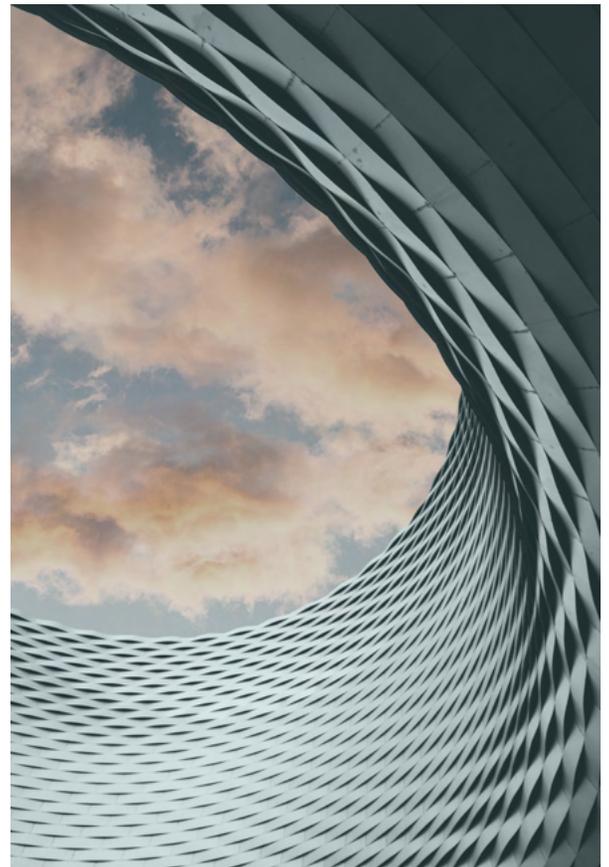


The Voluntary Carbon Market **Explained**

Chapter 7



Introduction

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Chapter 7: What is the role of carbon standards in the voluntary carbon market?

Carbon standards are central to the operation of the voluntary carbon market (VCM). Carbon standard organizations provide and administer the rules and requirements for VCM projects and programs, certify and issue carbon credits, and facilitate the trade in carbon credits.

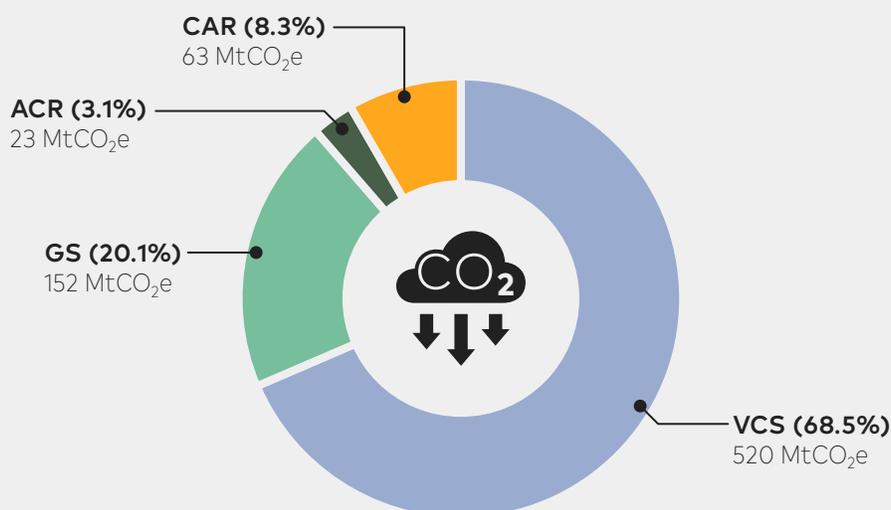
What are carbon standards?

A carbon standard—or GHG crediting program—refers to the complete set of rules, procedures, and methodologies according to which certified carbon credits are generated and issued. Carbon standards are developed and governed by standard organizations—typically international non-governmental organizations (NGOs) that consist of a standard-setting arm, a regulatory arm, and a validation and verification system usually outsourced to third parties. Governments can also develop or support the development of

carbon standards, such as the **Woodland Carbon Code in the United Kingdom** and the **Thailand Voluntary Emission Reduction Program**.

By developing and administering standardized procedures for crediting greenhouse gas (GHG) emission reductions, avoidance and removals, standard organizations act as the regulators of the VCM. Given the voluntary nature of this market, standard organizations safeguard the **quality of VCM carbon credits** and provide credibility to the **baseline-and-credit system** on which the VCM relies. Standard organizations with good governance have clear rules and requirements that are regularly updated, mechanisms for stakeholder consultation and grievances, specific environmental and social safeguard requirements, robust methodologies for determining baselines and project contributions, and requirements for

Figure 7.1 | Share of the credits issued in the VCM by the four leading Carbon Standards



independent review of projects by competent, third-party auditors (often called Validation and Verification Bodies, VVBs).

Carbon standards both certify carbon projects and programs and facilitate the trade of **carbon credits**. Standards issue one credit for each metric ton of GHG emissions avoided, reduced, or removed, which are measured in tons of carbon dioxide equivalents (tCO₂e). In this way, the standards convert certified GHG emission reductions and removals into tradable carbon credits. To obtain certification of GHG emission reductions or removals and **be issued credits** to trade, VCM projects and programs must comply with standards' processes, rules, requirements, and safeguards; apply methodologies approved by the standards; and provide evidence of compliance that is generated by activity managers and reviewed by an independent third-party auditor. Carbon standards use registries to track all credits generated, transfer tradable credits, and trace transactions between buyers and sellers.

What are the main carbon standards in the VCM?

Carbon standards vary in their approaches, methodologies, and requirements. The main carbon standards—by relative volumes of credits issued in 2020—are the Verified Carbon Standard (**VCS**), the Gold Standard (**GS**), the American Carbon Registry (**ACR**), and the Climate Action Reserve (**CAR**). As shown in Figure 7.1, VCS and GS are the major standards worldwide, issuing 68.5% and 20.1% of credits, respectively. ACR (3.1% of credits) is mainly active in North America and CAR (8.3% of credits) is active only in the United States.

VCS, GS, ACR and CAR all offer methodologies for projects in nature-based solutions (**Nbs**), energy, and industrial sectors. The four leading standards demonstrate good governance. They provide robust rules and requirements for project and program developers and auditors, and impose environmental and social safeguards for projects and programs to receive credits, including requirements that projects avoid harms to biodiversity and local ecosystems, follow all national and international laws and regulations, and conduct consultations with local stakeholders, following Free, Prior and Informed Consent (FPIC) processes when working with Indigenous Peoples.

There are smaller standards that issue small shares of credits in the VCM. **Plan Vivo** is a standard that sets requirements that are specific to smallholder and community projects in developing countries, with 17 projects actively issuing credits. In addition, there are various other context-specific crediting mechanisms, including voluntary domestic carbon standards such as those in **California, Colombia, Thailand**, and the **United Kingdom**.

In 2020, a new standard, Architecture for REDD+ Transactions, the REDD+ Environmental Excellence Standard (**ART/TREES**), was launched. ART/TREES formulates and administers standardized procedures for crediting emission reductions and removals from government-sponsored national or large sub-national programs for **Reducing Emissions from Deforestation and Degradation Plus (REDD+)**. ART/TREES is geared to certify large volumes of GHG emission reductions and removals. The first Letters of Intent for transactions involving jurisdictional credits certified under ART/TREES were signed in November 2021.

Table 7.1: The Four Main Carbon Standards

Standard	Market Volume (M = million)	Name of credits (Representing 1 tCO ₂ e)	Geographical Scope	Sectoral Scope
 Verified Carbon Standard (VCS)	746 M credits, 70.44% share	Verified Carbon Units (VCUs)	1,792 registered projects in 82 countries. VCS is dominant in developing countries.	Covers all project classes.
 Gold Standard (GS)	184 M credits, 17.37% share	Verified Emission Reductions (VERs)	1,313 registered projects in 80 countries. Credits are purchased especially by buyers in the European Union.	Covers most project classes, but excludes project-level REDD+. After 2025, will only cover credits backed by corresponding adjustments .
 American Carbon Registry (ACR)	63 M credits, 5.95% share	Emission Reduction Tons (ERTs)	156 projects in the United States.	Covers industrial processes; land use, land use change and forestry; carbon capture; waste.
 Climate Action Reserve (CAR)	66 M credits, 6.23% share	Climate Reserve Tonnes (CRTs)	26 projects in the US. CAR serves as the Offset Project Registry for California's Cap-and-Trade Program. CAR is also running a pilot Emissions Trading System in Mexico from 2020-2023.	Covers agriculture and forestry; energy; waste; and non-CO ₂ GHG abatement.

There are also standards that certify contributions of VCM activities to Sustainable Development Goals (SDGs). SDG standards complement carbon standards by adding additional certifications for projects that generate economic, social, biodiversity or

other benefits in addition to climate change mitigation. These standards establish requirements and methodologies for designing, monitoring, verifying, and validating contributions to SDGs. Some SDG standards offer sustainable

development labels to attach to carbon credits that demonstrate SDG benefits, and some standards allow projects to issue sustainable development credits that can be traded independently from carbon credits. VCM standard organizations that provide labels for sustainable development benefits include Verra, which administers the Climate, Community and Biodiversity Standard (**CCB**) and the Sustainable Development Verified Impact Standard (**SD VISta**) labels, and the Gold Standard for the Global Goals (**GS4GG**). SD VISta and GS4GG issue tradable credits that represent project contributions to the SDGs.

The certification of SDG benefits is particularly relevant for community-based and **NbS projects**. Due to their potential to offer benefits beyond climate change mitigation and offer removals, NbS credits are a popular project class. Voluntary carbon standards have approved methodologies to develop and generate credits from NbS activities under each of the main **NbS categories**—Forestry, Agriculture, and Wetlands. The desire to certify the additional benefits of NbS projects has played an essential role in the development of labels certifying strong social-ecological benefits and contributions to SDGs.

How do governments and carbon standard organizations interact?

Most VCM standards operate outside of government regulation. However, as governments seek to enhance VCM impact and policy alignment, interaction between governments and standard organizations is expected to grow.

Governments benefit from collaboration with private standard organizations because standards provide technical expertise for robust GHG accounting and management of carbon offset projects. Working with standards can lower countries' costs associating with tracking and trading credits.

To access VCM-based finance directly, **governments** can generate and market VCM carbon credits. Governments that implement national programs, such as **REDD+ jurisdictional programs**, sell credits generated using methodologies provided by standards. Governments can also promote the integration of VCM projects into national systems to attract investments into projects. integration can preserve and strengthen the environmental integrity of projects. For example, in the case of **REDD+**, standards such as Verra's Jurisdictional and Nested REDD+ (**JNR**) Framework or **ART/TREES** promote the integration of projects into larger-scale programs.

Another form of interaction is governments' use of voluntary carbon standards to support their domestic climate regulations, with some governments opting for private standards in their public rules. For example, the US State of **California** accepted offsets generated by voluntary standards (CAR and ACR) and eventually delegated the creation of its mandatory carbon market to the governing body of the CAR. Countries such as **Colombia** and **South Africa** recognize credits from GHG carbon crediting programs (i.e., VCS) for liable entities to meet carbon tax obligations and build on the architecture of private standards. The Carbon Offsetting and Reduction Scheme for International

Aviation (**CORSIA**) also allows liable entities to use VCM carbon credits for approved GHG emission reduction or removal activities, if backed by **corresponding adjustments**.

Governments may increase interactions with standards to accelerate implementation of the **Paris Agreement** and to encourage voluntary action. Voluntary carbon finance can be used to fill mitigation gaps for sectors not covered in Nationally Determined Contributions (NDCs) or to help countries to meet mitigation targets for sectors that are covered by NDCs. In some cases, particularly in carbon-intensive economies, the recognition of voluntary standards by governments increased the investment into VCM projects in their domestic economies. Proactive engagement with standards can attract investments into national mitigation opportunity. Governments increase the availability of credits by permitting more types of projects and can rely on greater liquidity with a larger carbon market to attract finance that supports meeting climate goals.

Further Reading

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