
CARBON CREDITING PROGRAMMES

What are carbon crediting programmes?

Carbon or greenhouse gas crediting programmes – also called carbon standards – establish a set of rules, procedures and methodologies that are requirements for carbon credits generated through carbon market projects and activities. Upon successful verification of the mitigation, a crediting programme issues carbon credits, also known Verified Emission Reductions (VERs). Each credit represents a specified amount of avoided or reduced greenhouse gas (GHG) emissions.

Carbon crediting programmes can supply credits primarily to compliance or voluntary markets or to both. Carbon crediting programmes supplying the VCM are developed and administered by private organisations – typically international non-governmental organisations (NGOs). Organisations administering these standards play a crucial role in safeguarding the quality of VCM carbon credits and providing credibility to the baseline and credit system on which the VCM relies. The stringency of different standards with regard to environmental and social integrity varies.

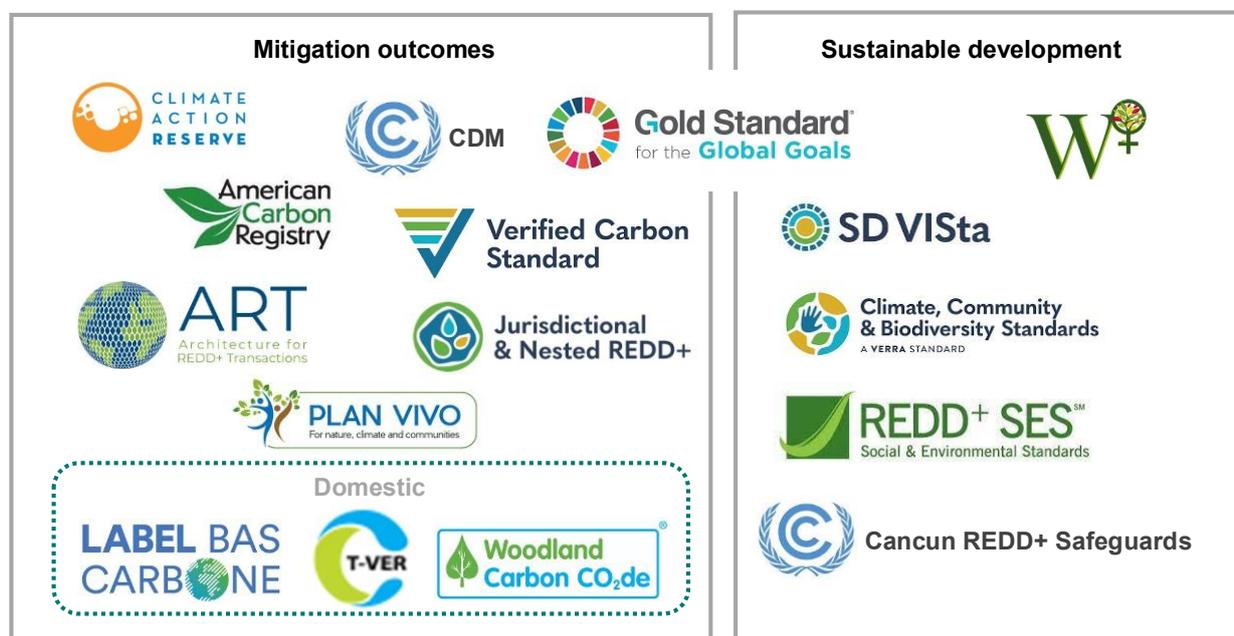
Carbon crediting programmes define the procedures that VCM activity developers must adhere to, encompassing monitoring, reporting, validation, and verification processes. They also oversee the issuance and transfer of carbon credits, often through registries. Thereby they apply clear rules and requirements that are regularly revised, mechanisms for stakeholder participation and grievances, specific environmental and social safeguard requirements, robust methodologies for defining baselines and project contributions as well as requirements for independent project reviews by third-party auditors (so called Validation and Verification Bodies). Most carbon credits are assessed by carbon standards for common quality criteria such as robust baselines; proof of additionality; permanence of emission reductions; prevention of leakage and absence of double counting. The assessment criteria and methods vary.

What are the main carbon crediting programmes in the VCM?

The four carbon crediting programmes that contribute the largest volumes of credits to the VCM are:

- [VERRA](#) (formerly the Verified Carbon Standard) with approx. 68%
- [Gold Standard](#) (GS) with approx. 20%
- [American Carbon Registry](#) (ACR) with approx. 8%
- [Climate Action Reserve](#) (CAR) with approx. 3%.

Figure 1: Carbon crediting programmes/standards taking part in the VCM



As represented in the Figure 1 above, carbon crediting programmes differ in their focus, approaches and procedures. Some standards align closely with specific goals, such as the Sustainable Development Goals (SDGs), and incorporate grievance mechanisms. Others are defined by their geographic coverage, while some, like *Puro.earth* and *Isometric*, focus exclusively on carbon removals.



With the Paris Agreement, the Article 6.4 Mechanism, also known as the **Paris Agreement Crediting Mechanism (PACM)**, has been established as the successor to the Clean Development Mechanism (CDM). While the CDM generated Certified Emission Reduction (CER) credits, which could be traded and used in both compliance and voluntary markets, the PACM issues A6.4 Emission Reductions (A6.4ERs). These credits are generated from projects that must undergo verification by accredited independent entities. The PACM is now recognised for setting a more rigorous environmental and social integrity benchmark compared to the CDM created under the Kyoto Protocol. This makes it particularly appealing for both buyers and sellers who are mindful of reputational risks under the Voluntary Carbon Market (VCM), where the credibility of carbon credits plays a significant role in decision-making.



Verra provides a framework for projects to quantify and verify their emission reductions or removals. While it does not explicitly include social or sustainable development criteria, Verra collaborates with other standards to create nested approaches that integrate additional sustainability benefits. The Verra Climate Standards (VCS) aims to ensure the environmental integrity of carbon credits. However, the standard has faced significant criticism, particularly in relation to overcrediting issues, notably in avoided deforestation projects. In recent years, Verra has made efforts to review and refine many of its methodologies to try to address some of these concerns and improve the credibility of its carbon credits.



The Gold Standard places a strong emphasis on sustainable development, aligning closely with the SDGs. Projects seeking Gold Standard certification must not only meet rigorous emission reduction criteria but also demonstrate positive social and environmental impacts. [The Gold Standard for the Global Goals](#) incorporates a broader range of sustainable development indicators. Gold Standard is aligning its certification framework with Article 6 of the Paris Agreement, requiring all projects with 2026+ vintages to be "Paris-aligned". The registry now labels authorised credits, tracks [corresponding adjustments](#) (CAs), and supports international mitigation transfers (ITMOs), ensuring credits meet strict, updated UNFCCC standards.

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