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The Voluntary Carbon Market **Explained**

Chapter 6

Chapter 6: What makes a high-quality carbon credit?

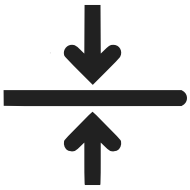
A high-quality carbon credit accurately or conservatively represents greenhouse gas (GHG) emission reductions or removals achieved through voluntary carbon market (VCM) activities. VCM projects and programs that generate high-quality carbon credits maximize climate, socio-economic and ecological benefits for local communities and ecosystems as appropriate to the project type and sector. Thus, high-quality carbon credits are the result of well-informed decisions made during project design and development following guidance from reputable carbon standards and in alignment with host country regulations.

What defines real and additional GHG emission reductions?

High-quality carbon credits represent real and additional GHG emission reductions or removals, which are quantified based on credible and conservative calculations of baselines, additionality, leakage, and permanence.

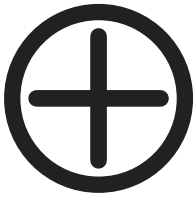
Quantification of emission reductions and removals refers to the methodologies according to which GHG emissions are measured, including methods for collecting, analyzing, and storing emissions data. Emissions should be quantified in a conservative manner, using credible baselines, and discount for uncertainty in measurements and for leakage.

The measurement of emission reductions requires robust measurement, reporting, and verification (MRV) protocols. Projects and jurisdictional programs for **Reducing Emissions from Deforestation and Degradation plus (REDD+)** should follow methods consistent with the Intergovernmental Panel on Climate Change for quantification and use new monitoring technologies to the extent possible.



Credible baselines determine the emissions that would have been emitted to and/or removed from the atmosphere had the VCM project or program not been implemented. Baselines are expressed as tonnes of carbon dioxide (CO_2) equivalent per year for the crediting period against which the GHG emissions and removals from a results period will be compared. Inflated baselines lead to the overestimation of climate benefits associated with VCM projects and programs, resulting in a scenario where each carbon credit is associated with less than one ton of emission reductions or removals. Credible baselines are conservative and assume that less rather than more GHGs would have been emitted. In the case of energy and landfill-gas projects or programs, baselines may be set based on expected project performance, sampling of fixed parameters, or other monitoring over the crediting period. In the case of land and forest projects and programs, baselines are set based on the difference in GHG emission reductions or removals achieved by

the project or program relative to a counterfactual business-as-usual reference scenario. In the context of **jurisdictional REDD+**, baselines are called 'forest emissions reference levels' or just 'reference levels.' Jurisdictional reference levels are based on business-as-usual emissions or defined as the historic level of emissions over a defined period.

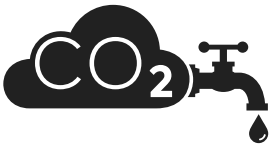


Assurance of additionality means that the GHG emission reductions and removals associated with a carbon credit would not have taken place without the incentives and/or resources provided by a project or program. Additionality tests are applied to demonstrate that the associated emission reductions or removals would not have occurred in the absence of the VCM project.

Additionality may be:

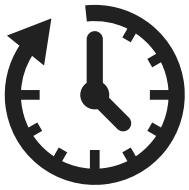
- financial—the emission reductions or removals would not have occurred without carbon finance;
- technological—the emission reductions or removals would not have occurred without equipment or infrastructure provided by the VCM activity;
- ecological—the emission reductions or removals would not have occurred without environmental interventions by the VCM activity;
- institutional or social—the emission reductions or removals would not have occurred without changes to governance and/or local practices that were facilitated by the project or program.

To be considered additional, emission reductions or removals cannot be due to activities that are already legally required or common practice in the project area. 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 without-project or without-program scenario. Additionality may be more credibly demonstrated at large spatial and temporal scales by showing that emission reductions or removals are below the level of historical trends.



Preventing and accounting for leakage refers to ensuring 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 project or program causes drivers of GHG emissions to move rather than cease emitting. Secondary leakage occurs if a VCM project or program 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 project types. Primary leakage can largely be controlled through project 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 triggered by policy interventions is more complex and

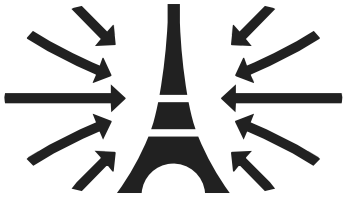
harder to manage. However, governments can model possible leakage and discount emission reductions or removals with the assumption that some leakage will occur.



Assurance of permanence involves ensuring that each carbon credit generated represents a long-term climate benefit, often defined as 100 years. Projects and programs must mitigate the risk that GHG emission reductions or removals are reversed at some point 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. Permanence is primarily relevant for credits that represent carbon removals through nature-based credits or carbon storage technologies. The risk of impermanence is often managed through mandatory buffer accounts: projects and programs set aside a portion of their credits in a buffer pool, from which credits are subtracted from the pool to compensate when reversals of carbon storage occur. Non-permanence buffers are standing practice and widely used at the project level. Their success at the REDD+ jurisdictional level, where much larger amounts of reversals may occur and the insurance-function of buffers is more complex, remains to be examined.

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

High-quality carbon credits are generated by high-quality projects and programs. High-quality projects and programs must be well-designed and appropriately monitored, in alignment with all **carbon standard** requirements and relevant policies. High-quality projects also provide benefits to local communities, as appropriate to the project type. 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 are filling the gap to implement mitigation activities that are not (yet) required by regulation or financially supported by the host country and do not provide competing incentives to private actors. VCM projects should be fully transparent about how project activities may interact with policy delivery. **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.

Safeguards ensure that VCM projects do not cause social and environmental harm. Projects and programs are

required to follow safeguards to ensure that VCM initiatives adequately address issues such as the **rights of IPLCs**, social participation, and preservation of ecosystems. Safeguards are put in place by **carbon standards** and, in some cases, by host country **governments**. Social safeguards typically require that projects protect human rights, avoid discrimination and any illegal practices, respect local customs and institutions, ensure consultations are inclusive, and follow a Free, Prior and Informed Consent process. Environmental safeguards require that projects 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** systems provide incentives for local communities to participate in VCM projects as appropriate. Benefit sharing is particularly relevant for **REDD+**, where it often takes the form of agreements between communities and project developers or governments (in the case of **jurisdictional programs**) about the distribution of monetary or non-monetary benefits from the commercialization of carbon credits.

Lasting and transformative impact is associated with VCM activities that help to shift host countries towards low emissions development paths. Larger sectoral or jurisdictional programs are more likely to generate transformation policy changes and impacts. Programs and projects 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**. Projects can also proactively pursue additional socio-economic and ecological impact through activities that contribute to sustainable development. Several **carbon standards** provide labels or credits to award projects for SDG contributions.

Further Reading

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