THE VOLUNTARY CARBON STANDARD

VERIFICATION PROTOCOL AND CRITERIA

Version 1 for Consultation

1 Introduction

Since agreement on the Marrakech Accords and, in particular, the entry into force of the Kyoto Protocol and commencement of the EU Emissions Trading Scheme, compliance-driven carbon markets have grown rapidly and become a central feature of policies aimed at cutting greenhouse gas emissions in a cost-effective manner and, in so doing, preventing dangerous climate change. Although, these markets are still relatively young, it is becoming increasingly clear that attaching a price to GHG emissions within a clearly regulated framework can act as strong incentive to GHG emissions reductions.

Parallel to this growth of national and international compliance-driven carbon markets, interest is now rapidly expanding in the use of voluntary carbon offsets – emission reduction credits generated by projects voluntarily undertaken to reduce greenhouse gas emissions below a project baseline level. These projects are often invested in by entities that as yet are not subject to binding GHG regulations but that wish make a quantifiable contribution to cutting GHG emissions. However, while compliance markets have evolved around an existing set of rules and adopted regulations – principally those of the Kyoto Protocol's Clean Development Mechanism (CDM) and the EU Emissions Trading System (EU ETS) – no similar framework exists for voluntary emissions reductions. As a result, investors, buyers, project developers, verifiers

and others have had to proceed on an ad hoc basis, leading to the emergence of a number of competing standards with no guidance as to which can be considered credible.

The Voluntary Carbon Standard seeks to provide a credible but simple set of criteria that will provide integrity to the voluntary carbon market and underpin the credible actions that already exist. As such the Voluntary Carbon Standard does not seek to compete with existing standards in the market but rather looks to reinforce those that are robust and already exist (e.g. WBCSD/WRI GHG Protocol for Project Accounting, Gold Standard, CCX) and give confidence to actors in this emerging market about the integrity of their investments.

Specifically, The Voluntary Carbon Standard will ensure that all voluntary emission reductions that meet its criteria are additional and represent real, quantifiable and permanent emission reductions. The Voluntary Carbon Standard does not seek to replace or undermine the Kyoto Protocol or the compliance-driven markets that have arisen around it. On the contrary, it designed to provide rigour to the quantification of many of the project-based activities taking place outside these markets and help drive actions by organisations that are as yet not regulated. It is anticipated that as carbon regulation and pricing expands – leading to larger and more liquid compliance markets – much of the voluntary activity covered by the Voluntary Carbon Standard will become part of these compliance driven systems.

The Voluntary Carbon Standard, therefore, provides the protocol and criteria to verification entities and emission reduction project developers on the specifications for creating, verifying, and registering Voluntary Carbon Units ("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 12 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.

VCUs 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. In this context, the Voluntary Carbon Standard offers a number of benefits:

- Provides companies and individuals 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.
- Promotes transparency and standardization of the voluntary emission reduction market.
- Enhances liquidity by creating fungible units that can be traded.
- Simplifies 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, provides users with access to sophisticated custodial and reporting platforms, providing transparency and assurance against double-counting.

1.1 Purpose of this document

The purpose of this document is twofold. First, it represents the first public version of The Voluntary Carbon Standard, which IETA, The Climate Group and WEF are making available for public comment (see 1.5 below) prior to the release of the second version in May 2006.

Second, the document provides 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 verification entities on how to verify compliance of voluntary emission reduction projects with the Voluntary Carbon Standard. As such, this first version of The Voluntary Carbon Standard can be used immediately by those wishing to employ its criteria and generate VCUs. While the criteria may be subject to modification as a result of the consultation period and from time to time thereafter (see 1.4 below), any such changes will not be applied retroactively.

1.2 Overview of the Voluntary Carbon Standard

- The Voluntary Carbon Standard (the "Standard") is a robust quality standard for the measurement and recognition of verified emission reductions created for voluntary use by corporations, organizations and individuals.
- The Standard is the first set of global quality criteria for the rapidly developing voluntary emission reduction market.
- The Standard is being first launched by IETA, The Climate Group and WEF. Together they are releasing the Standard with the aim of helping create a robust and credible market for voluntary project-based carbon offsets and thereby increasing investments in low carbon solutions. The Standard has been initially developed in consultation with a range of companies, organizations and individual climate change experts directly involved in the international carbon market.
- 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.
- The Standard is designed to follow the existing CDM approval framework for recognizing emission reductions and the best-practice principles and methods of the WBCSD/WRI GHG Protocol for Project Accounting, which will enable wide application of high quality carbon offsets in the management of companies' and institutions' carbon footprints.

1.3 Voluntary Carbon Unit

- The Voluntary Carbon Standard defines a Voluntary Carbon Unit ("VCU"), which is a measure that equals an emission reduction that is equivalent to one metric ton of CO_2 that has been implemented and subsequently verified according to the criteria comprised by the Voluntary Carbon Standard by an independent verification entity.
- VCUs are uniform instruments for the 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.

- In time, it is expected that more than VCU Registry will exist. If more than one VCU registry is in operation, the VCU Steering Committee will ensure that an independent tracking mechanism will ensure against multiple registration of VCUs.

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. 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. Full rules for the functioning of the VCS Steering Committee will be developed by the time of the release of the second version of the VCS in May 2006.

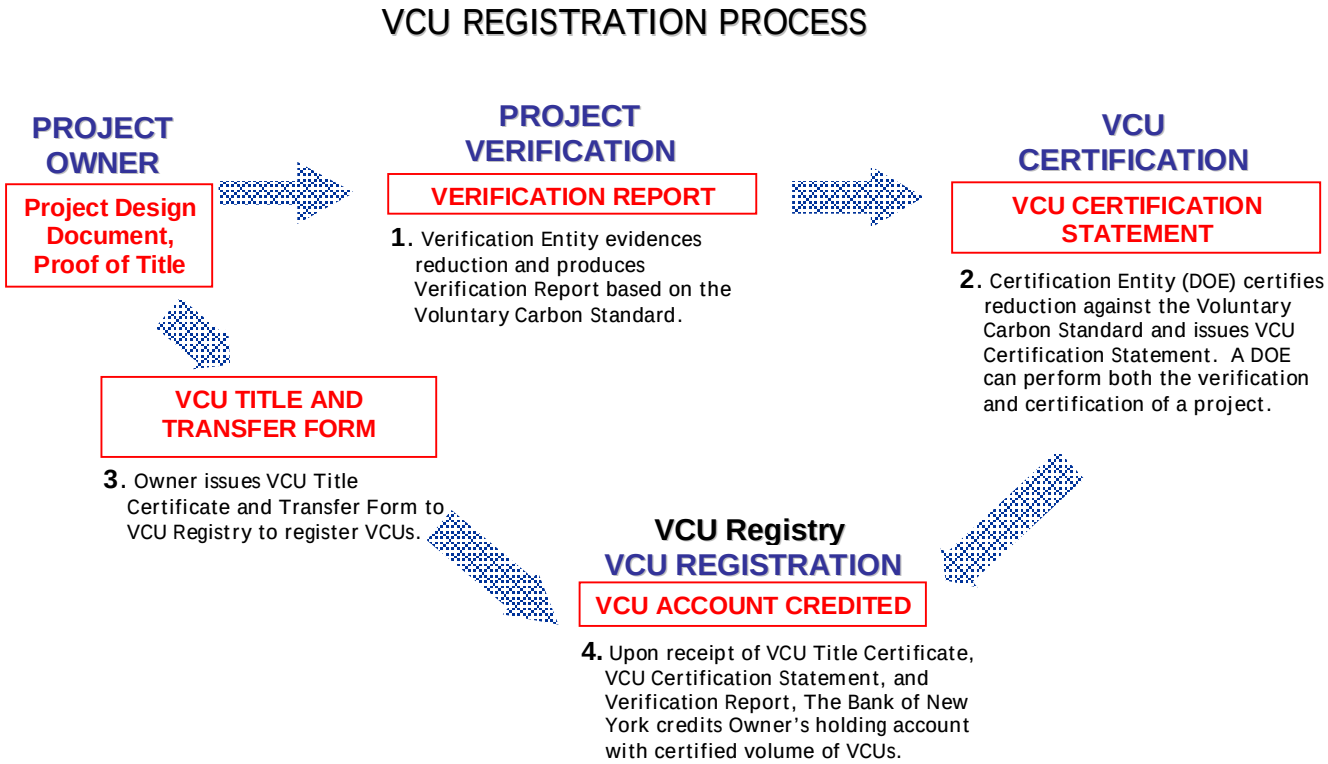
1.5 The Consultation Process

With the initial restricted release of the Standard on March 27th 2006, IETA, The Climate Group and WEF will also initiate a consultation period, seeking comments from a wide range of interested stakeholders. The period for submitting comments will continue until April 18th 2006. The Steering Committee will review comments and suggestions and approve a second version for launch on May 10th 2006 at the Carbon Expo in Cologne, Germany. A set of specific questions has been prepared (see Appendix) and are referenced in the criteria outlined in Section 3 but interested parties are invited to comment on any aspect of the Standard.

2 VCU Verification Protocol

2.1 VCU Registration Process

1. The VCU registration process is only applicable for 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 Verification Entities to create validation procedures at market terms to give project developers security of generating VCUs in the future.
3. Applicable Verification Entities are all credible institutions and organizations with documented experience in verifying greenhouse gas emission reductions.
4. A Verification Entity evidences 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 Voluntary Carbon Standard Verification Protocol and that the emission reduction project meets the Voluntary Carbon Standard Verification Criteria.
5. The Certification Entity, a UNFCCC accredited Designated Operational Entity or Certification body formally accredited by the VCS Steering Committee, certifies the reduction against the Voluntary Carbon Standard by issuing a VCU Certification Statement, accompanied by the Verification Report to an approved VCU registry.
6. To prove and warrant the ownership of the emission reductions, the Owner of the emission reductions issues a VCU Title Certificate and Transfer Form to the VCU Registry Operator in order to register the VCUs into the VCU Registry.
7. Upon receiving the VCU Title Certificate, the VCU Certification Statement and the original Verification Report, The VCU Registry Operator will credit the Owner's holding account with the corresponding volume of VCUs.
8. The Voluntary Carbon Standard Steering Committee will develop the criteria and process for accrediting non-DOE Verification Entities for certifying VCUs.



2.2 Qualifying Verification Entities

The Verification Entity is defined as an independent third-party entity which has documented experience in verifying project-based GHG emission reductions and has the required technical experience to determine the accuracy of monitoring GHG emission reductions.

2.3 Qualifying Certification Entities

The Certification Entity is defined as an entity which has been accredited as (1) a Designated Operational Entity ("DOE") by the CDM Executive Board; or (2) an Independent Entity by the Joint Implementation Supervisory Committee ("JISC") and has, where applicable, been accredited by

the CDM Executive Board for the particular scope into which the project falls; or (3) has been accredited as an approved Certification Entity by the VCS Steering Committee.

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 VCUs, all CDM Executive Board accredited DOEs are eligible to certify VCUs in the sectors that they have been accredited for.

2.4 Scope of Work

The Verification 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.

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

1. 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 and that material risks are accounted for.
2. Where necessary, request corrective action from the Verification Entity or to directly undertake the necessary examinations of the project's underlying data to be able to certify the reductions.
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.

2.5 Audit Practices

The Verification 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

2.6 Good Practice Principles

Both the Verification and Certification Entity shall use the principles and methods of the WBCSD/WRI GHG Project Protocol for their verification and certification work.

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

More specifically, the Verification Entity shall use, and 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

2.7 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, Verification Entities 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.

For further details, please refer to the IETA/PCF Validation and Verification Manual, Version 4, p.10; and the WBCSD/WRI GHG Protocol for Project Accounting, chapter 4, p.22: www.ghgprotocol.org.

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

2.8 Level of Assurance

As the Voluntary Carbon Standard only recognizes verified emission reductions, the Verification 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 Verification/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.

2.9 Accuracy

The Verification 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://europa.eu.int/eur-lex/pri/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.

2.10 Identification of Material Risks

The Verification 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 Verification 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

2.11 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%.

2.12 Positive Assurance

The Verification 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.

2.13 Format of Reporting

Verification 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.

3 The VCU Verification Criteria

#	Criterion	Description of Minimum Quality Level	Actions for Verification Entity (to be certified by Certification Entity)	Definitions, References, and Further Guidance
1.	Project Category	Emission reduction project types eligible under the VCU Verification Criteria are listed below, divided into categories for the benefit of project developers and verification entities: 1. Renewable energy [wind, PV, solar thermal, biomass, liquid biofuels, geothermal, run-of-river hydro] 2. Industrial energy efficiency 3. End-use energy efficiency 4. Fuel switch from fossil to fossil or non-agricultural waste gas 5. Waste gas capture and destruction (recovery) from non-agricultural industrial processes (N_20, HFCs, PFCs, SF_6) 6. Waste gas capture from municipal waste and municipal wastewater treatment (CH_4 &N_20) 7. Fugitive emissions	Verification Entity shall verify that the Project directly 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.	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 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. A Project Activity is defined as a measure, operation or action that aims at reducing greenhouse gas emissions 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

		capture/recovery		issues of leakage and permanence.
2.	Geographic Location	The VCU Verification Criteria recognizes projects from any geographic location.	Verification Entity shall verify, through site visits, that at the stated geographic location there are working physical components, installed facility and emission reduction monitoring equipment corresponding to the actual Project disclosed in the project documents made available to the Verification Entity. In the Verification Report, the Verification Entity shall include documented evidence of a site visit confirming existence of the stated Project at the stated location.	
3.	Eligible GHGs	The VCU Verification Criteria acknowledges emission reduction projects involving any of the six greenhouse gases currently included in the Kyoto Protocol.	Verification Entity shall verify that the Project Activity contributes to reductions in the emissions of one or more of the following six Kyoto Protocol greenhouse gases: 1. Carbon dioxide (CO_2); 2. Methane (CH_4); 3. Nitrous oxide (N_2O); 4. Hydrofluorocarbons (HFCs); 5. Perflourcarbons (PFCs); 6. Sulphur hexafluoride (SF_6). In the Verification Report, the Verification Entity shall state the volume of emission reductions for each of the six greenhouse gases separately. The Verification Entity shall further verify and state that the	The six Kyoto Protocol greenhouse gases are defined in Annex A of the Kyoto Protocol: (http://unfccc.int/resource/docs/convkp/kpeng.pdf) IPCC GWP definitions: The Science of Climate Change: Summary for Policymakers and Technical Summary of the Working Group I Report, p. 26. 1995.

			current IPCC published GWP factor has been used for non-CO_2 gases.	
4.	Project Start Date	The VCU Verification Criteria acknowledges emission reduction projects that have started on or after January 1st, 2000.	Verification 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. Verification Entity shall also verify that completion of installation works does not contradict with the dates of generation of emission reductions in the monitoring report. For Projects which had the Project Start Date between December 11 1997 and December 31 1999, Verification Entity shall verify that there is documented evidence that the Project was undertaken solely to reduce greenhouse gas emissions and that the project has a proven ongoing Financial Disincentive to keep the project in operation in absence of revenues from sale of resulting emissions reductions.	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. 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 December 11, 1997 was the date of adoption of the Kyoto Protocol. Financial Disincentive means that the technology applied by the Project Activity incurs direct costs to the project operator which are not recouped by improvements in process energy efficiency or cost reductions in supply of fuel or materials.
5.	Emission Reduction Start Date	The VCU Verification Criteria acknowledges emission reductions which have been generated after January 1, 2000. The Standard acknowledges only existing emission reductions, i.e. reductions that have already happened	Verification Entity shall verify, through examination of company documents, records, and monitoring reports that the emission reductions occurred on or after January 1, 2000. In the Verification Report, the Verification Entity shall clearly state the volume of emission reductions generated in each calendar year separately.	For clarification, the verification period can be shorter than a year.

6.	Public funding and grants	The VCU Verification Criteria only accept projects where no public funding or official development assistance has been employed in the project activity or those elements of the project activity that lead to emissions reductions. Where public funding has been used in conjunction with commercial financing, only emissions reductions associated with that portion of the project that has been financed on purely commercial terms shall be eligible to be certified as VCUs.	Verification Entity shall verify and state in the Verification Report that the Project has not employed any Public Funding, grants or Official Development Assistance ("ODA") for construction or running operations in any of the geographic locations of the Project Activity. Where a combination of public and private funding has been employed the Verification Entity shall verify and state in the Verification report that VCUs have only been generated form that portion of the project that has been financed on purely commercial terms. Verification should be performed through examination of financial records, management interviews, and where necessary, interviews with representatives of the relevant entities or organizations providing development assistance in the respective project locations.	Public Funding is defined as a source of financing (including grants and subsidies) for the Project which originates from Governmental or semi-governmental institutions. ODA is defined by the OECD as financial flows: • To developing countries and multilateral institutions; • Provided by government agencies; • Whose main objective is the economic development and welfare of developing countries; and • That are concessional in character, conveying a grant element of at least 25%. OECD, Development Assistance Committee, Glossary, available online at http://www.oecd.org/glossary/0,2586,en_2649_33721_1965693_1_1_1_1,00.html
7.	Project Boundary/GHG Assessment Boundary	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.	Verification Entity shall verify and state in the Verification Report 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. Verification Entity shall also make sure that the Project Boundary does not indirectly overlap with up- or downstream facilities. In particular, Verification Entity shall disallow any downstream energy	The Project shall only use one project boundary for all Project Activities in order to avoid double counting. 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

			efficiency projects in jurisdictions which have mandatory GHG emission caps on the electricity sector.	
8.	Calculation Methodology	The VCU Verification Criteria requires that: 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. Where an existing approved calculation methodology is not applicable in its entirety, project proponents may use combinations of approved methodologies. 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 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.	A. Verification Entity shall verify and state in the Verification Report, if applicable, that the project proponent has used calculation methodologies 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: • 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. In case the project has earlier been verified for delivery of VCUs, the Verification 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. In such cases where the Calculation	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 If the Project consists of more than one Project Activity, each Project Activity shall be quantified separately with their own separate baseline scenarios. 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 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. 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). The Performance Standard approach to calculating

			Methodology consists of a combination of approved methodologies, the Verification Entity shall clearly verify: • which approved methodologies have been used ;and, • methodologies have been used accurately and transparently in combination. B. If a CDM Executive Board approved methodology has not been used the Verification Entity shall verify and state in the Verification Report that the Project Activity has applied a methodology equivalent to the approved CDM methodology Verification 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: • 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 references; • 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.	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. 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). 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.

9.	Secondary Effects	The VCU Verification Criteria require that secondary effects be incorporated into the calculation methodology in accordance with the WBCSD GHG PP.	Verification Entity shall verify and state in the Verification Report that the project's GHG Assessment Boundary is in compliance with the ones indicated in the project documents. Verification Entity shall verify and state in the Verification Report that the GHG Assessment Boundary incorporates all primary effects and significant Secondary Effects.	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. 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). GHG Assessment Boundary includes all Primary Effects and significant Secondary Effects associated with the GHG project (Sec 2.5). 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 from the GHG assessment boundary if it satisfies the following general criteria (Sec 5.5): • 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. 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".
10.	Project Additionality	The VCU Verification Criteria requires that the projects from which emission reductions are created pass an	A. Verification Entity shall verify and state in the Verification Report that there is clear evidence that each of the following three	Project proponents shall analyze any other similar activities implemented previously or which are currently underway using the guidance in Step 4 of

		additionality test. Through the Additionality Test the project proponent shall show that mitigation measures result in a real reduction in greenhouse gases against a transparent emissions baseline. Project additionality shall be determined based on one of the four (A-D) additionality tests described herein.	requirements of the Additionality Test have been met by the project. 1. <u>The project is not common practice.</u> • Provision of underlying service or product with the project technology does not exceed 51% in the defined market area. • Business-as-usual technology options are clearly defined and their position on the market proven by official Statistics. 2. <u>The project is not required by regulation</u> • Local or National Legislation does not require the production of the underlying service or product with the chosen technology. • Additionally, the Project should not have been undertaken to meet a formal or voluntary target imposed by government regulation or under agreement with a government agency (e.g. the auto manufacturers and the EU, where companies agree to meet reduction targets voluntarily through their industry association). • Carbon credits should not be the byproduct from the creation of an ancillary environmental asset and/or financial instrument (e.g. renewable energy credits). • The emission reductions from the Project must not have been used against any voluntary corporate emission reduction targets. • Project is not a downstream	the latest version of the CDM Executive Board document "Tool for the demonstration and assessment of additionality" http://cdm.unfccc.int/EB/Meetings/016/eb16repan1.pdf Project proponents shall use and reference public Statistics by a local or national government body or an international semi-governmental organization (UN, WRI, OECD, IEA) to prove the market share of the project technology and to define business-as-usual technology options in the sector. Local or National Legislation is defined as policy which has been put into law, and is enforced prior to the project start date as defined above in Criterion 4. If the project has supplied (by law or voluntarily) credits for meeting renewable portfolio standards in its geographical area (i.e. where the underlying product or service has been sold) such emission reductions cannot be considered as additional. The project shall prove that that it is not the Least Cost Option for providing the underlying product or service, by the means of an investment comparison analysis (IRR, NPV, cost benefit ratio) against the dominating technology on the market. Guidance can be sought from Sub-step 2b-Option II in the CDM Executive Board additionality tool document.

			energy efficiency project in a jurisdiction with a mandatory GHG emissions cap on upstream electricity generators. 3. <u>The project is not the least cost option for providing the underlying product or service.</u> • Companies shall provide calculations that illustrate that the project is not the Least Cost Option. B. Verification Entity shall verify and state in the Verification Report that there is clear evidence that: • Using the steps in the CDM Additionality tool the project has been undertaken to reduce greenhouse gas emissions beyond normal business practice. C. Verification Entity shall verify and state in the Verification Report that there is clear evidence that: • In addition to a satisfactory project baseline, the project falls within the top quintile (20%) in terms of emissions efficiency for producing the underlying service or product in the region/country. D.	Emissions Efficiency is defined as the amount of Co2e in metric tonnes produced per unit of output of the underlying service or product. The relative efficiency shall be measured only against other producers of similar products and services which provide exactly the same utility to the end user in the same geographical market region.

			Verification Entity shall verify and state in the Verification Report 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 selected baseline. In order to determine the baseline the project will use either of the following three determination methods: - Determine the baseline based on existing or historical emissions - Determine the baseline based on its industry benchmark under similar social, economic, environmental and technological circumstances - Determine the baseline by identifying the most likely new project activity providing the same level of services as the proposed project.	
11.	Quality of Reductions	The VCU Verification Criteria requires that projects proponents demonstrate that project implementation has no negative impact on sustainable development in the local community.	Verification Entity shall verify and state in the Verification Report 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.	Verification 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. Where necessary, the Verification 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.

12.	Monitoring Process	The VCU Verification Criteria requires 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.	For reductions generated between January 1.2000 and the date of submission, the project proponent shall supply to the Verification Entity a complete Monitoring Report. Verification 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. Verification 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.	A Monitoring Report shall be based on parts D and annex 4 in the most recent version of the CDM PDD template to report on monitoring emissions. http://cdm.unfccc.int/Reference/Documents/cdmpdd/English/CDM_PDD_ver02.pdf The Verification 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 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