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Draft Regulation on Carbon Crediting and Offsetting: Fundamental Principles of the TR KDS and the Framework of the National Credit System

The impacts of climate change are no longer confined solely to the environment and ecosystems; they have become a reality affecting the entire economic structure, from production and supply chains to foreign trade and energy costs. Extreme temperatures, irregular precipitation patterns, prolonged drought periods, and wildfires have compelled countries to move beyond voluntary climate measures toward binding legal regulations. The Paris Agreement constitutes the global framework of this transformation, encouraging countries both to set national emission reduction targets and to establish carbon markets.

This transformation entered a new phase with the Climate Law No. 7552, which entered into force in 2025. By providing a comprehensive structure encompassing emission reduction, adaptation policies, permitting processes, audit mechanisms, and financing instruments, the Law placed Türkiye's climate policy on a legal footing for the first time. In order to operationalize the carbon management framework defined under the Law, it was envisaged that this structure would be completed through secondary legislation. Accordingly, draft regulations constituting the two main pillars of the carbon market and complementing each other were prepared and opened for public consultation:

1. **Draft Regulation on the Türkiye Emissions Trading System (TR ETS)** – Mandatory carbon pricing and allocation system
2. **Draft Regulation on Carbon Crediting and Offsetting** – National carbon credits, voluntary markets, and international carbon transactions

In a previous article, the draft ETS regulation was examined. This article focuses on the second pillar, namely the new credit mechanism established under the Türkiye Carbon Offsetting System (TR KDS).

Background

Global climate governance has acquired a more comprehensive and regulatory character with the transition to the implementation phase of the Paris Agreement. Countries are now obliged not only to formulate nationally determined contributions, but also to develop market mechanisms, monitoring and reporting infrastructures, and financing instruments that support emission reductions.

According to the IPCC, limiting global temperature increase to 1.5°C requires emissions to be reduced rapidly and permanently. However, under current technological and economic conditions, it is not possible to completely eliminate emissions in the short term in certain sectors. For this reason, alongside direct mitigation efforts, the offsetting of emissions through verified reduction and removal projects implemented elsewhere has become a complementary component of the international climate policy architecture.

The Climate Law, which entered into force in July, defines the fundamental market instruments related to carbon management within the framework of alignment with the international climate regime and includes provisions for structuring emissions trading, carbon credits, and international carbon transfer mechanisms at the national level. The Draft Regulation on Carbon Crediting and Offsetting further elaborates this framework, serving as a complementary regulation that brings together the rules governing voluntary markets and international carbon transactions under a national system.

Before evaluating the draft regulation, it is appropriate to briefly explain the basic concepts of carbon markets in order to provide a clearer understanding of the framework.

What Is a Carbon Credit?

A carbon credit is a certificate generated in return for a verified greenhouse gas emission reduction or removal and can be traded in markets. According to international standards, each carbon credit represents the prevention or removal of one metric ton of CO_2 equivalent from the atmosphere. These credits are created through the monitoring of projects developed in accordance with defined methodologies, their verification by independent validators, and their registration in official registries. In this respect, a carbon credit constitutes the financial representation of a quantified climate benefit.

What Is Carbon Offsetting?

Carbon offsetting refers to the process by which an organization compensates for emissions that it cannot completely eliminate by using verified reduction or removal projects implemented elsewhere. This process is carried out through the use, namely the retirement, of generated carbon credits. Accordingly, while a carbon credit represents a verified climate benefit, carbon offsetting refers to the use of this benefit for the purpose of balancing an organization's emissions. The offsetting process results in the permanent retirement of the relevant carbon credits. For this reason, in international carbon markets, the principle that a credit may be claimed by only a single actor is widely accepted. This mechanism prevents the reintroduction of the same credit into the market and eliminates the risk of double counting in carbon accounting.

Core Functioning of Carbon Crediting and Offsetting

Crediting processes aligned with international standards generally proceed through the following stages:

1. **Project development** – an activity generating climate benefits is designed.
2. **Independent validation and registration** – the project is assessed in accordance with the applicable methodology and registered.
3. **Monitoring and measurement** – emission reductions achieved during project implementation are measured.
4. **Verification** – independent entities audit the data.
5. **Credit issuance** – the verified amount is converted into credits.
6. **Registry entry** – credits are recorded in the system with a unique identification number.
7. **Retirement** – the entity uses the credit, after which it can no longer be resold.

This final stage ensures that each credit can be used only once and can no longer be traded on the market.

Examples of Carbon Offsetting Projects

The following list is based on internationally recognized categories:

- Renewable energy (wind, solar)
- Methane capture (landfills, biogas)
- Clean cookstoves and cooking solutions
- Forest conservation and reforestation
- Soil carbon enhancement practices
- Carbon removal technologies (biochar, DAC, mineralization)

KARBON KREDİLENDİRME VE DENKLEŞTİRME TASLAK YÖNETMELİĞİ

DRAFT REGULATION ON CARBON CREDITING AND OFFSETTING

Purpose and Scope

The purpose of the Draft Regulation on Carbon Crediting and Offsetting is to determine the procedures and principles governing the establishment and implementation of the Türkiye Carbon Offsetting System (TR KDS). Within this framework, the draft regulates the generation of carbon credits from programs and projects carried out within the borders of Türkiye, the registration of these credits within the national system, the execution of offsetting transactions, and the use of carbon credits generated in Türkiye in international carbon markets.

The scope of the draft is structured around four main areas:

1. The generation of carbon credits from programs and projects aimed at the reduction or removal of greenhouse gas emissions arising from activities outside the scope of the TR ETS, and the trading of such credits within the TR KDS,

2. Regulations governing voluntary commitments and the use of carbon credits by installations covered under the TR ETS for offsetting purposes,
3. Principles governing the authorization and use of carbon credits generated from programs and projects implemented in Türkiye in international carbon markets,
4. Provisions governing the tracking of programs and projects implemented or being implemented in Türkiye within the registry systems of international carbon crediting programs.

Fundamental Principles of the TR KDS: The Turquoise Credit System

The TR KDS is a comprehensive carbon offsetting framework designed in alignment with national and international climate policies. The system is based on cooperation, coordination, and regular information sharing among relevant institutions. Credits generated under the TR KDS are referred to as "Turquoise Credits," each representing one metric ton of CO_2 equivalent.

Programs and projects are required to be aligned with the Sustainable Development Goals (SDGs). Each initiative must contribute to at least three SDGs, including objectives related to combating climate change. Projects applying to the system must not have previously generated credits under any international carbon standard, nor be associated with energy attribute certificates such as YEK-G.

Furthermore, in order to ensure integrity and independence within the TR KDS, the validation and verification processes of a project may not be conducted by the same organization.

Institutional Structure and Responsibilities under the TR KDS

The Türkiye Carbon Offsetting System (TR KDS) operates through a multi-layered structure based on the allocation of responsibilities among the Presidency, TSE, TÜRKAK, and validation and verification bodies. The integrity, reliability, and alignment of the system with international standards are ensured through this institutional framework.

The Presidency is responsible for the overall governance of the TR KDS, safeguarding the reliability of the system, and examining project processes where necessary. It coordinates the development of methodologies, conducts technical assessments in cooperation with TSE, and has administrative access to the national registry system.

The Turkish Standards Institution (TSE) administers all technical and administrative processes, from the development of methodologies and the receipt of project applications to registration procedures and the retirement of Turquoise Credits. It determines the training principles for validation and verification personnel, publishes guidelines and procedures related to the TR KDS, and prepares annual activity reports.

TÜRKAK carries out the accreditation of validation and verification bodies in accordance with international standards (ISO 14064-2, ISO 14064-3, ISO 17029). It also notifies the public and competent authorities of accreditation decisions and any subsequent changes.

Validation and verification bodies are responsible for the technical processes that confirm project compliance with TR KDS requirements. During the validation phase, they assess the suitability of the methodology and formulate an opinion; during the verification phase, they evaluate the accuracy of project data and prepare reports.

This institutional structure constitutes the core components that ensure the TR KDS operates in a reliable, traceable, and internationally aligned manner.

Operation of the TR KDS: Methodology, Application, Verification, and Issuance of Turquoise Credits

The Türkiye Carbon Offsetting System (TR KDS) has an institutional structure encompassing all stages from the development of methodologies to the receipt of program and project applications; from validation, registration, monitoring, and verification processes to the issuance of Turquoise Credits corresponding to verified emission reductions. Methodologies are developed through cooperation between the Presidency and TSE, while project application, registration, and validation processes are conducted by TSE. Monitoring and verification are carried out by independent entities, and verified emission reductions are transferred as Turquoise Credits to the project owner's account in the Türkiye Carbon Offsetting Registry System. The issuance, transfer, cancellation, and retirement of credits are transparently tracked through the same registry system.

1. Development of Methodologies

All programs and projects to be implemented under the TR KDS are carried out based on methodologies that have undergone technical review within the system and have been approved by the Presidency.

Natural or legal persons may apply to the Presidency to develop methodologies, upon payment of the application fee, whereby the process formally commences. Applications deemed appropriate by the Presidency are forwarded to the Turkish Standards Institution (TSE) for evaluation. Methodologies developed or deemed appropriate by TSE enter into force upon approval by the Presidency following payment of the methodology development fee. The technical details of methodology preparation and evaluation processes are determined by a communiqué to be jointly published by the Presidency and TSE.

2. Program and Project Applications

Program or project owner entities submit applications in accordance with the principles of the TR KDS and the application procedures established by TSE. TSE reviews application files within ten business days and assesses their compliance with TR KDS requirements.

Upon payment of the registration fee for applications deemed compliant, the process formally begins. At this stage, the project is reviewed by an accredited validation body, and a validation report is prepared. The report is submitted to TSE by the project owner.

Validated programs or projects are recorded in the Türkiye Carbon Offsetting Registry System under an account opened in the name of the project owner.

Requests for changes submitted by project owners are also evaluated by TSE; approved changes are recorded in the registry system following payment of the applicable change fee.

The types of registry accounts and transaction rules are determined through implementation principles to be published by TSE.

3. Monitoring, Verification, and Issuance of Turquoise Credits

A validated project is monitored annually in accordance with the methodology under which it was approved. The monitoring process covers outputs related to the expected greenhouse gas emission reductions or removals, as well as contributions to the Sustainable Development Goals.

Project outputs are verified by an independent verification body accredited in the relevant field, and a verification report is prepared. This report is submitted to TSE by the project owner.

An amount of Turquoise Credits equivalent to the verified emission reduction or removal confirmed in the verification report is issued to the project owner's account within the TR KDS. Credit issuance is carried out following payment of the applicable fee.

Crediting periods for projects may be extended upon request by the project owner and payment of the renewal fee, based on the criteria specified in the methodology.

The issuance, transfer, cancellation, withdrawal, and retirement of Turquoise Credits are conducted entirely through the Türkiye Carbon Offsetting Registry System.

Offsetting Transactions

This section sets out the principles governing the use of carbon credits under both the Türkiye Emissions Trading System (TR ETS) and voluntary commitments.

1. General Principles

Rules and limits related to offsetting processes are determined by the Presidency. All criteria and limitations applicable in this context are separately announced by the Presidency and published on its official website. The trading of Turquoise Credits on organized markets with any form of guaranteed exchange is subject to the approval of the Presidency.

2. Use of Carbon Credits under the TR ETS

Carbon credits generated in Türkiye and Turquoise Credits created under the TR KDS may be used to meet a certain proportion of obligations under the TR ETS. The upper limit of this proportion is announced periodically by the Presidency.

Carbon credits to be used for offsetting purposes must:

- be generated from activities outside the scope of the ETS, and
- not exceed five years from the date of their generation.

YEK-G certificates and energy attribute certificates are not accepted as valid for offsetting under the TR ETS.

3. Use of Turquoise Credits for Voluntary Commitments

Turquoise Credits used to meet allocation surrender obligations under the TR ETS may not be reused for voluntary commitments. Turquoise Credits intended for voluntary use are permanently retired within the TR KDS registry system upon request by the project owner.

Public institutions are obliged to develop incentive mechanisms to promote the use of Turquoise Credits for voluntary commitments.

Authorization Processes

The authorization provisions of the draft regulation define the institutional framework required for carbon credits generated in Türkiye to be used in international markets. Within this scope, primary authority is vested in the Presidency in accordance with the decisions of the Carbon Market Board.

The Presidency is responsible for authorizing carbon credit holder institutions and organizations, determining policies related to international market use, and carrying out the necessary regulatory actions. Obtaining an authorization certificate is mandatory for carbon credits intended for use in international markets, and technical details regarding application processes are published separately by the Presidency.

The Carbon Market Board determines sectors, project types, methodologies, and limitations eligible for international markets. In line with the Board's decisions, the Presidency issues calls for proposals to select projects suitable for international use and grants authorization certificates for eligible carbon credits. Authorized credits are recorded in the Türkiye International Carbon Registry System and may not be used beyond the specified period.

Authorization certificates issued for carbon credits authorized under Article 6 of the Paris Agreement may be revoked or amended by the Presidency in accordance with decisions of the Carbon Market Board.

The authorization process also encompasses the necessary adjustments to nationally determined contributions in order to prevent double counting. Authorization certificates are not issued for retired credits, and authorizations are revoked in cases of misleading information or documentation.

Türkiye International Carbon Registry System

The draft envisages the establishment of the Türkiye International Carbon Registry System to track projects developed under international carbon crediting programs in Türkiye. The system enables national-level tracking of authorized projects, activities credited by international programs, and imported carbon credits. Registration of projects developed in Türkiye within this system is mandatory. Projects that have commenced carbon credit generation outside the TR KDS must be registered within 90 days after the system becomes operational; projects not yet registered under any international carbon program must be registered no later than 90 days from the registration date. Where necessary, protocols may be established between the Presidency and international standards to ensure integration of registry systems. Account types, transaction rules, and contribution fees are determined in accordance with procedures and principles published by the Presidency.

Auditing, Transparency, and Sanctions

Validation and verification bodies operating under the TR KDS are required to submit all information and documents, including accounting records, fully and in a timely manner during audits conducted by TSE and TÜRKAK. In cases where audits are obstructed, misleading information is provided, identified non-compliances are not remedied within the prescribed period, or material errors are found in validated or verified reports, the authorization of the relevant bodies is revoked by TÜRKAK following the opinion of the Presidency. Bodies whose authorization is revoked may not reapply for accreditation for a period of three years. All technical and institutional rules related to validation and verification processes are determined by the TR KDS procedures and principles published by TSE.

In line with the principle of transparency, annual data on the generation, use, and retirement of carbon credits, including Turquoise Credits, are disclosed to the public on the official website of the Presidency.

Under the sanction provisions, carbon credits associated with incorrect or incomplete declarations regarding projects may not be used under either TR ETS obligations or voluntary commitments. In cases where offsetting limitations under the TR ETS are violated, the relevant installation is deemed not to have fulfilled its obligations. Sanctions under the relevant provisions of the Climate Law are also applied to project owners who fail to comply with registration requirements in the international registry system.

Conclusion

The Draft Regulation on Carbon Crediting and Offsetting represents a significant regulatory step that complements the TR ETS and places Türkiye's carbon market structure on a more comprehensive footing. By defining in detail the processes related to the generation, verification, registration, and international use of carbon credits, the draft provides a predictable and transparent framework for both investors and public authorities.

The establishment of methodological standards, the requirement for independent verification, and safeguard mechanisms preventing double counting strengthen the international acceptability of carbon credits generated in Türkiye. This structure, aligned with Article 6 of the Paris Agreement, enhances Türkiye's capacity to integrate into global carbon markets.

The practical implementation of the draft will gain coherence through the operation of the registry system, verification processes, and project development activities within their respective frameworks. This integrated structure represents an important step toward a more traceable, transparent, and internationally aligned carbon market in Türkiye.

REFERENCES [1] Climate Change Presidency – Draft Regulations.https://iklim.gov.tr/taslaklar-i-2124