not only institutional and technical improvements but also stronger communication efforts to raise awareness among enterprises, government authorities about the benefits and importance of this emerging market.

The Voluntary Carbon Market (VCM) allows organizations, businesses, and individuals to voluntarily purchase carbon credits to offset emissions or fulfill social responsibility, without legal obligations. In the context of a global transition to a green economy, Vietnam’s VCM has emerged as a key instrument to support the net-zero emission target (PanNature, 2023).

Vietnam’s carbon credit market was formalized through the signing of the Emission Reductions Payment Agreement (ERPA) between the Government of Vietnam and the International Bank for Reconstruction and Development (IBRD) – a World Bank member – in October 2020. This was a milestone in developing a carbon market, particularly with the adoption of a jurisdictional REDD+ model⁶ in the North Central Region, covering six provinces: Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri, and Thua Thien Hue (Gia Linh, 2023).

According to the World Bank (2024), between 2018–2019, the North Central Region achieved 16.21 million tCO₂e of emission reductions from forests, of which 10.3 million tons CO₂ were transferred to the World Bank at USD 5/tCO₂, equivalent to USD 51.5 million. The first payment of USD 41.2 million was disbursed in late 2023 (World Bank, 2023). Compared to the average EU ETS⁷ price during the same period (~USD 25–30/tCO₂e), the

⁶ REDD+ :Reducing Emissions from Deforestation and Forest Degradation

⁷ ETS: Emissions Trading System

price of USD 5 is modest but consistent with current REDD+ market conditions. The remaining 5.91 million tCO₂e lack buyers, with 1 million tons under negotiation for supplementary purchase (Gia Linh, 2023).

As a country positioning itself as a regional leader in carbon credit trading under the new rules of the Paris Agreement, Viet Nam is striving to implement coherent policies to develop this market and thereby contributing to the achievement of its net-zero target by 2050.

4. DRIVERS TO CARBON CREDIT MARKET DEVELOPMENT IN VIETNAM

4.1 Natural resources – potential for large-scale credit generation in Viet Nam

Viet Nam possesses significant potential to generate carbon credits from forests and renewable energy, particularly from forestry and wind power, which are the two main sources that can make strong contributions to reducing greenhouse gas (GHG) emissions and achieving net-zero emissions by 2050.

Forests: Viet Nam currently has extensive forest resources, with an area of approximately 14.79 million hectares and a forest coverage rate of 42.02% (VNA, 2024) – and an average net forest sink of 39.3 million tCO₂ annually during 2010–2020, Vietnam has significant potential in forest carbon credit commercialization (Pham T. T. et al., 2023). Studies show that Viet Nam’s forests have the capacity to absorb around 50–100 million tons of CO₂ annually, thereby generating a large volume of carbon credits. These credits can contribute substantially to both domestic and international carbon markets. This potential not only supports Viet Nam in achieving its national GHG mitigation targets but also creates a sustainable source of revenue from selling carbon credits (Forest Trends, 2023). Through the transfer of carbon credits generated from forest emission reductions, Viet Nam can effectively utilize this potential to improve the livelihoods of local forest-dependent communities and to advance sustainable development.

Renewable energy – wind power: Renewable energy, particularly wind power, has become an increasingly important contributor to reducing CO₂ emissions and supporting the green transition. Viet Nam has set a target of 21 GW of wind power capacity by 2025, an ambitious goal to accelerate renewable energy development (World Bank, 2023). Clean Development Mechanism (CDM) projects from renewable sources such as wind energy represent significant opportunities for generating carbon credits in Viet Nam. These projects can sequester and offset substantial amounts of CO₂, thus creating tradable credits in international markets. They also help Viet Nam meet its international climate commitments while advancing renewable energy growth domestically.

The combination of forestry and renewable energy creates vast opportunities for Viet Nam’s carbon credit market, enabling the country to meet its national climate targets and engage more actively in the global carbon market. The extensive forest resources and the 21 GW wind power target for 2025 provide the foundation for issuing high-quality credits for both domestic use and export. This argument has been emphasized by reports from the World Bank (2023) and BloombergNEF (2024), which highlight the large-scale carbon potential in Southeast Asia.

4.2 International political commitments – Viet Nam’s determination to address climate change

Strong political commitment and the pressure from COP26 marked a turning point in Viet Nam’s climate policy. In addition, Viet Nam joined the Global Methane Pledge, aiming to cut methane (CH₄) emissions by 30% by 2030. Under the Just Energy Transition Partnership (JETP), Viet Nam also committed to gradually phasing out coal power between 2030 and 2045. Although these commitments are voluntary under the Paris Agreement (United Nations, 2015), they exert strong pressure for institutional reform, including the rapid establishment of a carbon credit market as an economic tool for effective and transparent emission reduction.

The implementation of international commitments, particularly those related to GHG mitigation under the Nationally Determined Contribution (NDC), has created significant opportunities for developing the domestic carbon market (World Bank, 2023). Moreover, the surge in demand for carbon credits after COP26 has opened favorable opportunities for Viet Nam to supply high-quality credits, not only for domestic needs but also for export to international markets. In practice, the carbon market in Viet Nam has shown encouraging progress, with several Emission Reduction Payment Agreements (ERPAs) signed between Viet Nam and the World Bank, including the transfer of 10.3 million tons of CO₂ between 2018 and 2024, which provides clear evidence of the feasibility of participating in the international carbon credit market (Chuong Phuong, 2024).

The national commitment to achieve net-zero by 2050 — codified in the 2020 Law on Environmental Protection and Decree No. 06/2022/ND-CP dated 7th January, 2022 provides a strong legal foundation for the carbon market and represents the most distinctive feature.

4.3 International cooperation – opportunities for developing the carbon market

Viet Nam is considered to have great potential for developing a carbon credit market. By November 2022, Viet Nam had 276 projects with nearly 30 million carbon credits certified under the CDM mechanism. In addition, over 300 programs and projects had engaged in carbon trading and offsetting on international markets. Among them, more than 150 projects were awarded over 40 million credits (PanNature, 2023). Viet Nam ranks among the top four countries with the highest number of registered CDM projects—alongside China, India, and Brazil—and ninth among 80 countries in terms of recognized and traded credits (PanNature, 2023). To date, Viet Nam has over 258 CDM projects, 40 projects certified under the Gold Standard, and 37 under the Verified Carbon Standard (VCS), with total credits exceeding 35 million, primarily from renewable energy (Mai Thu Hien, 2024). These achievements provide a strong foundation for expanding into an ETS.

Furthermore, Viet Nam has successfully implemented an ERPA with the World Bank, transferring over 10.3 million tons of CO₂ from the North Central region, setting a precedent and building confidence in both domestic and international carbon trading (World Bank, 2023).

The establishment and operation of a domestic carbon market will enhance Viet Nam's export competitiveness in environmentally demanding markets such as the EU while attracting green investment in the context of global transition. The practical experience from these credit trading programs and projects has paved the way for Viet Nam to develop and operate its own carbon market and to engage in international carbon markets.

The REDD+ project in Quang Nam was designed under VCS and CCB⁸ standards, targeting 6.1 million carbon credits for 2018–2026 through forest protection and community livelihood development (Quang Nam PPC, 2020). Launched in 2019 with USAID support (Green Annamites Project), it planned sales of 1.5 million credits in 2022, 2.5 million in 2024, and 2.1 million in 2026. Credits were verified and issued under Verra. However, despite completed project design documents, implementation has stalled due to gaps in legal frameworks for verification, issuance, and trading (Nguyen Ba Ngai, 2023). Proposal No. 6225/TTr-UBND dated 22nd Oct. 2020 of Quang Nam Provincial People's Committee requested pilot authorization for REDD+ carbon credit trading, highlighting unresolved issues of procedures, stakeholder responsibilities, and financial mechanisms in current laws.

In addition to local REDD+ projects, Vietnam has witnessed a rise in voluntary carbon initiatives led by international private actors. A notable example is the SK Forest Project (2023–2030), covering 12 northern mountainous provinces. This project, a collaboration between SK Group (Korea), the University of Queensland (Australia), and the VNFOREST (MARD), has completed feasibility studies since 2021, including baselines, emission reduction potential, MRV planning, REDD+ safeguards, and benefit-sharing mechanisms. The project is currently awaiting MARD approval and preparation for a Letter of Intent (LOI) among partners. Vietnam also signed an LOI with LEAF/Emergent (ART/TREES standard) in October 2020, committing 5.15 million tCO₂e from forests in the South Central and Central Highlands. The goal was to prepare an ERPA within 12 months, but negotiations and agreements have yet to progress (Nguyen Ba Ngai, 2023).

The REDD+ project in Hieu Commune (Kon Tum), coordinated by FFI since 2018, covers 1,238 ha, aiming to prevent deforestation and support M'nâm communities. Built under Plan Vivo standards, it averages 1,700 tCO₂/year. Although verified by Plan Vivo and financially supported by KfW10, no commercial credits have been issued (Duong Thi Bich Ngoc, 2021). Similar projects remain at the technical design stage due to legal barriers, but they serve as critical pilots in building Vietnam's forest carbon market (Nguyen Ba Ngai, 2023).

The ERPA still represents a substantial international financial inflow (USD 51.5 million) directed to the central budget without increasing public debt (World Bank, 2023). This is a positive outcome. Funds have been allocated to localities such as Quang Binh and Ha Tinh for reforestation, forest management, and community livelihood support (Gia Linh, 2023).

4.4 Legal foundations – government policies and the national transition model

The shift in development strategy and national commitments has accelerated Viet Nam's transition toward a low-carbon model. The implementation of strong environmental policies under Decision No.1775/QĐ-TTg of November 21st, 2012, on GHG emission management (Appendix 1), along with subsequent government Decisions and Decrees (Appendix 1), and the support of international organizations such as the World Bank and other financial institutions, has created sustainable financial mechanisms for the domestic carbon market. These policies are driving Viet Nam's transition from a high-emission model to a green economy by promoting emission reductions through afforestation, forest protection, and renewable energy development.

⁸ VCS: Verified Carbon Standard; CCB: Climate, Community & Biodiversity Standards

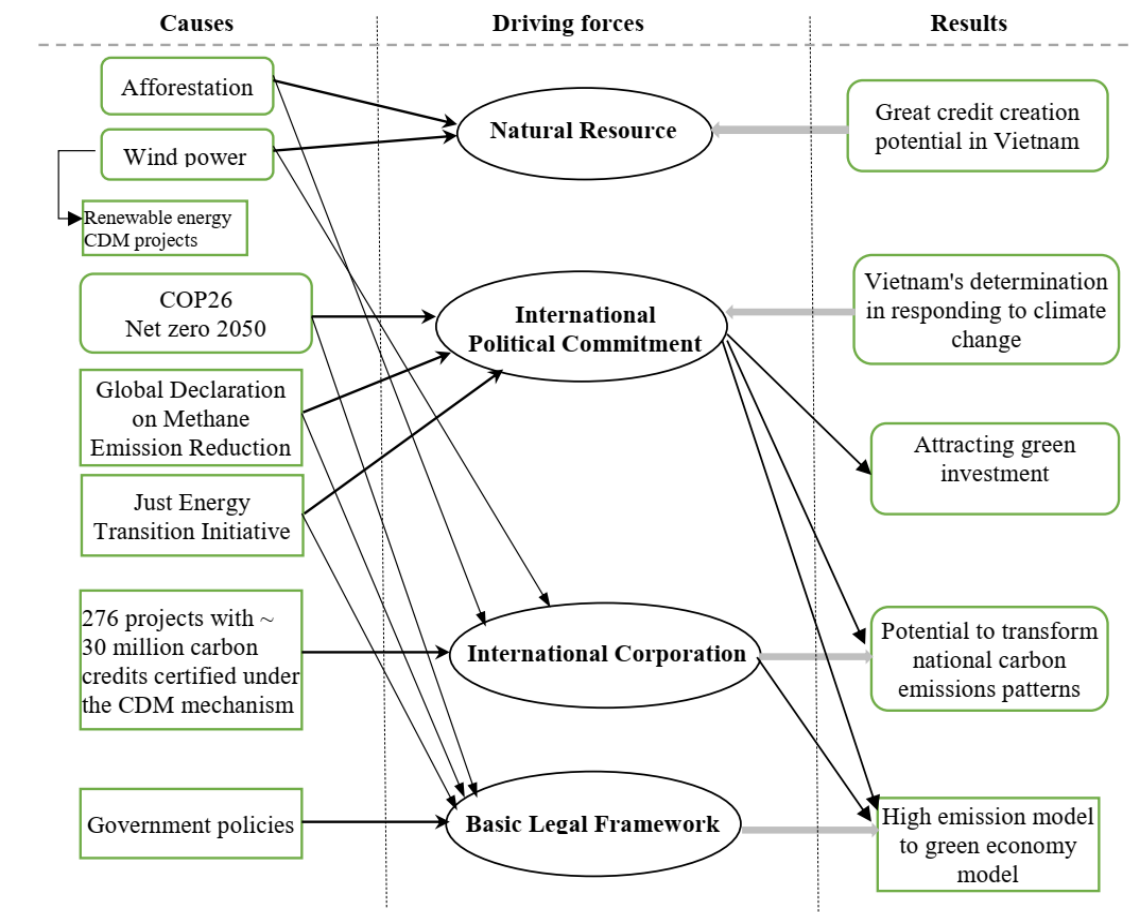


Figure 1. Driving forces to the carbon credit market development in Vietnam (Author, 2025)

5. BARRIERS TO CARBON CREDIT MARKET DEVELOPMENT IN VIETNAM

Although Viet Nam has established basic legal foundations and actively engaged in international cooperation mechanisms to develop a carbon credit market, the implementation gap remains wide compared to policy targets. This gap is particularly evident in the areas of institutions, technical infrastructure, market mechanisms, property rights, and private sector participation.

5.1 Lack of a coherent legal framework

One of the major obstacles to establishing and developing a carbon credit market in Viet Nam is the absence of a clear and coherent legal framework. Currently, there is no dedicated law to regulate the ownership and transfer of carbon credits, making the market vague and lacking transparency. In comparison, developed regions such as the European Union, where the EU Directive 2003/87/EC clearly defines ownership rights and trading mechanisms, Viet Nam still lacks a sufficiently robust legal system to effectively regulate and promote the carbon market.

Viet Nam urgently needs to issue regulations on initial quota allocation, sector-specific credit standards, MRV guidelines for construction and transport, and rules for exchange platforms. These will form the foundation for the pilot ETS phase 2025–2027 (Mai Thu Hien, 2024).

Although the 2020 Law on Environmental Protection, Decree No.06/2022/ND-CP dated 7th January, 2022, and Circular No.17/2022/TT-BTNMT dated 7th January, 2022 have established an overall legal framework for the carbon market, dividing it into compliance and voluntary markets, many elements remain at the policy-orientation level. They lack specific technical guidelines on verification, transfer, ownership, and benefit allocation. Furthermore, Decision No.01/2022/QĐ-TTg dated 18th January 2022, which requires that 95% of REDD+ credits be used for NDCs, reduces incentives for commercialization at the local and enterprise level, running counter to market principles and reducing investor interest.

Carbon credit ownership in Viet Nam has not yet been clearly defined in law. To date, no legal document officially recognizes carbon credits as assets that can be owned, valued, traded, or pledged. According to a joint report by UNDP and GIZ in 2023, the largest legal gap lies in the lack of explicit regulation on credit ownership—particularly in the voluntary market, where NGOs and private companies play a leading role in project development. The absence of ownership rights and financial safeguards for project developers creates investment risks and limits the ability to record carbon credits as assets on corporate balance sheets (UNDP & GIZ, 2023).

Legally, the 2020 Law on Environmental Protection and Decree No.06/2022/ND-CP laid the groundwork for the domestic carbon market, with pilot implementation from 2025 and full operation in 2029. However, detailed regulations on ownership, transfer mechanisms, market participants, and trading processes remain incomplete.

Recently, Decree No.119/2025/ND-CP dated 9th June 2025 amended Decree No. 06/2022/ND-CP, stipulating that only organizations (not individuals) are allowed to register carbon projects. Yet, the lack of clear delineation of forest ownership between the state, households, and communities continues to pose challenges for forest-based carbon projects. In addition, technical guidelines for MRV in sectors such as forestry, waste, and industry have been issued, but remain fragmented and inconsistent, hindering effective implementation.

5.2 Technical infrastructure not aligned with international standards

Another barrier to establishing Viet Nam's carbon credit market is the underdeveloped technical infrastructure, particularly in establishing and maintaining MRV (Measurement, Reporting, and Verification) systems. At present, Viet Nam's MRV system remains largely manual, lacking modern technological tools for measuring, reporting, and verifying carbon credits (MONRE, 2025). While countries such as China have applied blockchain technology to enhance transparency and security in carbon trading, Viet Nam has not yet introduced comparable technological solutions, making emission monitoring and verification slow and inefficient (Pham Thi Nga, 2015).

Because Viet Nam's MRV processes are largely manual and outdated, verification and measurement are often conducted by foreign organizations, increasing costs and implementation time. Moreover, there are currently no domestic Verification and Validation Bodies (VVBs) that meet international standards recognized by Verra, Gold Standard, or ART/TREES (MONRE, 2025). This dependence on foreign entities lengthens verification timelines, raises costs, and reduces the autonomy of domestic projects (VTN & Partners, 2023).

Viet Nam has not yet established a national registry system for emission allowances and carbon credits, while MRV systems in sectors such as transport and construction still lack specific guidelines. The integration of an Emissions Trading System (ETS) into the stock exchange infrastructure faces challenges due to limited technical capacity, requiring a dedicated design for the trading, depository, and settlement of carbon credits (Mai Thu Hien, 2024).

MRV activities in Viet Nam face high costs if advanced technologies such as LiDAR, high-resolution satellite imagery, or AI-integrated drones are applied. These technologies improve accuracy and reduce errors in carbon sequestration calculations but demand significant financial and technical resources, especially for small-scale project developers and local communities (Neuvition, 2024). Beyond cost, forestry MRV also carries long-term risks such as forest fires, pests, or tree diseases, which may result in the complete loss of credits without insurance mechanisms or risk-sharing funds. A recent study employing explainable AI to project the future of more than 190 forest carbon credit projects revealed that the global risk of wildfires will increase by an average of 55% by 2080 under the SSP2-4.5 climate scenario (Ballard, T. et al., 2023). This poses major challenges for the sustainability of forest-based credits unless proper risk-mitigation measures are implemented.

5.3 Unclear market structure

Although a domestic carbon exchange is expected to be launched in 2025, there are no detailed regulations on market operations, credit standards, auction mechanisms, settlement, or benefit-sharing. Many firms still lack access to trading channels or to a national carbon credit database. According to the World Bank (2023), the absence of transparency in benefit-sharing and credit management has undermined trust and delayed project implementation. In addition, Viet Nam lacks sector-specific credit standards, clear quota allocation rules, and auction and transfer procedures. Without these, the market remains fragmented and cannot operate effectively (Mai Thu Hien, 2024).

Furthermore, the transfer of credits still requires multiple inter-agency approvals, while auction procedures are complex, and there is no comprehensive legal framework on ownership rights or benefit distribution. These gaps make the carbon trading market slow, rigid, and non-transparent. Legal reforms are needed to establish clear approval processes and public auction mechanisms (Gia Linh, 2023).

Domestically, the absence of an official carbon exchange means projects still rely on international partners or bilateral agreements. While feasibility studies have mentioned bilateral contracts, there is still no clear legal foundation for trading platforms, auctions, or bilateral agreements.

Under Decree No. 107/2022/ND-CP dated 28th December, 2022, up to 95% of non-transferred credits must be counted toward NDCs, while only 5% may be traded. This creates challenges for the economic attractiveness and marketability of the ERPA⁹ model, making it difficult for domestic enterprises to access and participate.

Nevertheless, the ERPA model shows structural limitations. The main bottleneck is the lack of market mechanisms: since most credits count toward NDCs, firms and investors lack incentives to develop market-oriented REDD+ projects, especially given low credit prices (~USD 5/tCO₂e). Dang T. D. et al. (2024) emphasized that the lack of a clear regulatory framework for credit allocation between NDC targets and tradable credits is a major barrier to establishing a transparent and competitive carbon market in Vietnam.

5.4 Vietnamese credits not yet eligible for international trading

Several REDD+ credits from Viet Nam have not met international market requirements for additionality, community benefits, and transparency. Forest Trends (2023) reported that 62% of REDD+ credits on the global market had reliability issues. To participate in Article 6 of the Paris Agreement, Viet Nam must comply with standards such as ART/TREES recognized by the ICVCM (Forest Trends, 2023).

⁹ ERPA: Emission Reductions Payment Agreement

Another barrier is that Viet Nam has not yet developed corresponding adjustment mechanisms or issued letters of authorization for transfers—both mandatory conditions for linking with global markets under Article 6 of the Paris Agreement (Mai Thu Hien, 2024).

A further risk is that older credits may lose value, as international standards increasingly require stronger guarantees on additionality, community benefits, biodiversity, and Indigenous rights—criteria that many credits issued in 2018–2019 may not fully meet (Forest Trends, 2024).

5.5 Limited participation of enterprises and communities

Most domestic enterprises either lack sufficient understanding of carbon credits or lack incentives to participate, due to inadequate financial, technical, and policy support. In addition, many project developers cannot issue credits because of complex procedures and the absence of specific guidance from state authorities (Chuong Phuong, 2024).

Lack of benefit-sharing mechanisms: Viet Nam has not yet developed a clear, legally binding mechanism for benefit-sharing in REDD+ projects. By contrast, Thailand has introduced a 60–30–10 model, in which 60% of revenues from carbon credits go to communities, 30% to the Forest Protection Fund, and 10% to project developers (TGO, 2023). This model, formalized through tripartite contracts, enhances sustainability and investor appeal. In Viet Nam, clear regulations on credit allocation and benefit-sharing for communities, authorities, and enterprises are urgently needed to enhance participation.

Limited domestic demand for credits: Domestic demand for carbon credits remains low, as most enterprises have not set specific net-zero commitments or disclosed transparent implementation roadmaps. Viet Nam's emission reduction pledges remain at the national level, while the private sector has made limited contributions, except for a few pioneers such as Vinamilk, which achieved carbon neutrality at selected facilities under PAS 2060 (Vinamilk, 2024). These developments indicate that unless Viet Nam improves the transparency and credibility of its crediting system, it will be difficult to attract domestic demand or build international confidence—especially as global markets increasingly require high-quality credits.

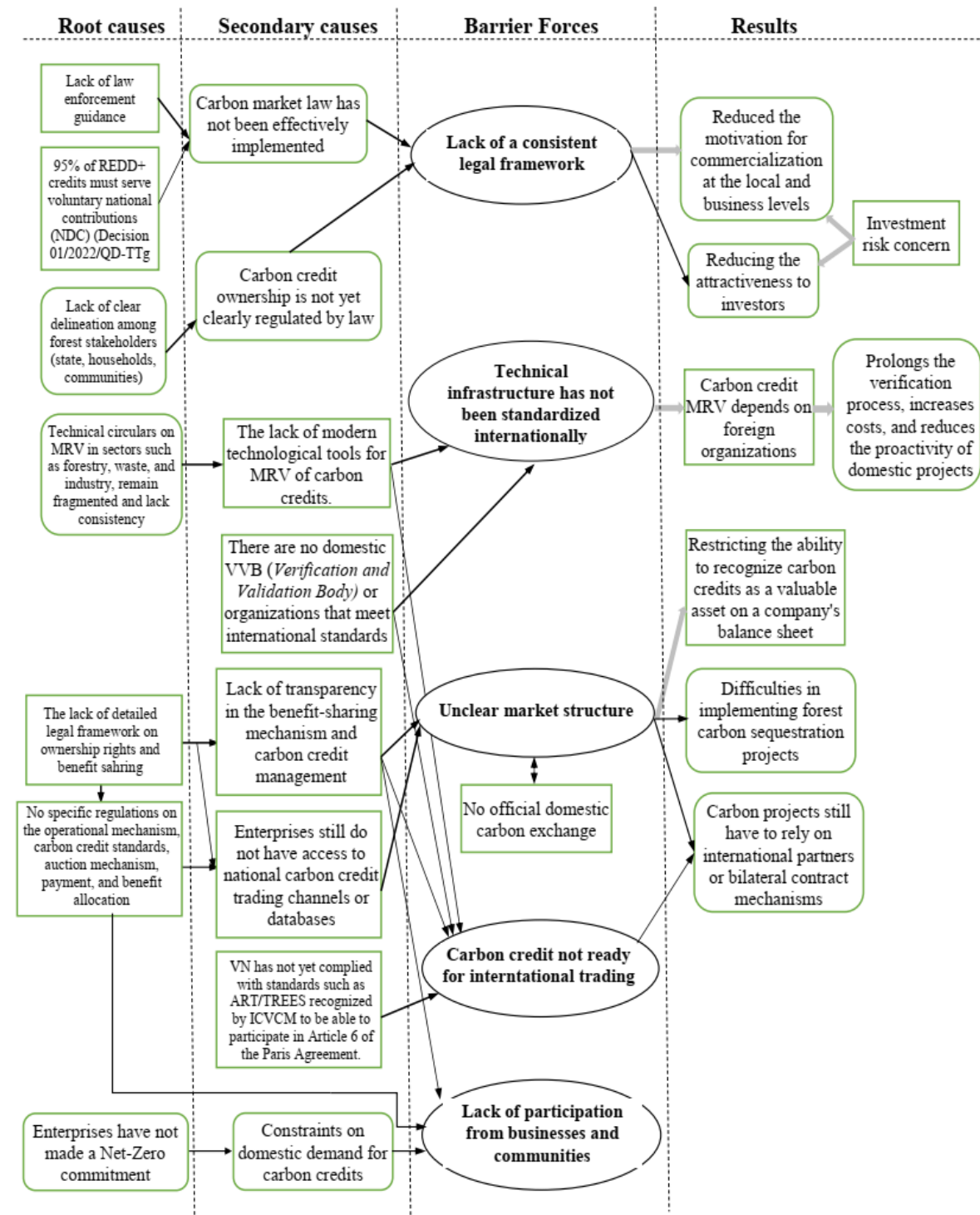


Figure 2. Barrier forces to the carbon credit market development in Vietnam (Author, 2025)

6. RESEARCH CONCLUSIONS AND IMPLICATIONS

6.1 Research Conclusions

Although four major drivers can potentially promote the development of the carbon market—(1) natural resources; (2) international political commitments; (3) international cooperation; and (4) a basic legal foundation—the barriers appear to outweigh these drivers. Key obstacles include: (1) the absence of a harmonized legal framework; (2) technical infrastructure not yet standardized to international levels; (3) an unclear market structure; (4) Vietnamese credits not yet eligible for international trading; and (5) limited participation from enterprises and communities. Unless these bottlenecks are quickly addressed, Viet Nam risks falling behind the global carbon market trend during the period 2025–2030.

Among the drivers, the most notable is Viet Nam's national commitment to achieving net-zero emissions by 2050—codified under the Law on Environmental Protection (2020) and Decree No.06/2022/ND-CP—providing a solid legal foundation for the carbon market. This demonstrates a significant contrast with many ASEAN countries

that have not yet enshrined such commitments into law, similar to South Korea prior to implementing its ETS (an appropriate reference for further FFA research in international ETS). Furthermore, Viet Nam successfully implemented the Emission Reductions Payment Agreement (ERPA) with the World Bank, transferring more than 10.3 million tonnes of CO₂ from the North Central region. This established a precedent and confidence for carbon credit trading both domestically and internationally (World Bank, 2023). From a natural perspective, Viet Nam's extensive forest resources, combined with the wind power development target of 21 GW by 2025, provide a foundation for generating high-quality carbon credits to serve both domestic and export markets. This argument has been emphasized in several reports, including those by the World Bank (2023) and BloombergNEF (2024), which highlight the large-scale carbon potential in Southeast Asia.

However, major constraints may undermine this momentum. First, carbon credits in Viet Nam are not yet formally recognized as commodities or assets within the legal system, leaving ownership rights and transfer mechanisms unclear—thereby reducing investor confidence and limiting market development. This issue mirrors Indonesia's delay in establishing regulatory frameworks for credit transfers after adopting its NDC, which hindered progress in its domestic ETS. Second, Viet Nam's MRV system still operates manually, lacks sectoral standardization, and has no accredited domestic validation and verification bodies (VVBs) recognized internationally, such as Verra or Gold Standard. In contrast, the EU and Japan have developed MRV systems based on fully digitized national databases to ensure maximum transparency. Viet Nam has previously faced delays in REDD+ projects and the FCPF program due to the absence of a stable MRV framework. Finally, inter-ministerial coordination remains fragmented, with no centralized ETS authority. The roles of HNX, the Ministry of Finance, and the Ministry of Natural Resources and Environment remain overlapping, which could create conflicts when piloting a mandatory carbon market during 2025–2027, as highlighted in recent policy recommendations.

Table 2. Summary of key drivers and barriers to the Carbon Credit Market (CCM)

Factors driving market development	Market development barriers
(i) Natural resources – significant potential for credit generation in Vietnam - Forests - Renewable energy – wind power (ii) International political commitments - Vietnam's determination to address climate change - COP 26 - Fair Energy Transition Initiative (iii) International cooperation – potential for carbon market development (iv) Basic legal framework – Government policies and the ability to transition the national carbon emissions model	(i) Lack of a coherent legal framework - Lack of guidelines for the enforcement of laws on the carbon market. - Clear ownership rights for carbon credits in Vietnam have not been established in law. (ii) Technical infrastructure not yet internationally standardised - Lack of a modern MRV (Measurement, Reporting, and Verification) system. - Measurement is primarily carried out by foreign organisations, increasing costs and implementation time. - There is no national registration system for emission quotas and carbon credits. - There is no domestic verification and validation body (VVB) that meets international standards recognised by Verra, Gold Standard, or ART/TREES. (iii) The market structure has not yet been clearly established - There are no specific regulations on operational mechanisms, credit standards, auction mechanisms, payment, and benefit allocation. - Lack of transparency in the benefit-sharing mechanism and credit management undermines trust and delays project progress. - There are no regulations on industry-specific carbon credit standards, specific quota allocation mechanisms, or auction and transfer procedures. (iv) Vietnamese credits are not yet eligible for international trading - REDD+ credits do not yet meet international market requirements for additionality, community benefits, and transparency. - There is a lack of corresponding adjustment mechanisms and transfer approval letters – mandatory conditions for connecting to the global market. - Old credits may lose value, as international standards are tightening requirements for additionality, community benefits, biodiversity, and indigenous peoples' rights. (v) Lack of business and community participation - Domestic businesses lack understanding of carbon credits or lack incentives to participate due to insufficient financial, technical, and policy support. - Lack of clear and legally binding benefit-sharing mechanisms in REDD+ projects. - Limited domestic demand for carbon credits as most businesses not having specific Net-Zero commitments or transparent implementation plans.

Source: Author, 2025

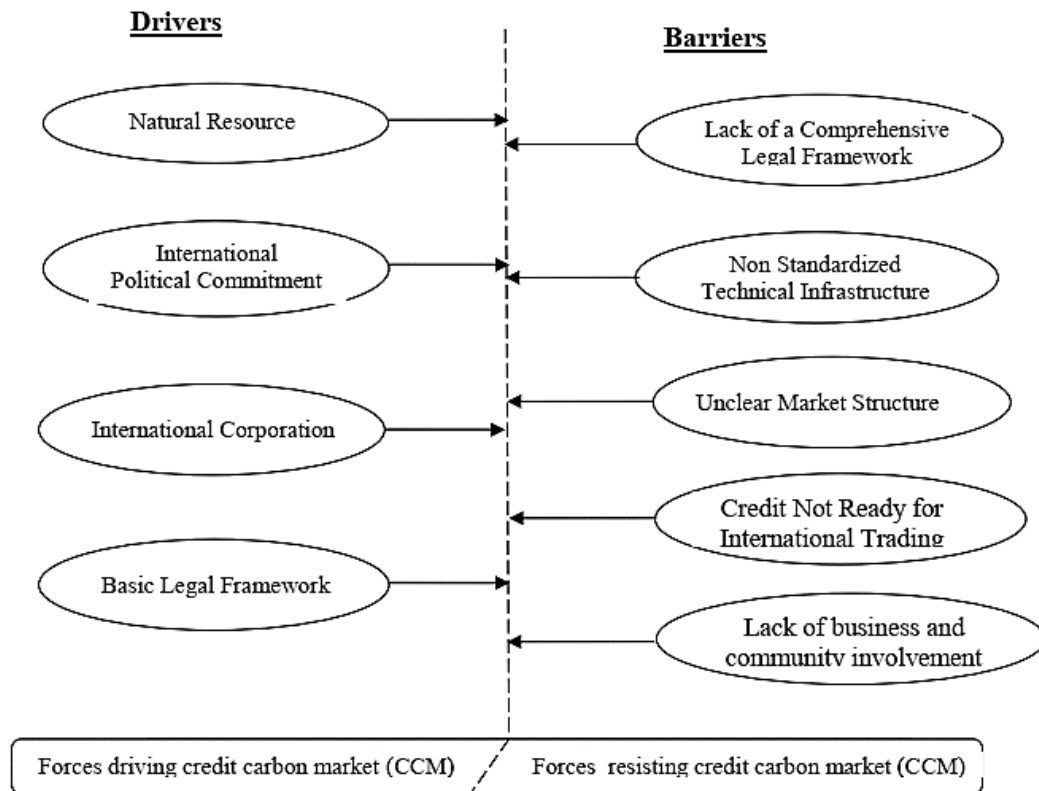


Figure 3. Driving forces and barrier forces to CCM development in Vietnam (Author, 2025)

6.2 Implications

The development of Viet Nam's carbon market requires strategic policies to remove barriers and unlock potential, especially in relation to green finance.

The absence of clear regulations on credit usage (between national and corporate levels) creates uncertainty for investors in determining long-term benefits from REDD+, reducing the attractiveness of commercial projects. Therefore, it is critical to establish clear credit ownership rights and benefit-sharing mechanisms to avoid conflicts among local stakeholders (Dang T. D. et al., 2024). A complete legal framework for REDD+ credit trading is needed, particularly with clear rules on credit allocation between NDC compliance and commercial use, transparent verification standards, and equitable benefit distribution.

The lack of a domestic VVB accredited to international standards (e.g., Verra, Gold Standard) forces projects to rely on foreign VVBs, prolonging verification, increasing costs, and undermining the competitiveness of Viet Nam's carbon market (VTN & Partners, 2023). Establishing a nationally accredited VVB is therefore essential to support enterprises and local communities in verification and to enable proactive participation in international markets.

Accelerating approval procedures, auctions, and the adoption of transparent technologies such as blockchain in monitoring and benefit-sharing is also necessary.

With 14.79 million hectares of forest and a 42.02% forest cover rate, Viet Nam has strong potential to become a regional leader in REDD+ credits, leveraging its natural resources to build a transparent, market-based system capable of attracting green investment and enhancing community livelihoods, if the right policies are implemented (CIFOR, 2023). It is therefore necessary to promote afforestation and high-quality plantation forests through green credit policies, public-private partnerships, and long-term investment incentives.

For carbon credits to hold genuine value, MRV systems must be robust and accurate, the legal framework must be transparent, and both approval and verification must be independent and credible. To enable the voluntary carbon market (VCM) to truly scale up, a comprehensive strategy is needed: (i) completing the legal framework on ownership, liability, and credit trading; (ii) developing a domestic exchange platform integrating auctions and bilateral contracts in line with Decree No. 06; (iii) harmonizing the national MRV framework with international standards (VCS, GS, ART/TREES) while applying advanced technologies; (iv) establishing risk-buffering mechanisms such as funds for fire or pest damage; and (v) incentivizing domestic and foreign enterprises to expand demand, particularly through tax benefits and ESG recognition. International lessons from Peru and Brazil—such as the TREES + LEAF Coalition model mobilizing USD 1 billion, which achieved a 30% reduction in deforestation at ~USD 1.12/tCO₂—demonstrate that when MRV and policies are well-designed, Viet Nam's credits can deliver not only environmental benefits but also financial and social value (VTN & Partners, 2024).

The VCM can play an important role in corporate ESG strategies. To achieve this, the same comprehensive approach is needed: completing the legal framework on ownership, responsibility, and credit transactions;

developing domestic exchanges with auctions and bilateral contracts; and standardizing MRV with international benchmarks while integrating modern technology.

Some Vietnamese companies, such as Vinamilk, have already adopted carbon neutrality standards (PAS 2060) for their factories, linking VCM participation to corporate sustainability strategies. However, most enterprises still lack awareness of how to integrate VCM into ESG. Specific guidance, as well as tax incentives or green credit scores, should be introduced to encourage corporate participation in the voluntary carbon market. Integrating carbon credits into ESG reporting would enable enterprises to access green finance, improve credit ratings, and enhance their reputation in global markets.

CONCLUSION

The establishment of a transferable emissions permit (TEP) market in Viet Nam stands at the intersection of two opposing forces: on one side, the drivers that foster expectations of a developmental transition; on the other, persistent barriers that have not been systematically resolved. The FFA analysis in this study highlights this tension, thereby identifying the prospects for a sustainable carbon market in Viet Nam during 2025–2030.

On the driver side, the most significant factor is Viet Nam's national commitment to achieving net-zero by 2050—enshrined in the Law on Environmental Protection (2020) and Decree No. 06/2022—providing a strong legal foundation for the carbon market (Government of Viet Nam, 2020). Yet the most critical barrier threatening this momentum is that carbon credits are not yet recognized as commodities or assets under Viet Nam's legal framework. As such, ownership rights and transfer mechanisms remain undefined, eroding trust and discouraging investment. For a carbon market to operate effectively, its elements must be regulated under a compatible and coherent legal regime. As with any asset or legal instrument, clarifying the legal nature of carbon credits is essential to assess and manage how they can be traded, and the risks borne by participants. The legal characterization of carbon credits also has implications for taxation in credit transactions.

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APPENDIX 1

Table 1. Government regulations on the carbon credit market (Carbon Credit Market – CCM) in Vietnam

No.	Year	Decree/ Decision/ Resolution/ Circular	Main Content
1	2020	<i>Environmental Protection Law 2020</i> Passed by the National Assembly on 17 th November 2020, <i>effective from 1 January 2022</i>	Initial legal framework. Article 139 first recognises carbon credits as a tradable commodity, and the establishment of a domestic carbon market is a mandatory direction to implement commitments to reduce greenhouse gas emissions. Article 91 stipulates that the organisation and development of the carbon market is one of the components of emission reduction.
2	2012	Vietnam became a member of the Programme for Market Readiness (PMR).	PMR: <i>Partnership for Market Readiness</i> – a global initiative launched by the <i>World Bank</i> to support countries and regions in preparing to establish, operate, or expand carbon pricing tools (such as carbon taxes, emissions trading systems – ETS) through technical assistance, experience sharing, and funding.
3	2012	<i>Decision No. 1775/QĐ-TTg</i> dated 21 st November 2012	Approving the Project on Managing Greenhouse Gas Emissions; Managing Carbon Credit Trading Activities in the Global Market. This Decision lays the foundation for: ◦ Establishing a greenhouse gas inventory system in Vietnam. ◦ Gradually forming a domestic carbon market. ◦ Participating in international carbon credit mechanisms (CDM, JCM, etc.).
4	2015	The VNPMR project funded by the World Bank	Enhancing capacity to develop carbon pricing tools. Two pilot sectors: solid waste and steel production. The project contributes to establishing an emissions database system and testing market-based tools as a foundation for future ETS operations.
5	2022	<i>Decree No. 06/2022/NĐ-CP</i> Issued on 7 th January 2022 and effective immediately upon issuance.	Technical framework for implementation to specify the legal provisions related to the carbon market, including: Article 91: On reducing greenhouse gas emissions; Article 92: On protecting the ozone layer; Article 139: On establishing and developing the carbon market.
6	2022	<i>Decision No. 01/2022/QĐ-TTg</i> dated 18 th January 2022 Signed and issued by the Prime Minister on 18 th January 2022. This document takes effect from the date of signing.	Roadmap for greenhouse gas inventory and foundation for the carbon market. Establishing roadmap for organising greenhouse gas (GHG) inventory in Vietnam, marking the stage of preparing emission data to support future carbon market operations.
7	2022	<i>Decree No. 06/2022/NĐ-CP</i> dated 7 th January 2022, effective from the date of signing.	Requires facilities with annual GHG emissions of 3,000 tonnes of CO ₂ equivalent or more to conduct GHG inventories every two years starting from 2022.
8	2022	<i>Circular 17/2022/TT-BTNMT</i> , dated 15 th November 2022, effective from 15 February 2023	Establishes the first comprehensive technical framework providing detailed guidance on measuring, reporting, and verifying GHG inventory results in Vietnam. Establishes a unified and internationally compatible technical standard to support the future operation of the domestic carbon market and enhance transparency in national emissions management.

9	2022	<i>Decision 896/QĐ-TTg</i> dated 15 th June 2021 & <i>Decision 942/QĐ-TTg</i> dated 26 th July 2022 (Decision approving the National Strategy on Climate Change up to 2050.)	Carbon Market Development Roadmap. Approval of the National Strategy on Climate Change up to 2050, identifying the carbon market as one of the key economic tools to achieve carbon neutrality, while setting out a roadmap for the development of a domestic carbon credit market.
10	2022	<i>Decision No. 888/QĐ-TTg</i> dated 25 July 2022, effective from the date of signing	Promoting business participation in the carbon market. Implementing the outcomes of COP26, determining the direction for the development of the domestic carbon market, focusing on building policies towards a low-carbon economy, and mobilising cooperation among businesses, social organisations, and communities to respond to climate change.
11	2022	<i>Decree No. 107/2022/NĐ-CP</i> dated 28 th December, 2022	On the pilot transfer of emission reduction results and the financial management of the greenhouse gas emission reduction payment agreement in the North Central Region
12	2025	Draft Decree on the Carbon Credit Trading Platform (2025)	– The Ministry of Finance officially announced and submitted the draft for approval by the Prime Minister on 25 March 2025. Solution to improve the legal framework (<i>the draft is still under review</i>).
13	2025	<i>Decree No. 119/2025/NĐ-CP</i> dated 9 June 2025	Amending and supplementing certain provisions of Decree No. 06/2022/NĐ-CP (regulations on greenhouse gas emission reduction and carbon market development), to strengthen the legal framework and promote the implementation of the carbon market.
14	2025	<i>The Carbon Market Development Project in Vietnam was approved by the Prime Minister on 24 January 2025</i>	The carbon market development plan sets out a roadmap: pilot operation from 2025 to the end of 2028, and full implementation from 2029.

Source: Authors, 2025