



Setting the Global Standard for Quality Carbon Credits

The VCS AFOLU Program: GHG Accounting for Agriculture and Forestry Projects

Emissions from deforestation account for about 16 percent of global GHG emissions, and the agriculture sector for an additional 14 percent. Recognizing this major opportunity to mitigate climate change, the Voluntary Carbon Standard (VCS) Agriculture, Forestry and Other Land Use (AFOLU) Program was established to provide a credible and robust approach to account for and credit voluntary offset projects in these key sectors.

The AFOLU Program, which includes Reduced Emissions from Deforestation and Forest Degradation (REDD), was developed through a comprehensive two-year stakeholder and public consultation process, drawing on leading forest and agricultural carbon experts and practitioners, including from CATIE, Winrock International, The Nature Conservancy, Conservation International, the Nicholas Institute at Duke University, Colorado and Ohio State Universities, Chinese Academy of Forestry, Swiss Federal Institute of Technology, Joanneum Research, TÜV SÜD and others.

The VCS is one of the preferred standards used for the development of voluntary carbon projects, accounting for more than a third of all GHG credits verified to a third-party standard¹. Investors rely on the VCS for ensuring that the GHG credits they source are real, additional, measurable, verifiable and permanent. In a major 2009 EcoSecurities survey² of the leading carbon market participants, the VCS was found to be the most highly desired offset standard for forest projects, ahead even of the UNFCCC's Clean Development Mechanism.

The vast majority of REDD projects under development around the world, which collectively will conserve tens of millions of hectares of native forestland, are using the VCS. In addition, the leading environmental NGOs active in this space are designing and validating their AFOLU projects with the VCS in addition to having the community and biodiversity benefits assessed with the Climate,

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Current VCS AFOLU project types:

- Afforestation, Reforestation and Revegetation (ARR)
- Agricultural Land Management (ALM)
- Improved Forest Management (IFM)
- Reduced Emissions from Deforestation and Degradation (REDD)

The VCS Association (VCSA) plans to release guidelines for peat projects (summer 2010) and avoided conservation of non-forest lands (grasslands and scrublands, early 2011).
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Community & Biodiversity Standard. The VCS is also being embraced by policymakers, being featured in emerging policy frameworks in the U.S. and Australia.

SETTING A HIGH BAR FOR CARBON QUALITY


The VCS ensures that project climate benefits are conservatively accounted for and that all GHG credits (Voluntary Carbon Units—VCUs) issued are real, additional and permanent.

Additionality

One of the most fundamental requirements for carbon offsets is that they are additional—in other words, they must go beyond ‘business as usual’ (BAU) and contribute to real GHG emissions reduc-

1 http://moderncms.ecosystemmarketplace.com/repository/moderncms_documents/vcarbon_2010.2.pdf

2 www.ecosecurities.com/Registered/ECOForestrySurvey2009.pdf



tions or removals compared to what would have occurred in the absence of the project. The VCS ensures additionality by requiring that projects demonstrate they are not mandated by any enforced law, statute or other regulatory framework (i.e., regulatory surplus) and then demonstrate they are not BAU through one of three tests:

- **The project test** requires projects to demonstrate they face barriers (investment, technology or institutional barriers) that would prevent the project's implementation without carbon finance, and must not be common practice in the sector or region compared to alternative projects without carbon finance. This is the approach taken by the Clean Development Mechanism (CDM), and it relies on detailed assessments of individual projects using tools such as the CDM Additionality Tool.
- **The performance test** requires projects to demonstrate that GHG emissions generated (or carbon sequestered) per unit output by the project are below (or above, for sequestration) the level that has been approved as a performance standard by the VCS Program for the product, service, sector or industry, at a level defined to ensure that the project is not BAU.
- **The technology test** requires that projects using less emissions-intensive technologies meet certain performance criteria, which when met results in crediting up to a pre-determined threshold (e.g., market penetration) that ensures that the project is not BAU.

Permanence

Carbon sequestered through land-based projects is subject to potential loss over time, whether intentional (e.g., timber harvesting or agricultural expansion) or unintentional (e.g., natural fires or pests). To address the risk of such reversals, the VCS has established a robust self-insurance mechanism, based on a buffer reserve, which ensures that all GHG credits issued are backed by a diverse pool of non-tradable buffer credits.

Using the Tool for AFOLU Non-Permanence Risk Analysis and Buffer Determination, two independent validation/verification bodies separately assess the specific risks of projects seeking to generate VCUs. The VCS defines the key risks that must be evaluated for each project type including, for example: country risk; potential for rising opportunity costs; project design, management and longevity; and potential for fire. Based on these assessments a certain percentage of the project's GHG credits are deposited into a pooled buffer account shared by all VCS AFOLU projects. These buffer credits are non-tradable and are maintained in the pooled account to cover the risk of unforeseen losses in carbon stocks no matter where they occur within the AFOLU project portfolio. If the project's risk profile improves during subsequent verifications, a portion of its buffer credits can be released, which provides an incentive for effective risk mitigation and reporting over time.

The buffer withholding requirements and overall reserve levels are periodically adjusted based on actual project performance across the VCS AFOLU portfolio, so there is always a healthy volume of buffer credits to insure potential losses that may affect individual projects. This allows the VCS Program to issue permanent VCUs to AFOLU projects, making them fungible with VCUs from all other project types, which enhances liquidity and enables the market to function effectively. This innovative pooled buffer approach has been widely recognized as being as robust as, and more workable than, the temporary credit system adopted by the UNFCCC CDM, and is increasingly considered a preferred approach to risk management by policy makers and practitioners around the world.

“The leading provider of standards for such [voluntary] offsets [is] the Voluntary Carbon Standard.”

—The Economist Nov 5th, 2009

Leakage

Projects that effectively reduce GHG emissions within their boundaries can result in increased emissions elsewhere. For example, when a piece of threatened forestland is protected, the drivers of deforestation (e.g., shifting agriculturalists or timber harvesters) can oftentimes simply move to another area and continue deforesting. Such offsite impacts are called 'leakage' and can dramatically reduce the net climate benefits generated by individual carbon projects.

The VCS requires that all projects define, mitigate, monitor and account for potential leakage. VCUs are issued based on each project's net GHG emissions reductions or removals, conservatively taking into account any leakage that may occur as a result of the project.

All VCS AFOLU projects must account for 'activity shifting' leakage (i.e., the impact of displaced deforesting agents moving to other locales). In addition, the VCS requires projects that reduce the production of global commodities (e.g., timber) to also account for 'market leakage', since, if demand is unchanged, reductions in commodity supply may be made up through increased production (potentially leading to deforestation) in other parts of the country. The VCS uses look-up tables backed by peer-reviewed research to assign credit discount factors to projects that may be affected by such market leakage.

By conservatively accounting for both direct (activity shifting) and indirect (market) leakage, the VCS has established itself as the world's first carbon standard for credibly accounting for AFOLU projects operating at sub-national scales.

MEASUREMENT AND MONITORING

The VCS requires the use of environmentally and scientifically sound best-practice methodologies, approved under the VCS double approval process or under an approved GHG program (e.g., CDM), for comprehensively measuring and monitoring the greenhouse gas benefits of AFOLU projects. Robust quantification methods must be used to measure the significant carbon pools both in the baseline scenario and as a result of the project activities to conservatively determine the GHG credits generated by the project.

AFOLU projects must identify significant carbon pools (e.g., above- and below- ground biomass) and their rates of change; collect and analyze data; determine the most likely and conservative baseline scenario; estimate the change in carbon stocks and GHG emissions due to the project activities, taking into account harvesting, planting or other activities; and measure and deduct any leakage attributable to the project. All of this must be done using conservative assumptions, while maintaining accuracy and reducing uncertainty to the extent possible. Over the life of the project, the actual changes in carbon stocks and emissions from project activities must be monitored using reliable and robust methods.

The VCS requires third party validation of the project and monitoring plans, as well as verification of the emissions avoided and/or carbon sequestered. This ensures that monitoring is carried out according to standardized procedures and the GHG emissions reductions or removals claimed by the project are accurate, conservative and real.

PREVENTING DOUBLE COUNTING

Using a state of the art registry system, the VCS ensures VCUs are unique and not double counted. The VCS registry system is the first multiple-registry system in the voluntary carbon market and allows market participants to choose where they open VCS registry accounts, thereby ensuring competition and minimizing transaction costs.

The VCS registry system consists of three international companies that are contracted by the VCS

Association to act as registries: APX Inc. (a leading environmental market infrastructure provider based in North America), Caisse des Dépôts (a leading French financial institution and developer of CO2 registries in Europe), and Markit (a leading international financial information services company based in the UK). The VCS registries issue, hold, transfer and retire VCUs, and interact directly with the VCS project database to upload project documentation and obtain unique serial numbers for each VCU. VCUs can also be tagged with additional standards and certifications, including those achieved under the Climate, Community & Biodiversity Standard, Forest Stewardship Council or Social Carbon, for example. Together, the infrastructure provided by the global registries and the project database pro-

vide a transparent, robust and scalable chain of custody for the voluntary carbon market.

The VCS registry system is also expandable, allowing the potential addition of new registries that can serve local markets.

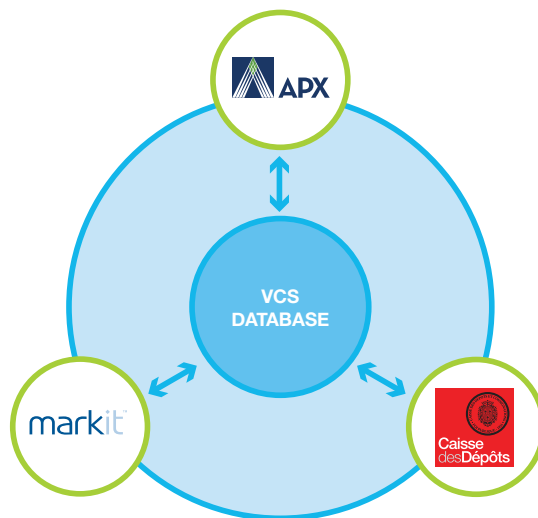
PROMOTING INNOVATION

Methodology Development

The VCS spurs innovation by using a bottom-up approach for the development and approval of new methodologies, including modular approaches that can be widely applied. Methodologies may be developed for any eligible project type, allowing project developers a clear path for creating new approaches where no current methodology applies to their project or where they have created a new and innovative approach. The rigorous VCS Methodology Approval Process requires a 30-day public comment period and subsequent approval by two validators—one of which is appointed by the developer of the methodology and the other by the VCS Association. This ensures that methodologies meet the requirements of the VCS and are scientifically and environmentally sound.

The first AFOLU methodology—an Improved Forestry Management (IFM) approach—was validated and approved for use under the VCS Program in June. And in August, the first ever REDD methodology was approved. In addition, methodologies covering all current AFOLU project types, including REDD, IFM, ARR and ALM, are currently making their way through the approval process.

The VCS Registry System
The VCS Registry System currently consists of three independent registry operators: APX, Markit and Caisse des Dépôts. All project documents and VCUs are listed on the project's registry of choice as well as the central VCS project database. VCUs may be transferred at any time between registries.



Founded in 2005 by the Climate Group, the International Emissions Trading Association and the World Sustainable Development Business Council, the VCS Program has pioneered the development of flexible and reliable processes and tools for generating voluntary GHG credits of lasting environmental integrity.

All Voluntary Carbon Standard documentation is available on the VCS website www.v-c-s.org. For more information on VCS, AFOLU and REDD please contact our AFOLU Program Coordinator Naomi Swickard at nswickard@v-c-s.org.