Chapter 4: How are greenhouse gas reductions and removals accounted for in the voluntary carbon market?

Transparent and conservative greenhouse gas (GHG) accounting is essential to ensure the credibility of voluntary carbon market (VCM) activities. Robust GHG accounting follows common principles and is supported by credible and robust carbon standards. GHG emission reductions and removals from VCM activities are accounted for at the activity level and used to meet climate (e.g., net zero or carbon neutrality) targets of companies. Governments that engage in jurisdictional programs in the context of Reducing Emissions from Deforestation and Degradation Plus (REDD+) account for GHG emission reductions and removals associated with land use change in a certain geographical area.

How do different actors account for greenhouse gas emissions?

The sponsors and developers of VCM activities account for GHG emission reductions and removals achieved by VCM activities to generate tradable carbon credits. Corporates monitor and report their GHG emissions and account for reductions to comply with reporting requirements and meet mandatory or voluntary climate goals. Governments account for GHG emissions and removals to monitor progress toward Nationally Determined Contributions (NDCs) under the Paris Agreement and toward national climate change mitigation goals. In alignment with their different goals, project and program managers, corporates and governments apply different accounting approaches to track GHG emissions.

VCM activity developers account for the climate benefits at the project or program level. They apply methodologies provided by carbon standards for different VCM activity types. Methodologies describe how VCM activities measure, report and verify GHG emission reductions and removals. GHG emissions, reductions, or removals from VCM activities are monitored according to GHG protocols and verified by third-party auditors. Based on verification reports, carbon standards or GHG crediting program managers issue carbon credits in VCM registries.
Corporates account for the GHG emissions linked to their operations. This includes direct emissions (Scope 1), emissions from energy consumption (Scope 2), and emissions from supply chains and consumption of products globally (Scope 3). Corporate accounting assigns responsibility for GHG emissions based on activities and actors, rather than geographical areas. When consolidating GHG emissions accounts across corporate operations that may be jointly owned or managed, emissions are allocated according to equity shares or assessments of financial or operational control. Corporates have multiple GHG reporting obligations. In addition, they often have climate targets and count emission reductions and removals against those targets. Non-governmental organizations (NGOs) support these efforts by publishing harmonized GHG accounting standards (e.g., the GHG Protocol) or by defining and monitoring high-quality climate targets for companies (e.g., the Science-based Targets Initiative).

Governments account for GHG emissions, reductions, and removals that occur on their territory. Governments capture emissions in GHG inventories and report these under United Nations Framework Convention on Climate Change (UNFCCC). Developed countries annually report direct GHG emissions, reductions, and removals in five sectors: energy; industrial processes and product use; agriculture; land use, land-use change and forestry; and waste. Developing countries report GHG emissions, reductions, and removals through national communications (NCs) and biennial update reports (BURs). NCs are submitted every four years and provide information about GHG inventories, mitigation and adaptation measures, and other activities that governments consider relevant to the achievement of the objectives of the UNFCCC. BURs provide updates of the information presented in national communications, particularly on GHG inventories; mitigation actions, constraints, and gaps; and support needed and received. All countries also report progress towards their NDCs under the Enhanced Transparency Framework of the Paris Agreement. This includes
accounting for emission reductions or removals that are transferred between countries under Article 6 of the Paris Agreement.

What is double counting?

The risk of double counting exists:

1) If the same emission reduction or removal is counted at least twice under the same accounting framework

2) If the same GHG emission reduction and removal is counted at least twice under two different accounting frameworks

The different goals, scopes, and scales of accounting lead to overlapping GHG measurement and reporting, which can lead to the double counting of emissions reductions or removals. Double counting occurs when a single emission reduction or removal is counted towards more than one goal, target, or pledge. Double counting can occur between different accounting systems (e.g., corporate accounting overlaps with government accounting) or within a system (e.g., different GHG projects under the same GHG crediting program account for the same GHG emission reduction more than once.) Generally, carbon standards have protocols in place to avoid the double counting of GHG emission reductions or removals within accounting systems. Double counting between accounting systems is more complex, and consequently, more controversial and difficult to manage.

There are three types of double counting (as depicted in Figure 4.1):

Double issuance occurs under the VCM when more than one credit is issued for a single ton of GHG emission reductions or removals. The risk of double issuance is addressed through robust carbon credit certification and issuance processes.

Double use occurs when a single, certified GHG emission reduction or removal is used more than once to meet a climate target in the same GHG accounting system. The risk of double use is addressed through adjustment rules, transparent disclosure, and reporting of GHG reductions and removals in GHG registries. For example, corresponding adjustments avoid double use of transferred GHG emission reductions and removals by governments to meet their NDCs under the Paris Agreement.

Double claiming occurs when a single carbon credit—representing one ton of GHG emission reduction or removal—is claimed against different types of climate goals in different accounting systems. This can happen, for example, when a company claims a carbon credit towards its (voluntary or binding) emission reduction goal, while the same credit is claimed towards the NDC target of a country. The risk of double claiming is currently not
managed by existing methodologies or registries.

**What are the risks of double claiming?**

While other forms of double counting are managed by carbon standards’ rules, double claiming of GHG emission reductions and removals between corporates and VCM host countries poses a risk. There are arguments that double claiming is a problem and arguments that it is not.

Some NGOs and governments argue that double claiming is a problem. They emphasize that double claiming may displace corporate or government mitigation action, resulting in less mitigation than what would be expected from merely looking at the respective achievement of corporate and NDC targets.

Where carbon credits are used to offset emissions, the risk of double claiming of GHG emission reductions and removals could undermine mitigation efforts. They argue that companies should not be able to offset their emissions through carbon credits that are also claimed under the NDCs of host countries.

Other NGOs and governments, as well as other market participants, argue that double claiming is not a
problem. They point out that since companies’ climate targets and countries’ NDCs are accounted for in separate, parallel accounting systems, double claiming does not result in the misrepresentation of the climate benefits being generated at a global level. They also argue that the VCM mobilizes additional mitigation in the Global South and that investments in the VCM are not necessarily linked to budgets that support corporate mitigation action. Voluntary action should contribute to host country NDCs in the form of climate finance and not result in adjusting the accounts of the host country. Since corresponding adjustments require complex accounting procedures and institutional requirements, they argue that such adjustments would disincentivize investments in mitigation action.

**How can double claiming under the VCM be addressed?**

Proposals on how to address double claiming have been made on both the supply and the demand sides of the VCM.

Double claiming could be addressed on the supply side of the VCM if host countries authorize VCM carbon credits to be traded as Internationally Transferred Mitigation Outcomes (ITMOs) with corresponding adjustments. Corresponding adjustments would ensure that when VCM credits are transferred internationally, the GHG emission reductions or removals associated with those credits would be subtracted from the NDC accounts of the host country. A drawback of applying corresponding adjustments to the VCM is the bureaucratic and technical complexity involved. Many governments may not have the capacity to offer corresponding adjustments now, although some may be willing and able to do so in the future.

Double claiming can be addressed on the demand side of the VCM by defining corporate claims that do not involve offsetting. In this case, the right to claim the climate benefit associated with a VCM activity or carbon credit does not include the right to offset company emissions. A drawback of this approach is that the business case of the non-offset uses of carbon credits has so far not resonated as strongly with corporate buyers as offsetting emissions, which allows companies to claim to be carbon neutral, a claim that is widely recognized by consumers. Governments can help address this drawback by working with companies to recognize the non-offset use of carbon credits and promoting public awareness of non-offset benefits. Private and public-private initiatives such as the VCM Integrity Initiative and the Science-based Targets Initiative are providing guidance on the claims corporates can make with VCM credits for offsetting and non-offsetting purposes.
Further Reading


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