

# The Legal Nature of Emission Rights – International Experience and Vietnamese Law

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## **Abstract**

*The carbon emission rights market effectively controls emissions activities and develops the economy. The market's stability will depend on determining the legal nature of the objects allowed to circulate in that market. However, carbon trading markets worldwide have yet to reach a consensus in determining the legal nature of carbon emission rights. The article shows that national laws have different approaches to the legal nature of carbon emission rights in one of the following cases: (i) Just an administrative tool; (ii) Is an object of ownership, which is divided into goods or financial instruments; (iii) Is subject to ownership rights but is limited; (iv) Determined flexibly. The article reviews international experience in determining the legal nature of emission rights. Based on that, the article explores the factors determining the legal nature of carbon emission rights. Specifically, the paper determines that the right to emit carbon qualifies as an asset and should be classified as an intangible asset.*

**Keywords:** Emission Rights, Carbon Market, Emission Rights Market

## **INTRODUCTION**

Vietnam is a member of at least three basic international treaties on climate change, including the Framework Convention on Climate Change, the Kyoto Protocol, and the Paris Agreement. Vietnam signed the Framework Convention on Climate Change on June 11, 1992, and ratified it on November 16, 1994. Vietnam signed the Kyoto Protocol on December 3, 1998, and approved it on September 25, 2002. Although there is no obligation to commit to reducing greenhouse gas emissions under the Kyoto Protocol, Vietnam, and other developing countries have several everyday obligations to contribute to combating climate change. Regarding the Paris Agreement, along with more than 170 countries, Vietnam joined in April 2016 and committed to implementing the NDC (Ministry of Natural Resources and Environment of Vietnam, 2020).

Vietnam's NDC includes two main components: greenhouse gas emission mitigation and climate change adaptation. Vietnam's greenhouse gas emissions reduction target is 15.8% unconditionally (with domestic resources) and 43.5% conditionally (with international support) by 2030 compared to the business-as-usual development scenario. Based on this national target, specific greenhouse gas emission reduction targets and measures were developed for five main sectors: energy, transport, industrial processes, construction, and waste. Accordingly, large-emitting enterprises in these five industries must inventory greenhouse gases and implement measures to reduce greenhouse gas emissions (WTO Center, 2023).

At the 27th Conference of countries participating in the United Nations Framework Convention on Climate Change at the end of 2022 (COP27), Vietnam identified the carbon market as one of the practical carbon pricing tools for climate change with the implementation of activities to reduce greenhouse gas emissions, contributing to the commitment to reduce greenhouse gas emissions ((Nguyen Van Minh, 2023).

However, an appropriate and compatible legal framework for emission rights markets must be established to achieve their goals. It is not easy for national laws to affirm the legal nature of emission rights. Emission rights differ from conventional assets because they are products created through environmental regulation, resulting in specific policies. Although they are a product of such policy, emission units are increasingly used and must be regulated by legal areas other than administrative law, which must consider regulations on the financial market, accounting, and tax regulations. In addition, emission units must comply with national laws and the

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mechanisms of international treaties. Determining the legal nature of emission rights is still an issue that needs to be clarified in the current period.

## **Overview Of Carbon Emission Rights and The Role Of Determining The Legal Nature Of Emission Rights**

### **Overview Of Carbon Emission Rights**

According to the definition of the International Financial Reporting Interpretation Committee (IFRIC3), emission rights are the government granting the right to emission participating units to emit a certain level. Program participants can buy and sell these emission rights. Therefore, there needs to be a market for trading emission rights (Bradbury, 2007).

The carbon emission rights trading market was formed to control total emissions and distribute emission rights. Establishing the market is done through two steps; the first is designing emission limits (also known as determining the total amount of emissions), followed by allocating emission norms, also known as assigning emission rights (Lina Zhang, 2020).

In the first step, the state agency will set an overall limit on the emissions allowed to be released during a specific period. This requires the ability to quantify carbon emissions systematically, that is, correctly determine the total amount of carbon emissions by the earth's absorption capacity. According to estimates, global carbon emissions at safe concentrations will be 450-550 ppm. The carbon sink's absorption rate is capped unchanged between 2006 and 2050, at a maximum of 127.577 million tons of CO<sub>2</sub> (Yang, 2014). However, countries worldwide have yet to sign specific carbon emission quota agreements, so each country's carbon quota has not been allocated internationally but will be determined by each country.

In the second step, state agencies allocate emission norms and permits for each discharger. Polluting entities must have sufficient permits to cover the emissions they emit. This allocation limit is generally called an emission right, an emission limit, or a discharge permit. Carbon emission rights represent the maximum amount of carbon an entity can emit. Dischargers can be allocated free emission rights by the state as recognized in the Kyoto Protocol or must pay through the auction method (Wang Sufeng, 2014). Each discharge permit is typically measured as the right to discharge one ton of pollutants such as CO<sub>2</sub>e. From an economic perspective, this can be called the primary market, where specific emission rights are formed.

Carbon emission rights can be traded, also known as the secondary emission rights market. This is because if a discharger does not use up the emission limit in their license, they can sell the remaining discharge limit to another entity that has used it. Emissions are granted, but there is still a need to continue emitting emissions (Huiqin, 2019). Trading carbon emission rights is not fundamentally different from the general financial trading market. It must also establish factors such as trading location, transaction type and method, registration, opening accounts, transaction procedures, and payments.

Currently, at least 29 emission rights trading markets are deployed globally (World Bank, 2021). However, after many years of operation, the legal nature of emission rights still needs to be agreed internationally. In the EU, the European Court of Auditors has required clearly defining the legal nature of emissions rights to ensure the safety of emissions markets (European Court of Auditors, 2015). Determining the legal nature of emission rights serves the following requirements: (i) Applying laws appropriate to the legal nature of emission rights; (ii) complying with accounting and tax regulations; (iii) protecting emission rights from acts that are the subject of criminal offenses; (iv) consider the impact on liquidity in the emission rights trading market; (v) resolve the issue of whether emission rights can be used as collateral.

The legal nature of emission rights needs to be considered by the parties involved, as those participating in the trading market want to be recognized as having absolute ownership of the right to emit emissions. At the same time, the agency's State management is more concerned with flexibility, meaning the possibility of policy modifications regarding emission rights (Mace, 2005).

## **The Role Of Determining The Legal Nature Of Emission Rights**

Emission rights differ from conventional assets because they are products created by environmental policies. Emission rights exist for a specific public policy purpose and may cease if that policy changes. Although they are a product of policy, emission rights are traded on financial markets. As a product of administrative decisions, emission rights are transferable and are affected by market laws, including the laws of supply and demand.

In addition, although created by national law, emission rights are also governed by international law. Therefore, determining the legal nature of emission rights is relatively complex and diverse. The different national laws regulating the legal nature of emission rights have created a need for more consensus in the international emission rights trading market.

Determining the legal nature of emission rights is essential because of the following contents:

The legal nature of emission rights will determine the substantive law applied to regulate the emissions trading market and the agency with management and enforcement authority. For example, if we consider emission rights as a common good, the applicable law will be commercial and civil regulations. Meanwhile, if we believe the right to discharge as a financial instrument, the applicable law will be regulations on finance and securities;

Decide on the application of accounting and tax regulations;

Determine whether emission rights can be the subject of a crime;

Resolve issues related to liquidity in the market;

Resolve the possibility of emission rights becoming collateral or not;

Serves as a basis for determining the legal nature of other products in the environmental resource market.

The researchers assessed that it would be coercive to prevent property-specific emissions rights, even if the law stipulates this. Fundamentally, asset regimes depend on the relative costs and benefits of asset protection in a particular national context (Carlson, 2001). Differences between countries, or even regions within a country, come from different factors, such as cultural differences and legal traditions (Krygie, 1986). Furthermore, today's world has two major legal systems: the standard law system and the civil law system. However, studies in most cases consider emission rights subject to ownership rights (Pei, Jiang & Zhang, 2009).

## **International Experience In Determining The Legal Nature Of Carbon Emission Rights**

### **The US Views Emission Rights As Mere Administrative Permits**

The emission rights trading market in the United States developed very early, the most fundamental being the Acid Rain Program and the NO<sub>x</sub> Program. Although these two emission rights trading systems reflect the same US legislative perspective in considering the legal nature of emission rights in refusing to record ownership rights.

### **Legal Nature Of Emissions Rights Under The Acid Rain Program**

The Acid Rain Program was created under Title IV of the Clean Air Act Amendments (CAA - 42 USC) of 1990 [16]. This is the first US federal law to introduce a large-scale emissions trading system, marking a breakthrough in the emissions trading system [OECD, 1999]. The CAA regulates SO<sub>x</sub> and NO<sub>x</sub> emissions limits from specific power plants in 48 US states (42 USC, Sections 7651c-7651d). Owners or operators of fossil fuel-burning equipment must obtain an emissions permit from the US Environmental Protection Agency (EPA) for each location or source where the units operate (42 USC, §7651g). Each permit allocates several licensed emissions allowances to that site, allowing the holder to emit one ton of SO<sub>x</sub> (42 USC, Sec. 7651g(a), and 7651a(3)). The CAA provides that these allowances may be bought and sold like any other commodity (42 USC, §7651b(b)). Multiple owners can hold a unit, which will then appoint a representative to distribute emissions and receive proceeds from transfer transactions. Section 403(f) of the 1990 CAA Amendments clearly defines the legal nature of emission allowances:

*"A grant allocated under this subchapter is a limited authorization to emit sulfur dioxide under the provisions of this subchapter. Such grants do not constitute property rights. Nothing in this subchapter or any other provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. Nothing in this section relating to subsidies shall be construed to affect the application or compliance with any other provisions of this chapter concerning the affected entity or source, including the provisions regarding applicable National Ambient Air Quality Standards and State implementation plans."*

According to the above regulations, the legal nature of emission rights under the Acid Rain Program is explicit: These emission rights do not constitute property rights. Instead, an emission allowance is defined as a "limited permission to emit sulfur dioxide." This long and far-reaching provision needs to be viewed in the context of US statutory law, representing an attempt to anticipate any litigation that might arise from the ownership of emissions rights. US lawmakers are concerned that as owners of subsidies, companies will not accept the withdrawal or devaluation of emissions rights, even if this is done for environmental purposes.

If emission rights constitute proprietary assets, the government will have to compensate somewhat for the recovery of these assets. To maintain the flexibility of the pollution reduction system, regulators should have the authority to proactively modify the trading system by increasing or canceling emissions quotas when necessary without incurring liability. In the final version of the Act, through the explicit exclusion of property rights and the EPA's explicit authorization to terminate or limit subsidies, Congress allowed the EPA the flexibility it needed to execute the program. From here comes a legal consequence: CAA excludes disputes and legal claims over emission rights if these disputes are based on ownership rights. The rule also creates the authority of the United States, at any time, to proactively interfere with emission rights holders, including by terminating or creating restrictions on that emission right.

Although Article 403 clearly defines that emission rights do not create property rights, it still allows for the transfer of emission rights. It allows the holder to enjoy all the utilities the law grants full possession of a real property. These utilities help exclude all other subjects from illegally intervening in their possession, use, and disposal of their emission rights.

Several disputes in practice illustrate the provisions of the CAA. In the 1996 lawsuit, Ormet Company sued Ohio Power Company, demanding 89% of the emissions quota that Ohio was granted (for the operation of Ohio Power's Kammer generating station). This comes from the fact that Ormet and Ohio Power previously had an Electric Power Contract in which Ormet paid a portion of the operation and maintenance costs of the Kammer plant. Therefore, Ormet argued that it was entitled to a proportionate share of the emission quotas granted to the Kammer plant. The court's final ruling focuses on two main contents. First, the court interpreted Congress's intent behind the provisions of the CAA to determine whether property rights could apply. The court held that Congress had explicitly denied treating emissions rights as property. The legislature's intention for emissions quotas is to allow emissions quotas to "be bought and sold like any other commodity." The court also held that "in establishing a system of marketable emissions quotas, Congress intended to resolve disputes between subsidy holders like private commercial disputes. Congress did not intend for EPA to participate in resolving subsidy disputes." This shows that although the dispute over emissions quotas may not be considered a dispute over property and ownership, it is still a civil dispute and, therefore, still falls under the court's jurisdiction (United States Court of Appeals, 1996a).

Based on the above arguments, the court concluded that, under the CAA, the contract between Ormet and Ohio Power did not make Ormet a joint owner of the Kammer plant. Therefore, Ormet was not entitled to a proportionate share of the emission quota allocated to the power plant (United States Court of Appeals, 1996b).

This has led some researchers to describe §403(f) as "based on a confusion between ownership of something and the thing itself" (Daniel, 1999). The CAA regulations clearly define that emission quotas do not create property rights but allow free transfer as a utility type for those allocated emission quotas. This utility does not mean recognizing ownership of emission rights but eliminating the intervention of other individuals and organizations (except the state) concerning emission quota holders.

In the dispute between Kaiser International and South Coast Air Quality Management, the court cited section 40710 of the Health and Safety Code, stating that "a certificate evidencing ownership of approved emissions reductions shall not constitute instruments, securities or any other form of property" (Padis, 2011). Similarly, the Florida Administrative

Code provides that a natural resource or environmental permit "shall not convey to the permittee or create in the permittee any property rights or interest in real property" (State of Florida Division of Administrative Hearings, 2011).

### **Legal nature of emissions rights in the Ozone Transport Commission (OTC) NO<sub>x</sub> Budget Program**

Another model for the US emissions rights trading system is the NO<sub>x</sub> Trading Program. In September 1994, the OTC adopted a Memorandum of Understanding to achieve regional reductions in NO<sub>x</sub> emissions. This reduction complements previous US efforts to control NO<sub>x</sub> emissions. By signing the Memorandum of Understanding, the states commit to adopting regulations to reduce summertime NO<sub>x</sub> emissions in each state's area to achieve national air quality standards for the ozone layer (United States EPA, 2021).

To achieve this, the OTC states have developed a model rule that identifies critical elements that should be kept consistent in regulations for all participating states. The model rule (also known as the model law) defines emission authorization: "*Permission means a limited authorization to emit one ton of NO<sub>x</sub> during a specified or arbitrary control period. Any control period after that is subject to the terms and conditions of use of the stored allowance prescribed by this rule. All allowances are allocated, transferred, or used in full. To determine the complete allowance, the allowance is rounded down for decimals less than 0.50 and rounded up for decimals greater than 0.50*" (United State EPA, 1999).

Based on this model law, specific differences will exist in each state's legal details. For example, New York Environmental Conservation Law Article 227-3.3(b)(6) defines a NO<sub>x</sub> allowance as "*a limit on the right to emit one ton of NO<sub>x</sub> within a specified control period or any other control period after that. The grant shall not constitute a form of security or other property.*" This provision shows that OTC member states have been careful not to co-opt the term "right" to avoid the inference that the emissions quota creates property rights for its holders. The New York state definition emphasizes this by noting that the right to emit NO<sub>x</sub> "*does not constitute a security or other form of property.*" The definition of emission rights in the NO<sub>x</sub> Program echoes the legal position stated in the Acid Rain Program.

In addition, the Model Rules have a definition related to emission quota transfers, according to which transfer, in this case, means transfer from one person to another by any means, including but not limited to purchases, exchanges, auctions, or gifts by the procedures established in Section (8) of the Model Rules, to be made by submitting a transfer request to the Administrator of the Exchange Program NO<sub>x</sub> subsidy service (NATS) (US EPA, 1997). Thus, emission rights can be "*purchased, exchanged, auctioned or given as a gift*" if the "*procedures established in Section (8) of this rule are followed.*"

The NO<sub>x</sub> program is also notable for the following two regulations:

*First*, although NO<sub>x</sub> amounts may accumulate, they cannot be used to push emissions above the legal limits of other federal or state programs. This is due to the highly localized impact of low-level NO<sub>x</sub>, significantly different from the effects of CO<sub>2</sub>, which does not constitute a local pollutant. This regulation is intended to avoid a situation where one emission source receives enough permits to pollute too much. Emission rights cannot be licensed for legal emissions but can only be traded on the carbon market.

*Second*, all transfer activities must occur by the procedures prescribed by law and confirmed by the Environmental Management Agency (EPA). Thus, the state maintains relatively tight control over emissions and emission rights.

### **Comments On US Law In Determining The Legal Nature Of Emissions Rights**

The market is where buying and selling activities take place. Hence, assigning ownership rights to the objects transacted on the market is very important because, in essence, ownership must be present to transfer. However, the United States is concerned that if emission rights are determined to be subject to ownership, the state's allocation, change, withdrawal, or adjustment of future emission quotas will face many difficulties, primarily when the carbon trading system has been operating stably for a long time. The following two reasons explain why emissions rights are not recognized as property rights in the United States (Daniel H, 1999):

Firstly, the most significant purpose of emission rights trading programs is to ensure that the amount of emissions is consistent with the absorption capacity of the natural environment. The most important goal is to

reduce pollution. When discussing the rules, lawmakers initially intended to regulate emissions rights as property rights. This created concern among various states' environmental community and regulatory agencies (Jeffrey, 1999). Suppose it is determined that emission rights are the subject of ownership rights in case of changes in environmental policy. In that case, the state can only revoke these emission rights after providing adequate compensation. To the owner, as well as being revoked only under certain conditions (Palazzolo, 2022).

Meanwhile, the pollution control system needs to operate flexibly, based on the actual situation in each period, and management agencies must have the right to amend the trading system in many ways, such as increasing the number of emission rights or canceling emission rights, without incurring costly compensation liability. Thus, as passed, the final version of the Act explicitly excluded that the right to emit is subject to ownership. The US Congress allowed the EPA (the emissions market regulator) the flexibility to implement its environmental goals.

Second, if not a type of property, emission rights are essentially just an administrative tool, reflecting the state's adjustments in implementing environmental policy. However, the United States still recognizes that some form is needed to assert and protect the rights of emission quota holders, promote stability, and develop the emissions trading market. Therefore, the United States still recognizes emissions rights transactions in the market, which are quickly done through a trading system managed by registries.

In the United States, the holding of emission quotas by subjects does not eliminate the right of the state to intervene. However, it means protecting the rights of the holder in the relationship with the subjects. Other on the market. Therefore, not recognizing the property nature of emissions quotas does not create any difficulties for the holders in exploiting its values but does have implications for state agencies when it is necessary to adjust environmental policy in the future.

### **The View That Emission Rights Are Subject To Ownership Rights**

The transferability properties helped emission rights become the subject of ownership under the laws of some countries (Yandle, 1999). Many scholars also believe that this decision is appropriate (Cole, 2000). Studies that consider emission rights as assets are based on neoclassical economic theory, finding that they have the basic properties of an asset, including transferability, permanence, and allocation based on the intended use (Rolph, 1983). Viewing emission rights as assets helps increase efficiency in protecting environmental resources, reduce transaction costs, and encourage subjects to participate in the emissions market.

Although emission rights are considered an object of ownership, national laws also have different ways of classifying them.

### **Emission Rights Are Property.**

The judgment of the High Court of England and Wales in case number HC10C00532 between Armstrong DLW GMBH and Winnington Networks Ltd dated January 11, 2012, contained an attempt to define the legal features of generation quotas based on common law and Directive 2003/87/EC (Royal Court of Justice, 2023).

The characteristics of the EUA (as a product of the EU Emissions Trading Scheme) considered in the judgment mentioned above are essential for determining the legal nature of emissions rights. The EUA exists only in electronic form; it can be transferred automatically by electronic means in the registration system. It has economic value because it can be used to avoid emissions violations and because there is an active commercial market for EUAs. Each EUA has a unique number and can be located by reference to that number.

Judges view EUA as property by pointing out its characteristics. *"It can be defined as the totality of rights and benefits conferred on the holder under the ETS. It is identifiable by third parties; it has a unique reference number. Third parties can assume it since the EUA is transferable under the ETS. It is permanent and stable, as it continues to exist in the registered account until it is transferred for filing or sale, and can exist from year to year."* According to the ruling above, EUA should be considered an *"intangible" asset*" (European Union Emissions Trading System, 2012).

## Emission Rights Are Derivative Financial Instruments

As a member state of the EU ETS, Germany started a carbon trading market in 2005. Emission rights are identified as a financial instrument in Germany in Article 21 of Germany's Submission to the EU ETS (European Commission, 2021). In the Financial Markets Instruments Directive (MiFID II), financial instruments are assets that can be traded and are generally divided into two categories, including cash instruments and derivatives. Among them are "*derivatives related to securities, currencies, interest rates, emissions allowances or some other basis*" (Financial Conduct Authority, 2018).

The accounting treatment in companies' annual financial statements is also listed under Article 21 of MiFID II: "*In both commercial and financial law, emissions allowances are assigned to current assets in the form of intangible. Allowances granted free of charge will be rated at EURO in the tax balance sheet... Charged emission allowances will be capitalized at their purchase cost in the tax balance sheet and balance sheet commerce.*" This means that in Germany, in accounting activities, emission allowances are considered intangible assets, and their treatment depends on whether the entity receives them from state allocation activities or receives information from them through trading activities on the carbon market. Emission rights received from state allocations will not be subject to value-added tax (VAT). In contrast, trading emission rights on the secondary market will be subject to VAT at a tax rate of 19%.

## Emission Rights Are A Commodity

Spain is a typical country for defining emission rights as a commodity, as stipulated in Article 21 of the submission to the EU ETS [34]. For accounting purposes, emission rights will be accounted for as intangible assets. Spain will not charge taxes while businesses are allocated emission quotas from the state, but transactions on the secondary market will be subject to VAT. Meanwhile, France started its carbon trading market in 2005 and also follows the rules and regulations of the EU ETS. France clearly defines the legal nature of emission rights in Article L229-15 of the Environmental Code; emission rights can be defined as assets (The Official Journal of the French Republic, 2012).

The view of classifying carbon emission rights as inventory goods. The Federal Energy Regulatory Commission (FERC) requires the classification of carbon emissions rights based on the company's use of the rights (Federal Power Commission, 1973). If rights are used to offset greenhouse gas emissions, they must be recorded as inventories. Mortand Milne argues that the right to emit carbon must meet the preconditions to be considered a reserve good (Milne, 1996). The Mouvement des Entreprises de France (MEDEF), or the French Enterprise Movement, also claims that the right to emit carbon has the character of an inventory. However, inventory is usually tangible goods. The ultimate purpose of owning inventory is to sell it. Carbon emission rights are not comparable to inventories in nature.

## The View That Emission Rights Are Subject To Limited Ownership Rights

Viewing the right to emit as an object of limited ownership is the intersection between defining the right to emit as just an administrative permit and seeing the right to emit as an object of ownership. This stems from the fact that an emissions trading market is only sustainable if a balance is achieved between the regulatory flexibility required by regulators and the stability of property rights (Hahn, 1989). Defining emission rights as the subject of limited ownership helps create flexibility for the state to change regulations, ensuring the ability to adapt to future emissions needs.

The first emissions rights trading market was in Japan, launched in April 2010 under the Tokyo Metropolitan Government Emissions Trading Program (IMG ETS). The program stipulates that ownership of emissions rights will generally be recorded in at least two types of accounts: Compliance and trading accounts. Initially, the owner of emission rights will store these rights in a compliance account to ensure the correct implementation of emission obligations within the granted limits. Emission rights contained in this compliance account are not traded. After completing the emission obligation and being confirmed by the competent authority, the emitter can transfer the unused emission quota to a trading account. They have the right to transfer to the market [41].

On the accounting side, the Japanese Accounting Standards Board (ASBJ) issued a basic policy at its 199th meeting (April 9, 2010), requiring emission rights to be accounted for in fixed assets. In cases where emission rights are resold, the credit is accounted for in inventory (International Carbon Action Partnership, 2021).

### **The View Defines The Legal Nature Of Emission Rights Flexibly**

Norway is flexible in determining the legal nature of emissions rights. Norway needs to define the legal nature of carbon emission rights clearly. Different authorities will have their definitions for each management perspective. For example, the regulator considers the right to emit an immaterial right, while under the value-added tax law, the right to talk is regarded as a service. The accounting for emission rights depends on whether they are allocated for free or acquired through market trading. If this emission right is given free of charge from the state, it will be included in taxable income. Meanwhile, if the entity obtains the right to emit emissions through market trading activities, this amount will be subject to VAT at a tax rate of 25% (Chuwen, Shijie Liu & Xin Pa, 2018).

### **Vietnamese Law On Determining The Legal Nature Of The Right To Emit Carbon**

#### **Current Status Of Vietnamese Law On Determining The Legal Nature Of Emission Rights**

In the Law on Environmental Protection 2020, the right to emit carbon is mentioned according to the regulations on carbon credits in Clause 35, Article 4 as follows: "*Carbon credits are certificates that can be traded commercially and represent the right to emitting one ton of carbon dioxide (CO<sub>2</sub>) or one ton of carbon dioxide (CO<sub>2</sub>) equivalent*". Carbon credits are a form of expression of the right to emit carbon.

According to the provisions of Clause 2, Clause 3, and Clause 4, Article 139, Environmental Protection Law 2020, carbon emission rights will be allocated by the state to greenhouse gas emitters. Then, if the emissions facility does not use up its allocated quota, carbon emission rights will be traded on the domestic carbon market. Article 139 of Decree No. 06/2022/ND-CP on Greenhouse Gas Emission Reduction and Ozone Layer Protection stipulates that the domestic carbon market is expected to officially launch in 2028 after undergoing several activities, including pilot movement. Therefore, determining the legal nature of carbon emission rights is very important to ensure the implementation of transfer regulations and determine how to account for them and tax obligations.

However, according to current legal regulations, confirming the legal nature of the right to emit carbon in Vietnam is impossible. Article 105 of the 2015 Civil Code stipulates that assets are objects, money, valuable papers, and property rights. Assets are classified as real estate and movable property. According to the provisions from Article 110 to Article 114 of the 2015 Civil Code, emission rights cannot be objects. Emission rights are also not money according to the requirements of the Law of the State Bank of Vietnam.

Emission rights are also not valuable documents because they do not meet the criteria of Clause 1, Article 2, Circular 01/2012/TT-NHNN dated February 16, 2012, of the State Bank of Vietnam regulating rebates. Discount of valuable papers of the State Bank of Vietnam for credit institutions and foreign bank branches issued by the State Bank of Vietnam. Accordingly, "*valuable papers are evidence confirming the debt repayment obligation between the valuable paper issuer and the valuable paper owner within a certain period, interest payment conditions and other conditions*." Emission rights certificates only record the ability of the emitting entity to emit a certain amount of emissions legally and do not involve any debt repayment obligations. Therefore, emission rights are not valuable documents.

- Emission rights are also not securities. According to the provisions of Clause 1, Article 4, Securities Law 2019, Securities are assets, including the following types: (i) Stocks, bonds, and fund certificates; (ii) Warrants, covered warrants, share purchase rights, depository certificates; (iii) Derivative securities and other types of securities regulated by the government. Emission rights cannot be classified as ordinary securities (stocks, bonds, fund certificates, warrants, stock purchase rights). For derivative securities (option contracts, futures contracts, forward contracts), the Securities Law requires it to be determined based on the underlying asset. Clause 10, Article 4, Securities Law 2019 stipulates that the underlying holdings of derivative securities must be securities, stock indexes, or other assets according to government regulations to be used to determine



derivative securities value. Therefore, emission rights are not confined to derivative securities under current legal rules because the underlying asset is not a stock or stock index.

Although it is unclear whether emission rights are property, they can be traded on the carbon market. The transferable characteristic of emission rights creates a situation where emission rights are considered a type of commodity because "*buying and selling goods is a commercial activity, whereby the seller is obliged to deliver the goods and transfer ownership rights and receive payment; The buyer should pay the seller, receive the goods and take ownership of the goods according to the agreement*" (Clause 8, Article 3, Commercial Law 2005). Clause 2, Article 3 of the 2005 Commercial Law stipulates that goods include: (i) All types of movable property, including movable property formed in the future; (ii) Objects attached to land. This makes it difficult for emission rights to be recognized as a commodity.

In addition, there is no basis to confirm that emission rights are tangible or intangible assets. Although, in essence, emission rights can be traded but do not exist in physical form, they are more similar to intangible assets than tangible assets, as determined in Section 3.1 Valuation Standards Intangible assets issued together with Circular No. 06/2014/TT-BTC. Accordingly, intangible assets are assets that simultaneously satisfy the following conditions: (i) Have no physical form or can be contained in or on a physical entity, but the value of the physical entity is insignificant compared to the value of intangible assets; (ii) Can be identified and has tangible evidence of the existence of intangible assets (for example contracts, certificates, registration documents, computer floppy disks, customer lists, financial statements); (iii) Ability to generate income for owners; (iv) The value of intangible assets can be quantified.

However, the right to emit carbon can also be just an administrative permit granted by a state agency and, therefore, not subject to ownership. If the emission right belongs to a type of administrative license, the competent state agency can change and revoke this license. At that time, changing and revoking administrative licenses is not a change or revocation of assets.

## Reviews and Recommendations

There has yet to be a consensus on the legal nature of emission rights globally. Due to the intersection between administrative relations and economic relations, determining the legal nature of emission rights will be based on consideration of the following needs:

*First*, the goal of reducing emissions. Emission reduction targets affect the establishment of emission ceilings for allocation to emitters and the need to adjust emission norms. Each country can estimate emission reduction targets over different periods, and, combined with actual emission reductions, authorities can predict the need for changes to the regulatory nature of emission rights.

Second, there is a necessary level of flexibility in regulations on emission rights. How the legal nature of emissions rights is regulated in different countries reflects different degrees of flexibility in the state's regulatory capacity. In cases with a strong need for policy flexibility, authorities will be more likely to choose a legal nature of flexible mechanisms so that the state can proactively adjust quotas. Emissions.

Third, there is a need to develop an emissions trading market. Deciding the legal nature of emissions rights is a balance between state authority's flexibility and market participants' stability needs. If we choose the legal nature of emission rights as property subject to ownership, it will encourage market development rather than flexible regulation.

Although uncertainty exists regarding determining the legal nature of emission rights, holders must still provide a clear legal position. In this aspect, defining emission rights as assets subject to ownership is appropriate because this helps increase the stability of the emissions market, thereby promoting the market for trading emission rights.

In essence, emission rights have characteristics that meet the requirements of an asset in economics. Economics suggests that assets must fully satisfy competitiveness, durability, and connectivity (Fairfield, 2005). The following example succinctly expresses these three properties: "*If I pick up a pen, I have it, and you do not... If I put the pen down and leave the room, it is still there... And finally, You can all interact with the pen...*" (Vu, 2005). These characteristics were initially assigned to traditional tangible assets. Then, it is attached to intangible assets such

as intellectual property rights. Over time, these characteristics are used to consider ownership of virtual assets. These characteristics can also be referenced to view the asset nature of emission rights in the current period.

*First, emission rights are competitive. Competitiveness is a characteristic of traditional assets, allowing control of assets at any given time to just one person* (Fairfield, 2005). For example, a shoe can only be worn by one person; therefore, the shoe is competitive. By wearing shoes, the person wearing the shoe excludes all others from using it. The right to emissions may ensure competitiveness. When an emissions quota is granted to entity A, entity B cannot use these emissions allowances.

Second, emission rights are durable. Durability is also an inherent characteristic of traditional assets. Persistence keeps an asset unchanged, even when it is not in use. *"A parked car continues to exist, and at the end of the day, the owner will find the vehicle where he parked it"* (Fairfield, 2005). A user of remotely hosted email services, such as Gmail, may find messages stored in the "Inbox" persist for a long time, even though the email account is only used for a few minutes daily. If no emission activity is carried out, the emission rights holder remains the owner of that emission quota.

*Third, emission rights are interconnected. Connectivity allows one asset to influence or be affected by another person/asset* (Fairfield, 2005). The interconnectedness of emission rights is shown in the fact that the holder can carry out transaction activities on the carbon market.

Legally, emission rights also meet the characteristics of an asset, specifically:

First, assets are objects that can be owned. If they are intangible assets, people will have ways to manage and control their existence (Vu, 2005). In this case, it establishes the holder's rights by allocating emission quotas by a competent state agency.

*Second, the assets must be worth money* (Standing Committee of the National Assembly, 2023). The emission rights of a specific emitter can be valued in money according to valuation methods. This valuation is essential for accounting, tax-related activities, and operating carbon trading markets.

Third, that property can become the subject of a civil transaction. Article 116, 2015 Civil Code stipulates that *"a civil transaction is a contract or unilateral legal act that creates, changes or terminates civil rights and obligations."* Emission rights can become an object of civil transactions, demonstrated through trading emission quotas on the carbon market.

*Fourth, property is a concept with economic, social, and legal content to meet human needs* (Standing Committee of the National Assembly, 2023). The development of science and technology causes more and more new types of assets that differ from traditional ones. Therefore, recognizing emission rights as a type of asset is consistent with the laws of development.

Categorically, emission rights can be viewed as property rights. Article 115 of the 2015 Civil Code stipulates that property rights can be valued in money. Article 450 stipulates that in the case of buying and selling property rights, the seller must transfer documents and carry out procedures to transfer ownership rights to the buyer. The buyer must pay money to the seller. The time of transfer of ownership of a property right is when the buyer receives documents on ownership of that property right or from the time of registration of transfer of ownership if prescribed by law. Emission rights can be valued in money and transferred in carbon trading markets. Therefore, it is appropriate to classify emission rights as property rights.

Property law has long divided legal protections for tangible and intangible assets (Merges, 2000). This division is traditionally based on the fact that tangible assets derive value from their exclusivity and material usefulness. Meanwhile, intangible assets have value according to their information value (Worthington, 2007). Emission rights in carbon markets should be classified as intangible assets. On the one hand, the right to emit carbon does not exist in physical form.

On the other hand, it is developed, owned, and traded to serve the operation of the carbon market. Licensing by a competent state agency is not simply an administrative permit but an essential aspect for emission rights

to become an asset protected by law (Patterson & Lindberg, 1991). Licensing is a popular way to form and manage intangible assets, not just for carbon emission rights (Ramu, 1997).

Viewing carbon emission rights as a property right helps owners become more aware of using and trading emission rights in the market. During the transaction, the owner has the right to possess, use, and dispose. This dynamic is consistent with the overall goals of carbon markets.

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