

BRIEFING

Overview of the Voluntary Carbon Market

What is the carbon market?

The term 'carbon market' is used interchangeably to refer to a wide range of markets that have resulted from economic instruments and policies to regulate Greenhouse Gas (GHG) emissions. At the simplest level carbon markets are marketplaces participants can generate, buy and sell carbon 'units' – in some schemes these units represent **rights to emit GHGs** and in other schemes these represent **emissions reductions**.

Most schemes have their own unit and there is some mutual recognition between some schemes – e.g. some cap-and-trade schemes allow the use of offset credits for compliance purposes. Through the interaction of supply and demand, the market establishes a price for the units – which reflects the cost of reducing one additional tonne of CO₂ emissions equivalent (known as the marginal cost of abatement).

Scheme designs vary depending on the goal of the mechanism.

- **Mechanics:** There are two main models for emissions trading. Firstly, 'cap-and-trade' schemes create and trade permits to pollute whereas 'baseline-and-credit' schemes create and trade emissions reductions.
- **Legal nature:** Participation can be mandatory or voluntary.
- **Participants:** Schemes can be company-to-company trading or country-to-country.
- **Targets:** Schemes may have their own emissions targets, or may complement other regulations on emissions.

To illustrate how these elements can combine, existing schemes can be thought of in three categories (see the Annexes more detailed overviews of each):

- **International trading system:** Defined by the UNFCCC – originally this was the Kyoto Protocol Flexible Mechanisms (JI/CDM) – referred to as the Clean Development Mechanism. It was originally intended to incentivise collaboration between countries by allowing one country to claim emissions reductions in another country if it financed the activities that generated them. This has now been superseded by Article 6 of the Paris Agreement, which aims to establish a fairer approach to international co-operation, and to align accounting for cross-border emissions reductions – however the rules for this are still being developed.
- **Regulated Schemes:** These are mainly government defined schemes to regulate companies and can be mandatory or voluntary. In some cases (for example the EU ETS), these are designed to achieve a fixed emissions reduction target (through cap-and-trade). In other cases, these are a way to put a price on carbon to incentivise reductions (through baseline-and-credit) and ensure that participants account for their emissions (but don't set hard limits).



- **Voluntary Carbon Market:** Generally, this operates at company level – and is a way to incentivise emissions reductions by monetising them. Companies generate credits from voluntarily reducing emissions. Other companies, organisations and individuals can voluntarily choose to buy these credits to offset the impact of their emissions (i.e. account for them).

The Voluntary Carbon Market

Voluntary Carbon Markets (VCM) are private schemes. Demand is created by companies, organisations and individuals who wish to account for their emissions by buying emissions reductions from other (offset). On the supply-side, they provide a way that companies can monetise voluntary emissions reductions.

- **Offsetting Emissions:** The VCM allows companies and individuals to compensate for their emissions by buying carbon credits generated from projects that reduce greenhouse gases elsewhere.
- **Carbon Credits:** These projects generate carbon credits, which represent one tonne of CO₂ (or other greenhouse gas) that has been reduced or removed from the atmosphere.
- **Buying Offsets:** Companies (or individuals) can buy these carbon credits from the VCM to offset their own emissions, by supporting projects that are actively reducing the carbon footprint in other areas.

Some existing compliance markets incorporate offsetting elements alongside trading, whereby participants can purchase carbon credits to account for a portion of their emissions.

Issuing VCM credits

Various VCM *Schemes and Programmes* have been created, with the main 4 being: Verra VCS, The Gold Standard, American Carbon Registry and the Climate Action Reserve. Each of these schemes sets their own rules for generating credits (known as *Standards*), but they all follow the same general structure:

Project Development and Registration:

- Developers design a project that reduces or removes greenhouse gases. This could involve renewable energy installations, forest conservation initiatives, or other approved project types.
- Developers register their project with a VCM standard body (e.g., Verra, Gold Standard) following agreed ways of developing and implementing the specific project type (known as *Methodologies*).

Validation:

- Independent third-parties assess the project design and ensure it adheres to the chosen VCM standard's methodologies and requirements. This includes evaluating the project's baseline emissions (emissions that would occur without the project) and its monitoring plan. These *Validation/Verification Bodies (VVBs)* are accredited by the relevant standard body.
- Validation confirms that the project meets the VCM standard's rules and requirements. Once validated, a project can be registered with the respective VCM programme.

Monitoring and Reporting:

- Once validated, the project developer implements the project and monitors its progress according to the approved monitoring plan. This typically involves collecting data on emission reductions achieved or carbon removed over time.
- Periodic monitoring reports are submitted to the VVB for review.

Verification:

- The VVB conducts periodic on-site visits and reviews monitoring data to confirm that the project delivers the planned emission reductions according to the standard's rules and the validated project documentation.
- If the project outcomes are successfully verified, the verifier issues a report confirming the amount of verified emission reductions (VERs) or removals (VRs) generated by the project.

Credit Issuance and Registry:

- Based on the verification report, the VCM standard body issues the corresponding number of carbon credits. These credits represent one tonne of CO₂ equivalent (tCO₂e) reduced or removed. Different schemes have different 'currencies' – for example, under Verra's Voluntary Carbon Scheme issues VCUs (Verified Carbon Units) whereas the Gold Standard scheme issues VERs (Verified Emissions Reductions).
- The credits are then registered on a central registry, which tracks ownership and facilitates trading. Project developers can then sell these credits to companies or individuals looking to offset their emissions.

Key considerations:

- The specific process can vary slightly depending on the chosen VCM standard and project type.
- Transparency and rigor are crucial throughout the process to ensure the environmental integrity of the credits issued.
- Reputable VCM standards have clear requirements for project additionality, meaning the emission reductions wouldn't have happened anyway without the project generating carbon credits.

Trading VCM credits

The process for trading carbon credits involves several steps and can happen through different channels. Companies, organizations, or individuals looking to offset their emissions can purchase carbon credits through various channels:

- **Directly from project developers:** This can be negotiated bilaterally, and can be a key way for projects to secure up-front financing or assure investors that there will be buyers for the credits generated.
- **Trading platforms:** These platforms facilitate buying and selling, often with transparent pricing mechanisms.
- **Retail brokers:** Some brokers specialize in selling carbon credits to individuals who want to offset their personal footprint.

Key considerations:

- **Pricing:** The price of carbon credits can vary depending on project type, vintage (year of issuance), and overall market demand.
- **Quality Considerations:** Buyers should carefully assess project information and verification standards to ensure they are purchasing high-quality offsets.
- **Emerging Innovations:** New technologies like blockchain are being explored to enhance transparency and traceability in VCM transactions.

Retiring VCM credits

Once purchased, the buyer offsets their emission by "retiring" the credits, meaning they are removed from the market to avoid double counting. Once purchased, a buyer retires the credit in its registry account – this means that the registry will record the retirement and associate it with the buyer. This permanently removes the credit from circulation and it can no longer be traded or used.

Some buyers might choose to use their credits for internal claims or marketing purposes to showcase their sustainability efforts. However, this doesn't remove the credits from circulation, and their retirement will be required at a later stage to avoid double counting and ensure permanence.

Key consideration:

- **Transparency and Traceability:** Reputable VCM platforms and registries provide buyers with information about the origin, type, and verification details of the carbon credits they purchase.
- **Choice and Alignment:** Buyers can often choose credits from projects that align with their specific sustainability goals (e.g., renewable energy, forestry) or prioritize additional benefits beyond carbon reduction (e.g., biodiversity conservation).