



THE VOLUNTARY CARBON STANDARD

VERIFICATION PROTOCOL AND CRITERIA

Proposed Version 2

Introduction

The Voluntary Carbon Standard (VCS) seeks to provide a credible but simple set of criteria that will provide integrity to the voluntary carbon market. In particular, the VCS will ensure that all project-based voluntary emission reductions that are independently verified to meet its criteria - defined as Voluntary Carbon Units (VCUs) - represent real, quantifiable, additional and permanent project-based emission reductions.

The VCS provides the protocol and criteria to certification entities and emission reduction project developers on the specifications for creating, verifying, and registering VCUs. The VCU Verification Protocol in Section 2 provides verifiers with a general operating scope for undertaking the verification of VCUs. The VCU Verification Criteria in Section 3 lists ten minimum threshold criteria which the emission reduction project must meet in order for its reductions to meet The Voluntary Carbon Standard and be verified and registered as VCUs.

The purpose of this document is to provide a detailed description of the minimum quality level that any voluntary emission reduction project needs to satisfy in order for its reductions to meet the Voluntary Carbon Standard, be recognized as a source of VCUs and to become eligible for registration into a VCU Registry. Once registered in a VCU Registry, the VCUs become fungible and tradable instruments between market

participants. In addition, this document serves as a guide for certification entities on how to verify compliance of voluntary emission reduction projects with the Voluntary Carbon Standard.

Purpose of Proposed Version 2 and Consultation

This proposed Version 2 of the Voluntary Carbon Standard has been drawn up on the basis of the comments received on the Version 1 for Consultation that was released by The Climate Group (TCG), the International Emissions Trading Association (IETA) and the World Economic Forum Global Greenhouse Register (WEF) on March 28th 2006. It has been reviewed by a range of experts and is now being distributed for further public consultation. Comments on all aspects of the document are invited until November 3rd 2006. Any comments received will be submitted to the VCS Steering Committee - which will be formally constituted (see Section 1.4) before the end of the consultation period - and used to create a final VCS Version 2.

In terms of use by project developers and other interested parties, Proposed Version 2 does not supplant Version 1 which will remain valid until the VCS Steering Committee fully approves Version 2. At this point Version 2 will become the final fully operational VCS and replace Version 1.

1 Objectives, Principles and Governance

1.1 Objectives of the VCS

The Voluntary Carbon Standard is a robust standard for the measurement and recognition of verified emission reductions created for voluntary use by corporations, organizations and individuals. The VCS is designed to be a global benchmark standard for project-based voluntary emission reductions that provides a degree of standardization to the Voluntary Carbon Market and creates a credible voluntary emission reduction credit, the VCU that can be trusted, traded and used by VCM participants. As such the creation of the VCS is designed to allow participants to distinguish between project-based emission credits that represent real, measurable, permanent and additional independently verified emission reductions and those that do not, thereby introducing greater confidence and fungibility into the VCM.

In this way the VCS aims to

- Give investors, buyers and other users confidence that voluntary emission reduction projects and credits represent real and additional permanent GHG emission reductions;
- Provide a globally applicable standard and create a trusted fungible voluntary carbon unit, the VCU, defined as tonne of carbon reduction meeting the VCS;
- Promote transparency and standardization of the voluntary emission reduction market;

- 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 GHGs and enhance liquidity;
- Help increase investment into low carbon solutions;
- Contribute to raising public awareness about climate change solutions
- Provide companies and individuals with a way to accelerate the transition to a low-carbon energy system by investing in technologies that directly reduce greenhouse gas emissions in the production and consumption of energy and in certain industrial processes.
- Simplify the purchase process for voluntary emission reductions by eliminating the need for the purchaser to evaluate the merits of many different projects.
- Through its links with approved VCU registries, provide users with access to sophisticated custodial and reporting platforms, offering transparency and assurance against double-counting.
- Enable experimentation with different approaches to designing, implementing and assessing emission reduction projects and offer lessons that can be build into other programmes and regulations

Therefore VCUs will provide companies and institutions with a transitional solution to accelerate the shift towards a low-carbon energy system by channeling funds through voluntary offset programs to low-carbon technologies that directly reduce greenhouse gas emissions from the production and consumption of energy and from industrial processes.

1.2 Guiding principles

The Voluntary Carbon Standard aims to maintain a balance between environmental rigour and ease and cost of use. This is reflected in the VCU Verification Protocol and Verification Criteria. In particular, the Voluntary Carbon Standard seeks to ensure that emissions reductions are:

Real: All emission reductions that are to qualify as VCUs and the project activities that generate them must be proven to have genuinely taken place. For this reason, in addition to the principles below, the VCS only allows certification of emission reductions that have already taken place.

Measurable: All emission reductions that are proposed for certification as VCUs must be quantifiable using recognized measurement tools and techniques within standard margins of measurement error.

Permanent: In order to be used to offset emissions produced elsewhere, it is essential that any credits used represent permanent emission reductions and are not likely to be reversed. Where VCUs are generated by projects that carry a risk of reversibility, adequate safeguards must be put in place before verification and certification as a VCU to ensure that the risk of subsequent reversals of a GHG emission reduction is minimized and that, should any reversal occur, a mechanism is in place that guarantees that the emission reduction will immediately be replaced or compensated.

Additional: A key factor in the “genuineness” of a project-based emission reduction -especially when used to offset GHG emissions produced elsewhere- is that a emissions reductions from a project activity should be additional.

Independently verified: In order to provide sufficient guarantees to buyers, sellers and other users that the principles above have been met, all emission reductions proposed for certification as VCUs must be verified by an approved independent third party verifier with the expertise necessary in both the country and sector in which the project is taking place to provide an adequate level of assurance (see Section 2)

In addition to these key principles, it is essential that no more than one VCU or other emission reduction credit is associated with a single emission reduction. Therefore, the VCS contains checks to ensure that double counting of emissions reductions - in mandatory or other voluntary markets - does not take place.

Furthermore, since transparency is key to credibility and public acceptance, the VCS requires:

- That project proponents make project documents and verification reports available for public scrutiny;
- All projects that are certified as meeting the VCS to be registered with the official VCS website;
- All VCUs to be deposited in an approved VCU registry
- All VCUs to have a unique serial numbers that allows participants to identify the project from a VCU has been generated and its year of issuance.
- Approved VCU registries to provide any relevant information to the VCS Steering Committee and publish quarterly data detailing the aggregate volumes of VCUs that have been deposited and transactions that have taken place.

1.3 Voluntary Carbon Unit

- The Voluntary Carbon Standard defines a Voluntary Carbon Unit (“VCU”), defined as being equal to an emission reduction that is equivalent to one metric tonne of CO₂ that has been implemented and subsequently verified according to the criteria comprised by the Voluntary Carbon Standard by an accredited independent certification entity.
- VCUs are uniform instruments for use in voluntary offset programs that can be purchased and sold between the market participants such as project developers and intermediaries, and ultimately purchased and retired by the participants and/or end-use customers.
- A verified emission reduction shall be defined as a VCU only if it has been certified as meeting all the criteria contained in The Voluntary Carbon Standard and subsequently registered in an approved VCU Registry.
- VCUs are registered and kept in custody in an approved VCU Registry, approved by the Voluntary Carbon Standard Steering Committee.

1.4 Governance and the Voluntary Carbon Standard Steering Committee

The Voluntary Carbon Standard and associated documentation will be managed by IETA and The Climate Group (and other independent partners as appropriate) who will act as custodians of the Standard and be responsible for its maintenance and development. Together they will designate a person or team as the VCS Manager. IETA - the International Emissions Trading Association- is an independent, non-profit organization dedicated to the establishment of effective systems for trading in greenhouse gas emissions by businesses. The Climate Group is an independent nonprofit organization dedicated to advancing business and government leadership on climate change.

Approval of the Standard and any subsequent modifications to it - and review, auditing and accreditation of registries - will be carried out by an independent Steering Committee. This Voluntary Carbon Standard Steering Committee will consist of nine independent climate change experts, appointed initially by IETA and The Climate Group who will also act as its secretariat.

The Standard will be maintained and reviewed on a regular basis by an independent Steering Committee (the "Voluntary Carbon Standard Steering Committee"), consisting of renowned climate change experts who support the standardization of the global voluntary carbon market. Initially this Steering Committee will be co-chaired by IETA and The Climate Group who will nominate members. At its first meeting, the VCS Steering Committee will approve the draft rules for its operations (see Appendix X). One year after the launch of the VCS, external nominations will be taken and a new Chair and members will be selected.

Other features and functions of the Governance and the VCS Committee are the followings;

- The Voluntary Carbon Standard will be a stand-alone non-profit organization.
- The Founding organizations will CG, IETA and WEF. (Founders)
- Its governing body will be made up of up to 9 individuals that will form the Committee of the VCS
- The Founders will have permanent presence on the Committee
- The first Committee will be through invitation by the Founders
- All other members of the Committee will have a 2 year term, renewable (max of 2 terms)
- The members of the Committee will be invited by the existing Committee
- Committee nominations will be personal and no substitutes will be accepted
- The Committee will rely on Advisory Panels for technical matters. The Panels will be nominated by the Committee.
- The Committee will meet a maximum of 4 times a year, in person or by telephone, with at least 2 meetings in person.
- The VCS will be funded through contributions and self sustaining by charging for project registration (see section Funding)
- Operation of the Committee and activities of those Committee members that need it will be funded from VCS funds
- The Committee will approve accreditation bodies that will accredit the VCS verifiers
- The Committee will approve criteria and certify Registries that will meet criteria to be VCS Registries
- The Committee will approve & recognize other GHG mitigation programmes

1.5 Funding

Funding for the management and operation of the VCS (including meetings of the VCS Steering Committee, random auditing of projects, technical support, maintenance of the VCS website, etc.) will come from two sources:

- Initial grant-based fund-raising by the VCS founders
- A levy on all VCUs registered in an approved VCU registry. The levy value will be established once a business plan has been approved. Payment of this levy will be a condition for VCU registration, and will be collected by the Registry Operator of the Registry in which the VCUs are registered.

2 VCU Verification Protocol

2.1 VCU Registration Process

The VCU Registration Process is designed in a way that makes it easy for project owners to follow easily and carry out efficiently and cost effectively.

1. The VCU registration process is only applicable to existing verified emission reductions.
2. At the time of the launch of the Standard, forward streams of VCUs cannot be registered (“validated”) into a VCU Registry. However, the Voluntary Carbon Standard Steering Committee encourages project developers and Certification Entities to create validation procedures at market terms to give project developers security of generating VCUs in the future.
3. Applicable Certification Entities are all credible institutions and organizations with documented experience in verifying & certifying greenhouse gas emission reductions. The Entity is a UNFCCC accredited Designated Operational Entity and Applicant Entity, a UNFCCC accredited Independent Entity by the Joint Implementation Supervisory Committee (“JISC”), or Certification body formally accredited for ISO 14064 by an accreditation body member of the IAF (International Accreditation Forum).
4. Certification Entities must be accredited as a verifier for the appropriate scope of work and project category.
5. The five steps (four steps without validation process) described below are to be followed in full.
6. Validation is a voluntary step, and not a required part of the VCU registration process.

The roles of each party involved in the VCUs registration process are as follows:

Project Owner

- The Project Owner prepares a Project Design Document (PDD), Monitoring Reports and Proof of Title for the project, and submits them to the Certification Entity for the following verification process.
- The project owner submits monitoring plan.
- To prove and warrant the ownership of the emission reduction, the Project Owner of the emission reductions issues a VCU Title Certificate and Transfer Form to VCU Registry in order to register VCUs.
- To avoid double counting and to ensure that VCUs are only registered in a single registry, the project owner must provide to the Certification Entity:

- a) A letter confirming that the VCUs being registered have not been registered, transferred or retired prior to the said registration;
- b) Where emissions reductions have occurred in a country with a QELRO under the Kyoto Protocol, a certificate from the national registry of the host country that an equal number of Assigned Amount Units have been cancelled from that registry;
- c) Proof that emissions reductions (from renewable energy projects) have not arisen from an activity used to meet a regulatory renewable energy commitment or to generate Renewable Energy Certificates or that the latter have been cancelled.

Certification Entity

- A Certification Entity verifies the emission reductions and produces a Verification Report, which must contain all the information that is required to certify that the Verification meets the requirements of the VCS Verification Protocol, and that the emission reduction project meets the VCS Verification Criteria.
- A Certification Entity certifies the emission reductions against the VCS and issues a VCU Certification Statement accompanied by the Verification Report to an approved VCU registry.
- Local verification companies will be able to provide verification services to project entities on the basis that they are under the direct supervision of the Certification Entity in line with requirements for this type of subcontracting as outlined in ISO 14065, ISO Guide 62, 65 & 66.

VCU Registry Operator

- Upon receiving the VCU title Certificate, the VCU Certification Statement, the original Verification Report and payment of the relevant VCU levy, the VCU Registry Operator will credit the Owner's holding account with the corresponding volume of VCUs.

VCS Steering Committee

- The VCS Committee will develop the criteria and process for accrediting non-DOE Certification Entities for certifying VCUs.

STEPS FOR VCU REGISTRATION PROCESS

Step 1. Project development by Project Owner

- The project owner prepares a Project Design Document (PDD) and Proof of Title for the proposed project.

PDD

Proof of Title



Step 2. Voluntary Validation

- Project owner can voluntarily have a Certification Entity validate the project. This step, however, is not required under the VCS Certification Protocol.

Validation Report



Step 3. Verification and Certification

- Project Owner submits monitoring report and other proof of project implementation.
- Certification Entity verifies emission reductions and produce Verification Report based on VCS.
- Certification Entity certifies reduction against VCS and issues VCU Certification Statement.

Verification Report

Certification Statement



Step 4 VCU Title and Transfer Form

- The Project Owner issues VCU Title Form to VCU Registry to register VCUs.

VCU Title Form



Step 5. VCU Registration

- Upon receipt of VCU Title Certificate, VCU Certification Statement, and Verification Report, the VCU registry credits the Project Owner's holding account with certified volume of VCUs.

VCU ACCOUNT CREDITED

2.2 Qualifying Certification Entities

The Certification Entity is defined as follows;

- The Certification Entity is an independent third-party organisation.
- The Certification Entity has the required technical experience to determine the accuracy of monitoring GHG emission reductions.
- Applicable Certification Entities are all credible institutions and organizations with documented experience in verifying project-based greenhouse gas emission reductions using the ISEA3000/ISO14064 or the GHG Protocol for Project Accounting.
- The Certification Entity is a creditworthy organisation with sufficient resources to respond in cases of fraud or other legal action.
- The Certification Entity must not be involved in the project's development or implementation.

The Certification Entity should be accredited as one of the following;

- (1) a Designated Operating Entity ("DOE") by the CDM Executive Board;
- (2) an Independent Entity by the Joint Implementation Supervisory Committee ("JISC"); or
- (3) an approved Certification Entity by an accreditation body which is member of the IAF for ISO 14064.

Accredited DOEs by the CDM Executive Board are those entities officially accredited by the CDM Executive Board for emission reduction project validation/verification/certification services. The list of currently accredited DOEs is maintained at <http://cdm.unfccc.int/DOE/list>. Sectoral scopes and the DOEs that are accredited for verification services for each scope are defined at <http://cdm.unfccc.int/DOE/scopes.html>.

As of March 2006, the Joint Implementation Supervisory Council has yet to put in place procedures for accrediting Independent Entities to independently verify/validate JI projects. For the purpose of certifying VCU, all Joint Implementation Supervisory Council accredited IEs are eligible to certify VCUs in the sectors that they have been accredited for.

2.3 Scope of Work

The Certification Entity has the following responsibilities in the VCU registration process:

1. Carry out a verification of the reductions generated by the project and produce a Verification Report which is prepared in line with the Voluntary Carbon Standard Verification Protocol, and which contains all the necessary information to evidence the project's compliance with the twelve criteria in the Voluntary Carbon Standard Verification Criteria as set out in Section 4 below.
2. Certify that the emission reductions in the Verification Report are based on accurate underlying data, employ methodologies that are correctly applied, adhere to the principles and methods of the WBCSD/WRI GHG Project Protocol or ISO 14064 and that material risks are accounted for.
3. Issue to an approved VCU Registry a VCU Certification Statement, which certifies that the project is in full compliance with the Voluntary Carbon Standard. The VCU Certification Statement shall also state the number of VCUs generated by the project.
4. In the event that the certification entity is using local subcontractors, it undertakes regular internal controls on the performance of the local subcontractor in line with the requirements of ISO 14065, or ISO Guide 62, 65 & 66.

2.4 Audit Practices

The Certification Entity shall carry out the verification in accordance with the audit practices described in “ISEA3000 (Revised) Assurance Engagements other than Audits or Reviews of Historical Financial Information” and/or ISO/FDIS 14064-3 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions”.

For further details, please refer to the following Internet pages:

ISEA 3000 (Revised): <http://www.ifac.org/IAASB/ProjectHistory.php?ProjID=0008>

ISO/FDIS 14064-3: <http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38700&scopelist=PROGRAMME>

2.5 Good Practice Principles

Certification Entity shall use the principles and methods of the WBCSD/WRI GHG Project Protocol for their verification and certification work, as well as the audit practice of ISO/FDIS 14064-3 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions”.

The GHG Protocol for Project Accounting: <http://www.ghgprotocol.org/plugins/GHGDOC/details.asp?type=DocDet&ObjectId=MTc0MTg>

More specifically the Certification Entity shall enforce, the use of, the good practice principles for the verification process of the VCU Verification Criteria in Section 4 below, as described in the IETA/PCF Validation and Verification Manual (pp.9, Version 4). This manual defines the principles under which documents related to verification should be prepared and reviewed.

For further details, please refer to the following Internet page:

IETA/PCF Manual: <http://www.ieta.org/ieta/www/pages/download.php?docID=259>

2.6 Transparency

Full transparency in all steps of documentation and verification of emission reductions is the cornerstone of the Voluntary Carbon Standard. Project developers, project operators, and Certification Entities shall ensure throughout the verification process that:

- All assumptions are clearly explained and documented.
- All background material is clearly referenced.
- The rationale for selection and use of baseline methodologies, as well as the use of such are clearly explained.
- The rationale for the identification of baseline candidates
- The rationale for determining the GHG assessment boundary, including documenting specific exclusions of secondary effects
- There is a clear conclusion or decision from all presented discussions.
- All formulas used for calculations are clearly stated.
- All calculations are incorporated or referenced.
- Changes in documentation as a result of validation/verification are clearly identified in revised documents.
- Confidential information is clearly identified.

- Independent stakeholders are provided with access to all documents that are not commercially sensitive and given sufficient opportunity to offer comments and other inputs.
- Certification reports are made available for public scrutiny before VCU registration and are made available to the VCS Steering Committee.

For further details, please refer to the IETA/PCF Validation and Verification Manual, Version 4, p.10; the WBCSD/WRI GHG Protocol for Project Accounting, chapter 4, p.22: www.ghgprotocol.org, and the ISO 14064 ISO/FDIS 14064-3: <http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38700&scopelist=PROGRAMME>

Upon submitting projects into the VCU registry, Certification Entities will be required to confirm, in writing, their endorsement of the above guidelines for transparency.

2.7 Level of Assurance

As the Voluntary Carbon Standard only recognizes verified emission reductions, the Certification Entity shall focus on providing the highest level of assurance that the emission reduction calculation methodology used is appropriate and correctly applied, and that emission reductions have been accurately monitored.

In accordance with the recommendation in the IETA/PCF Validation and Verification Manual (Version 4, p.12) it is expected that a Certification Entity “discounts verified emission reductions or requests a discount of these by using conservative assumptions for uncertainties in emission reduction calculations that cannot be fully quantified or that cannot give a desired level of assurance”. For verifying/certifying VCUs, the desired level of assurance should be based on the combined quantitative assessment of the accuracy of monitoring project performance and the identification of material risks, as well as an assessment of the chosen baseline methodology and proof of additionality.

2.8 Accuracy

The Certification Entity shall ensure that all metering installations related to monitoring project performance are of sufficient accuracy and calibrated and maintained to a sufficient standard. The accuracy of measurement should not exceed the lower of a generic +/- 3% range of uncertainty, or the metering device specific range given in table 2 in the Monitoring and reporting Guidelines of the EU ETS defined by EU commission decision of January 29, 2004 (2004/156/EC) on the following internet site: http://eur-lex.eu.int/eur-lex/prj/en/oj/dat/2004/L_059/L_05920040226en00010074.pdf

A statement of uncertainty should ensure that the emission determination is neither systematically over nor under true emissions, and that uncertainties are reduced by the operator as far as practicable under normal operating circumstances.

2.9 Identification of Material Risks

The Certification Entity shall identify, categorize and list risk factors (quantitative only) that have a high or moderate impact on the requirements of the audit (listed below). Risks should be listed if they affect the accuracy of the emission reduction calculation and the Certification Entity shall clearly report how the risks were accounted for in determining the emission reductions.

High risk category: >5% impact on project emissions
Moderate risk category: <5% impact on project emissions
Low risk category: <1% impact on project emissions

2.10 Freedom of Error

The Verification Report shall include a statement of freedom of material error, where material error is determined as a misstatement where aggregate omissions, misrepresentations, or errors in the total emissions figure is greater than 5%.

2.11 Positive Assurance

The Certification Entity's opinion of each of the requirements of the VCU Quality Standard (as detailed in Section 4) shall be expressed in the form of positive assurance.

2.12 Format of Reporting

Certification Entities can choose any reporting format in which they transparently provide the project's information for meeting each of the VCU Quality Criteria according to the guidelines of the VCU Verification Protocol.

2.13 VCU Registries

In order to be certified as a VCU, all emission reductions verified as meeting the Voluntary Carbon Standard must be deposited in an accredited VCU Registry. Accreditation shall be carried by the VCS Steering Committee or other body to whom the VCS Steering Committee designates this task. Accreditation will be for renewable five-year periods. In order to be accredited as a VCU Registry, the operator must demonstrate that:

- The institution is an existing experienced provider of custodial services to the financial and/or carbon markets able to provide a robust and credible registry for the voluntary carbon markets.
- The institution is a recognised international financial institution with expertise in the global custody of securities or regulatory authority with an ability to provide secure vault services for the related documents.
- The institution has established processes for handling certification documents, transaction confirmations and other related documentation in regarding registration, storage, trading and retirement of the VCUs.
- The Registry has an internal identification and tracking mechanism for every VCU registered, traded and retired. Complete record of every transaction and associated documentation must be kept for at least 10 years for audit and fraud prevention purposes.
- The institution has sufficient credit rating to ensure market participants that in the event of litigation the VCU Registry will be able to settle any potential claims and liabilities arising from the Registry activities.

- The Registry is able to provide separate trading and retirement accounts for each customer .
- The Registry has reporting capability to provide customers with adequate reports of account trading and retirement activity.
- The Registry only accepts emission reductions from projects certified by an approved certifier in accordance with the Voluntary Carbon Standard.
- The Registry will hold physical custody of the title certificates and the project documentation in a secure vault at least for a period of 10 years.
- The Registry is able to confidentially communicate with other VCU Registries (should multiple VCU Registries exist) or via an appointed independent third party auditor .
- The Registry will issue unique serial numbers for each VCU according to the guidelines provided by the VCS Steering Committee.
- The Registry is able and willing to collect a levy per VCU deposited that will be transferred to the management of the VCS to cover its operating costs.

Initially one registry will be selected through a tender process for the first 18 months of VCS operation. After the first 18 months of the VCS operation, the VCS Steering Committee will decide if other registries should be approved.

VCUs will have unique serial numbers that will include a project identifier and year of issuance. Project identifier numbers shall be issued by the VCS management. All serial numbers and the information on projects that generate VCUs shall be made available on the VCS website.

3 The VCU Verification Criteria

| # | Criterion | Description of Minimum Quality Level | Actions for Project Owner (to be certified by Certification Entity) | Definitions, References, and Further Guidance |
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| 1. | Project Category | <p>Emission reductions permitted under the VCU Verification Criteria are those generated by projects in the Endorsed project categories below:</p> <ol style="list-style-type: none"> 1. Energy industries (renewable-/non-renewable) 2. Energy distribution 3. Energy demand 4. Manufacturing industries 5. Chemical industries 6. Construction 7. Transport 8. Mining/mineral production 9. Metal production 10. Fugitive emissions from fuels (solid, oil and gas) 11. Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride 12. Solvent use 13. Waste handling and disposal 14. Afforestation and reforestation* 15. Agriculture * <p>*LULUCF projects will be included once the VCS Steering Committee has approved rules relating to permanence.</p> <p>New categories will be added as and when they are approved by the VCS</p> | <p>The project owner shall demonstrate to the Certification Entity that the Project directly and permanently avoids or displaces greenhouse gas emissions from an Endorsed Project Category and shall clearly state in the Verification Report which project category the reduction belongs to.</p> | <p>For the purposes of this document, one Project can consist of one or several Project Activities as long as the Project Activities are clearly part of a single Project. This means that one verification report is sufficient for one Project with several Project Activities, as long as the Project Activities all meet the VCU Verification Criteria. However, while Project Activities should be quantified separately with their own separate baseline scenarios, the Project shall only use one project assessment boundary for all Project Activities in order to avoid double counting. For more detail, see WBCSD/WRI GHG-PP chapter 2.</p> <p>A Project Activity is defined as a measure, operation or action that aims at reducing greenhouse gas emissions</p> <p>At its first meeting, The Steering Committee will consider the possible inclusion of LULUCF and CCS approved project categories under the Voluntary Carbon Standard, taking into account in particular issues of leakage and permanence.</p> <p>[In the case of LULUCF projects, project owner shall demonstrate to the Certification Entity how the project will address permanencies of projects and its emission reductions. Rules for demonstrating the permanence of emission reductions from LULUCF projects can be found in Annex Y].</p> |

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| | Steering Committee | | New project types/categories can be added upon approval of VCS Steering Committee. |
| 2. | Eligible GHGs | <p>The VCU Verification Criteria acknowledges emission reduction projects involving any of the six greenhouse gases currently included in the Kyoto Protocol.</p> | <p>The Project Owner shall demonstrate to the Certification Entity that the Project Activity contributes to reductions in the emissions of one or more of the following six Kyoto Protocol greenhouse gases:</p> <ol style="list-style-type: none"> 1. Carbon dioxide (CO₂); 2. Methane (CH₄); 3. Nitrous oxide (N₂O); 4. Hydrofluorocarbons (HFCs); 5. Perfluorocarbons (PFCs); 6. Sulphur hexafluoride (SF₆). <p>In the Verification Report, the Certification Entity shall state the volume of emission reductions for each of the six greenhouse gases separately. The Certification Entity shall further verify and state that the current IPCC published GWP factor has been used for non-CO₂ gases.</p> |
| 3. | Project & Emission Reduction Start Date | <p>The VCU Verification Criteria acknowledges emission reductions and emission reduction projects that have started on or after January 1st, 2000.</p> <p>Special provision: See the next column.</p> | <p>The Project Owner shall demonstrate to the Certification Entity and the Certification Entity shall verify, through examination of company documents and records that the Start Date of the Project which generated the emission reductions was on or after January 1st 2000. The Verification report will establish the project start date for all projects.</p> <p>Special provision: Projects that have been implemented before January 1st 2000 can be registered during the first full year of VCS operation. If the project owner can demonstrate to</p> |
| | | | <p>The six Kyoto Protocol greenhouse gases are defined in Annex A of the Kyoto Protocol: (http://unfccc.int/resource/docs/convkp/kpeng.pdf)</p> <p>IPCC GWP definitions: The Science of Climate Change: Summary for Policymakers and Technical Summary of the Working Group I Report, p. 26. 1995.</p> <p>Project Start Date is defined as the date on which the emission reduction installation or technology was completed and the technology became operational to reduce emissions.</p> <p>See "Guidelines for Completing CDM-PDD", and step 0 of the "CDM Tool for the demonstration and assessment of additionality (v2)": http://cdm.unfccc.int/methodologies/PAMethodologies/AdditionalityTools/Additionality_tool.pdf</p> |

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| | | <p>Certification Entity that emission reductions arising from such projects after January 1st 2000 meet all the remaining VCS certification criteria, such emissions reductions can be registered as VCUs.</p> <p>Upon expiry of one calendar year from the launch of the VCS, this provision shall be terminated.</p> | |
| 4. | Crediting period | The VCU Verification Criteria acknowledges crediting period should be a single crediting period of 10 years, commencing from the project start date. | |

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| 5. | <p>The VCU Verification Criteria require that the project boundary shall encompass all anthropogenic emissions by sources of greenhouse gases (GHG) under the control of the project participants that are significant and reasonably attributable to the project activity.</p> <p>Project Boundary/GHG Assessment Boundary</p> | <p>The Project Owner shall demonstrate to the Certification Entity that the project boundary and GHG Assessment Boundary incorporates all primary effects and significant Secondary Effects, and that the requirements for defining the GHG assessment boundary (as defined in the GHG-PP) have been met.</p> <p>The Certification Entity shall also certify that the Project Boundary does not indirectly overlap with up- or downstream facilities. In particular, Certification Entity shall disallow any downstream energy efficiency projects in jurisdictions, which have mandatory GHG emission caps on the electricity sector.</p> | <p>The Project shall only use one project boundary for all Project Activities in order to avoid double counting.</p> <p>GHG Assessment Boundary is defined in Sec 2.5 and Chapter 5 of the GHG-PP, available at; http://www.ghgprotocol.org/plugins/GHGDOC/details.asp?type=DocDet&ObjectId=MTc0MTg and ISO 14064</p> |
| 6. | <p>The VCU Verification Criteria require that secondary effects be incorporated into the calculation methodology in accordance with the WBCSD GHG PP.</p> <p>Secondary Effects</p> | <p>The Project Owner shall demonstrate to the Certification Entity that the project's GHG Assessment Boundary is in compliance with the ones indicated in the project documents.</p> <p>Certification Entity shall verify and state in the Verification Report that the GHG Assessment Boundary incorporates all primary effects and significant Secondary Effects.</p> | <p>Secondary Effects are defined by the WBCSD GHG Project Protocol (Sec 2.4) as unintended changes caused by the project activity in GHG emissions associated with a GHG Source.</p> <p>Primary Effects are defined as the intended changes caused by the project activity in GHG emissions associated with a GHG Source (GHG PP Sec 2.5).</p> <p>GHG Assessment Boundary includes all Primary Effects and significant Secondary Effects associated with the GHG project (Sec 2.5).</p> <p>Significance is defined in terms of the relative magnitude of the Secondary Effect compared to the Primary Effect (Sec 5.4). A Secondary Effect may be determined as Insignificant and excluded</p> |

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| | | | <p>from the GHG assessment boundary if it satisfies the following general criteria (Sec 5.5):</p> <ul style="list-style-type: none"> • The Secondary Effect involves a positive difference between the baseline and project emissions (i.e. “positive leakage”) and is excluded from the GHG assessment boundary; • The Secondary Effect is small relative to the associated primary effect; • The Secondary Effect involves a negligible market response. <p>To clarify, Sec 11.2 of the WBCSD GHG-PP requires reporting of “all significant secondary effects resulting from the project activity” and “justifications for excluding any secondary effects and why they are not significant”.</p> |
| 7. | <p>Calculation Methodology</p> <p>The VCU Verification Criteria requires that:</p> <p>A. Where possible, the project proponents shall use calculation methodologies that have been approved by the CDM Executive Board for determining emission reductions for the specific Project type.</p> <p>Where an existing approved calculation methodology is not applicable in its entirety, project proponents may use combinations of approved methodologies.</p> <p>B. In situations where an existing CDM Executive Board methodology is not available in its entirety or as a combination of existing approved methodologies, the project proponent shall clearly illustrate how the Project</p> | <p>A. The project owner shall demonstrate to the Certification Entity calculation methodologies have been used that have been approved by the CDM Executive Board for estimating the volume of emissions reductions generated from the Project, and that those methodologies have been correctly and accurately applied in calculating the total emissions reductions generated by the respective Project. This includes, but is not limited to, stating in the Verification Report the following:</p> <ul style="list-style-type: none"> • Identification of Baseline Candidates; • Determination of a Baseline Scenario; • Definition and calculation of Baseline Emissions; • Definition and calculation of project emissions; and • Calculation of project emission reductions. | <p>Approved CDM Executive Board methodologies are those methodologies for calculating emission reductions that have been approved by the CDM Executive Board. The list of currently approved methodologies is maintained at http://cdm.unfccc.int/methodologies/PAMethodologies/approved.html</p> <p>If the Project consists of more than one Project Activity, each Project Activity shall be quantified separately with their own separate baseline scenarios.</p> <p>Baseline Candidates are defined as alternative technologies or practices within a specified geographic area and temporal range that could provide the same product or service as the project’s activity (Sec. 2.7 and Ch.7 in the WBCSD GHG Protocol for Project Accounting). http://www.ghgprotocol.org/includes/getTarget.asp?type=d&id=MTc1NDc</p> |

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| <p>baseline was identified and emission reductions calculated. The proponent may use a performance standard or best practice approaches to determine the baseline emissions and calculating the emissions reductions, as described in the GHG -PP.</p> | <p>reductions.</p> <p>In case the project has earlier been verified for delivery of VCUs, the Certification Entity shall point out differences in the baseline between the current and any earlier verifications. The baseline shall not remain fixed between two verification periods.</p> <p>In such cases where the Calculation Methodology consists of a combination of approved methodologies, the Certification Entity shall clearly verify:</p> <ul style="list-style-type: none"> • which approved methodologies have been used ;and, • methodologies have been used accurately and transparently in combination. <p>B. If a CDM Executive Board approved methodology has not been used the Certification Entity shall verify and state in the Verification Report that the Project Activity has applied a methodology equivalent to the approved CDM methodology</p> <p>Certification Entity shall then verify and state in the Verification Report that the requirements, as defined by the GHG PP, for the following criteria have been met:</p> <ul style="list-style-type: none"> • It uses the Performance Standard approach to calculate the baseline emissions in the absence of the project activity; • All the appropriate Baseline Candidates have been identified and their GHG emissions rates drawn from public | <p>The Baseline Scenario is a hypothetical description of how the underlying service or product, would have most likely been provided in the absence of any considerations about climate change mitigation through the Project.</p> <p>Baseline Emissions are described as an estimate of GHG emissions that would likely have occurred in absence of the proposed project activity (WBCSD GHG-PP Sec 2.8-2.9 and Ch. 8 & 9).</p> <p>The Performance Standard approach to calculating baseline is described in detail in Chapter 9 of the WBCSD GHG-PP. Step-by-step guidance in sections 9.1-9.5 in the WBCSD GHG PP shall be used to create and verify the use of the Performance Standard.</p> <p>Stringency Level is defined (Sec 9.3-9.4 of WBCSD GHG-PP) as a GHG emission rate that is more restrictive than the average GHG emission rate of all baseline candidates (i.e. better than the 50% percentile).</p> <p>The Steering Committee will consider methodologies approved by other programmes (e.g. CCX, RGGI, CCAR) with a view to approving their use as methodologies appropriate for inclusion in the VCU Verification Criteria.</p> |
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| | | <p>references;</p> <ul style="list-style-type: none"> • An appropriate Stringency Level has been selected for the performance standard; • All Primary and Significant Secondary Effects have been incorporated into the project's GHG Assessment Boundary (see secondary effects criterion below); • The calculation of emission reductions is accurate and fairly stated. | |
| 8. | <p>Project Additionality</p> <p>[Rules for dealing with additionality will be decided by the VCS Steering Committee after further consultation.]</p> <p>The VCU Verification Criteria require that a project activity be additional. A project activity is considered additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the project activity.</p> | <p>[Rules for dealing with additionality will be decided by the VCS Steering Committee after further consultation.]</p> <p>The Project Owner shall demonstrate to the Certification Entity that there is clear evidence that a project is additional because the project has selected the appropriate baseline and its project emissions are found to be below the emissions from the selected baseline scenario.</p> | |
| 9. | <p>Quality of Reductions</p> <p>The VCU Verification Criteria require that projects proponents demonstrate that project implementation has no negative impact on sustainable development in the local community.</p> | <p>The Project Owner shall demonstrate to the Certification Entity that a project's design and implementation has been carried out in compliance with all relevant local and national environmental and social legislation in the host country.</p> | <p>Certification Entity shall use its expertise, experience from previous verification assignments and its professional judgment to determine which project types are likely to be governed by the relevant social and environmental legislation And check such legislation accordingly.</p> <p>Where necessary, the Certification Entity shall highlight the associated negative impacts (e.g. run-of-river hydro -> soil erosion, water availability etc) and verify that the project is not increasing the intensity or magnitude of the problem.</p> |
| 10. | <p>Monitoring Process</p> <p>The VCU Verification Criteria require</p> | <p>For reductions generated between January</p> | <p>A Monitoring Report shall be based on parts D and</p> |

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| <p>that for estimating a project's emission reductions the project proponent shall, to the extent possible, use the most recent emission reduction monitoring protocol that has been approved by the CDM Executive Board or the JI Supervisory Committee for that project type.</p> | <p>1.2000 and the date of submission, the project owner shall supply to the Certification Entity a complete Monitoring Report.</p> <p>Certification Entity shall assess the proposed greenhouse gas data management, control and reporting systems, e.g. instructions, procedures, record keeping systems, assumptions, technical equations, models and other means that support complete, accurate, and conservative VCU estimates.</p> <p>Certification Entity shall verify and state in the Verification Report that the project proponent has either (1) used the most recent emission reduction monitoring protocol approved by the CDM Executive Board or JI Supervisory Committee for the project type if available; or if not available has (2) employed monitoring procedures support complete, accurate, and conservative VCU estimates.</p> | <p>annex 4 in the most recent version of the CDM PDD template to report on monitoring emissions.</p> <p>http://cdm.unfccc.int/Reference/Documents/cdm_pdd/English/CDM_PDD_ver02.pdf</p> <p>The Certification Entity shall use the data monitoring checklist questions C.3 to E.3 provide in the IETA/PCF project verification checklist: http://www.ieta.org/ieta/www/pages/download.php?docID=262</p> <p>In cases where it is not possible, due to past measurement protocols and technologies, any differences to the templates above shall be clearly disclosed by comparing the actual monitoring report to the most recent version of the CDM PDD</p> |
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