



MEMORANDUM

To: California Air Resources Board

From: David Antonioli, CEO

Re: Comments on CARB Public Meeting Presentation:
Criteria for Compliance Offsets in a Cap-and-Trade Program

Date: May 21, 2009

Thank you for taking the time to review the following VCS comments regarding AB-32's criteria for compliance protocols based on the presentation made at the Public Meeting on April 28, 2009 and which appears on your website at

www.arb.ca.gov/cc/capandtrade/meetings/042809am/presentation.pdf

Initially launched in March 2006, the Voluntary Carbon Standard (VCS) aims to provide a rigorous, trustworthy and innovative global standard and validation and verification program for voluntary greenhouse gas offsets. At the end of this message please find additional background information on the VCS and the VCS Association, the non-profit charged with managing the VCS and the VCS Program.

Introduction

With the likely adoption of cap and trade greenhouse gas regimes such as the one CARB is proposing, there is a unique role that the voluntary carbon market can play, particularly regarding the development of a robust offset market during the transition between enactment and promulgation of rules and regulations. We are at the very early stages of thinking about how we go about tackling such an all-encompassing problem, and there are various platforms that have been developed in the voluntary market that can serve as a blueprint for effectively structuring an offset market. It will therefore be important to allow several frameworks to operate during the transition so that CARB can then leverage the best of these when ready to promulgate rules and regulations.

Guiding Principles for a Robust Offset Market

Developing a robust offset market will require several key elements. The most obvious principle that needs to be enshrined in any cap and trade regime is **environmental integrity** as this is the critical ingredient if the system is to deliver what it promises – real emission reductions. Environmental integrity will be critical in order to motivate the investment community, and needs to be at the heart of any regulation including offsets. It is evident that CARB has identified the pivotal criteria that will ensure the environmental integrity of the system (i.e., real, quantifiable, permanent, verifiable, enforceable, additional and third-party verified) and the VCS fully supports the clear articulation of these basic offset criteria. Indeed, the VCS Program is the only international offset standard that was granted a license to use copyrighted text from the ISO standards, and yet ensuring that all of the emissions reductions are additional required deliberate language in the standard regarding issues such as additionality and baseline setting.

Beyond environmental integrity, the market will need to have **liquidity** if it is to enable the identification of the true marginal cost of abatement, which the private sector can then use to make long-term investment plans in the technological innovations that are desperately needed. However, only by having sufficient volumes in the system can liquidity be obtained. Therefore, a key objective of a regulating entity should be to ensure the supply of sufficient volumes of offsets. Generally this is only achieved if one has at their disposal platforms that are truly scaleable.

In addition, the VCS considers that the **breadth** of choices available in the offset market is an important component that will enable a robust offset market. Not only will having several options (i.e., project types, origin, methodologies) enhance the probability for a truly liquid market, it will also help find the lowest cost emission reductions, which is, after all, one of the major objectives of offsets. There are dozens of opportunities to reduce emissions and a robust market should enable as many of those options as possible, especially since they will result in direct investment in project activities, many of which can have ancillary employment benefits.

Finally, **certainty** is needed in order for investment to take place. In terms of the offset market, investors need to know that the platforms used for developing offset projects will be viable for a certain period of time and that each project will be given a reasonable timeframe to recover its costs and make a profit. It would therefore be wise to allow developers investing in projects before rules and regulations are in place to recover their investments over a reasonable timeframe.

Testing Different Operating Platforms

CARB, or for that matter any other entity considering establishing the framework for an offset market, has an incredible opportunity to learn from the different systems that are currently operating in the voluntary market. Because we are at the beginning stages of how best to manage and provide oversight for an offset market, it would be particularly useful to allow several different platforms to operate such that the lessons learned regarding the operation of these platforms can eventually be leveraged. Three examples illustrate this.

First, the market would benefit, at least in the short-term, from having both **project-** and **benchmark-based** offsets. The most extensive offset system in existence, the Clean Development Mechanism (CDM) of the Kyoto Protocol, works on a project-based approach, and there is a strong move towards developing the next set of frameworks, which currently are envisioned to be performance benchmarks. However, not all activities will be able to be covered by benchmark approaches and in many cases extensive project-based activities will help inform the benchmarks themselves. It is therefore critical that the offset market encompass both approaches so that the market identifies all of the cost-effective emission reductions and the thinking about how to credit activities that reduce emissions can evolve. Thinking back to liquidity, it is hard to imagine how a system that relies solely on benchmark approaches will enable a liquid market in the short run. It is clear that CARB recognizes the importance of both approaches, and how these can even combine to yield a hybrid approach.

Second, the system will benefit significantly from having internal procedures for the development of new methodologies and protocols that are based on both **top-down** and **bottom-up** approaches. Top-down approaches are characterized by the vesting, in a select group of (ostensibly qualified) people, the authority to decide what methodologies or protocols get approved and how they are developed. An alternative approach is to allow for the organic development of new methodologies and protocols by the private sector, provided, of course, that these are developed within a framework that generates real and additional emission reductions. This latter approach leaves the door open to innovation, and the VCS considers this to be a critical element as it will set the stage for the development of new offset opportunities that entrepreneurs can bring forth. Both approaches have their strengths and their weaknesses, and both should be in the mix of available options available to project developers during in the transition phase.

Third, there are different registry systems in operation, with the most obvious difference being whether these are **single** or **multiple registry** systems. Currently, nearly all registries are based on a single registry provider, but the VCS Registry is the only one to have adopted a multiple-registry approach. The VCS adopted this approach to foster competition among the registry providers, and because the system is expandable, it is truly scalable on a global scale. From a contractual point of view, a multi-registry system is probably more complicated than a single registry system, but, again, both will provide invaluable lessons regarding how best to establish a registry system that ensures transparency and enhances the credibility of the offset market, and yet does not grant to one sole entity monopoly power.

Any voluntary platform that would be considered for the transition phase to a compliance regime should be vetted for quality assurance, and it should also be clear that such voluntary platforms cannot expect to operate indefinitely – at some point CARB (or the regulating entity) will assume all responsibility for overseeing the market. However, in the short- to medium-term, until the regulator is fully able to promulgate rules and regulations for a variety of different projects types and sectors, allowing high quality voluntary sector platforms to operate can provide regulators with a wealth of knowledge and insights that will enable the creation and improved operation of the offset market in the future.

ABOUT THE VOLUNTARY CARBON STANDARD

The rest of this document presents the main elements of the Voluntary Carbon Standard (VCS). It starts by describing the process by which the VCS was formed, and then describes the governance of the association that manages the VCS. The document then presents the main concepts behind the VCS Program and concludes with an example of how the VCS has been able to innovate and broaden the set of potential projects that can leverage carbon finance.

A) Origins

The Voluntary Carbon Standard, launched in March 2006, aims to provide a rigorous, trustworthy and innovative global standard and validation and verification program for voluntary greenhouse gas offsets. Specifically, the VCS aims to:

- 1) Give investors, buyers and other users confidence that voluntary emission reduction projects and credits represent real and additional permanent greenhouse gas emission reductions;
- 2) Provide a globally applicable standard and create a trusted fungible offset (the Voluntary Carbon Unit, or VCU);
- 3) Promote transparency and standardization in the voluntary emission reduction market;
- 4) Provide a sound basis for expansion of the voluntary carbon market and use of offsets as part of a comprehensive set of actions to reduce greenhouse gases and enhance liquidity;
- 5) Accelerate the transition to a low-carbon energy system by promoting investments in technologies that directly reduce greenhouse gas emissions;
- 6) Establish a platform that offers transparency and assurance against double-counting; and
- 7) Enable experimentation with different approaches to the design, implementation and assessment of emission reduction projects, and offer lessons that can be built into other programs and regulations.

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 to where it is today 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 developers, 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.

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 an independent VCS Association (VCSA) that is registered as a non-profit Association under Swiss law, and it is also in the process of being registered under US law. The VCSA has established its Head Office in Washington, DC and is considering establishing an office in Europe (London) in late 2009 and the Asia-Pacific region in 2010.

The VCSA is exclusively focused on supporting the VCS and the VCS Program. By not engaging in work such as consulting, validation/verification services or methodology development the VCSA maintains an objective perspective and remains free of any conflicts of interest.

The VCSA is currently funded through three different mechanisms. The most important one, in the start up phase, has been grants from foundations. Second, the VCSA is funded by a €0.04 levy on all VCU's that are issued on a VCS registry. Currently this source of funding is not sufficient to operate

the VCS, but it is expected that once volumes increase to a significant number this source will indeed provide all the necessary funding for the organizations. Finally, the VCS accepts contributions from individuals or commercial organizations, but these may not exceed EUR 20,000 per calendar year.

The VCS Program employs a bottom-up structure. 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 developers and NGOs as a credible and more efficient approach than the some of the top-down approaches in the market (e.g., the Clean Development Mechanism).

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:

- 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 developers 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.¹ All VCUs issued under the standard must be:

- Real;
- Measurable;
- Permanent;
- Additional;
- Independently verified;
- Conservative (i.e., use conservative assumptions)
- Unique; and
- Transparent.

In terms of additionality, the VCS relies on a broad set of principles to ensure that: (a) projects are beyond regulation; (b) there must be a barrier to their implementation; and (c) they must not be common practice. For instance, project developers can use the CDM additionality tool; however, they can also propose alternative ways of defining additionality, such as establishing sectoral

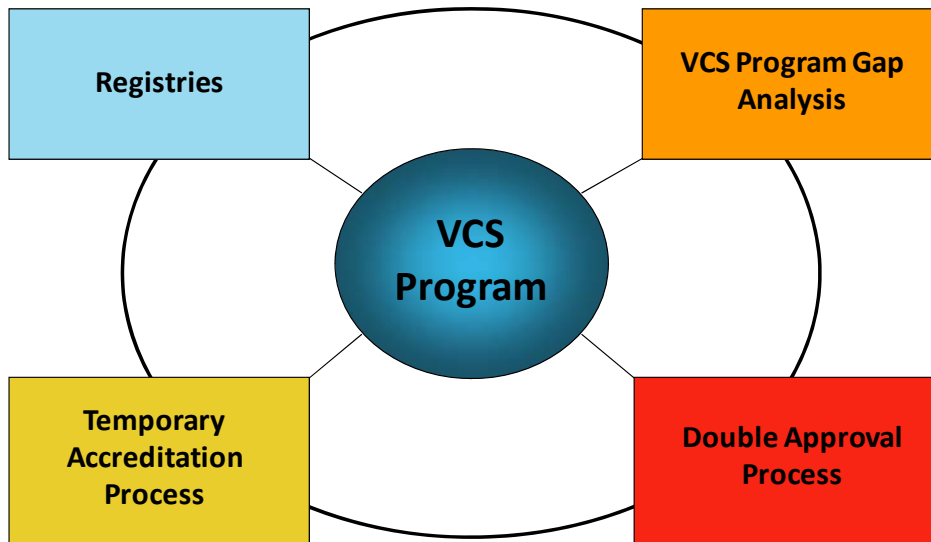
¹ The VCS Program is the only international offset standard that was granted a license to use copyrighted text from the ISO standards.

baselines or lists of accepted technologies or procedures within certain contexts or geographical regions.

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 was to provide a global benchmark for the development of high quality offsets. 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. The California Climate Action Registry (CCAR) was the first to apply to gain recognition from the VCS and that recognition was announced in October 2008.

Double Approval Process

In order to facilitate the development of new and credible projects, the VCS Program has established the double approval process for new project elements (e.g., methodologies). Specifically, the VCS allows project proponents to develop new project elements by obtaining the approval of two properly accredited independent validators, as in Joint Implementation.² This platform for new methodologies is generating lots of activity and there is already some pioneering work being done under this conceptual framework.

Temporary Accreditation Process (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 registry system has been built on the following main principles:

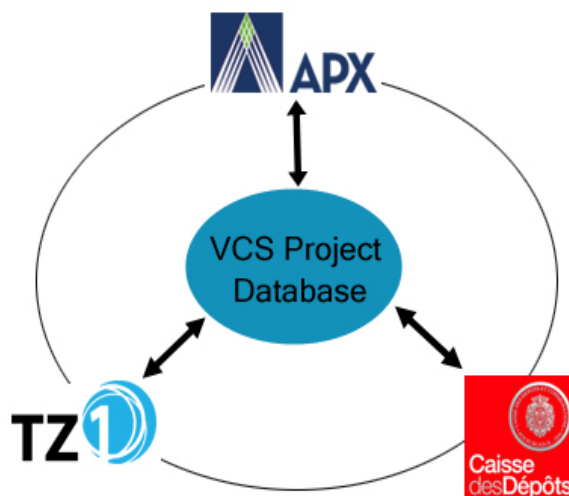
- *Uniqueness.* To prevent double counting of credits, the VCS Registry System issues unique serial numbers to each VCU that is generated. Furthermore, project proponents are required to provide GPS project boundary coordinates to prevent the same project from being registered twice on the VCS system.

² The VCS considers that the double approval process will ensure the highest quality of methodologies and project elements because having the evaluation done by properly accredited entities controls the influence that conflicts of interest could in the development of these project elements.

- *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 VCU's 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.

One of the important features of the VCS Registry System is the fact that it can be expanded (e.g., new registries can be added to it in the future), which will enable the VCS to become a truly global standard. As indicated in Diagram 2 below, currently three registries are operating in the system: APX Inc (the leading registry provider in North America), Caisse Des Depots (a triple A rated French Bank), and TZ1 (a company formed from the New Zealand Stock Exchange).

Diagram 2. VCS Registry System



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. Indeed, AFOLU sectors have largely been left out of carbon markets because, understandably, projects can be quite challenging to design, implement and monitor.

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 guidance 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 catastrophic losses. 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 .

It is still early to draw any conclusions about the AFOLU sector, but judging from the number of methodologies currently in development and the number of projects being developed, the early indications suggest that there is a significant amount of interest in these important sectors.