December 15, 2010

Chairman Mary Nichols and Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Submitted electronically

Re: Comments on the Proposed Cap-and-Trade Regulation

Dear Chairman Nichols and Members of the Board:

The Voluntary Carbon Standard Association (VCSA) is pleased to offer the following comments on the California Air Resources Board's (CARB) draft cap-and-trade regulation released on October 28, 2010. We appreciate the significant time, dedication and resources that have gone into this rulemaking over the past several years and wish to congratulate you on moving forward with this important and groundbreaking regulation.

As one of the world's leading voluntary greenhouse gas (GHG) emission reduction programs, founded in 2005 by The Climate Group, International Emissions Trading Association, World Business Council for Sustainable Development and World Economic Forum, and with almost 47 million Voluntary Carbon Units (VCUs) issued from 541 projects registered worldwide, the VCSA is eager to assist CARB in developing a robust and market-driven offset program. Such a program will minimize the costs of compliance with the cap-and-trade regulation while supporting the development of innovative projects and technologies operating outside the capped sectors. We have many years of experience in building a strong, coherent and well-respected global GHG emission reduction program and would like to share our experiences and insights. More information about the VCSA and the VCS Program can be found in the Annex attached and on our website at www.v-c-s.org.

Our comments are focused on the offsets provisions of the draft regulation, with a view to providing market participants with the clarity needed to proceed with investments in both protocols (or "methodologies," as some programs refer to them) and projects that will generate the offsets to be used in the system. Specifically, we address the following main topics:

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A. The requirements regarding external offset project registries, details regarding the CARB offset project registry, and recommendations to make sure the offset project registries provide adequate support to CARB and serve to ensure the environmental integrity of the program;
B. The requirements regarding the adoption of offset protocols, including requests for clarification of CARB preferences in terms of how to address baselines and additionality, and suggestions for broadening the list of approved protocols;
C. The need for guidance regarding REDD activities and a suggestion for considering alternative approaches to permanence that do not require distinguishing between intentional and unintentional reversals;
D. The need for guidance regarding sector-based credits; and
E. A final section setting out general recommendations on specific items.

We take no position on features of the draft regulation not addressed herein.

A. COMMENTS ON OFFSET PROJECT REGISTRY PROVISIONS

1. **Provide more details about the CARB offset project registry.** The draft regulation suggests that CARB will be creating and operating its own offset project registry but no details are provided about this process and when this registry will be established. Furthermore, it is not clear that the rigorous requirements that would be imposed on external offset project registries would similarly be imposed on the CARB offset project registry. If offset project registries are competing on an uneven playing field with CARB, this will disincentivize external registries from participating in the program. CARB should clearly indicate its intentions in this regard.

2. **Provide more details about external offset project registries.** The draft regulation does not create enough certainty for external offset project registries to incentivize them to prepare and apply to become an approved registry. In addition to the possibility that external offset project registries may have to compete with the CARB registry, the following issues are not clear:

   - What is the process for applying to be an approved external project registry?
   - When will the application window open, or will it be open immediately after the regulation becomes effective?
   - What are the fees, if any, to participate?
   - Will there be any restrictions on what the offset project registries can charge for the issuance of offsets that will later be issued by CARB?

3. **Reconsider the "primary business" requirement.** Section 95986(d) requires the offset project registry applicant to have its "primary business" be to operate an offset project registry. This requirement may exclude GHG programs like the VCS which do much more than provide a limited registry function. The VCSA therefore recommends that the language in this section be amended to include "operating a GHG program that includes a registry system." To be clear, the VCSA is strictly dedicated to the management and improvement of the VCS Program and does not undertake other activities (e.g., consulting, validation/verification, methodology development) within the carbon market, and we applaud CARB's attempt to ensure that offset project registries not play larger roles in the market as that could lead to real or perceived conflicts of interest.

4. **Consider adopting financial standing requirements.** The vast majority of GHG programs with registry functions that could qualify as offset project registries under the regulation are non-profit organizations that have contracted with third parties for the provision of registry services. In the event that an offset project registry has contractual agreements with third parties for the provision of registry services involving the issuance of and custodial holding of offset credits, these third parties should face minimum financial asset and/or credit requirements. In addition, insolvency protections should be considered so that offset credits being held in the third party registries do not become tied up in bankruptcy proceedings. Strict conflict of interest provisions should also be imposed on these service providers.

5. **Remove requirement to track prices.** The draft regulation would require that offset project registries track prices and counterparties. The VCS does not track prices and does not see the value in having the offset project registries track such information. The purpose of a GHG program and its associated registry is to ensure the creation of offsets according to the criteria and rules set out in the program, and the requirement to track prices is not relevant to the work of a GHG program. This requirement should therefore be removed.

6. **Reconsider the level of liability insurance that will be required.** The requirement for an offset project registry to hold $50 million in liability insurance would be prohibitive for most non-profit organizations of the type that would likely seek to become offset project registries. Moreover, an insurance policy regarding improper issuance of offset credits may even be impossible to obtain in the insurance market. In addition, it is not clear what the term of such a policy would be required, and what the coverage or trigger for the insurance would be.

7. **Reconsider the re-application requirement.** CARB should not require external offset project registries to re-apply for registration every five years (Section 95986(i)(5)). This is unnecessary particularly in light of CARB's ability to sanction an offset project registry for misdeeds under Section 95986(j). It also creates significant uncertainty for projects registering under an external offset project registry where those projects have crediting periods longer than 5 years. This uncertainty would serve as another disincentive to use an external offset project registry as opposed to CARB's offset project registry, as discussed in more detail above.

8. **Clarify the project re-registration requirement.** Section 95986(j)(3) of the draft regulation is not clear about whether projects that must re-register with CARB or a new external offset project registry will be able to start with a new crediting period or carry on with an existing crediting period. While it seems clear that future-generated offsets from an existing project would be issued in the new registry, it is not clear what would happen to the existing project's already issued offset credits.

9. **Reconsider the project audit requirement.** While it is critically important that oversight of project verifications is provided, the requirement that external offset project registries audit and physically visit 20% of their projects is onerous and likely to be prohibitively costly and thus limit the scalability of the mechanism. This is especially so given that visits must occur in conjunction with annual verifications which will generally be occurring at the same time of year. Depending on the number of projects listed in an offset project registry it may be very difficult to coordinate scheduling of all these projects among three different entities at the same time of the year.

   Instead, we would recommend emphasizing oversight of the validation/verification bodies. Under the VCS Program, this is achieved through a strict and rigorous process of accreditation, combined with annual surveillance of validation/verification bodies by the accreditation body and contracts between the VCS Association and these entities that set out obligations and liabilities. The American National Standards Institute (ANSI) may be an appropriate accreditation body to provide accreditation services for CARB, especially given their long-standing expertise in this area. This would allow CARB to leverage an existing platform, scale up the number of approved auditors quickly, and provide consistency across the market, including one that already establishes links with international partners and may likely have more in the future. The approach would be similar to that taken under the EU Emissions Trading Scheme, which leveraged national accreditation bodies to provide accreditation services and thus was able to harness their expertise and capacity to manage the accreditation process and verification oversight. Setting up a new and workable accreditation system that is capable of approving a sufficient number qualified validation/verification bodies) and is able provide the appropriate level of oversight could prove to be a long and challenging task and would effectively duplicate work already accomplished.

B. COMMENTS ON OFFSET PROTOCOL ADOPTION PROVISIONS

1. **Provide Additional Clarity About the Policy Toward Standardized Versus Project-Based Approaches to Protocol Development.** The *Staff Report: Initial Statement of Reasons* (Staff Report) released with the draft regulation suggests a philosophical preference for standardized protocols (Staff Report, II-45, III-4).[1] However, this preference is not explicitly reflected in the regulation. The VCSA believes it would be helpful to the market for CARB to clearly indicate whether it intends to endorse one approach to protocol development to the exclusion of another, and insofar as CARB has a preference for standardized approaches, it should clarify exactly what this means (i.e., whether standardized approaches relate to the determination of additionality, the calculation of emissions reductions, or both).

   In this regard, the VCSA encourages CARB to specify that project-based approaches, like those used in many other offset programs around the world, will be accepted for a limited transition period at the beginning of the cap-and-trade program's implementation, or as a transition to a sector-wide approach. The rationale for this would be threefold: (1) to enable an adequate supply of early offsets for the program; (2) to encourage additional innovation in a still-nascent market, and (3) to recognize pioneers for groundbreaking efforts in protocol development and project investment.

   Allowing project-based protocols to be approved for a limited time will encourage a diverse and creative range of protocol types over the longer term. Standardized approaches, while ultimately perhaps the preferred way to go, are limited in number, take time to develop, and require significant resources. Importantly, the development of project-based approaches can serve to inform the creation of standardized approaches in certain sectors and will provide the necessary incentives to motivate an industry-wide move towards lower carbon emissions. Restricting approved protocols to only standardized approaches could also result in insufficient offset supply arising from a limited set of protocols.

[1] It should be noted that Section 95976(e)(1)(C) of the draft regulation would be applicable only with a project-based approach to protocol development and not to a standardized approach.

2. **Provide more details about how and what additional protocols may be approved and how they might be approved.** The draft regulation does not create enough certainty for offset project operators and investors to initiate protocols that fall outside of the scope of the four offset protocols indicated by the regulation as being "pre-approved." This will significantly slow momentum on any other offset protocols. In addition, the process for proposing and approving offset protocols is not clearly specified and, as mentioned above, it is not clear whether going forward CARB will only accept standardized approaches or if it is open to project-based approaches. Furthermore, it is not clear whether protocols already created by other programs might be accepted, and whether each protocol will be required to undergo the CEQA process. CARB should consider outlining clear criteria, guidelines, and procedures for the evaluation and adoption of new protocols and project types to give the market clear guidance to continue developing protocols (and projects) that will provide the offsets necessary for effective cost-abatement.

3. **Clarify the Early Action Provisions.** Section 95990(b) of the draft regulation suggests that no additional offset project types will be able to be added to the list of creditable early action offsets. This section should provide a mechanism for adding to the list of eligible early action offset project types and protocols to incentivize the development of early action offset projects now and the creation of early action offsets. As mentioned above, the VCSA recommends the recognition of project-based approaches to reducing emissions during a transitional phase that closely mirrors the early action stage of the program. This change would ensure an adequate supply of offsets for the program.

4. **Adopt measures to incentivize the development of broadly applicable new protocols.** Under the VCS program there is a financial incentive for developers to formulate and develop new protocols (known as "methodologies" under the VCS). Entities that successfully develop a methodology under the VCS Program receive a share of the issuance fee for credits issued using that methodology. This has motivated creativity and action to voluntarily reduce greenhouse gas emissions from a number of different sectors, and encourages protocol developers to make sure their protocols are robust, clear, broadly applicable, and scalable. Given that the development of protocols is a time- and resource-intensive process, we recommend that if CARB adopts protocols created by other programs with robust rules it should recognize and compensate the program (and/or protocol developer) for the work involved in developing the protocol. It could do this by paying a licensing fee for a certain period of time, or perhaps a fee on a per credit issued basis. This would create a powerful incentive for the development of rigorous and broadly applicable protocols to be presented to CARB.

5. **Reconsider drafting method of how protocols are recognized in the regulation.** Listing each approved offset protocol repeatedly throughout the regulation is confusing and suggests that no additional protocols will ever be approved (see, e.g., Sections 95973(a)(2)(C); 95975(c), 95976(c) and (d)). Rather than doing this, CARB should consider simply saying, "as applicable in an approved offset protocol," or "as relevant in the approved offset protocol," or "as contained in the appropriate protocol." This will also minimize the regulatory amendments that need to be made each time a new protocol is adopted.

C. COMMENTS ON FORESTRY-RELATED PROVISIONS AND REDD PROVISIONS

1. **REDD provisions should be incorporated as soon as possible.** Section 95993 of the draft regulation provides placeholder language for potential future crediting of reduced emissions from deforestation and degradation (REDD) projects. It is important to the market and to developing country policymakers to indicate the general criteria and process that will be undertaken to approve REDD activities. For instance, it is currently unclear whether CARB will accept only jurisdiction-wide programs or whether it is open to project-based activities. In addition, the State of California has signed agreements with the States of Acre (Brazil) and Chiapas (Mexico) for the recognition of REDD credits from those regions, but has not stated clearly whether it is open to REDD offsets from other regions in the world. The VCSA strongly recommends that CARB provide additional clarity and detail regarding these provisions at the earliest possible opportunity.

2. **CARB should remove the distinction between intentional and unintentional reversals in the forest buffer account provisions.** Section 95983 of the draft regulation distinguishes between intentional and unintentional reversals of offset credits in the context of forestry projects. The VCSA strongly recommends that CARB consider alternative approaches that do not rely on distinguishing between intentional and unintentional reversals. The reason for this is that it can be difficult to determine whether reversals are intentional or unintentional, particularly in developing country jurisdictions where strong property law protections and legal enforcement may either not exist or be applied consistently. For instance, one could imagine a scenario in which a landowner hires someone to burn down the forest so that the project can be terminated and crops planted without having to replace offset credits, all the while making the occurrence appear to be unintentional. Since the vast majority of REDD projects will occur in developing countries, the unintentional/intentional distinction is likely to be very difficult to determine and thus may hinder the development of REDD projects and/or undermine the integrity of the buffer system.

   The VCSA recommends that CARB accept alternative non-permanence management approaches than what is currently featured in the draft regulation. Although the currently proposed framework may be appropriate for the two domestic forestry-related protocols CARB has already endorsed, this framework could be highly

problematic for non-US forest offsets that may enter the system through Section 95973 (Requirements for Offset Projects Using ARB Compliance Offset Protocols). And that is not to mention REDD projects that may come through the international sectoral crediting frameworks that CARB will develop. The VCSA recommends that CARB add language to Section 95983 of the regulation about how the agency will accept other robust approaches for managing reversals if they meet certain quality standards, and the VCSA would gladly cooperate to assist in the development of the language needed to achieve this.

For purposes of illustration, the VCS risk tool assesses all potential reversal risks and establishes buffer withholding requirements in a manner that will maintain atmospheric integrity (and the permanence of all credits issued) without needing to distinguish between intentional and unintentional reversals. Many experts believe this approach to be more comprehensive and robust than a reversal management system that is dependent on hard-to-make determinations about intentionality.

D. COMMENTS ON SECTORAL CREDITING PROVISIONS

The VCSA recognizes that the provisions on sectoral crediting are placeholders but we believe the parameters for how sectoral crediting might be incorporated should be outlined a bit more now if at all possible. Given the short duration of the cap-and-trade program, it will be important to the market and to developing country policymakers to indicate the general process for approving sectoral crediting programs, and the criteria CARB will factor in to do so. We would therefore recommend a criteria- and rules-based approach that would allow any entity meeting such requirements to participate in the program. In addition, the process should be open and transparent. In particular, CARB should indicate the following:

- Will CARB have an open approach to all geographic jurisdictions and sectors or will it be selective in terms of what countries or sectors can apply?

- When will CARB start considering sectoral approaches?

- What are the criteria for acceptance?

E. COMMENTS ON GENERAL FEATURES OF PROPOSED OFFSET PROGRAM

1. Consider Distinction Between Greenhouse Gas Programs and Offset Project Registries.

The VCSA applauds CARB for acknowledging the value that external offset registries can bring to the California cap-and-trade program. In addition to recognizing external registries, the VCSA encourages CARB to consider the difference between registries and greenhouse gas programs.

GHG programs encompass a broader range of offset functions than registries, which primarily serve to issue offset credits and allow participants to transfer them between accounts. GHG programs generally provide a comprehensive architecture and process by which protocols and projects are developed and approved, contain policies governing conflicts of interest, outline procedures for accreditation of validation and verification bodies, and set out details regarding eligibility of projects and other matters.

Under CARB's proposed protocol system, many of the details that would normally be found under a broader program's architecture of rules are contained within the protocol's terms. In other words, in CARB's design, each protocol would be a standalone system and would contain many of the rules that govern all offset projects. In contrast, some GHG programs like the VCS operate on the basis that the high-level rules are applied to all protocols adopted under the program. The VCSA recommends that CARB consider this difference in approach when considering recognition of external protocols. If each protocol contains many of the same rules that are contained in all protocols, whenever a high-level policy change is made, for instance, governing how many crediting periods a project is eligible to renew, amendments will have to be made to each protocol that has been recognized, potentially creating a significant added workload that could be minimized if the generally applicable rules are contained at a higher program level that universally applies to all protocols.

The VCSA offers this input mainly as a background observation as CARB seeks to potentially integrate registries and protocols from greenhouse gas programs that have adopted a slightly different approach to protocol development.

2. Revise the End-User Liability Policy.

As many other commenters have noted, end-user liability will severely dampen the creation of offset credits as a tool for compliance. Compliance buyers will be much less likely to purchase and utilize offsets if they are required to accept liability for projects to which they have no connection. Even in the less liquid voluntary carbon markets, offset credits often change hands multiple times before reaching the ultimate end-user. In a liquid secondary compliance market where issued offsets are usually fungible commodities, and where trades occur on a daily basis, oftentimes on electronic exchanges, it is both unreasonable and unnecessary to expect buyers to attempt to reach the original project operator to perform thorough and expensive due

diligence on the project. This provision would undermine both liquidity and the goal to create fungible commodities as part of a well-functioning market.

The market needs to have certainty that once an offset credit has been issued, it is as "good as gold." This is why extensive verification and certification requirements exist. Once a credit has been issued, it should be valid for compliance no matter who purchases it. Buyers should know with certainty that the product they are purchasing has met the requirements of both the protocol to which it has been issued and the CARB regulation overall. In the rare circumstance where a problem is found it would be far better from a market-functioning perspective to require whichever entity holds liability for the "bad" credits (such as the project operator or a validation/verification body) to have to replace them by sourcing other offsets and retiring them, instead of mandating a cancellation of the credits at issue.

If offset project operators, verifiers and others submit to the jurisdiction of CARB as required by this regulation, it is not clear why CARB would need to shift this liability onto entities that are least able to warrant or control the quality of offsets.[2] Under the VCS, there is always someone standing behind a ton. In our program it is the project operator that guarantees the veracity of the reductions its project has generated.

In addition, Section 95985(d) of the draft regulation would shift the liability to the project operator only if the end-user no longer exists. This seems to be an arbitrary shift based on a circumstance outside of the control of the project operator. The project operator should either always be liable or it should never be. Its liability risks should not be dependent on the financial health of end-users to which it has no connection.

3. Miscellaneous Comments

- The draft regulation suggests that offset credits may be issued only on an annual basis, and not more frequently. CARB should consider amending this to give the market flexibility to submit verification reports and request credit issuance on a more frequent basis if desired.

- Since the cap-and-trade regulation ends in 2020, CARB should consider what will happen to offset projects that may have a crediting period that extends beyond 2020. Will there be some mechanism to continue to allow such projects to be recognized or shifted to other registries and programs? This is a particular concern for forestry and sequestration-based projects with long crediting periods.

[2] While it may seem that putting the onus on the verifier would be the logical approach, in our experience that has been difficult given the legal and confidentiality hurdles that verifiers have in ascertaining and confirming legal title to emission reduction rights.

- In Section 95974, it is not clear whether one can designate an Authorized Project Designee after the project has been listed or whether this can only take place prior to listing.

- Section 95977(e)(2)(C)(xxi) (page 143) does not include any time frame or statute of limitations on when a conflict of interest must exist or be discovered in order to invalidate a verification statement. In other words, if a verification body is found to have had a high level of conflict of interest in 2009, but the verification at issue was completed in 2018 when no conflict of issue existed, this clause could potentially invalidate the verification statement issued in 2018, even if no conflict of interest existed in 2018.

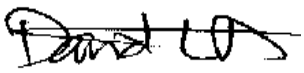
- Section 95981 indicates a 15 business day delay between issuance and deposit of credits into a holding account. In most other systems, issuance and deposit are simultaneous and it is not clear why there is a need for a 3 week delay after issuance before transferring credits into a holding account. There is a total delay of 60 calendar days and 15 business days from the receipt of the verification statement until the project proponent receives the credits—nearly 3 months, which seems like an unnecessarily long period of time for what is essentially an automated function.

- Section 95981(d)(3) appears to conflict with Section 95981(a).

- It is not clear how Section 95981(d)(2) and (4) are different.

Thank you for your consideration. Please do not hesitate to contact me if the VCSA can be of any assistance as CARB further develops its cap-and-trade regulation. We look forward to the final regulation and to working closely with CARB to ensure the success of this important initiative.

Sincerely,



David Antonioli
Chief Executive Officer

Annex

The Voluntary Carbon Standard

This document presents the main elements of the Voluntary Carbon Standard (VCS) and the related VCS Program. It starts by describing the process by which the VCS was formed, and then describes the governance of the association that manages the VCS Program. The document then presents the main concepts behind the VCS Program, illustrating how innovation within the VCS Program has resulted in the inclusion of the Agriculture, Forestry and Other Land Use (AFOLU) sectors into the carbon market.

A) Origins

The Voluntary Carbon Standard and the related VCS Program, launched initially in March 2006, aim to:

1) Establish clear rules and procedures to enable the successful development of GHG projects and the creation of high quality GHG credits;
2) Create a trusted and fungible GHG credit, the VCU;
3) Stimulate innovation in GHG mitigation technologies and measures as well as procedures for validation, verification and registration, all within a context of quality, credibility and transparency;
4) Provide a secure registry system for all VCUs that offers assurance against double counting and provides transparency to the public;
5) Demonstrate workable frameworks and offer lessons that can be incorporated into other GHG programs and climate change regulation;
6) Provide oversight to ensure that investors, buyers and the market recognizes VCUs as being real, additional and permanent; and
7) Link carbon markets worldwide through a coherent and robust framework.

The VCS was established by The Climate Group, the International Emissions Trading Association (IETA), the World Business Council for Sustainable Development (WBCSD), and the World Economic Forum (WEF) because these organizations recognized the need for a single quality benchmark in the voluntary market.

The process of establishing the VCS and developing the standard has been exhaustive and thorough. In addition to obtaining participation from a broad cross-section of participants in the conceptualization of the VCS and the subsequent Steering Committee, the VCS went through an

extensive public consultation process. Table 1 below presents key milestones in the development of the VCS.

Table 1. Key Milestones in the Development of the VCS

2005	The Climate Group, IETA and WEF formed a partnership to standardize the voluntary carbon market in 2005.
March 26, 2006	VCS version 1 launched as both a consultative document and an operative standard which meant that projects could be validated and verified against it.
2006	85 written submissions were received on version 1.
October 2006	VCS version 2 released purely as a consultative document
2006/007	65 written submissions were received on version 2 and a global round of industry workshops were attended by approximately 1000 stakeholders.
January 2007	WBCSD joined the VCS Program as a formal partner and a 19 member Steering Committee with representatives from NGO's, project proponents, buyers, verifiers and financial institutions was established (see below).
19 November 2007	VCS 2007 launched and replaced VCS version 1 as the operative standard in the market. An independent, non-profit, VCS Association was also launched at this time to administer the VCS Program.
18 November 2008	VCS 2007.1 released incorporating rules for agriculture, forestry and land use projects.

Most recently, the VCS underwent a 60-day public stakeholder consultation and received 349 comments on various aspects of the program documentation. The VCSA is currently revising the documentation and plans to issue the latest version in early 2011.

The VCS Steering Committee mentioned in Table 1 consisted of the following members:

- NGOs: The Climate Group, IETA, WBCSD, WEF, World Resources Institute, Climate Trust, California Climate Action Registry
- Validators/Verifiers: SGS, DNV
- Developers: Ecofys, Cantor CO2e, EcoSecurities, Blue Source
- Financial institutions: Goldman Sachs, Cheyne Capital
- Buyers/Suppliers: Taiheyo Cement, Interface, BP, Invista

B) **Governance**

The VCS is managed by the independent VCS Association (VCSA) that is registered as a non-profit Association under US law[3], and also has a Swiss entity. The VCSA has established its Head Office in Washington, DC.

The VCSA is currently funded through three different mechanisms. The most important one in the start up phase, were grants from foundations. Second, the VCSA is funded by a US$0.10 levy on all VCUs that are issued on a VCS registry. This source of funding has grown in importance and is now covers most operating expenses. Finally, the VCS accepts contributions from individuals or commercial organizations, but these may not exceed EUR20,000 per calendar year and have been negligible over time.

The VCS Program is characterized by a bottom-up approach, which means that the VCSA dedicates a significant amount of time and effort to setting the overarching rules that govern the program and relying on market participants to undertake important developmental work. Rather than reviewing and approving every individual project application, the VCS Association accepts verifier findings and undertakes a periodic review of verifier work to ensure VCS rules are being applied correctly. This governance structure is supported by verifiers, project proponents and NGOs as a credible and efficient approach.

For instance, to develop a protocol under the VCS Program, a developer has to submit their protocol for a 30-day public comment period hosted on the VCS website, and they then have to hire an accredited validator to assess the protocol. Assuming that first validator approves the protocol (even after changes may have been made), the VCSA then hires a second validator to check the work of the first validator. If at the end of the process both validators approve the same final version of the protocol, it then becomes an approved VCS methodology and project proponents can use it to generate Voluntary Carbon Units (VCUs). Likewise, the VCS has recently undertaken an initiative to establish VCS Program rules to credit jurisdiction-wide and nested REDD frameworks as a way of integrating the accounting of emissions reductions generated by policies, programs and individual projects. This approach allows the VCS to leverage the significant learning and innovation that has taken and continues to take place in the market, within a framework of robust rules and procedures.

The VCS Program aims to provide the highest legal assurance for all market participants and consumers. For instance, parties participating in the VCS Program sign an agreement with the VCS Association providing for a variety of different aspects that, as a whole, lend the system integrity. For example:

[3] A formal application to the US Internal Revenue Service requesting confirmation of the VCSA's 501(c)(3) non-profit status has been submitted.

- Independent verifiers sign an agreement that makes them financially liable to the VCS Association if through their negligent or fraudulent actions they over issue VCUs;
- All project proponents sign Project Registration and VCU Issuance Representations confirming that the documentation reported in respect of their projects is correct; and
- All VCS registries commit themselves to extensive provisions that ensure there is no conflict of interest in respect of their work for the VCS.

C) **Criteria**

The VCS uses at its core the requirements of ISO:14064:2, ISO 14064:3 and ISO 14065, which provide the framework to measure, monitor and verify GHG reductions and removals[4]. All VCUs issued under the standard must be:

- Real;
- Measurable;
- Permanent;
- Additional;
- Independently verified;
- Unique;
- Transparent; and
- Use conservative assumptions.

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 reductions 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 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

[4] The VCS Program is the only international offset standard that was granted a license to use copyrighted text from the ISO standards.

Program for the product, service, sector or industry, at a level defined to ensure that the project is not BAU.

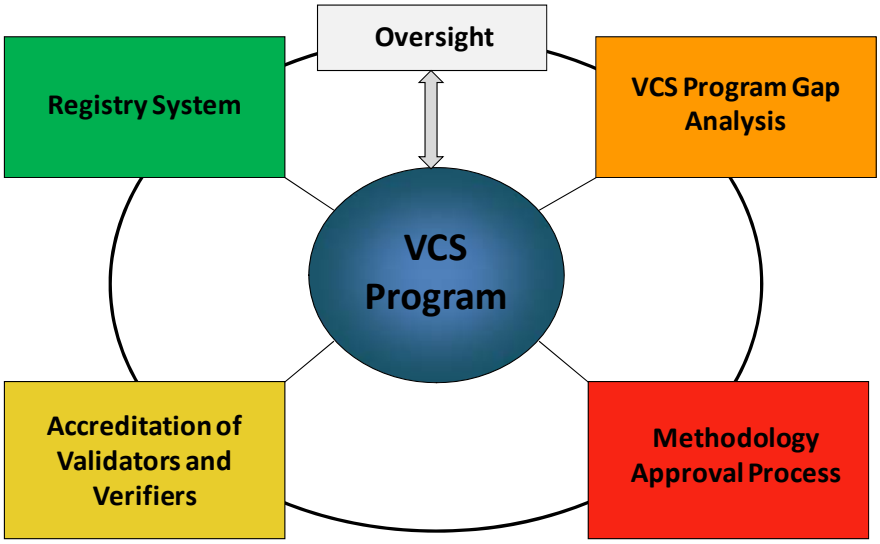
- The *Technology Test* requires that projects using less emissions-intensive technologies meet certain performance criteria, which when met results in crediting up to a pre-determined threshold (e.g., market penetration) that ensures that the project is not BAU.

While the VCS currently allows performance standard and technology test approaches to assessing baselines and additionality, there is currently no specific guidance that developers can use to develop such approaches under the VCS methodology approval process. To that end, the VCSA has convened a steering committee that will draft the requirements needed to enable the development of these approaches under the VCS.

D) VCS Program

The VCS Program consists of five basic elements, as illustrated in Diagram 1 below.

Diagram 1. Elements of the VCS Program



Program Gap Analysis

As mentioned above, one of the stated goals of the VCS is to link carbon markets worldwide through a coherent and robust framework. One way of accomplishing this was to design a system that was capable of incorporating the various elements of other programs it deemed acceptable. As a result, the VCS has a Program Gap Analysis through which it assesses the compatibility of other greenhouse gas programs and thereby determines whether they can be accepted by the VCS and their frameworks used to generate VCUs. To date, the VCS Program recognizes the Clean Development Mechanism (CDM), Joint Implementation (JI), and the Climate Action Reserve (CAR, formerly the California Climate Action Registry), which means that methodologies developed under those programs can be used to issue VCUs, and units from those programs can be issued as VCUs.

Methodology Approval Process

In order to facilitate the development of new and credible projects, the VCS Program has established a methodology approval process. Specifically, the VCS allows project proponents to develop new project elements by obtaining the approval of two properly accredited independent validators, one of which is contracted by the developer of the methodology and one of which is accountable to the VCS. To date, six new methodologies have been approved under the VCS methodology approval process, including the first ever first methodology for Reduced Emissions from Forest Degradation and Deforestation (REDD), and there are more than 20 more methodologies in the pipeline covering a variety of new project activities.

The VCSA has also committed to incentivize the development of broadly applicable methodologies and is planning to rebate the developers of those methodologies that are used to issue VCUs. Specifically, the VCSA will rebate US$0.02 for each VCU using a methodology developed under the VCS methodology approval process.

Accreditation of Validators and Verifiers

The VCS Program only accepts independent validators and verifiers that have been accredited to the highest international standards. This means that the VCS will accept validators and verifiers that have been accredited under an approved GHG Program (e.g., the Clean Development Mechanism), or they have been accredited under ISO 14065 by a National Accreditation body who is a member of the International Accreditation Forum (e.g., the American National Standards Institute).

As a means of addressing the shortage of qualified validators and verifiers in the marketplace, the VCS has also established a Temporary Accreditation Program whereby validators/verifiers applying to a National Accreditation body can gain temporary accreditation if a review of their application indicates that they are likely to achieve such accreditation. To preserve the integrity of the services provided, entities who apply to the temporary accreditation program agree to

audits of their work in the event that they do not achieve accreditation under the National Accreditation. Importantly, such applicants agree to replace any VCUs issued erroneously.

The VCS Registry System

The VCS has developed an innovative registry system that was launched on March 17, 2009 and set the highest standards in the voluntary market for registry services. The VCS registry system issues, holds, transfers and retires VCUs, and interacts directly with the VCS project database to upload project documentation and obtain unique serial numbers for each issued VCU. The registry system has been built on the following main principles:

- *Uniqueness*. To prevent double counting of credits, the VCS Registry System issues unique serial numbers to each VCU that is generated. Furthermore, project proponents are required to provide GPS project boundary coordinates to prevent the same project from being registered twice on the VCS system.

- *Transparency*. All projects registered in a VCS registry are reported in the central VCS Project Database and anybody can log onto the project database to view project information, including the project description, validation and verification reports, and whether the VCUs have been retired.

- *Data Security*. The multiple registry system uses a nostro/vostro accounts systems, which is the system used by the banking sector, and transfers data using the UNFCCC Data Exchange Standard.

- *Financial Standing*. To ensure that the market has complete confidence in the financial integrity of VCS Registries, the VCS Program requires registries to meet a range of financial standing tests that are the most stringent of any registry system in the voluntary market and were strongly endorsed by the financial community as a pre-requisite for any voluntary program. For instance, VCS Registries shall maintain adequate insurance levels, have a minimum financial rating of BBB by Standard & Poor (S&P) or an equivalent rating agency, and have substantial net assets to cover operating overheads.

- *Conflicts of Interest*. To ensure that the market has complete confidence in the overall integrity of VCS Registries, the VCS Program requires registries to meet stringent conflict of interest provisions.

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. As illustrated in Diagram 2 below, the VCS registry system currently consists of three international companies that are contracted by the VCS Association to act as VCS registries: APX Inc. (a leading environmental market infrastructure

provider based in North America), Caisse des Dépôts (a leading French financial institution and developer of GHG registries in Europe), and Markit (a leading international financial information services company based in the UK). Each of the VCS registries interacts directly with the VCS project database (www.vcsprojectdatabase.org) which is the central clearinghouse for all VCS project VCU issuance information.

Diagram 2. VCS Registry System

The VCS registry system can also be expanded (e.g., new registries can be added to it in the future), enabling new entities wanting to serve local markets to play a role in the growth of the carbon market. All VCS registries have to meet strict eligibility criteria as indicated above (e.g., financial standing, conflicts of interest) and agree to working collaboratively with the existing VCS registries.

To date, the VCS registry system, launched on 17 March 2009 has issued almost 47 million VCUs.

Oversight

The VCS Program oversees the operation of its different components, making sure that the rules and procedures are followed. For instance, the VCSA conducts regular audits of the registry system, making sure that the requirements in respect of issuing VCUs are being followed by the registry administrators. Likewise, the VCSA oversees the work performed by other entities working under the VCS Program, such as validators and verifiers.

E) **Agriculture, Forestry and Other Land-Use Projects**

The work that the VCS has done in respect of the Agriculture, Forestry and Other Land Use (AFOLU) sectors illustrates the potential the VCS has in terms of establishing a platform for innovation in the carbon market. The VCS has taken a lead role in respect of projects in the AFOLU sectors, mostly because land-use change and agriculture account for more than 30 percent of global greenhouse gas emissions and there are significant opportunities reduce greenhouse gas emissions in these sectors.

In order to realize the potential of these markets, the VCS Association established a working group of 30 international experts (led by Conservation International) to develop solutions for dealing with the most vexing issues that were preventing the development of projects in the AFOLU sectors, namely permanence, additionality, leakage, measurement, and monitoring. As a result of this work, the VCS has now issued detailed requirements for project proponents to follow in respect of developing AFOLU projects, with perhaps the most important innovation being the approach used to address permanence. Specifically, anybody developing an AFOLU project is required to set aside a certain percentage of the VCUs they generate into a buffer, which serves as an insurance pool against reversals. Moreover, the required percentage contribution to the buffer depends on the project's risk profile, thereby providing a direct incentive for project proponents to design projects that minimize the underlying risks surrounding the project. Importantly, the risk profile of projects needs to be assessed by two independent verifiers.

To date, VCS Program allows the following project types from the AFOLU sector:

- Afforestation, Reforestation and Revegetation (ARR);
- Agricultural Land Management (ALM), which could include improved cropland and grassland management activities, as well as cropland and grassland land-use conversions;
- Improved Forest Management (IFM), which could include a transition from conventional logging to reduced impact logging, conversion of logged forests to protected forests, extending the rotation of evenly aged managed forests, and conversion of low productive forests to high productive forests; and
- Reduced Emissions from Deforestation and Degradation (REDD), which could include avoiding planned deforestation, avoiding unplanned frontier deforestation and degradation, and avoiding unplanned mosaic deforestation and degradation.

In addition to the above, the VCSA is preparing requirements for a new project category – Peat Rewetting and Conservation (PRC) – and these should be available to project proponents in early 2011. Finally, five AFOLU methodologies (3 REDD and 2 IFM) have already been approved, 12 more in the pipeline, and numerous projects are seeking VCS accreditation.