Giant Barb
This planet is ours

CREDITING STANDARDS AND MECHANISMS

January, 2025

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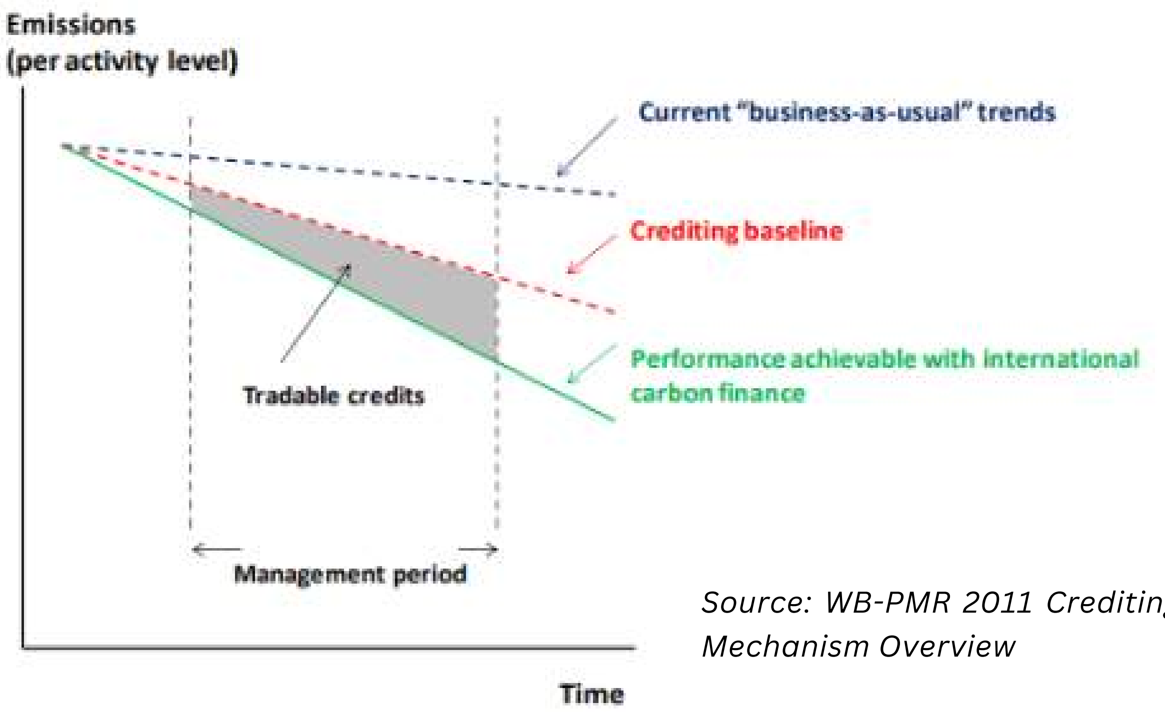
I. OVERVIEW

A crediting mechanism (a baseline and credit system) enables remuneration of achieved emission reductions; tradable certificates are issued for actual emission reductions achieved. Other sources may use “crediting program” or “offset program” to describe the same initiative.

This requires the creation of a baseline condition upon which a project will need to perform better, i.e., emit less than business-as-usual. Depending on the crediting scheme, this baselining could be defined as a performance standard (benchmark) or be defined on a project-by-project basis.

Figure: Simple depiction of a crediting baseline



Source: WB-PMR 2011 Crediting Mechanism Overview

Carbon credits & Offsetting

- **Carbon credits:** These are generated from projects or programs of activities that reduce GHG emission via a variety of methods. These methods adhere to strict standards and are scrutinized through a monitoring, reporting and verification process. Credits are measured in metric tons of Co2 equivalent.

- **Offsetting (or emission):** This is the act of claiming carbon allowances or credits in order to compensate for unavoidable emissions.

Participants in the market created by crediting mechanisms may fall into four categories:

1 Market regulators

Who set the rules that create the settings for there to be demand and acceptable supply, and who ensure that rules are complied with, including operating or verifying key parts of the quality assurance systems (e.g. unit registries and MRV of emissions performance).

2 The demand side

The 'end' buyers that have a need (or desire) for the commodity based on some obligation they are required to meet.

3 The supply side

The producers (sometimes called originators) of the commodity who will respond to the demand.

4 Intermediaries

The players that help buyers and sellers to 'meet' each other and complete transactions with proper due diligence, integrity and surety (e.g. exchanges, brokers, carbon funds, banks, lawyers, insurers and market information providers). These are especially relevant in cases where there are several participants.

II. TYPES OF CARBON CREDITING MECHANISM

These are classified according to levels of governance and geographical focus:

- **International crediting mechanisms:** International crediting mechanisms are those governed by international climate treaties and are usually administered by international institutions (i.a: Clean Development Mechanism (CDM) & Joint Implementation (JI)).

Clean Development Mechanism

- **Independent crediting mechanisms:** Independent crediting mechanisms are mechanisms not governed by any national regulation or international treaties. They are administered by private and independent third-party organizations, which are often nongovernmental organizations (i.e., Verra, Gold Standard, ACR, etc.).

- **Domestic:** Established by regional, sub-national and national governments (i.e., California Compliance Offset Program).

III. CREDITING MECHANISMS

Crediting schemes under the Kyoto Protocol

The Kyoto Protocol (KP) adopted in 1997 established the first generation of large-scale compliance carbon market mechanisms: the Clean Development Mechanism (CDM), Joint Implementation (JI) and International Emissions Trading (IET).

- **The Clean Development Mechanism (CDM):** Defined in Article 12 of the KP, allows a country with a greenhouse gas (GHG) emission reduction or emission limitation commitment under the KP to acquire Certified Emission Reductions (CERs) from emissions reduction projects in developing countries and use them towards their commitment for compliance.

- **Joint Implementation (JI):** Defined in Article 6 of the KP, allows a Party to buy emission reduction units (ERUs) from an emission reduction or emission removal project in another Party. ERUs have to be converted from host Parties' carbon budgets under the KP, i.e. Assigned Amount Units (AAUs). Unlike the CDM, the JI mechanism thus operates in a "capped environment" where host countries have their national emissions reduction commitments.

- **International Emissions Trading (IET):** Allows Annex I countries to directly trade their Assigned Amount Units (AAUs). The Green Investment Scheme (GIS) concept was introduced in order to tackle the hot air issue. The idea underlying the GIS can be described as "greening the hot air". Under a GIS, the revenues obtained by a country from the sale of its AAUs must be invested in concrete domestic emission reduction activities.

Bilateral crediting schemes

- **The Joint Crediting Mechanism (JCM):** A project-based bilateral crediting mechanism initiated by the Government of Japan from 2010 onwards. The JCM aims to facilitate the diffusion of leading low carbon technologies, products, systems, services, and infrastructure resulting in the mitigation of GHG emissions and contributing to the SD of developing countries. It was developed because the Japanese government was unhappy with the complex international rulebook of the CDM.

Voluntary crediting schemes/carbon standards

Verra (formerly known as the VCS)

A not-for-profit organization founded in 2005, serving as a secretariat to various standards. Verra's flagship is the Verified Carbon Standard (VCS) with CDM-like MRV requirements. It issues Verified Carbon Units (VCUs). In terms of volume, it is the largest voluntary standard in the world.

Gold Standard

A foundation established in 2003 by WWF and other international NGOs that operates an offset standard focusing on environmental and social benefits. It can also be applied as an add-on quality label to CDM activities. Eligible sectors are RE, EE, waste, land use and forests (afforestation, reforestation and agriculture) and water (supply, purification and conservation).

American Carbon Registry (ACR)

Founded in 1996 as a nonprofit enterprise of Winrock International as the first private voluntary greenhouse gas registry in the world. The ACR is furthermore an approved offset project registry issuing Registry Offset Credits (ROCs) and early action offset program, issuing Early Action Offset Credits (EAOCs) for the California Cap-and-Trade program.

IV. KEY ELEMENTS AND PRICIPLES OF CARBON CREDITING SCHEMES

1/ Governance and accounting

- ***Composition of the governance body - Public vs private:*** Governing bodies can be public or private. Most compliance instruments, such as the UNFCCC mechanisms and national offset standards that issue credits eligible for compliance under carbon pricing policies are managed by a public governing body.

- ***Validation procedures:*** Carbon crediting mechanisms usually require validation of the project activities before their registration and the verification of emission reductions achieved by the project.

- ***Supervision of activity cycle:*** Carbon crediting mechanisms typically include some degree of supervision of the three key phases of the activity cycle, notably, validation, MRV and credit issuance.

- ***Accounting and registries:*** The issuance and transfers of carbon credits are typically accounted for in dedicated registries that allow to prevent double-counting. Public offset programmes usually have public registries. Most private standards have their own registries.

2/ Scope and eligibility

- ***Scope of activities:*** Most crediting mechanisms are focused on individual emissions reduction or sequestration projects.

- ***Temporal scope:*** Most carbon crediting mechanisms set limits on crediting periods.

- ***Geographical eligibility:*** Carbon crediting mechanisms vary considerably in their geographical eligibility.

3/ Environmental integrity

Environmental integrity means that global GHG emissions must not increase because of the use of crediting mechanisms. Most mechanisms explicitly or implicitly require that environmental integrity is ensured.

- **Baseline setting:** A scenario that reasonably represents anthropogenic GHG emissions that would most likely have occurred in the absence of the project. There are different approaches in setting baseline emissions, mainly between standardized and project-based baselines, with all offset programmes using standardized approaches to some extent.

- **Additionality:** Ensures that only those projects that would not have happened anyway should be eligible to receive carbon credits. Similar to setting baseline emissions, determining additionality under carbon crediting schemes requires to consider the respective country's circumstances.

- **Permanence of emissions reductions:** Emissions reductions have to be permanent, which may not be the case for some forestry and land use projects due to the risk of reversing emissions reductions (e.g. if there is a forest fire).

- **Avoiding double counting:** Double counting is an umbrella term commonly used to describe situations in which:
  a) The same emission reduction leads to issuance of more than one unit (double issuance)
  b) The same emission reduction is counted by the buyer country and at the same time by the seller country (double claiming)
  c) The same unit is used twice (double use)

- **Contribution to overall mitigation:** While the existing carbon crediting mechanisms are not explicitly targeting "net mitigation", overall emissions reductions have likely occurred due to conservative baselines, limited crediting periods and the use of results-based climate finance to cancel units.

4/ Monitoring, Reporting and Verification (MRV)

MRV structures aim at ensuring transparency and ensuring that the number of carbon credits corresponds to actual GHG emissions reductions.

- **Monitoring:** Stands for the collection of the data through direct measurement or the use of proxies, necessary for calculating the emission reductions within a given scope and timeframe. In the CDM, the monitoring plan to identify and regularly measure (or estimate) anthropogenic GHG emissions from sources within the project boundaries has to be implemented in accordance with methodologies, guidance documents and standard.

- **Reporting:** Includes the aggregation, recording and communication of this data to the relevant authorities. For any programme several reporting periods will be contained in the crediting period of a project.

- **Verification:** Is aimed at detecting errors and/or fraudulent reporting and is usually conducted by an independent third party. Most carbon crediting mechanisms require some form of verification by an independent third party, which usually has to be accredited by the governing body.

5/ Sustainable Development contributions

6/ Linkages with other carbon pricing instruments and policies

- **Cap and trade schemes:** Some emissions trading schemes (ETS) allow for the use of carbon credits in order to provide a “safety valve” cost containment tool and to stimulate emissions reductions outside the scope of an ETS.

- **Carbon taxes:** Some carbon taxes allow for full or partial “offsetting” through carbon credits, typically using domestic offsets. The latter condition is put in place in order to ensure that emissions reductions are achieved in the same jurisdiction as the carbon tax and thus avoid the “outsourcing” of emissions.

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"REACH OUT TO US TODAY, AND TOGETHER, LET'S SHAPE A BETTER TOMORROW"

Together, we can make a difference that transcends boundaries and leaves a positive legacy for generations to come.

Giant Barb is a pioneer in the field of **Carbon Finance in Vietnam,** offering comprehensive services such as **Greenhouse Gas Inventory, ESG Reporting**, and **Carbon Credit Market** solutions to both domestic and international enterprises.

With the motto "***Towards a low carbon society***", Giant Barb connects individuals, investors, businesses, and governments together to build green projects aimed at carbon neutrality, contributing to global efforts in combating climate change.

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