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CURRENT STATUS OF LEGAL REGULATIONS ON THE DEVELOPMENT OF THE CARBON MARKET IN VIETNAM AND SOME RECOMMENDATIONS

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Abstract: *Climate change causes significant harm and long-term consequences. Vietnam is considered one of the most severely affected countries by climate change. Recognizing the serious impact, the Vietnamese government has taken important early steps, such as participating in the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. It has made strong commitments to the international community to prevent climate change at the United Nations forums on Climate Change (COP). Additionally, Vietnam has implemented related policies to reduce greenhouse gas emissions and prevent climate change, building a carbon market in Vietnam step by step. However, while implementing these related policies, Vietnam has encountered many obstacles. Therefore, analyzing and assessing the current status of legal regulations to provide recommendations for the future is necessary.*

Keywords: *Carbon market, Climate Change, Greenhouse gas emissions, Vietnam.*

1. THE NECESSITY OF DEVELOPING A CARBON MARKET IN VIETNAM

Climate change is considered one of the biggest challenges to human development and survival in the 21st century. According to assessments by the Intergovernmental Panel on Climate Change (IPCC), the main cause of global climate change is the excessive emission of greenhouse gases from human socio-economic activities. To address and limit global temperature rise, the United Nations Framework Convention on Climate Change (UNFCCC) was signed by 155 countries at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. The goal is to stabilize greenhouse gas concentrations in the atmosphere at levels that prevent dangerous human interference with the climate system. Since then, reducing greenhouse gas emissions has been a main

topic of negotiation at the Conference of the Parties to the UNFCCC (COP).

A historic international framework was adopted at COP21 in 2015 at Paris (the Paris Agreement). The main goal of the Paris Agreement is to limit global warming to below 2°C compared to the pre-industrial period and to continue efforts to keep the temperature rise at 1.5°C. Therefore, each country must develop its route to meet this global goal by submitting its Nationally Determined Contributions (NDC). These NDC are evaluated every five years, and countries are encouraged to enhance the quality of these reports over time and through low-emission development strategies.

Recognizing the importance of reducing global greenhouse gas emissions and their impact on the nation's socio-economic development, Vietnam has supported the UNFCCC and actively participated in related legal agreements to mitigate climate change.

Specifically, Vietnam signed the Climate Convention 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 implementing the Climate Convention and Kyoto Protocol. Vietnam was one of the countries that signed the agreement at COP21. By COP26, Vietnam committed to reducing methane emissions by 30% by 2030 and achieving carbon neutrality, and phasing out coal by 2050 (Viet Nam, 2022)^{8,15}]]. "issued":{"date-parts":[["2022"]]}}, "schema":"https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} . Vietnam has developed many mechanisms and policies to reduce emissions and prevent climate change to fulfill these commitments, including establishing a carbon emission market.

2. ELEMENTS IN THE CARBON MARKET

2.1. Goods on the Market

In the carbon market, two types of goods are traded:

Greenhouse Gas Emission Quotas:

These are the maximum amount of greenhouse gases that an emission unit is allowed to emit into the environment within a certain period. The Ministry of Natural Resources and Environment allocates these quotas to facilities listed as requiring greenhouse gas emission inventory.

Carbon Credits: A carbon credit represents the right to emit one ton of carbon dioxide (CO₂) or an equivalent amount of another greenhouse gas (CO₂eq). One ton of CO₂eq is considered one carbon credit, the trading unit in the carbon or carbon credit market. According to the Environmental Protection Law 2020, carbon credits are tradable certificates representing the right to emit one ton of CO₂ or its equivalent. These credits, certified by the Ministry of Natural

Resources and Environment, are traded on the carbon credit exchange and are created from domestic and international credit-generating programs or projects.

Carbon credits or quotas are a type of license allowing the holder to emit a specified amount of CO₂ or other greenhouse gases (CH₄, NO₂). Each business or production facility has a set quota for greenhouse gas emissions. If their emissions exceed the allowed limit, they must purchase additional carbon credits to avoid violating environmental protection regulations. Conversely, if actual emissions are lower than the limit, the facility can sell unused carbon credits to others.

The carbon market is where transactions involving buying and selling carbon credits occur between companies, entities, organizations, or countries. It is a mechanism that creates resources to promote greenhouse gas emission reduction and transition to a carbon-neutral economy.

2.2. Market Participants

According to Clause 1, Article 5 and Article 16 of Decree 06/2022/ND-CP, the entities participating in the carbon market are as follows:

- Facilities listed in the categories of sectors and facilities emitting greenhouse gases that are required to conduct greenhouse gas inventories, as stipulated by the Prime Minister.
- Organizations participating in implementing mechanisms for exchanging and offsetting carbon credits domestically and internationally per the laws and international agreements to which the Socialist Republic of Vietnam is a party.
- Other organizations and individuals related to activities involving investing and trading greenhouse gas emission quotas and carbon credits in the carbon market.

2.3. Organization of the Market

The centralized carbon market organizes carbon trading based on legal regulations and countries' commitments in international conventions, agreements, and programs to achieve greenhouse gas reduction goals. When participating in this market, organizations must comply with the goals committed under mandatory national, regional, or international carbon reduction regulations to reduce CO₂ emissions. The centralized carbon market operates under two types of mechanisms.

First, the "Cap and Trade" mechanism is the most common centralized market type. The process works as follows:

- **Cap Process:** The government establishes a greenhouse gas emission quota system for production units with emissions, where each unit can emit a certain amount of CO₂ or equivalent. Through this process, countries can limit the total amount of CO₂ emitted into the environment.

- **Trade Process:** Production units emitting more than the allowable quota may be subject to high taxes or required to purchase additional quotas. Units that do not use up their emission quotas can accumulate them as carbon credits and sell or exchange quotas through the carbon market. In these markets, regional, national, and international government organizations issue the maximum carbon emission limits for businesses and domestic industries. Each allowable emission (or emission permit) typically allows the emission of one ton of pollutants like CO₂. These permits are then traded on the secondary market, with prices determined by supply and demand. For example, a company that exceeds its allocated emissions may seek to purchase additional emission credits from a company with actual emissions below the limit.

Second, the baseline-and-credit system, where the baseline emission level, i.e., the target level set by the regulatory authority,

is determined based on historical data and environmental objectives. This baseline is established based on units that have complied in the past, and permits are issued to units that have reduced emissions below that level. Units emitting more than the baseline are not necessarily penalized but will not receive carbon permits. Countries like China and Australia have utilized baseline-and-credit systems for emission reduction fund initiatives.

2.4. Market Monitoring and Management

Developing the carbon market and managing carbon credit exchanges and offset mechanisms are crucial solutions for achieving greenhouse gas emission reduction goals at a reasonable cost, promoting the development and application of low-emission technologies, enhancing business competitiveness, and increasing income for people participating in greenhouse gas reduction projects.

Carbon credit management involves developing and implementing regulations on creating and exchanging carbon credits, whether voluntarily or to offset greenhouse gas emission quotas. This forms the basis for developing the domestic carbon market and participating globally. The exchange, trading, and reduction of greenhouse gas emissions must ensure the national greenhouse gas emission reduction goals and balance the interests of the state, the people, businesses, and participating partners.

3. CURRENT STATUS OF LEGAL BASES FOR BUILDING THE CARBON MARKET IN VIETNAM

On November 21, 2012, the Prime Minister promulgated Decision No. 1775/QĐ-TTg approving the Project for the Management of Greenhouse Gas Emissions and the Management of Carbon Credit Trading Activities on the World Market,

which included implementing “Nationally Appropriate Mitigation Actions” (NAMAs) and set the requirement that NAMAs be implemented in a measurable, reportable, and verifiable manner (MRV) (Decision No. 1775/QĐ-TTg, 2012) (Decision No. 896/QĐ-TTg, 2022). The main legal bases that have been promulgated in Vietnam to concretize the carbon emissions market gradually include:

Resolution 24-NQ/TW, dated June 3, 2013, of the 11th Central Executive Committee, affirmed that climate change is a global issue and a severe challenge for all of humanity in the 21st century. Proactively responding to climate change, enhancing resource management, and protecting the environment are particularly important issues that have significant impact and interplay, jointly determining the country’s sustainable development. These are the foundation and prerequisites for formulating strategies and policies for socio-economic development, ensuring national defense, security, and social welfare. This resolution emphasized the need to investigate, inventory, and develop route and implementation plans for greenhouse gas emission reductions appropriate for each sector, field, and locality. It also promoted activities to reduce greenhouse gas emissions suited to the country’s conditions, based on financial and technological support from other countries and international organizations; it also aimed to develop the domestic carbon credit market and participate in the global carbon market. The target set was to reduce greenhouse gas emissions per unit of GDP by 8-10% by 2020 compared to 2010 (Resolution 24-NQ/TW, 2013).

The Government’s Action Program to implement Resolution No. 24-NQ/TW, the National Strategy on Climate Change,

the National Strategy on Green Growth, and Resolution No. 93/NQ-CP approving the Paris Agreement on Climate Change highlighted the establishment of a carbon market aimed at developing a comprehensive emission trading mechanism based on market mechanisms. (Resolution No. 93/NQ-CP, 2016)

The Plan to Implement the Paris Agreement (Decision 2053/QĐ-TTg dated October 28, 2016) outlined greenhouse gas emission reduction tasks to implement the Paris Climate Agreement, divided into two phases: 2016-2020 and 2021-2030. These tasks outlined related to emissions reduction in key sectors such as energy, transportation, and agriculture include an important initiative: “Establishing and developing a domestic carbon market and other cooperative mechanisms for reducing greenhouse gas emissions under Article 6 of the Paris Agreement. This will be piloted in sectors with potential” (Decision 2053/QĐ-TTg, 2016).

The Environmental Protection Law No. 72/2020/QH14: For the first time, it introduced provisions on the organization and development of a domestic carbon credit market (Article 139), which includes the organization and development of a domestic carbon market as part of the greenhouse gas emissions reduction efforts. The law also stipulates that “The domestic carbon market consists of activities related to the exchange of greenhouse gas emission quotas and carbon credits obtained from the exchange and offsetting mechanisms of carbon credits, both domestic and international, under legal regulations and international treaties to which Vietnam is a party.” The National Assembly has tasked the Ministry of Finance, in collaboration with the Ministry of Natural Resources and Environment and other relevant ministries and agencies, with

establishing the domestic carbon market (No. 72/2020/QH14, 2014).

The most recent is Decree No. 06/2022/ND-CP: This decree provides detailed regulations on reducing greenhouse gas emissions, protecting the ozone layer, and establishing and developing the carbon credit market under Article 139 of the Environmental Protection Law 2020, which states: “The exchange of greenhouse gas emission quotas and carbon credits shall be conducted on the carbon credit exchange and the domestic carbon market” (Decree No. 06/2022/ND-CP, 2022). The decree outlines the development roadmap and timeline for the domestic carbon market. The roadmap is expected to be divided into three phases:

- Phase 2023-2024: Establishing the initial legal framework to develop the proposal.

- Phase 2025-2027: Pilot trading period on the carbon market.

- By 2028: Official operation of the carbon market and connection with carbon credit exchanges in the region and the world.

Accordingly, on January 18, 2022, the Government issued Decision No. 01/2022/QĐ-TTg, which stipulates the list of sectors and facilities required to inventory greenhouse gases, including 1,912 facilities that will participate in the domestic carbon credit market.

With the documents that have been issued, it can be seen that the carbon market is gradually taking shape, enhancing compatibility with international carbon credit pricing mechanisms, creating opportunities for linkage with global and regional carbon credit markets, and improving the competitiveness of Vietnamese products in international markets. The carbon credit market that Vietnam aims to build is

compulsory. Enterprises will be regulated on greenhouse gas emissions. If they exceed the quota, they may purchase additional carbon credits on the mandatory market or a small portion from the voluntary market for offsetting. This mechanism also creates resources to promote developing and applying low-emission technologies, moving towards a carbon-neutral economy, and encouraging enterprises to invest in technology transformation to reduce carbon emissions in production processes. (Luu Quoc Dat et al, 2024).

4. RECOMMENDATIONS FOR THE DEVELOPMENT OF THE CARBON MARKET

Building and Completing the Legal Framework:

The government needs to develop and issue regulations on state management of carbon credits, including regulations on auctions, transfers, loans, repayments, and the revocation of quotas. A legal framework for organizing and operating carbon credit trading platforms should also be established. A financial management mechanism for the carbon credit market's activities should also be developed. Regulations on the procedures and techniques for measuring, reporting, and verifying greenhouse gas emission reductions must be issued.

The ministries, including the Ministry of Industry and Trade, Ministry of Transport, Ministry of Construction, Ministry of Agriculture and Rural Development, and the Ministry of Natural Resources and Environment, should urgently issue sectoral greenhouse gas emission reduction plans by Government Decree No. 06/2022/ND-CP and organize implementation to ensure that the commitments under the Nationally Determined Contributions (NDC).

Relevant ministries and local authorities need to coordinate with related agencies to advise competent authorities on organizing negotiations, signing, and implementing agreements or contracts with international partners on carbon credit transfers and greenhouse gas emission reduction results in their management fields, ensuring the achievement of emission reduction targets according to the NDC. They also need to assess the readiness of certain sectors to participate in the carbon market.

Organizing the Market Operation:

Ministries must quickly establish goods in the carbon market by allocating quotas and carbon credits to relevant entities. The Ministry of Natural Resources and Environment should urgently research and establish a national carbon credit registration system, manage programs, projects, and activities to reduce greenhouse gas emissions, and create carbon credits for piloting and developing the domestic carbon market and international exchange. Furthermore, the organizational structure, human resources, technical infrastructure, and management, inspection, and monitoring mechanisms for the market must be improved.

Raising Awareness and Enhancing Capacity:

To raise awareness about issues related to the carbon emissions market, the Ministry of Information and Communications should collaborate with relevant ministries to direct news agencies, radio, and television stations at the central and local levels to develop and implement media programs on national greenhouse gas emission reduction goals, Nationally Determined Contributions (NDC), carbon credit creation methods, voluntary carbon market participation, and the

organization and development of a compliant carbon market. Additionally, the government should have policies to support enterprises in developing information systems related to disseminating information about the carbon emissions market.

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