The Voluntary Carbon Market **Explained**

Chapter 6

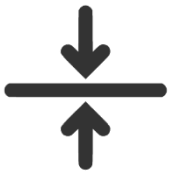
Chapter 6: What makes a carbon credit high quality?

High-quality carbon credits accurately represent climate and other socio-environmental benefits. High-quality carbon credits are the result of well-informed decisions made during voluntary carbon market (VCM) activity design and implementation following guidance from reputable carbon standards and in alignment with host country regulations. GHG emission reductions or removals represented by high-quality carbon credits are conservatively quantified and based on credible baselines, assurance of additionality, prevention of leakage, and permanence. Higher quality credits often attract higher prices.

What are the features of high-quality carbon credits?

The quality of a carbon credit is based on the integrity of the activity that generated the credit and, often, whether that activity provided social or environmental benefits beyond avoiding or removing greenhouse gases (GHGs).

Conservatively quantifying emissions means that VCM activity developers use low estimates for the number of credits or other benefits that the activity will deliver and use high estimates for possible failures or risks. Different types of VCM activities vary in levels of certainty and risk. This variation is reflected in the measurement, reporting, verification, and validation protocols set by carbon standards.



Credible baselines are conservative in estimating the tons of carbon dioxide equivalent (tCO_2e) that would have been emitted or removed from the atmosphere in the absence of the VCM activity. This is to ensure that each carbon credit at least represents a ton of GHG emissions avoided or removed. Inflated baselines lead to the overestimation of climate benefits associated with VCM activities, resulting in carbon credits associated with less than one tCO_2e.

Assurance of additionality means that there is a high degree of certainty that GHG emission reductions and removals associated with a carbon credit would not have taken place without the incentives or resources provided by the sale of certified emission reductions and removals. Demonstrating and verifying additionality is difficult because it is not possible to determine exactly how finance, technology, laws, or local practices would have changed in a counterfactual scenario where the VCM activity did not take place.

Preventing and accounting for leakage ensures that a VCM activity avoids and does not simply displace GHG emissions. Leakage occurs across all sectors and at all levels of implementation. Primary leakage occurs when a VCM activity causes drivers of GHG emissions to move rather than cease emitting. Secondary leakage occurs if a VCM activity inadvertently incentivizes increases in GHG emitting activities, for example by shifting supply and demand of land, products, and services.

Leakage should be prevented by managing, quantifying, accounting for and compensating displacements, with best practices differing across VCM activity types. Primary leakage can largely be controlled through activity designs that analyze and address the proximate causes of leakage and the underlying drivers. Larger accounting areas, such as jurisdictional programs, can account for leakage from specific project areas. Secondary leakage is more complex and harder to manage. Activity developers and governments can model possible leakage and discount emission reductions or removals achieved by the activity with the assumption that some leakage will occur.

Permanence involves ensuring that each carbon credit generated represents a long-term climate benefit, often defined as 100 years. Permanence is primarily relevant for credits that represent carbon removals through nature-based credits or carbon storage technologies. VCM activities must mitigate the risk that GHG emission reductions or removals are reversed in the future due to natural disasters, climate changes, human

activities, or other events that cause stored carbon to be released back to the atmosphere.

The risk of impermanence is often managed through mandatory buffer accounts. VCM activities set aside a portion of the credits they generate in a buffer pool, from which credits are subtracted to compensate when reversals of carbon storage occur. Impermanence buffers are widely used at the project level. Their success at the level of jurisdictional programs for Reducing Emissions from Deforestation and Degradation (REDD+) – where much larger amounts of reversals may occur and the insurance function of buffers is more complex and politically challenging – remains to be examined.

What are the features of VCM activities that generate high-quality credits?

VCM activities that generate high-quality carbon credits maximize climate, socio-economic, and ecological benefits for people and ecosystems as appropriate to the type and sector of a VCM activity. High-quality VCM activities must be well-designed and appropriately monitored, in alignment with all carbon standard requirements and relevant policies. High-quality activities should also provide benefits to local communities. Buyers may be willing to pay higher prices for carbon credits that not only represent real and additional emission reductions or removals, but that also exhibit benefits to host countries and local communities.

Policy alignment ensures that VCM activities fall within the sectoral policy priorities of a country. Carbon markets can support policy implementation and help achieve governments to meet policy goals. During activity design and implementation, VCM activities should ensure that all social and environmental requirements of the host country are complied with, even in contexts where law enforcement is weak.

Safeguards ensure that VCM activities do not cause social and environmental harm. VCM activities follow safeguards to ensure that VCM activities adequately address issues such as the Indigenous Peoples and local communities (IPs&LCs), social participation, and preservation of ecosystems. Safeguards are put in place by host country regulation and

complemented by carbon standards.

Social safeguards typically require that VCM activities protect human rights, avoid discrimination and any illegal practices, respect local institutions, ensure consultations are inclusive, and follow a Free, Prior and Informed Consent (FPIC) process. Environmental safeguards require that activities protect intact and high conservation value ecosystems and follow all relevant environmental regulations.

Transparent and fair benefit sharing ensures that local populations benefit from VCM activities. Benefits can accrue to communities in the form of direct payments, improved infrastructure, community services, or other non-monetary benefits. Effective benefit sharing agreements provide incentives for IPs&LCs and other local stakeholders to participate in VCM activities as appropriate. Benefit sharing is particularly relevant for REDD+ and other community-driven VCM activity types (e.g., cookstove projects), where it is often formalized through agreements between communities and activity developers or governments (in the case of jurisdictional programs).

Lasting and transformative impact is associated with VCM activities that shift host countries towards low emissions development paths. Larger sectoral or jurisdictional programs are more likely to generate transformative policy changes and impacts. Activities that provide transformative capacity building and technology with effects outside of project boundaries can enhance the climate ambitions of countries and provide net contributions to the Paris Agreement, even if credits are used as offsets. VCM activity developers can proactively pursue socio-economic and ecological impacts through activities that contribute to sustainable development. Several carbon standards provide labels or credits to certify contributions to Sustainable Development Goals or other socio-environmental benefits.

How can governments increase the supply of high-quality carbon credits?

Governments can support VCM actors in aligning their activities with domestic policies by clarifying the rules of engagement in the VCM in their country and by

indicating where VCM finance can best complement public policy. Governments can clarify land tenure and land ownership, carbon rights, and benefit sharing rules, to facilitate more effective and equitable engagement with local communities. Governments can also provide stable investment environments that assure VCM activity developers, investors, and beneficiaries of the permanence of climate and socio-environmental outcomes.

Further reading

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Schneider, L., Healy, S., Fallasch, F., De León, F., Rambharos, M., Schallert, B., et al. (2020). What Makes a High Quality Carbon Credit. https://www.worldwildlife.org/publications/what-makes-a-high-quality-carbon-credit

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