

VALIDATION REPORT FOR THE KATINGAN PEATLAND RESTORATION AND CONSERVATION PROJECT



Prepared By Francis Eaton

Project Title	Katingan Peatland Restoration and Conservation Project
Version	V1.0
Report ID	050516

Report Title	Validation Report for the Katingan Peatland Restoration and Conservation Project
Client	PT. Rimba Makmur Utama
Pages	67
Date of Issue	6 May 2016
Prepared By	Scientific Global Services (SCS)
Contact	Physical address, telephone, email, website
Approved By	2000 Powell Street, Suite 600, Emeryville, CA 94608, USA http://www.scsglobalservices.com Email: cpollet-young@scsglobalservices.com Telephone: +1 (510) 452-8000
Work Carried Out By	Francis Eaton: Lead Auditor

Dr. Aswin Usup: Technical Expert

Agus Putera: Local Expert

Dr. Letty B. Brown: Technical Reviewer

Summary:

This report describes the validation audit of the Katingan Peatland Restoration and Conservation Project (“the project”), a Reduced Emissions from Deforestation and Degradation (REDD) project located in the region of Central Kalimantan, Indonesia, that was conducted by SCS. The purpose of the validation audit was to assess the conformance of the project with the validation criteria. The validation audit was performed through a combination of document review, interviews with relevant personnel and on-site inspections. A total of 15 findings were raised during the validation and sufficiently resolved. The project complies with all of the validation criteria, and the assessment team has no restrictions or uncertainties with respect to the compliance of the project with the validation criteria.

CONTENTS

1	Introduction	5
1.1	Objective	5
1.2	Scope and Criteria	5
1.3	Level of Assurance.....	5
1.4	Summary Description of the Project	5
2	Validation Process	6
2.1	Method and Criteria.....	6
2.2	Document Review	6
2.3	Interviews	8
2.4	Site Inspections	16
2.5	Resolution of Findings.....	17
2.6	Forward Action Requests.....	17
3	Validation Findings.....	17
3.1	Project Details	17
3.1.1	Project type, technologies and measures implemented, and eligibility of the project.....	18
3.1.2	Project proponent and other entities	18
3.1.3	Project start date	18
3.1.4	Project crediting period	18
3.1.5	Project scale and estimated GHG emission reductions or removals.....	18
3.1.6	Project location.....	18
3.1.7	Conditions prior to project initiation	18
3.1.8	Project compliance with applicable laws, statutes and other regulatory frameworks	19
3.1.9	Ownership and other programs.....	19
3.1.10	Additional information relevant to the project.....	19

3.2	Application of Methodology	20
3.2.1	Title and Reference	20
3.2.2	Applicability	21
3.2.3	Project Boundary.....	29
3.2.4	Baseline Scenario	33
3.2.5	Additionality	34
3.2.6	Quantification of GHG Emission Reductions and Removals	36
3.2.7	Methodology Deviations.....	44
3.2.8	Monitoring Plan	44
3.3	Non-Permanence Risk Analysis.....	45
3.4	Environmental Impact	52
3.5	Comments by Stakeholders	52
4	Validation conclusion	52
APPENDIX A: VALIDATION FINDINGS.....		53

1 INTRODUCTION

1.1 Objective

The purpose of the validation audit activity was to conduct an independent assessment of the Katingan Peatland Restoration and Conservation Project (“the project”) to determine whether the project complies with the validation criteria, as set out in the guidance documents listed in Section 1.2 of this report.

1.2 Scope and Criteria

In accordance with Section 4.3.4 of ISO 14064-3:2006, the scope was defined as follows:

- The project and its baseline scenarios;
- The physical infrastructure, activities, technologies and processes of the project;
- The GHG sources, sinks and/or reservoirs that are applicable to the project;
- The types of GHGs that are applicable to the project; and
- The project crediting period, as discussed in Section 3.1.4 of this report.

In accordance with Section 5.3.1 of the VCS Standard, the criteria for validation was the VCS Version 3, including the following documents:

- VCS Program Guide
- VCS Standard
- VCS AFOLU Requirements
- VCS AFOLU Non-Permanence Risk Tool

Unless otherwise indicated, the assessment was performed against the most recent version of the relevant VCS guidance document. It should be noted that, while the project complies with the prevailing versions of the VCS guidance documents as of the issuance of this report, the assessment criteria changed during the course of the provision of assessment services, and therefore some findings (described in Section 2.5 below) refer to previous versions of various VCS guidance documents.

1.3 Level of Assurance

In accordance with Section 5.3.1 of the VCS Standard, the level of assurance of this report is reasonable.

1.4 Summary Description of the Project

The project is located in the Central Kalimantan region of Indonesia, and is aimed at reducing and avoiding emissions related to Planned Deforestation and Reforestation in combination with Conservation of Undrained and Partially drained Peatland and Rewetting of Drained Peatland activities

2 VALIDATION PROCESS

2.1 Method and Criteria

The validation was performed through a combination of document review, interviews with relevant personnel and on-site inspections, as discussed in Sections 2.2 through 2.4 of this report. At all times, the project was assessed for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.5, findings were issued to ensure that the project was in full conformance to all requirements.

The audit team created a sampling plan following a proprietary sampling plan workbook developed by SCS. Per Section 4.4.3 of ISO 14064-3:2006, the audit team identified possible risks of errors, omissions and misrepresentations with respect to the validation criteria. For each identified risk, the audit team assessed the likelihood of the material discrepancy occurring, the likelihood of the material discrepancy not being prevented or detected by the controls of the project, and the likelihood of the material discrepancy not being detected by the audit team. Sampling and data testing activities were planned to address any risk where the likelihood of a material discrepancy not being detected by the audit team was judged to be unacceptably high. The audit team then created a validation plan that took the sampling plan into account.

2.2 Document Review

The project design description (Version 1.3 11 May 2016) (PD) and supporting documentation were carefully reviewed for conformance to the validation criteria.

Particular attention was focused on the PD, given its central role in the description of “the project and its context” (VCS Standard, Section 3.19.1). Through review of the PD, the audit team ensured that:

- The project design, as described in the PD, is in conformance with the VCS rules and the requirements of the methodology
- The PD satisfies all applicable documentation requirements of the VCS rules and the methodology

In addition to the project description, the following written documents (e.g., reports, memos, land deeds and titles) were reviewed to ensure conformance of the project to the VCS rules and the methodology:

Document Description	File Name	Ref.
Minister Decree	70_95_ind_Ref 28	/1/
Additionality Evidence	Buku Statistik 2013	/2/
NPV Analysis	eCBA 3 GGGI - Katingan - Technical Document	/3/
Baseline Scenario	<ul style="list-style-type: none"> • Sims_Summary_DSR20150707.xlsx • Master_bsl.xlsx 	/4/

	<ul style="list-style-type: none"> 20150624_REDD_BSL_WPS_emission_estimate_ITC_SK_NR_ver7 20150625_ARR_BSL_WPS_emission_removal_estimate_ITC_ver5 	
Project Area Boundaries	Multiple Screen Shots	/5/
Uncertainty Calculations	Uncertainty_calculation.xlsx	/6/
Ex Ante Reductions	20150729_SummaryEmissionReductions	/7/
Field SOP's	PD Annexes.docx	/8/
LandSat Imagery	Various Scenes	/9/
Project Boundaries	Various Shapefiles	/10/
Plot locations	Various Shapefiles	/11/
Associated Documents and Literature	Database Access Guidelines	/12/
Indonesian Law 41/99	uu41_99_en	/13/
Indonesian Law 19/2004	ins137703	/14/
Audited Financials	Endorsement of Katingan Financial Model_60-Year Projection_FINAL_CONFIDENTIAL	/15/
Forest Cover Analyzer	http://www.wri.org/applications/maps/forest-cover-analyzer/index.html	/16/
Community Interviews	CCB validation on Community Section for PT RMU	/17/
Land Suitability	http://www.wri.org/applications/maps/suitability-mapper/index.html#v=suitability	/18/
Indonesian Forest statistics	Buku Statistik 2013	/19/
Proxy Data	http://commodities.globalforestwatch.org	/20/

Methodological Annex to the PD	PD Annexes	/21/
--------------------------------	------------	------

2.3 Interviews

Interviews constituted an important component of the audit process. The following personnel associated with the project proponent and/or implementing partner were interviewed. The phrase “throughout audit” under “Date(s) Interviewed” indicates that the individual in question was interviewed on multiple occasions throughout the audit process.

Individual	Affiliation	Role	Date(s) Interviewed
Dharsono Hartono	PT. Rimba Makmur Utama (RMU)	Chief Executive Director	Throughout Audit
Rezal Ashari Kusumaatmadja	RMU	Chief Operating Director	Throughout Audit
Taryono Darusman	RMU	General Field Manager	Throughout Audit
Priyatno	RMU	Executive Director	4-13 October 2015
Syamsul Budiman	RMU	Forestry Liason Director	4-13 October 2015
Leswarawati	RMU	Finance and Administration Director	4-13 October 2015
Deasy Andriana	RMU	Human Resources Manager	4-13 October 2015
Big Antono	RMU	Database Manager	4-13 October 2015
Hardian Mulyana	RMU	GIS Specialist	4-13 October 2015
Nugrahadi Ramadhan Tohir	RMU	GIS Assistant	4-13 October 2015
Meyner Nusalawo	RMU	Head of Forest Restoration and Head of Research and Development	4-13 October 2015

Muhammad Malik Arrahiem	RMU	Hydrologists	4-13 October 2015
Hendri Saleh	RMU	Technical Assistant of Hydrology	4-13 October 2015
Yusef Fabianus Hadiwinata	RMU	Section Head of Biodiversity	4-13 October 2015
Fransiskus Agus Harsanto	RMU	Division Head of Forest Restoration and Rehabilitation	4-13 October 2015
Rudi Mulyadi	RMU	Field Coordinator	4-13 October 2015
Noerman	RMU	Senior Field Staff	4-13 October 2015
Muhammad Araf	RMU	Field staff	4-13 October 2015
Rendi Pranata	RMU	Field staff	4-13 October 2015
Suryadi	RMU	Field staff	4-13 October 2015
Hardi	RMU	Field staff	4-13 October 2015
Dipa Satriadi Rais	Wetlands International	Technical Consultant	Throughout Audit
Irwansyah Reza Lubis	Wetlands International	Technical Consultant	4-13 October 2015
Iwan Tricahyo Wibisono	Wetlands International	Technical Consultant	4-13 October 2015
Andaman Muthadir	Yayasan Puter Indonesia	Manager Program	4-13 October 2015
Asep Mulyana	Yayasan Puter Indonesia	Sub-District Coordinator Kamipang	4-13 October 2015
Mambang Rena	Yayasan Puter Indonesia	Community Organizer Kamipang	4-13 October 2015
Suandri	Yayasan Puter Indonesia	Community Organizer Kamipang	4-13 October 2015

Heru	Yayasan Puter Indonesia	Community Organizer Kamipang	4-13 October 2015
Entis Sutisna	Yayasan Puter Indonesia	Sub-District Coordinator Mendawai	4-13 October 2015
Subronto Aji	Yayasan Puter Indonesia	Community Organizer Mendawai	4-13 October 2015
Decky Zulkarnain	Yayasan Puter Indonesia	Community Organizer Mendawai	4-13 October 2015
M Galigo Trianto	Yayasan Puter Indonesia	Community Organizer Mendawai	4-13 October 2015
Rumi Naito	Starling	Technical Consultant	Throughout Audit
Nick Brickle	Permian Global	Technical Consultant	Throughout Audit
Nathan Renneboog	Permian Global	Technical Consultant	4-13 October 2015
Simon Koenig	Permian Global	Technical Consultant	4-13 October 2015
Henrietta Boyd	Permian Global	Technical Consultant	4-13 October 2015
Christy Magerkurth	Permian Global	Technical Consultant	Throughout Audit

Residents of communities located near the project boundary (termed “local residents” within this report) were also interviewed. The villages and village groups interviewed are listed below:

Individual	Position	Village
Mr. Rendi	Village office staff (Kepala Urusan Pembangunan)	Perupuk
Mr. Suparji	Village secretary	Perupuk
Mr. Yuliano	CO Assisntant (local facilitator recruited by Puter Foundation)	Perupuk
Mrs. Muslimah	Villager (worker in RMU's nursery pilot)	Perupuk

Mrs. Sukanti	Villager (worker in RMU's nursery pilot)	Perupuk
Mr. Saryanto	Head of BUMDes (Village owned company)	Perupuk
Mr. Duak Rahmanto	Village Secretary	Telaga
Mr. Jaransah	Head of KSM (community institution for livelihood priority program)	Telaga
Mr. Pendi	Treasurer of KSM	Telaga
Mr. Yusuf Afandi	Village office staff	Telaga
Mr. Dabik	Traditional Custom Head (Mantir Adat)	Telaga
Mr. Yanto	Village office staff (Kepala Urusan Pembangunan)	Jahanjang
Mr. Dedi Heriyadi	Head of KSM (community institution for livelihood priority program)	Jahanjang
Ms. Silvia Wulandari	Secretary of BPD (Village Representatives Body)	Jahanjang
Ms. Nursinah	Villager	Jahanjang
Mr. Sarwedi	CO Assisstant (local facilitator recruited by Puter Foundation)	Jahanjang
Mr. Puji	Village office staff (Kepala Urusan Pemerintahan)	Tumbang Runen
Mr. Nasrulah	Head of KSM (community institution for livelihood priority program)	Tumbang Runen
Mrs. Kadariah	Teasurer of KSM (community institution for livelihood priority program)	Tumbang Runen
Mr. Karyadi	Member of BPD (Village Representatives Body)	Tumbang Runen

Mr. Tomi Dunawan	Vice Head of BPD (Village Representatives Body)	Tumbang Runen
Mr. Suwanto	CO Assisstant (local facilitator recruited by Puter Foundation)	Tumbang Runen
Mrs. Siska Melatiana	Resident	Tumbang Runen
Mr. Rah Dahlan	Village office staff (Kepala Urusan Pembangunan)	Asem Kumbang
Mr. Sudiyono	Head of KSM (community institution for livelihood priority program)	Asem Kumbang
Mrs. Nur Apiyanti	Secretary of KSM (community institution for livelihood priority program)	Asem Kumbang
Mrs. Sri Hartati	Treasurer of KSM (community institution for livelihood priority program)	Asem Kumbang
Mr. Anggus	Member of BPD (Village Representatives Body)	Asem Kumbang
Mr. Masjati	CO Assisstant (local facilitator recruited by Puter Foundation)	Asem Kumbang
Mr. Mukhlis	Head of KSM (community institution for livelihood priority program)	Buan Bango
Mrs. Sukarti	Treasurer of KSM (community institution for livelihood priority program)	Buan Bango
Mrs. Junaimah	Member of KSM (community institution for livelihood priority program)	Buan Bango
Mr. Muksinin	Resident	Buan Bango
Mr. Wanto	Village office staff (Kepala Urusan Pemerintahan)	Karuing
Mr. Andi Liani	Village Head	Karuing

Mr. Azis	Resident	Karuing
Mr. Heri Irama	CO Assisstant (local facilitator recruited by Puter Foundation)	Karuing
Mr. Jeki	Resident	Karuing
Mr. Hernodyansyah	Secretary of KSM and Member of BPD	Tampelas
Mr. Hamansyah	Villager	Tampelas
Mr. Rantau	CO Assisstant (local facilitator recruited by Puter Foundation)	Tampelas
Mrs. Widyawati	Tocologist/midwife	Tampelas
Mrs. Hartati	Kindergarden teacher	Tampelas
Mr. Yosef Pagan	Head of KSM (community institution for livelihood priority program)	Gelinggang
Mrs. Susi	Treasurer of KSM	Gelinggang
Mr. Baniansah	Member of customary village institution	Gelinggang
Mr. Suharman	Resident	Gelinggang
Mr. Marjiansah	Village office staff (Kepala Urusan Pembangunan)	Gelinggang
Mrs. Hawanah	Resident	Gelinggang
Mr. Muhidin	CO Assisstant	Gelinggang
Mr. Sarif Fadli	Head of customary village institution and Vice Head of KSM	Gelinggang
Mr. Rusdiansah	Village Secretary	Gelinggang
Mrs. Raminah	Resident	Gelinggang
Mr. Ahmad	Head of BPD (Village Representatives Body)	Gelinggang

Mr. Haji Yusran	Village head	Tumbang Bulan
Mr. Aliansah	Head of KSM (community institution for livelihood priority program)	Tumbang Bulan
Mr. Ariansyah	Village office staff (Kepala Urusan Pemerintahan)	Tumbang Bulan
Mr. Soton	Member of BPD	Tumbang Bulan
Mr. Zulkifli	Resident	Tumbang Bulan
Mr. Sabirin	Village office staff (Kepala Urusan Pembangunan)	Tumbang Bulan
Mrs. Siti Komariah	Resident	Tumbang Bulan
Mr. Sahril	Head of Capacity Building of FORMAS (Community Forum)	Tumbang Bulan
Mr. Sudiyanto	Resident	Tewang Kampung
Mr. Wansah	Resident	Tewang Kampung
Mr. Rudiansah	Head of Fire Fighting Team	Tewang Kampung
Mr. Tri Wahyono	Resident	Tewang Kampung
Mrs. Dewi Ariani	Treasurer of KSM (community institution for livelihood priority program)	Tewang Kampung
Mr. Ahmad Satria	CO Assisstant	Tewang Kampung
Mr. Junaedi Fadli	Village office staff (Kepala Urusan Pemerintahan)	Tewang Kampung
Mr. Masrani	Village office staff (Kepala Urusan Pembangunan)	Tewang Kampung
Mr. Hasanudin	Member of BPD	Tewang Kampung
Mrs. Ernawati	Sub-village head	Tewang Kampung
Mrs. Auda	Resident	Tewang Kampung

Mr. Apokarto	Village Head	Kampung Melayu
Mr. Guntur Setiawan	Village Secretary	Kampung Melayu
Mr. Heri Wahyudi	Head of KSM (community institution for livelihood priority program)	Kampung Melayu
Mr. Jarmanto	Resident	Kampung Melayu
Mrs. Ami Siskawati	Treasurer of KSM (community institution for livelihood priority program)	Kampung Melayu
Mr. Karyadi	Village office staff (Kepala Urusan Pembangunan)	Kampung Melayu
Mr. Amansah	Member of BPD	Kampung Melayu
Mr. Alfiansah	Sub-village head	Kampung Melayu
Mr. Hermanto	Resident	Kampung Melayu
Mr. Ardiansah	Resident	Kampung Melayu
Mr. Sahrani	Resident	Kampung Melayu
Mr. Juliansah	Resident	Kampung Melayu
Mr. Agus	Resident	Kampung Melayu
Mr. Halikurahman	Secretary of BPD	Kampung Melayu
Mr. Beang	Sub-village head	Kampung Melayu
Mr. Fahrul	Sub-village head	Kampung Melayu
Mr. Hartawan	Village Head	Mendawai
Mr. Agus Panipasma	Village Secretary	Mendawai
Mr. Rasidi	Head of BPD	Mendawai
Mr. Sapril Fauzi	Village office staff (Kepala Urusan Pembangunan)	Mendawai
Mr. Hengki	Village office staff (Kepala	Mendawai

	Urusan Pemerintahan)	
Mr. Udin	Member of BPD	Mendawai
Mrs. Rupawan	Resident	Mendawai
Mrs. Fatimahtur Auliah	Resident	Mendawai
Mr. Khairil	Resident	Mendawai
Mr. Arifin	Resident	Mendawai
Mr. Basri	Resident	Mendawai
Mr. Darmawansah	Sub-village head	Mendawai
Mr. Tajudin Noor	Sub-village head	Mendawai

2.4 Site Inspections

The objectives of the on-site inspections performed were to:

- Ensure that the geographic area of the project, as reported in the project description and the accompanying KML file, is in conformance with Section 3.11.1 of the VCS Standard;
- Select samples of data from on-the-ground measurements for validation in order to meet a reasonable level of assurance and to meet the materiality requirements of the project, as required by Section 5.1.3 of the VCS Standard;
- Perform a risk-based review of the project area to ensure that the project is in conformance the eligibility requirements of the VCS rules and the applicability conditions of the methodology; and
- Perform a risk-based review of the project area to ensure that the project conforms to all other requirements of the VCS rules and the methodology

In fulfilment of the above objectives, the audit team performed an on-site inspection of the project area on the dates 3-11 October 2015. The main activities undertaken by the audit team were as follows:

- Interviewed project personnel (see Section 2.3 of this report) to gather information regarding the design of the project;
- Interviewed project personnel (see Section 2.3 of this report) for the purpose of seeking evidence of conformance with respect to the specific requirements of the methodology and the VCS rules;
- Interviewed residents of several communities (see Section 2.3 above) located in the immediate vicinity of the project area to confirm the claims of the project proponents with respect to the

extent of community engagement, the determination of the baseline scenario and the demonstration of additionality;

- Viewed representatives of the Katingan project conducting re-measurements on four inventory plots, including a re-measurement by the audit team. The representatives were asked to replicate the measurement protocol that was applied, for the purpose of providing the audit team with reasonable assurance that the measurements were collected to meet the appropriate quality standards;
- Resampled two peat transects using best practices to determine the accuracy of the peat parameters.

2.5 Resolution of Findings

Any potential or actual material discrepancies identified during the assessment process were resolved through the issuance of findings. The types of findings issued by SCS were characterized as follows:

Non-Conformity Report (NCR): An NCR signified a material discrepancy with respect to a specific requirement. This type of finding could only be closed upon receipt by SCS of evidence indicating that the identified discrepancy had been corrected. Resolution of all open NCRs was a prerequisite for issuance of a validation statement.

New Information Request (NIR): An NIR signified a need for supplementary information in order to determine whether a material discrepancy existed with respect to a specific requirement. Receipt of an NIR did not necessarily indicate that the project was not in compliance with a specific requirement. However, resolution of all open NIRs was a prerequisite for issuance of a validation statement.

Opportunity for Improvement (OFI): An OFI indicated an area that should be monitored or ideally, improved upon. OFI's were considered to be an indication of something that could become a non-conformity if not given proper attention, and were sometimes issued in the case that a non-material discrepancy was identified. OFIs were considered to be closed upon issuance.

All findings issued by the audit team (11 NCR's and 4 NIR's) during the validation process have been closed. In accordance with Section 5.3.6 of the VCS Standard, all findings issued during the validation process, and the impetus for their closure, are described in Appendix A of this report.

2.6 Forward Action Requests

No forward action requests were issued during the validation.

3 VALIDATION FINDINGS

3.1 Project Details

The audit team confirmed that the PD provides a detailed description of the project design that is both accurate and complete, as it conforms to Section 3 of both the VCS Standard and the AFOLU Requirements. Moreover, it is the opinion of the audit team that the PD provides a comprehensive understanding of the nature of the project.

3.1.1 Project type, technologies and measures implemented, and eligibility of the project

The project exists under sectoral scope 14 (AFOLU). As described in Section 4.2 of the VCS AFOLU Requirements, the project falls under the category of Reduced Emissions from Deforestation and Degradation (REDD).

3.1.2 Project proponent and other entities

The project proponent for the Katingan Peatland Restoration and Conservation Project is PT RMU. Using a web based review, the audit team was able to confirm the official status of each notary. In addition, the audit team met with members of local communities and project personnel who confirmed the claims stated in the PD.

3.1.3 Project start date

The project start date is listed as 1 November 2010. While onsite, the audit team reviewed the original data sheets dated 1 November 2010 as evidence of the commencement of the project biomass sampling. As the results of biomass sampling are directly linked to the baseline carbon stocks by which the project will be assessed in to the future, it is the opinion of the audit team that start date of this activity represents the date on which activities that lead to the generation of GHG emission reductions or removals are implemented and is therefore justified according to section 3.2.1 of The AFOLU Requirements.

3.1.4 Project crediting period

The audit team reviewed the PD and confirmed the project crediting period of 60 years, commencing on 1 November 2010, to be in conformance with Section 3.8.1 of the VCS Standard, as it falls between the 20 year minimum and 100 maximum for AFOLU projects.

3.1.5 Project scale and estimated GHG emission reductions or removals

As stated in Section 1.7 of the project description, the project is considered a “large project” according to the requirements of Section 3.9.1 of the VCS Standard. The project is estimated to result in GHG emission reductions and removals equivalent to 7,451,846 tCO₂e annually, over the project crediting period.

3.1.6 Project location

The audit team reviewed Section 1.2 of the PD and confirmed it provides an adequate description of the project location. The audit team was provided with a KML file of the project area and was able to confirm the accuracy of the polygon delineation while on site. In addition, the audit team confirmed that the KML provided is consistent with the KML file on the VCS website and therefore the project conforms to all applicable VCS rules with respect to project location.

3.1.7 Conditions prior to project initiation

Section 1.3 of the PD contains an exhaustive description of the conditions prior to project initiation. Whereas, some project activities had been implemented prior to the validation site visit, the audit team

visited a suite of locations across the project area and confirmed the description in the PD to be accurate. A further description of the validation activities performed on site can be found in Section 3.2.4 below.

3.1.8 Project compliance with applicable laws, statutes and other regulatory frameworks

The audit team held interviews with project personnel who provided the audit team with access to what were, in their opinion, all of the laws and statutes and other regulatory frameworks applicable to the project activities. The audit team cross-checked these laws with both the information provided in the PD and using a web based investigation and confirmed with a reasonable level of assurance that the project is designed to be in conformance with all applicable laws, statutes and other regulatory frameworks.

3.1.9 Ownership and other programs

3.1.9.1 Right of use

The tract of land encompassing the project area is covered by a ministerial decree (Minister of Forestry Decree SK 734/Menhut-II/2013) covering the project area. There is some question at this point as to whether the entire accounting area will be covered by decree before the project is verified, however local government has allowed the project to operate under the assumption that the entire project area will be covered prior to verification which is in conformance with item 6 of Section 3.11.1 of the VCS Standard. Given the history of the audit team working in the region and the understanding of right of use at validation the audit team is comfortable with the project assertions at this point, however this will be need to be re-addressed at verification.

3.1.9.2 Emission trading programs and other binding limits

As the project has not reduced GHG emissions from activities that are included in an emissions trading program or any other mechanism that includes GHG allowance trading, this section is not applicable. It is the audit team's understanding that emissions from planned deforestation activities in Indonesia are not included in any emissions trading programs at the time of the project start date.

3.1.9.3 Other forms of environmental credit sought or received

As the project has not sought or received other forms of environmental credit, this section is not applicable.

3.1.9.4 Participation under other GHG programs

As the project is not participating under other GHG programs, this section is not applicable.

3.1.9.5 Rejection by other GHG programs

As the project has not been rejected by any other GHG programs, this section is not applicable.

3.1.10 Additional information relevant to the project

3.1.10.1 Eligibility for grouped projects

This section is not applicable, as the project is not a grouped project.

3.1.10.2 Leakage management for AFOLU projects

The audit team reviewed Sections 5.2 and 5.5 of the PD and confirmed it contains a detailed leakage mitigation strategy. Through interviews with local residents of the project area the audit team confirmed that the activities are designed in conformance with Sections 3.6.1-3.6.2 of the AFOLU Requirements. A further description of the validation activities regarding leakage management can be found in Sections 3.2.6 and 3.3 of this report.

3.1.10.3 Commercially sensitive information

As stated in Section 2.8 of the PD, certain commercially sensitive information has been excluded from the PD. All information, however has been provided to the audit team. The audit team reviewed this information and agrees that in the context of this project the information excluded from the PD meets the definition of sensitive information, as defined in the VCS Program Definitions and therefore may be excluded in accordance with Section 3.18.2 of the VCS Standard. Specifically, the rules allow for the exclusion of financial and private descriptions of the property information for whose public disclosure could reasonably be expected to undermine or negatively affect the development and/or implementation of a program.

3.2 Application of Methodology

3.2.1 Title and Reference

The project has applied the following:

VCS methodology VM0007 v1.2

VCS module VMD0001 v1.1

VCS Module VMD0006 v1.2

VCS Module VMD0041 v1.0

VCS Module VMD0042 v1.0

CDM AR-ACM0003 v2.0

VCS Module VMD0016 v1.1

VCS Module VMD0017 v1.2

VCS Module VMD0013 v1.1

VCS Module VMD0043 v1.0

VCS Module VMD0009 v1.2

VCS Module VMD0044 v1.0

VCS Module VMD0045 v1.0

VCS Module VMD0046 v1.0

VCS Module VMD0015 v2.1

VCS Tool VT0001 v3.0

3.2.2 *Applicability*

The project complies with each applicability condition of the methodology and associated modules and tools, as justified below.

VM0007 v1.2	REDD MF Methodology
Condition	Steps taken to assess compliance
4.1	<p>All land areas registered under the CDM or under any other GHG program (both voluntary and compliance-oriented) must be transparently reported and excluded from the project area. The exclusion of land in the project area from any other GHG program must be monitored over time and reported in the monitoring reports.</p> <p>The audit team performed a web based review of current GHG programs and found no evidence of the project being registered under any other program</p>
4.2.1	<p>Land in the project area has qualified as forest (following the definition used by VCS) at least 10 years before the project start date.</p> <p>The audit team visited random portions of the property and investigated remote sensing imagery dating back to 2001 confirming that even the most degraded portions of the project area met the FAO definition of forest (10% canopy cover, area of more than .5 hectares, and trees meeting or able to meet 5 meters at maturity).</p>
4.2.1	<p>If land within the project area is peatland and emissions from the soil carbon pool are deemed significant, the relevant WRC modules (see Table 1) must be applied alongside other relevant modules.</p> <p>The audit team cross checked the soil carbon pools claimed in the PD against the requirements of the WRC modules and confirmed that all pools not allowed for conservative exclusion have been included.</p>
4.2.1	<p>Baseline deforestation and forest degradation in the project area fall within one or more of the following categories:</p> <ul style="list-style-type: none"> • Unplanned deforestation (VCS category AUDD); • Planned deforestation/degradation (VCS category APD);

	<ul style="list-style-type: none"> • Degradation through extraction of wood for fuel (fuelwood and charcoal production) (VCS category AUDD). <p>The audit team confirmed through assessment of additionality that the project meets this applicability condition that the baseline deforestation and degradation falls into the planned deforestation/degradation category (see Section 3.2.5 below for a more detailed description).</p>
4.2.1	<p>Leakage avoidance activities must not include:</p> <ul style="list-style-type: none"> • Agricultural lands that are flooded to increase production (eg, paddy rice); • Intensifying livestock production through use of feed-lots and/or manure lagoons <p>The audit team reviewed Sections 2.2.1 and 5.2 of the PD confirming that the above activities are not included in the project design</p>
4.2.3	<p>Unplanned deforestation/degradation activities are applicable under the following condition:</p> <ul style="list-style-type: none"> • Conversion of forest lands to a deforested condition must be legally permitted. <p>The audit team reviewed the laws in place at the time of the project start date (/13/ /14/) confirming that acacia plantation and logging concessions are allowable under Indonesian Law.</p>
4.3	<p>ARR activities are applicable under the following conditions:</p> <ul style="list-style-type: none"> • The project area is non-forest land or land with degraded forest. • The project scenario does not involve the harvesting of trees. Therefore, procedures for the estimation of long-term average carbon stocks are not provided. • The project scenario does not involve the application of nitrogen fertilizers <p>The audit team reviewed the PD and observed while on site that the areas slated for the ARR activities take place on non-forest or degraded forestland, do not include plans for harvesting of trees, or involve the application of nitrogen fertilizers.</p>
4.4	<p>WRC activities are applicable under the following conditions:</p> <ul style="list-style-type: none"> • This methodology is applicable to rewetting drained peatland (RDP) and conservation of undrained and partially drained peatland (CUPP) activities on project areas that meet the VCS definition for peatland. The scope of this methodology is limited to domed peatlands in the tropical climate zone. • Fire reduction projects on peatland that exclude rewetting as part of the project activity are not eligible. • Rewetting of drained peatland and conservation of undrained or partially drained peatland may be implemented in combination with REDD project activities. REDD project activities on peatland must not increase drainage. • Rewetting of drained peatland may be implemented as a separate activity or in combination with ARR project activities. ARR activities must not enhance peat oxidation and therefore

	<p>this activity requires at least some degree of rewetting.</p> <p>The audit team reviewed the PD along with observations while on site and confirmed the project design does not include fire reduction projects that exclude rewetting or include any drainage activities, and does occur on domed peatlands in the tropical climate zone and includes rewetting.</p>
VMD0042 v1.0	Estimation of baseline soil carbon stock changes and greenhouse gas emissions in peatland rewetting and conservation project activities (BL-PEAT)
Condition	Steps taken to assess compliance
4.0	<p>It must be demonstrated by using the latest version of T-SIG that N2O emissions in the project scenario are not significant, or that N2O emissions will not increase in the project scenario compared to the baseline scenario, and therefore N2O emissions need not be accounted for.</p> <p>The audit team reviewed the PD and confirmed that nitrogen fertilizers are not included in the project design</p>
4.0	<ul style="list-style-type: none"> In the baseline scenario the peatland must be drained or partially drained. At the start of the project the peatland may still be undrained. <p>While on site, the audit team reviewed the areas where rewetting is to take place and confirmed that they are either drained or partially drained.</p>
VMD0041 v1.0	Estimation of baseline carbon stock changes and greenhouse gas emissions in ARR project activities on peat and mineral soil (BL-ARR)
Condition	Steps taken to assess compliance
4.0	<p>The applicability conditions set out in AR-ACM0003 Afforestation and reforestation of lands except wetlands must be met.</p> <p>See AR-ACM0003 below.</p>
4.0	<p>Applicability conditions included in AR-ACM0003 Afforestation and reforestation of lands except wetlands and corresponding tools that exclude project activities on wetlands can be disregarded for the purpose of their use in this module, as accounting procedures for the peat soil are provided in module BL-PEAT.</p> <p>The project uses BL-PEAT as described above.</p>
15)	<p>Where the ARR project activity is implemented on peatland, the peatland must be degraded in the baseline scenario as identified by the presence of drainage infrastructure (ditches, canals) and associated lowered water tables below the surface. In case of forested peatland, degradation may be identified by the removal or degradation of the tree cover before the project start date.</p> <p>While on site the audit team travelled to the project area through series of canals supporting the peatland drainage and sampled forestland that can be classified as degraded.</p>

<p>AR-ACM0003 v2.0</p>	<p>Afforestation and reforestation project activities implemented on wetlands</p>
<p>Condition</p>	<p>Steps taken to assess compliance</p>
<p>5.</p>	<p>This methodology is applicable under the following conditions:</p> <ul style="list-style-type: none"> (a) The land subject to the project activity does not fall in wetland category; (b) Soil disturbance attributable to the project activity does not cover more than 10 per cent of area in each of the following types of land, when these lands are included within the project boundary: <ul style="list-style-type: none"> (i) Land containing organic soils; (ii) Land which, in the baseline, is subjected to land-use and management practices and receives inputs listed in appendices 1 and 2 to this methodology. <p>Item (a) can be excluded as described as an applicability condition of BL-ARR as the accounting procedures are accounted for in the BL-PEAT module.</p> <p>The audit team reviewed the PD and confirmed that the project is not designed to include soil disturbing activities.</p>
<p>5.</p>	<p>A project activity applying this methodology shall also comply with the applicability conditions of the tools contained within the methodology and applied by the project activity.</p> <p>As this methodology is covered by the REDD MF methodology and associated modules and tools, the project meets this criterion.</p>
<p>VMD0016 v1.1</p>	<p>Methods for stratification of the project area (X-STR)</p>
<p>Condition</p>	<p>Steps taken to assess compliance</p>
<p>4.1</p>	<p>Any module referencing strata i must be used in combination with this module.</p> <p>The audit team reviewed the PD and confirmed that all parameters using strata i are designed to be used in combination with the X-STR module</p>
<p>4.2</p>	<p>In case of REDD, above-ground biomass stratification is only used for pre-deforestation forest classes, and strata are the same in the baseline and the project scenario. Post-deforestation land uses are not stratified. Instead, average post-deforestation stock values (e.g. “Simple” or “Historical area-weighted” approaches are used, as per Module BL-UP).</p> <p>The audit team reviewed the PD and confirmed that above-ground biomass stratification is only used for pre-deforestation forest classes, and strata are the same in the baseline and the project scenario. And post-deforestation land uses are not stratified. Instead, average post-deforestation stock values (e.g. “Simple” or “Historical area-weighted”) approaches are used, as per Module BL-UP.</p>

4.3	<p>For peatland rewetting and conservation project activities this module must be used to delineate non-peat versus peat and to stratify the peat according to peat depth and soil emission characteristics, unless it can be demonstrated that the expected emissions from the soil organic carbon pool or change in the soil organic carbon pool in the project scenario is de minimis.</p> <p>The audit team reviewed the peat stratification in the PD and sampled peat depths in the field confirming that the project used the module to delineate non-peat versus peat and to stratify the peat according to peat depth and soil emission.</p>
4.4	<p>In the case of peatland rewetting and conservation project activities, the project boundary must be designed such that the negative effect of drainage activities that occur outside the project area on the project GHG benefits are minimized.</p> <p>The audit team reviewed the PD and interviewed project personnel and confirmed that the project is designed in a way that project boundary must be designed such that the negative effect of drainage activities that occur outside the project area on the project GHG benefits are minimized. As shown in the project area maps, the project area is set between two major waterways ensuring the effects of the project do not negatively impact areas outside of the boundary.</p>
VMD0009 v1.2	Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP)
Condition	Steps taken to assess compliance
4.1	<p>The module is applicable for estimating the leakage emissions due to activity shifting from forest lands that are legally authorized and documented to be converted to non-forest land, including activity shifting to forested peatland that is drained as a consequence of project implementation. This tool must be used in countries where planned deforestation happens on forested peatlands regardless of the absence of peatland within the project boundaries. Under this situation, displacement of baseline activities can be controlled and measured directly by monitoring the baseline deforestation agents or class of agents.</p> <p>The audit team reviewed the PD and confirmed that the design includes the appropriate description and inclusion of planned deforestation leakage monitoring. The audit team was also able to confirm through review of other concessions granted to acacia plantations in Indonesia*. In addition the audit team confirmed through onsite observations that deforestation takes place on peatland.</p>
4.2	<p>The module is mandatory if Module BL-PL has been used to define the baseline and the applicability criteria in Module BL-PL must be complied with in full.</p> <p>The audit team confirmed this condition is met (see BL-PL below)</p>
<p>*Whereas, Indonesia no longer posts concession information online, the audit team was able to confirm the existence of such concessions using other online resources.</p>	
VMD0006 v1.2	Estimation of Baseline Carbon Stock Changes and Greenhouse Gas Emissions from Planned Deforestation and Planned Degradation (BL-PL)

3.1	<p>The module is applicable for estimating the baseline emissions on forest lands (usually privately or government owned) that are legally authorized and documented to be converted to non-forest land.</p> <p>Condition met (see LK-ASP above).</p>
3.2	<p>Where, pre-project, unsustainable fuelwood collection is occurring within the project boundaries modules BL-DFW and LK-DFW shall be used to determine potential leakage.</p> <p>Not Applicable.</p>
VMD0044 v1.0	Estimation of Emissions from Ecological Leakage (LK-ECO)
4.1	<p>This module is applicable under the following condition:</p> <ul style="list-style-type: none"> • Leakage caused by hydrological connectivity is avoided by project design and site selection, as outlined in Chapter 5. <p>The audit team visited the project area on site and confirmed that the areas set for rewetting are generally small and insignificant as they are bordered by major waterways and are highly unlikely to affect water tables in surrounding areas.</p>
VMD0017 v2.1	Estimation of uncertainty for REDD+ project activities (X-UNC)
4.1	<p>The module is mandatory when using VCS methodology VM0007. It is applicable for estimating the uncertainty of estimates of emissions and removals of CO₂-e generated from REDD and WRC project activities. The module focuses on the following sources of uncertainty:</p> <ul style="list-style-type: none"> • Determination of rates of deforestation and degradation • Uncertainty associated with estimation of stocks in carbon pools and changes in carbon stocks • Uncertainty associated with estimation of peat emissions • Uncertainty in assessment of project emissions <p>The audit team reviewed uncertainty calculations for the bullets above, confirming that the module was used in determining all uncertainty.</p>
4.2	<p>Where an uncertainty value is not known or cannot be simply calculated, then a project must justify that it is using an indisputably conservative number and an uncertainty of 0% may be used for this component.</p> <p>As described above, the audit team reviewed uncertainty calculations for the project and confirmed that the module was used in each of the calculations. In addition the audit team agrees that uncertainty from water body emissions was appropriately set to zero, as excluding such emissions is conservative and that using the lowest deforestation rate based on the evidence provided is certainly conservative given the average rate is considerable higher and therefore an uncertainty rate of zero is appropriate.</p>
4.3	<p>Guidance on uncertainty – a precision target of a 95% confidence interval half-width equal to or less than 15% of the recorded value shall be targeted. This is especially important in terms of project planning for measurement of carbon stocks; sufficient measurement plots should be included to achieve this precision level across the measured stocks.</p> <p>The audit team reviewed the sampling design and uncertainty calculations and confirmed that the project added sufficient plots to ensure the sample size met the guidance on</p>

	uncertainty.
VMD0043 v1.0	Estimation of emissions from displacement of pre-project agricultural activities (LK-ARR)
4.1	<p>This module is applicable under the following conditions:</p> <ul style="list-style-type: none"> • Applicability conditions set out in AR-ACM0003 must be met. • Applicability conditions in AR-ACM0003 that exclude project activities on wetlands can be disregarded in the context of this module. <p>Condition met (AR-ACM0003 above)</p>
VMD0013 v1.1	Estimation of greenhouse gas emissions from biomass and peat burning (E-BPB)
4.1	<p>This module is applicable to avoiding unplanned deforestation or degradation (AUDD), avoiding planned deforestation (APD) and avoiding degradation project activities, whether or not situated on peatland.</p> <p>The audit team confirmed the baseline scenario and confirmed the project baseline allows for the use of this module (See Section 3.2.4 below)</p>
VMD0045 v1.0	Methods for monitoring greenhouse gas emissions and removals in ARR project activities on peat and mineral soil (M-ARR)
4.1	<p>This module is applicable under the following conditions:</p> <ul style="list-style-type: none"> • The applicability conditions provided in AR-ACM0003. • Applicability conditions included in AR-ACM0003 and corresponding tools that exclude project activities on wetlands can be neglected for the purpose of their use in this module, as accounting procedures for the peat soil are provided in module BL-PEAT. <p>Condition met (See BL-ARR above).</p>
VMD0046 v1.0	Methods for monitoring of soil carbon stock changes and greenhouse gas emissions and removals in peatland rewetting and conservation project activities (M-PEAT)
4.1	<p>This module is applicable to RDP and CUPP activities as defined in VCS AFOLU Requirements.</p> <p>The project area must meet the VCS definition for peatland. This module is limited to domed peatlands in the tropical climate zone.</p> <p>Condition met (See BL-PEAT above)</p>
4.2	<p>Furthermore, the following applicability conditions apply:</p> <ul style="list-style-type: none"> • It must be demonstrated using tool T-SIG that N₂O emissions in the project scenario are not significant, or it must be demonstrated that N₂O emissions will not increase in the project scenario compared to the baseline scenario, and therefore N₂O emissions need not be accounted for. <p>Condition met (T-SIG below).</p>

4.3	<p>Furthermore, the following applicability conditions apply:</p> <ul style="list-style-type: none"> • In the baseline scenario the peatland must be drained or partially drained. <p>The audit team confirmed that the baseline scenario is acacia plantation, thus meeting this condition (see section 3.2.4 below)</p>
4.4	<p>Furthermore, the following applicability conditions apply:</p> <ul style="list-style-type: none"> • At project start the peatland may still be undrained. <p>The audit team performed onsite inspections and confirmed that the majority of the project area is undrained at the start of the project.</p>
4.5	<p>Furthermore, the following applicability conditions apply:</p> <ul style="list-style-type: none"> • It must be demonstrated using module LK-ECO that ecological leakage must not occur. <p>Condition met (See LK-ECO above)</p>
T-SIG v01	Tool for testing significance of GHG emissions in A/R CDM project activities
	<p>The tool shall be used in the application of an A/R CDM approved methodology to an A/R CDM project activity:</p> <p>a) To determine which decreases in carbon pools, and increases in emissions of the greenhouse gases measured in CO₂ equivalents that result from the implementation of the A/R project activity, are insignificant and can be neglected.</p> <p>The audit team reviewed the project design and concluded that no significant tests were necessary as pools were only excluded if allowed by the methodology as conservative.</p>
	<p>The tool shall be used in the application of an A/R CDM approved methodology to an A/R CDM project activity:</p> <p>b) To ensure that it is valid to neglect decreases in carbon pools and increases in GHG emissions by sources stated as being insignificant in the applicability conditions of an A/R CDM methodology.</p> <p>Condition met (see conditions for AR-ACM0003 v3.0 above)</p>
VT0001 v3.0	Tool for the demonstration and assessment of additionality in VCS agriculture, Forestry and other land use (AFOLU) project activities
1.2 (a)	<p>The tool is applicable under the following conditions:</p> <p>AFOLU activities the same or similar to the proposed project activity on the land within the proposed project boundary performed with or without being registered as the VCS AFOLU project shall not lead to violation of any applicable law even if the law is not enforced.</p> <p>Condition met (See Section 3.2.5 below).</p>
1.2 (b)	<p>The tool is applicable under the following conditions:</p> <p>The use of this tool to determine additionality requires the baseline methodology to provide for a stepwise approach justifying the determination of the most plausible baseline scenario. Project proponent(s) proposing new baseline methodologies shall ensure consistency</p>

	between the determination of a baseline scenario and the determination of additionality of a project activity.
	Condition met (See Section 3.2.5 below).

As described above, the audit team agrees that the applicability conditions of the methodology and all associated modules and tools have been met by the evidence provided and gleaned by the audit team.

3.2.3 Project Boundary

Overall, the project boundary and selected sources, sinks and reservoirs are justified for the project. A further discussion of this is given below.

3.2.3.1 Spatial boundaries

Through a combination of document review, remote sensing, and ground truthing the audit team confirmed that the spatial boundaries of the project area conform to Sections 5.1.1 – 5.1.4 of the methodology. The audit team reviewed the PD and confirmed that it includes maps including all of the geographic and physical boundaries required by the methodology.

While on site, the audit team observed the replication of the process for digitizing the concession boundaries into a GIS format and confirmed that the boundaries utilized for extrapolation of carbon stocks is consistent with the boundaries and area provided in the concession. In addition, the audit team confirmed that the process was performed using best practices in GIS.

Next, the audit team observed re-measurements of aboveground biomass plots and confirmed the results were consistent with that of the reporting in the PD. The biomass teams performed this exercise at a high level of quality supporting the belief of the audit team that the aboveground biomass is reported accurately and with the precision reported.

Finally, the audit team resampled and recalculated bulk density (BD) for six of the peat transects previously measured by project personnel. The results of the analysis showed that the BD values reported by the project, while different from the audit sample (most likely due to sampling methods), and are more than likely to result in conservative estimates of GHG reductions (a more detailed description can be found in section 3.2.6 below).

3.2.3.2 Temporal boundaries

The audit team confirmed that the project complies with all of the requirements of the methodology regarding temporal boundaries. The audit team observed the replication of the process used to attain remote sensing imagery and confirmed the dates meet the requirements of the methodology. See Section 3.1 above for a complete description of how the project meets the additional requirements.

3.2.3.3 Carbon Pools

Carbon pool	In/excluded	Step(s) to assess Conformance
Aboveground tree biomass	Included	Cross checked against tables 4-8 of the

Carbon pool	In/excluded	Step(s) to assess Conformance
		methodology to ensure conformance
Aboveground non-tree biomass	Excluded	Cross checked against tables 4-8 of the methodology to ensure conformance. The justification provided in the PD is appropriate as the baseline scenario is plantation and thus is expected to increase under natural forest in the project scenario
Belowground biomass	Included	Cross checked against tables 4-8 of the methodology to ensure conformance
Litter on mineral soil	Excluded	Cross checked against tables 4-8 of the methodology to ensure conformance
Litter on peatland	Excluded	Cross checked against tables 4-8 of the methodology to ensure conformance
Dead wood	Excluded	Cross checked against tables 4-8 of the methodology to ensure conformance
Mineral soil carbon pool	Excluded	Cross checked against tables 4-8 of the methodology to ensure conformance.
Peat carbon pool	Included	Cross checked against tables 4-8 of the methodology to ensure conformance
Wood products	Excluded	Cross checked against tables 4-8 of the methodology to ensure conformance

3.2.3.4 Gases

3.2.3.4.1 REDD

Source	Gas	Included	Step(s) to assess Conformance
Biomass burning	CO ₂	No	Confirmed - exclusion in the baseline is conservative
	CH ₄	No	Confirmed - exclusion in the baseline is conservative
	N ₂ O	No	Confirmed - exclusion in the baseline is conservative

Source		Gas	Included	Step(s) to assess Conformance
	Combustion of fossil fuels	CO ₂	No	Confirmed - exclusion in the baseline is conservative
		CH ₄	No	Confirmed - exclusion in the baseline is conservative
		N ₂ O	No	Confirmed - exclusion in the baseline is conservative
	Use of fertilisers	CO ₂	No	Confirmed - exclusion in the baseline is conservative
		CH ₄	No	Confirmed - exclusion in the baseline is conservative
		N ₂ O	No	Confirmed - exclusion in the baseline is conservative
Project scenario	Biomass burning	CO ₂	No	Excluded as is accounted for in carbon stock changes
		CH ₄	Yes	Confirmed through cross check of table 6 of the methodology
		N ₂ O	Yes	Confirmed through cross check of table 6 of the methodology
	Combustion of fossil fuels	CO ₂	No	Confirmed through cross check of table 6 of the methodology
		CH ₄	No	Confirmed through cross check of table 6 of the methodology
		N ₂ O	No	Confirmed through cross check of table 6 of the methodology
	Use of fertilisers	CO ₂	No	Confirmed through cross check of table 6 of the methodology
		CH ₄	No	Confirmed through cross check of table 6 of the methodology

Source		Gas	Included	Step(s) to assess Conformance
		N ₂ O	No	Confirmed through cross check of table 6 of the methodology

3.2.3.4.2 ARR

Source		Gas	Included	Step(s) to assess Conformance
Baseline scenario	Burning of woody biomass	CO ₂	No	Confirmed as exclusion in the baseline is conservative
		CH ₄	No	Confirmed as exclusion in the baseline is conservative
		N ₂ O	No	Confirmed as exclusion in the baseline is conservative
Project scenario	Burning of woody biomass	CO ₂	No	Confirmed, as accounted for in carbon stock change
		CH ₄	Yes	Confirmed through cross check of table 7 of the methodology
		N ₂ O	Yes	Confirmed through cross check of table 7 of the methodology

3.2.3.4.3 WRC

Source		Gas	Included	Step(s) to assess conformance
Baseline / Project scenario	Microbial decomposition	CO ₂	Yes	Confirmed through cross check of table 8 of the methodology
		CH ₄	Yes	Confirmed through cross check of table 8 of the methodology
		N ₂ O	No	Confirmed through cross check of table 8 of the methodology
	Peat combustion	CO ₂	Yes	Confirmed through cross check of table 8 of the methodology

Source		Gas	Included	Step(s) to assess conformance
		CH ₄	Yes	Confirmed through cross check of table 8 of the methodology
		N ₂ O	Yes	Confirmed through cross check of table 8 of the methodology
	Combustion of fossil fuels	CO ₂	No	Confirmed through cross check of table 8 of the methodology
		CH ₄	No	Confirmed through cross check of table 8 of the methodology.
		N ₂ O	No	Confirmed through cross check of table 8 of the methodology

Based on the above cross checks and conservative exclusions the audit team has a reasonable level of assurance that all required carbon pools and emission sources have been appropriately accounted for as required by the methodology and associated modules.

3.2.4 Baseline Scenario

The audit team reviewed the justification in the PD and confirmed that the justification was consistent with what was observed during the site visit, that acacia plantation is the most plausible baseline scenario.

Using web based research /16//18/, remote sensing imagery /9/, and interviews with local communities' /17/, the audit team confirmed the following scenarios are all possibilities in the project area (whereas the main sources have been provided in Section 2.2 of this report, corroborating proprietary evidence from project personnel were used as well):

Industrial oil palm plantation

The audit team reviewed the proprietary evidence consisting of existing concessions and land use classifications and cross checked the data against the WRI data /16//18/ and confirmed that while the project area itself is not legally permissible for conversion to oil palm plantation, observations on site confirmed that oil palm plantations had been implemented in the region.

Logging Concessions

The audit team reviewed the proprietary evidence consisting of existing concessions and land use classifications and cross checked the data against the WRI data /16//18/ and confirmed that for the project area the land is legally permitted commercial logging in the absence of the project concessions. In addition, observations on site confirmed that commercial logging had been implemented in the region.

Unprotected Forests

The audit team reviewed the proprietary evidence consisting of existing concessions and land use classifications and cross checked the data against the WRI data /16//18/ and confirmed that for the project area the land has unprotected status. In addition, observations during the site visit confirmed that degradation through local exploitation had been implemented in the region.

Protected Forests

The audit team reviewed the proprietary evidence consisting of existing concessions and land use classifications and cross checked the data against the WRI data /16//18/ and confirmed that protected forests exist in the region encompassing the project area. In addition, the audit team has experience working in the region and can corroborate that protected areas exist through firsthand knowledge.

Smallholder Agriculture

While on site the audit team observed many areas in the region of the project area in which agricultural activities are taking place. The audit team observed subsistence agriculture, as well as rubber trees and pineapple. In addition, the audit team reviewed remote sensing imagery /16//18/ showing settlements near the project area in which land had been cleared for agriculture.

Mining

The audit team confirmed through interviews with local communities /17/ that residents are being paid to work as gold miners in the area. Specifically, there is concern that the project will result in the discontinuing of such activities and thus is viewed by the audit team as an alternative to the project activities. Furthermore, the audit team reviewed the proprietary evidence showing concessions for mining in the region.

Acacia Plantations

The audit team reviewed the proprietary evidence consisting of existing concessions and land use classifications and cross checked the data against the WRI data /16//18/ and confirmed that plantation forestry is rampant across the region encompassing the project area. Additionally, the audit team reviewed literature (Cifor 2004, Bartlett 2011, Jauhiainen et al 2012) corroborating project claims of acacia plantation as an alternative to the project activities.

All of the above alternative scenarios are supported by multiple pieces of corroborating evidence. The current global focus on Indonesian forests provides a host of literature, work papers, and remote sensing work products describing the state of deforestation in Indonesia. All of the evidence collected by the audit team is in agreement with the claims reported by the PD.

In conclusion, the audit team agrees that the information and justifications provided clearly show acacia plantations as the most likely baseline scenario. Moreover, the audit team agrees that based on current and past evidence that in the absence of the project activities that the project correctly identifies the without project scenario.

3.2.5 Additionality

Overall, additionality is justified for the project. In accordance with the methodology, and as well-documented within Section 4.5 of the PD, Version 3.0 (the most recent version) of the VCS-approved

“Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities” has been used to demonstrate additionality. The audit team’s findings regarding the application of this tool are as follows.

3.2.5.1 Step 1. Identification of alternative land use scenarios to the proposed VCS AFOLU project activity

3.2.5.1.1 Sub-Step 1a

The identified land use scenarios identified in sub-Step 1a of the PD include those scenarios required by VT0001. The audit team’s findings regarding the identified scenarios are discussed in section 3.2.4 above.

3.2.5.1.2 Sub-Step 1b

As stated above in Section 3.2.4 all of the described alternatives are taking place in the region encompassing the project area. The legality of such activities is not clear in all cases. The audit team reviewed Indonesian land use law /13//14/ and were able to confirm the claims in the PD as to the legality of such activities in the project area itself in the absence of the project. Based on this evidence, the audit team confirmed that those activities not legally permitted were removed from the list of alternatives as required by the tool. Based on this use of the tool the audit team confirmed that after accounting for sub-step 1b that acacia plantations, unprotected forests, and protected forests remained as viable alternative baseline scenarios. One note is that aside from oil palm plantation, government licensing could allow for the other alternatives and while eliminated using the barrier analysis by the project, this report will focus only on alternatives with clear legality.

3.2.5.1.3 Sub-Step 1c

3.2.5.1.4 Step 3

As described in the PD the project chose to use both the investment and barrier analysis in order to select a single baseline scenario. As only one of the analyses are required by the tool, this report with focus on the barrier analysis. For a complete description of the investment analysis performed by the project see https://issuu.com/greengrowthprogram/docs/ecba_3_katingan_technical_report.

Commercial logging

The audit team reviewed the legality and suitability of land use in Indonesia /16//18//19/ along with proprietary evidence of project personnel and confirmed that logging concessions are highly unlikely in the project area given the history of logging in the area. In addition, the audit team visited random portions of the project area while on site and used professional judgment to ascertain that very little to no primary forest still exists. This combined with improving laws regarding forestry and labor have significantly decreased the economics associated with commercial logging. It is the profession forestry knowledge of the audit team that economic barriers would eliminate this activity as the baseline scenario.

Protected forests

The audit team reviewed the available literature /19//2/ and online resources /16//18/ and were able to confirm the project claims in the PD. Additionally, the audit team has experience working in the region and other institutional knowledge and used professional judgment to ascertain that economic barriers exist to including the project area as a protected forest. The audit team used the cited resources to understand that current trends in Indonesia lend themselves to including land under restoration concessions in which the concession holder is financially responsible for protection of the forest. Whereas, the audit team was unable to speak to government officials who would corroborate such claims, the audit team has a reasonable assurance that the evidence provided supports the elimination of this activity as an alternative baseline scenario.

Acacia plantations

As stated throughout the baseline and additionality sections of this report, the audit team used a number of online /16//18/, remote sensing /14/, and literature /19//2/ to understand the legal and other barriers impeding certain activities. All of the evidence reviewed by the audit team shows that acacia plantations are legally permitted, face no ecological or economic barriers, and is appropriate given the suitability of the land. Based on this evidence the audit team agrees that the project have used the additionality tool appropriately and provided adequate justification in the PD that acacia plantations are the single alternative to project activities.

3.2.5.1.5 Step 4

The audit team reviewed the justification provided in the PD and use professional forestry knowledge to confirm that it is not common practice in commercial forestry operations, particularly 5 year pulp rotation plantations, to protect secondary and degraded forests

In summary, it is the opinion of the audit team that as long as the project is implemented as designed, the justification and the supporting evidence provided are sufficient to show that the additionality of the project is justified.

3.2.6 Quantification of GHG Emission Reductions and Removals

Overall, the methodology and any referenced tools have been applied correctly to calculate baseline emissions, project emissions, leakage and net GHG emission reductions and removals. The quantification of such is described in greater detail below.

The audit team can confirm that the PD contains a very high level of detail regarding the calculation of GHG emission reductions, such that the following are true:

- All relevant assumptions and data are listed in the project description, including their references and sources: the PD is very thoroughly documented and all equations, data, assumptions and other sources of information are included
- All of the project description requirements (PDR) with respect to the quantification of GHG emission reduction and removals are clearly presented replete with the equations and processes employed

The audit team reviewed a series of remote sensing products, GIS output, workbooks, and proprietary models (see section 2.2 above) in order to confirm conformance with the quantification requirements of

the methodology and associate modules. Specifically, the audit team used the verified aboveground biomass and peat data, and remote sensing results (selected as high risk variables from the validation risk assessment) for data checks to determine the accuracy of the baseline and ex-ante GHG calculations. A complete reporting of the resulting values for each requirement of the methodology is as follows:

3.2.6.1 Quantification of baseline emissions

3.2.6.1.1 Selection of proxy areas

As the project does not have a verifiable plan for the rate of deforestation six proxy areas were selected to determine the rate of deforestation. See below for a description of what how the audit team assessed the criteria:

Criteria	Step(s) to assess conformance
Land conversion practices shall be the same as those used by the baseline agent or class of agent.	The audit team reviewed the proxy areas selected by the project in the project database and confirmed that acacia plantation was the land conversion practice.
The post-deforestation land use shall be the same in the proxy areas as expected in the project area under business as usual.	As stated above and in Section 2.3.4 the audit team reviewed the proxy area data and cross checked against the remote sensing imagery /14/ and online resources /16//18/ confirming that the post deforestation land use classes are the same.
The proxy areas shall have the same management and land use rights type as the proposed project area under business as usual.	During review of the project concession application, the audit team confirmed that under the legal requirements of Indonesia, concession applications require a financial and management plan for the concession land and would be granted for a specific land use type, ensuring the same management and land use rights type as the proposed project area under business as usual.
If suitable sites exist they shall be in the immediate area of the project; if an insufficient number of sites exists in the immediate area of the project, sites shall be identified elsewhere in the same country as the project; if an insufficient number of sites exists in the country, sites shall be identified in neighboring countries.	As stated in the PD all proxy sites are in the country of Indonesia. The audit team reviewed the ministry database and remote sensing imagery confirming adherence to this requirement /16//18/.
Agents of deforestation in proxy areas must have deforested their land under the same criteria that the project lands must follow (legally permissible	See section 3.2.4 above.

and suitable for conversion)—see section.	
Deforestation in the proxy area shall have occurred within the 10 years prior to the baseline period.	The audit team reviewed the project data for the proxy areas and cross checked against the available online data /20/ confirming the proxy areas were converted to convertible production forest within the ten years prior to the start date.
<p>The three following conditions shall be met:</p> <ul style="list-style-type: none"> • The forest types surrounding the proxy area or in the proxy area prior to deforestation shall be in the same proportion as in the project area (±20%). • Soil types that are suitable for the land-use practice used by the agent of deforestation in the project area must be present in the proxy area in the same proportion as the project area (±20%). <p>The ratio of slope classes “gentle” (slope <15%) to “steep” (slope ≥15%) in the proxy areas shall be (±20%) the same of the ratio in the project area.</p> <ul style="list-style-type: none"> • Elevation classes (500m classes) in the proxy area shall be in the same proportion as in the project area (±20%). 	The audit team observed the replication of the remote sensing and GIS processes used to determine how the proxy areas compare with project area with respect to the criteria of the BL-PL modules and confirmed that the same results were produced. In addition, the audit team cross checked the results against the available online data /20/ which corroborated the results reported in the PD.

In determining the conformance to the above criteria the audit team performed an assessment of the remote sensing analysis to ensure best practices were followed as described GOF-C-GOLD 2013 handbook. The audit team observed the replication of the process for preparing imagery for analysis and were able to confirm that best practices were followed, as all Landsat imagery was appropriately downloaded from USGS, was atmospherically corrected, ground-truthed, masked out non-readable pixels (scan line corrector failure), and met best practice accuracy requirements.

The audit team selected one proxy area (Bumi Mekar Hijau) for an independent analysis. Using online resources /18//20/ the audit team was able to confirm with a reasonable level of assurance that the proxy area is appropriate as, surrounding forest type, slope, and elevation are all within +or – 20%. In addition, the audit team used the ministry of forestry concession database to calculate soil characteristics and confirmed 91% peat soils for the concession.

3.2.6.1.2 Baseline deforestation rate

As previously stated the audit team independently confirmed one proxy area. Based on the ability to confirm the data reported for the single proxy area, the audit team recalculated the total area of deforestation and deforestation rate to be applied to the project area. Whereas, the audit team calculated a slightly higher total area and deforestation rate, the audit team agrees that the use of the most

conservative proxy value calculated by the project (3.91%) is appropriate and therefore the uncertainty value of 0 is allowed.

3.2.6.1.3 Baseline stratification

Aboveground Biomass

While onsite the audit team reviewed the remote sensing procedures for determining land use classes (see Section 3.2.6.1.1) and confirmed the accuracy for forest through reviewing a replication of the process. In addition the audit team observed the replication of the biomass collection process in the field and confirmed that the data was consistent with the results reported in the PD. Moreover, the audit team agrees that not stratifying the existing forest is appropriate as the sample size was sufficient for meeting the desired level of error, as required by the methodology. The audit team confirmed the uncertainty of the aboveground biomass through a recalculation of the project inventory data. Also, through on site observations on site and review of Indonesian forest regulation the audit team confirmed that project personnel have accurately accounted for the portions of the project area that are required for each use type by the regulation. Finally, in addition to the regulatory review, and the proxy analysis, the audit team visited community crop areas while on site and confirmed that the allocation of area to each strata is appropriate.

Peatland

Initial delineation of peatland vs non-peatland boundaries was reviewed by the audit team, who confirmed that the methodology employed by project personnel is consistent with the professional understanding of the audit team. The audit team further corroborated the boundaries through an independent sampling of peat in the field, using transects initially installed by project personnel. Given that transects begin at canals and rivers, any misallocation of soil data would more than likely be observed by the audit team. Furthermore, the audit team used the field sampling exercise to determine peat thickness across the dome and confirmed the results reported by project personnel to be accurate for the sampling points.

During the office portion of the site visit, the audit team observed a replication of the extrapolation of peat data to areas outside of the sampling points and cross checked the reported and verified field verified sampling data against the requirements of Section 5.3 of the X-STR module:

No	Requirements per VM0007 module X-STR	Step(s) to assess conformance
1	When in more than 5% of the project area peat is absent or the thickness of the peat is below a threshold value (e.g., 50 cm); the map only needs to distinguish where peat thickness exceeds this threshold. It is conservative to treat shallow peat strata as mineral soil strata.	As stated above the audit team observed a replication of the peat stratification process and confirmed that less than 5% of the project area includes peat soils less than 50cm. In addition the audit team observed the replication of the Kriging process used to interpolate peat thickness for non-sampled areas and confirmed the process was performed using verified peat depths and included an appropriate process for determining distances used in the smoothing process.
2	When, using a conservative (high) value for	During the office portion of the site visit the

No	Requirements per VM0007 module X-STR	Step(s) to assess conformance
	subsidence rates, in more than 5% of the project area less peat is available at t=100 years in the project scenario than in the same strata in the baseline scenario, the peat thickness map only needs to distinguish these strata	audit team repeated the process described above and confirmed the initial peat thickness values were accurately imported into the subsidence calculations. In addition, the audit team was able to confirm that the values and methods for calculating subsidence follow the processes prescribed by IPCC and are appropriately referenced in the project documentation. Based on the validation activities the audit team was able to confirm that in more than 5% of the project area less peat is available at t=100 years in the project scenario than in the same strata in the baseline scenario.
3	When, using a conservative (high) value for subsidence rates, in the baseline scenario in more than 5% of the project area the project crediting period exceeds the peat depletion time (PDT); the peat thickness map must distinguish with a resolution of 50 cm strata where peat will be depleted within the project crediting period. Peat strata that will be depleted can be further stratified according to their peat depletion time. Areas where peat will not be depleted need not be further stratified.	During the office portion of the site visit, the audit team observed a replication of the calculation of baseline and ex-ante estimates and confirmed that more than 5% of the project area the project crediting period exceeds the peat depletion time (PDT).

In addition to the aboveground biomass and peatland activities described above, the audit team reviewed the analysis performed by project personnel and described in in the methodological annex to the PD /21/ and confirmed that the rationale for the ultimate stratification of the project area. Moreover, as described in Section 3.2.2 of this report the audit team recalculated the uncertainty analysis for each applicable pool and confirmed the calculations were free from calculation error and in conformance with the methodology and associated modules.

3.2.6.1.4 Baseline emissions

Subsidence

The audit team reviewed the subsidence rate used to calculate baseline emissions for peatlands. Whereas, the audit team was unable to ascertain water table fluxes in the project or proxy areas due the time involved in collecting such data, the audit team reviewed the processes used by project personnel /21/ in combination with water levels encountered during the re-sampling of peat transects in the field and confirmed, with a reasonable level of assurance that the process had been performed accurately and in conformance with best practices.

The audit team reviewed the values employed to calculate subsidence rates and confirmed that the values were consistent with those produced through field sampling and the verified proxy data and

employed default values allowed by the methodology and associated modules (see parameters available at validation below). Based on the successful validation of computational inputs the audit team recalculated subsidence for a sample of data and confirmed the reported values to be free from calculation error.

Water bodies

The audit team reviewed the explanation in the PD and the proxy area data and confirmed the basic assumption that the baseline agents described in Section 3.2.4 above do not create open bodies of water such as ponds or lakes. In addition, the audit team reviewed the information provided in appendix 4 and the proxy data and confirmed the rationale for applying temporal stratification. The audit team also performed a recalculation of the area of water bodies (WB) and found the value of 3,327 ha to be free from calculation error.

In addition to confirming the WB area, the audit team recalculated a sample of data and confirmed that the baseline emissions employ the appropriate values for dissolved organic carbon (DOC) (see parameters available at validation below) and are free from calculation error.

Peat burn

The audit team analyzed the modis data surrounding the project area and fire data for the sampled proxy area and confirmed that the rationale provided in Annex 7 to be appropriate. The audit team reviewed the calculations of burn probability and confirmed the results to be accurate based on the historic fire data. In addition while on site, the audit team observed a replication of the Sims (Excel) model used to select areas that would have burned in the baseline scenario and confirmed that the model appropriately accounts for probability of burn and that the correct emissions factors were employed. Finally, the audit team recalculated the uncertainty of peat burn and confirmed the project calculations to be accurate.

Aboveground biomass

As stated in Section 3.2.4 above, the audit team confirmed that the determination of the baseline scenario was reported as a result of the correct use of the VT0001 additionality tool. Based on this the audit team confirmed that the baseline scenario and thus the pattern of deforestation and land use is appropriate for determining baseline emissions from deforestation.

The audit team reviewed the inventory data and cross checked field data against the original inventory and confirmed the mean stocking for aboveground biomass is reported accurately. In addition the audit team confirmed that subtracting the lowest stocking level from the mean stocking level is an appropriate method for estimating degradation using professional judgment. The audit team also confirmed that the reported post deforestation class values are appropriate and supported by the literature and other online resources. Through recalculation of a sample of the data, the audit team was able to confirm that the allometric equations have been used as designed and are appropriate for the region (see parameters available at validation below). Finally, the audit team performed a recalculation of the uncertainty associated with aboveground biomass and confirmed it to be accurate.

ARR activities

The audit team considered the ARR activities of the baseline and project scenario a low risk area as this accounts for less than .5% of the overall GHG emission reductions. Based on the initial risk assessment the audit team did not recalculate baseline or project scenario emissions, however the audit team reviewed the inputs and calculations performed by the project and confirmed that the calculations were performed using the same methods and work products as other emissions. The audit team was able to trace all data to its source and have a reasonable level of assurance that the emission reductions from ARR activities have been reported accurately.

3.2.6.2 Project emissions

Given the similarities between the methodology for calculating baseline emissions and project emissions, this report will not recap each of the steps taken to assess each emission source, but refers the reader to the baseline emission section. The stratification follows the same procedures and was recalculated by the audit team confirming the strata areas reported by project personnel in the PD.

While on site the audit team visited portions of the property and confirmed that the areas planned for reforestation are currently deforested and otherwise meet the applicability conditions for ARR activities reported by the methodology and associated modules (see Section 3.2.2 above). In addition the audit team observed the areas for peat rewetting and confirmed that the canal exists and is appropriate for restoration activities.

The audit team reviewed and recalculated a sample of project data for each of the emissions reported in the PD and confirmed that the emissions have been calculated accurately and the inputs used are consistent with those verified in the baseline scenario (see parameters available at validation below). Based on the previous text and the methods employed as described in the baseline emissions section, the audit team confirms with a reasonable level of assurance that the ex-ante emissions have been reported accurately.

3.2.6.2.1 Leakage emissions

As described in Section 3.2.2 the project evaluation of which leakage modules are applicable to the project is appropriate. A complete description of the activities employed to assess leakage estimate for the project are discussed below:

Leakage Module	Step(s) taken to assess conformance
<p>Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP);</p> <p>Step 1. Determine the baseline rate of deforestation;</p> <p>STEP 2: Estimate New Projection of Forest Clearance by the Baseline Agent Of Deforestation with Project Implementation if No Leakage is Occurring;</p>	<ol style="list-style-type: none"> 1. As previously described the baseline deforestation rate of 3.91% is appropriate and conservative. The audit team reviewed the regression analysis and confirmed the areas reported for the deforestation estimates were those confirmed in Section 3.2.6.1.2 of this report and that the resulting correlation meets the requirements of the module. 2. The audit team recalculated the area of

<p>STEP 3: Monitor All Areas Deforested by Baseline Agent of Deforestation Through the Years in Which Planned Deforestation was Forecast To Occur;</p> <p>STEP 4: Monitor GHG Emissions Outside the Project Boundary by Baseline Agent of Deforestation;</p> <p>STEP 5: Estimate the Peat Carbon in All of the Agent Concessions;</p> <p>STEP 6: Estimate the CO2 Emission Factor from Leakage to Peatland per ha;</p> <p>STEP 7: Estimate the Net GHG Emissions Due to Leakage to Undrained Peatlands as a Result of Implementation of a Planned Deforestation Project in Year t (Lkpeat,T).</p>	<p>new forest clearance if no leakage is occurring and found the reported values of the project to be correct.</p> <ol style="list-style-type: none"> 3. The audit team reviewed the PD and confirmed the documentation includes an adequate monitoring plan for meeting the requirements of the module. 4. As no single agent of baseline deforestation has been identified, this step is not applicable. 5. The audit team reviewed the rationale in the PD and confirmed that the method employed is more than likely to overestimate leakage emissions from peat. For a description of the methods used to determine peat loss see Section 3.2.6.1 of this report. 6. The audit team recalculated this step as described in the module and confirmed the project reported value to be accurate. 7. The audit team recalculated the net emissions due to leakage based on the project data and confirmed the reported value to be accurate.
<p>Estimation of emissions from displacement of pre-project agricultural activities (LK-ARR)</p>	<p>Step(s) taken to assess conformance</p>
<p>Emissions due to the displacement of pre-project agricultural activities in ARR project activities are estimated using CDM tool Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity.</p>	<p>The audit team reviewed the rationale provided in the PD and observed projected agricultural areas while on site and using GIS and confirming an ex-ante estimate of zero for this module.</p>
<p>Under the applicability conditions of this module, ecological leakage affecting the soil (peat) carbon pool does not occur, by ensuring that the effect of hydrological connectivity with adjacent areas is insignificant (ie, causing no significant alteration of mean annual water table depths in such areas). This can be achieved either by an appropriate</p>	<p>The audit team reviewed the rationale provided in the PD and observed projected restoration areas while on site and using GIS and confirming an ex-ante estimate of zero for this module.</p>

<p>design (eg, by establishing an impermeable dam, by rewetting peatland surrounded by undrained peatland or by rivers) or by a buffer zone within the project boundary. This buffer zone, if employed, shall be mapped (see module X-STR). The width of the buffer zone shall be determined on the basis of quantitative hydrological modeling, or expert judgment.</p>	
--	--

3.2.6.3 Parameters available at validation

The parameters below are those required by the methodology, however given the complexity of the project, project personnel have provided a methodological annex to the PD /21/ in which a host of associated parameters available at validation are provided.

Parameter	Value	Step(s) taken to assess conformance (Forest)
$\Delta C_{BSL,planned}$	34,037,000	See Section 3.2.6.1 above
$\Delta C_{BSL-ARR}$	441,274.71	See Section 3.2.6.1 above
$GHG_{BSL-WRC}$	437,681,743	See Section 3.2.6.1 above

In summary, it is the opinion of the audit team that the VM0007 v1.5 methodology and the associated tools and modules have been applied correctly and allow for the audit team to have a reasonable level of assurance that the result is the correct calculation of baseline emissions, project emissions, leakage and net GHG emission reductions and removals.

3.2.7 Methodology Deviations

Not applicable as no methodology deviation were assessed during validation.

3.2.8 Monitoring Plan

The parameters below are those required by the methodology, however given the complexity of the project, project personnel have provided a methodological annex to the PD /21/ in which a host of associated parameters monitored are provided.

Parameter	Value	Step(s) taken to assess conformance (Forest)
$\Delta C_{WPS-REDD}$	64,407,344	See section 3.2.6.2 above
$\Delta C_{LK-AS,planned}$	Not applicable until monitoring takes place	See section 3.2.6.2.1 above

$\Delta C_{WPS-ARR}$	1,864,644.09	See section 3.2.6.2 above
ΔC_{LK-ARR}	Not applicable until monitoring takes place	See section 3.2.6.2.1 above
$GHG_{WPS-WRC}$	430,919,776	See section 3.2.6.2 above
GHG_{LK-ECO}	0	See section 3.2.6.2.1 above

In summary, the audit team confirmed that the monitoring parameters have been included in conformance with the applicable methodology and that the monitoring methods and procedures are designed using best practices as required by the methodology. In addition, as described in Section 3.2.2 above, the project has assessed the applicability of the associated monitoring modules and is designed to conform to the applicable criteria.

3.3 Non-Permanence Risk Analysis

In accordance with Section 3.7.3 of the VCS AFOLU Requirements, the project’s non-permanence risk report was assessed by the audit team. The risk analysis assessment was based on the Version 6.0 of the non-permanence risk report, which is dated 11 December 2015. The findings and conclusion regarding the non-permanence risk analysis undertaken for the project are summarized below for each risk category and factor. Unless noted otherwise, the audit team agrees with the conclusion stated in the non-permanence risk report.

The findings of the audit team regarding the risk scores applied for each factor are as follows.

Internal Risks

Project Management			
Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of the risk rating
a)	No credits have been issued at this time and therefore this risk score is not applicable	N/A	N/A
b)	No credits have been issued at this time and therefore this risk score is not applicable	N/A	N/A
c)	The audit team is familiar with many of the project management team and was able to confirm that this team designed and	The audit team was provided with access to all of the company websites showing the experience of the team members. The audit team	The Risk Score Is Appropriate

	implemented these project types dating back to 2011. The audit team also reviewed published literature showing further experience in each of the required areas	considers this high quality	
d)	The management team has offices in Jakarta, Bogor and Palangkaraya. The audit team visited the Bogor office and traveled to the project area during the site visit and confirmed that the project team is less than a days travel from the project area.	Given that the audit team observed this first hand, the audit team considers their own experience and knowledge high quality	The Risk Score Is Appropriate
e)	The same individuals alluded to in item c above have also successfully implemented a number of AFOLU projects around the world, therefore meeting these requirements. The audit team reviewed the VCS project database on 27 December 2015 providing evidence for meeting this criteria	Also, as stated in item c above the project team has evidence of the types and number of projects available on their respective websites. In addition, the same information is available on the VCS website; therefore, the information can be considered to be of high quality	The Risk Score Is Appropriate
f)	The audit team reviewed the PD and confirmed that Section 6.3 and Chapter 8 of the PD and confirmed it includes a detailed description of the adaptive management plan.	Through interviews with local communities and project personnel, and review of meeting minutes, the audit team confirmed that the adaptive strategies were the result of a long collaborative process therefore are considered high quality	The Risk Score Is Appropriate
Total Project Management (PM) [as applicable, (a + b + c + d + e + f)] Total may be less than zero.			The Risk Score Is Appropriate

Financial Viability			
Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of the risk rating
a)	N/A	N/A	N/A

b)	N/A	N/A	N/A
c)	The audit team was provided with a suite of documentation supporting the breakeven analysis /19-20/ and /25-29/. The audit team traced organization budget values through the series of project budget worksheets and confirmed that the secured funding values were appropriate. In addition, the audit team reviewed the current and anticipated expenses and confirmed that the values provided for the anticipated project expenses were reasonable	The documentation provided included audited financial documents and a detailed, user friendly budget workbook that allowed for assessment by the audit team and is therefore of high quality	N/A
d)	N/A	N/A	The Risk Score Is Appropriate
e)	N/A	N/A	N/A
f)	N/A	N/A	N/A
g)	N/A	N/A	The Risk Score Is Appropriate
h)	In addition to the documentation provided above, the audit team reviewed the funding received by the project confirming it to be sufficient to cover project cash out prior to breakeven.	See item C above	The Risk Score Is Appropriate
i)	See item g above	See item g above	The Risk Score Is Appropriate
Total Financial Viability (FV) [as applicable, ((a, b, c or d) + (e, f, g or h) + i)] Total may not be less than zero.			The Risk Score Is Appropriate

	Opportunity Cost		
Risk	Assessment of rationale,	Assessment of quality of	Conclusion regarding

	assumptions and justification	documentation and data provided	appropriateness of the risk rating
a)	N/A	N/A	N/A
b)	N/A	N/A	N/A
c)	N/A	N/A	N/A
d)	The audit team reviewed the project financial model, as well as the costs and benefits supported by confidential financial documents and compared the analyses performed by project personnel confirming that item d is the appropriate risk indicator for the project	The audit team was provided with a detailed financial model and literature supporting the costs and benefits associated with the baseline scenario which have been audited by investment organizations and the Indonesian government making them of high quality	The Risk Score Is Appropriate
e)	N/A	N/A	N/A
f)	N/A	N/A	N/A
g)	N/A	N/A	N/A
h)	N/A	N/A	N/A
i)	N/A	N/A	N/A
Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e or f) + (g + h or i)] Total may not be less than zero.			The Risk Score Is Appropriate

	Project Longevity		
Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Risk
a)	Whereas the project is legally required to continue the management practices, the audit team confirmed that the	The audit team considers the legal application process for forest concessions in Indonesia to be of	The Risk Score Is

	entire carbon accounting area is not currently covered and thus does not meet the requirement to use item b below. While on site, the audit team reviewed the financial and management plans (requirements of the concession application) confirming the conformance to this criterion	high quality.	Appropriate
b)	N/A	N/A	N/A
Total Project Longevity (PL) May not be less than zero			The Risk Score Is Appropriate

Internal Risk	
Total Internal Risk (PM + FV + OC + PL) Total may not be less than zero.	8

External risk

Land Tenure and Resource Access/Impacts			
Risk	Assessment of rationale, assumptions and justification		Risk
a)	N/A	N/A	N/A
b)	As described in section 3.1.9 above the audit team reviewed the concession for the project area confirming the ownership and use rights are held by separate entities.	The audit team considers government decrees to be of high quality	The Risk Score Is Appropriate
c)	The audit team held interviews with local communities and reviewed concession process confirming no disputes exist at this time	The audit team considers the concession process and firsthand knowledge through interviews of high quality	The Risk Score Is Appropriate
d)	See above	See above	The Risk Score Is Appropriate
e)	The audit team reviewed the rationale and made observations on site confirming that the project is not likely to have upstream impacts	The information provided in the PD and the supporting literature is considered high quality by the audit team	The Risk Score Is Appropriate

f)	N/A	N/A	N/A
g)	N/A	N/A	N/A
Total Land Tenure (LT) [as applicable, ((a or b) + c + d + e + f + g)] Total may not be less than zero.			The Risk Score Is Appropriate

Community Engagement			
Risk	Assessment of rationale, assumptions and justification		Risk
a)	The audit team held interviews with communities inside of the project zone and confirmed that the all of the individuals in the audit sample had been consulted. The results of this sample leads the audit team to believe that the majority of communities inside the project area have been consulted	Interviews, consultation meeting minutes are considered high quality	The Risk Score Is Appropriate
b)	N/A	N/A	N/A
c)	The audit team also conducted the CCB validation of the project and held interviews with local communities confirming that the project is designed to provide net positive impacts on the social and economic wellbeing of the local communities who derive livelihoods from the project area.	The CCB PD and Interviews with local communities and are considered high quality	The Risk Score Is Appropriate
Total Community Engagement (CE) [where applicable, (a + b + c)] Total may be less than zero.			The Risk Score Is Appropriate

Political Risk			
Risk	Assessment of rationale, assumptions and justification		Risk
a)	N/A	N/A	N/A
b)	The audit team observed project personnel downloading and calculating the political risk score confirming the	The World Bank governance indicator online database is considered of high quality	The Risk Score Is

	applicability of this indicator	http://info.worldbank.org/governance/wgi/index.aspx#home	Appropriate
c)	N/A	N/A	N/A
d)	N/A	N/A	N/A
e)	N/A	N/A	N/A
f)	The audit team reviewed the Governors' Climate and Forest Task Force website confirming that the project area meets this criteria	The audit team considers the online database of high quality http://www.gcftaskforce.org/	The Risk Score Is Appropriate
Total Political (PC) [as applicable ((a, b, c, d or e) + f)]			2 The Risk Score Is Appropriate
Total may not be less than zero.			

Natural Risk - Fire		
Risk	Assessment of rationale, assumptions and justification	Risk
	The audit team interviewed local communities and reviewed MODIS data for the project area confirming that fires are not responsible for loss of carbon stocks for undrained peatland. While on site the audit team did observe a suite of fires near the project area, however these were taking place on drained soils. Whereas peatland fires are growing in frequency and intensity in Indonesia, the available literature and online resources are in agreement that these are anthropogenic fires	The Risk Score Is Appropriate

Natural Risk - Pest		
Risk	Assessment of rationale, assumptions and justification	Risk
	The audit team reviewed the evidence referenced in the PD and included an expert in peatlands in the region and was able to confirm that risks from pests to more than 5% of the carbon stocks is highly unlikely.	The Risk Score Is Appropriate

Natural Risk - Extreme Weather		
Risk	Assessment of rationale, assumptions and justification	Risk
	The audit team interviewed local communities and reviewed the literature referenced in the PD. In addition, the audit team included an expert in peatlands in the region. Based on the literature and expert knowledge of the audit team confirms the score is appropriate	The Risk Score Is Appropriate

In summary, given the audit teams' experience in the region, the audit team agrees with the assessment of project personnel that the natural risk literature is indeed lacking. Overall, the audit team agrees with the expert opinion that has been documented in the PD. Finally, the audit team agrees that the minimum risk score of 10% has been appropriately applied in this project case.

3.4 Environmental Impact

The audit team also performed the validation of the CCB portion of the project and confirmed that project personnel provide a complete environmental assessment within the PD. It is the experience of the audit team that protecting native ecosystems through community incentives and alternative livelihoods is, by design, more than likely to result in only positive environmental impacts.

3.5 Comments by Stakeholders

N/A. Stakeholder comments will be provided upon the completion of the CCB portion of the validation.

4 VALIDATION CONCLUSION

In conclusion, the project complies with the validation criteria for projects set out in VCS Version 3. The audit team holds no qualifications or limitations regarding the above statement. Thus, the audit team has validated the Project's compliance with the VCS Program requirements as set out in the VCS Rules.

While only time will tell whether the project is able to achieve the estimated GHG emission reductions, it should be noted that the implementation of methodology has resulted in fairly conservative methodological choices for ex-ante calculation. These conservative methodological choices, along with the conservative choices inherent in the approach selected by project personnel, make it quite likely that the project will meet or exceed the estimated GHG emission reductions.

APPENDIX A: VALIDATION FINDINGS

The following tables include all issues raised during the validation audit of the Katingan Restoration and Conservation Project. It should be noted that all language under “Client Response” is a verbatim transcription of responses to findings as provided by project personnel.

NCR 2015.1 dated 11/23/2015

Standard Reference: VCS Standard v3.5 Section 3.11.1

Document Reference: 2015-08-27 Final PD_RMU Section 3.2

Finding: The VCS Standard requires that:

The project description shall be accompanied by documentary evidence establishing conclusively one or more of the following rights of use (see VCS document Program Definitions for definition of right of use) accorded to the project proponent(s)..."

The information provided in the PD does not allow for an assessment of which right of use is being claimed and therefore is not in conformance with the Standard.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team reviewed the revised PD and confirmed that section 3.2 of the PD now states "A right of use arising or granted under statute, regulation or decree by a competent authority." The amendments to the PD are sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.2 dated 11/23/2015

Standard Reference: VCS Standard v3.5 Section 3.7.3

Document Reference: N/A

Finding: The VCS Standard requires that:

"AFOLU projects with a project start date on or after 8 March 2008 shall complete validation within five years of the project start date."

Given that the deadline for validation completion has past, the project is not in conformance with the Standard.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with an extension letter from the VCSA dated 28 October 2015 granting an extension for validation completion until 31 May, 2016 Therefore resolving this issue.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.3 dated 11/23/2015

Standard Reference: VCS Standard v3.5 Section 3.14.1, 1.1. VCS VM0007 - "Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, v3.0

Document Reference: 2015-08-27 Final PD_RMU Section 4.5

Finding: The VCS Standard states "This document will be updated from time-to-time and readers shall ensure that they are using the most current version of the document. Where external documents are referenced, such as the IPCC 2006 Guidelines for National GHG Inventories, and such documents are updated, the most recent version of the document shall be used."

The VM0007 methodology states "T-ADD must be used to identify credible alternative land use scenarios and evaluate both the alternatives and the proposed project scenarios and to demonstrate the additionality of the project."

The PD states that the "combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities: Version 1" [17]" was used for demonstrating additionality, however the the Tool provided along with the VM0007 methodology is the "Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, v3.0 and therefore is not in conformance with the Standard.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team reviewed the information provided and confirmed that the determination of baseline and additionality conform to the stepwise approach provided in the VCS VT0001 additionality tool.

Closing Remarks: The client's response adequately addresses the finding.

NIR 2015.4 dated 11/23/2015

Standard Reference: "Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, v3.0 Section 2.3.1 (L)

Document Reference: 2015-08-27 Final PD_RMU Section 4.5.1.2

Finding: Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, v3.0 states:

"Provide transparent and documented evidence, and offer conservative interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers. Anecdotal evidence can be included, but alone is not sufficient proof of barriers. The type of evidence to be provided may include:

- i) Relevant legislation, regulatory information or environmental/natural resource management norms, acts or rules;
- ii) Relevant (sectoral) studies or surveys (e.g. market surveys, technology studies, etc) undertaken by universities, research institutions, NGOs, associations, companies, bilateral/ multilateral institutions, etc;
- iv) Documentation of relevant market data (e.g. market prices, tariffs, rules);
- v) Written documentation from the company or institution developing or implementing the VCS AFOLU project activity or the VCS AFOLU project developer, such as minutes from Board meetings, correspondence, feasibility studies, financial or budgetary information, etc;
- vi) Documents prepared by the project developer, contractors or project partners in the context of the proposed project activity or similar previous project implementations;
- vii) Written documentation of independent expert judgments from AFOLU related Government/ Non-Government bodies or individual experts, educational institutions (e.g. universities, technical schools, training centers), professional associations and others.
- iii) Relevant statistical data from national or international statistics;"

Whereas the PD provides a list and description of barriers, there has been no evidence provided to support these claims and therefore is not in conformance with the Tool.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team reviewed the literature supporting barrier analysis provided in the PD and confirmed the information provided transparent and documented evidence, and offered conservative

interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers. The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.5 dated 11/23/2015

Standard Reference: VCS AFOLU Requirements v3.4. VCS Non-Permanence Risk Tool v3.2. VCS Non-Permanence Risk report v3.1

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The AFOLU Requirements state "Projects shall prepare a non-permanence risk report in accordance with VCS document AFOLU Non-Permanence Risk Tool at both validation and verification. In the case of projects that are not validated and verified simultaneously, having their initial risk assessments validated at the time of VCS project validation will assist VCU buyers and sellers by providing a more accurate early indication of the number of VCUs projects are expected to generate. The non-permanence risk report shall be prepared using the VCS Non-Permanence Risk Report Template, which may be included as an annex to the project description or monitoring report, as applicable, or provided as a stand-alone document."

The VCS Non-Permanence Risk Tool states "This document shall be updated from time-to-time and readers should ensure that they are using the most current version of the document."

The project has not used the VCS risk report template and therefore is not in conformance with the VCS program documents.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with the non-permanence risk report and confirmed it to be the most up to date version of the risk report template and therefore closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.6 dated 11/23/2015

Standard Reference: VCS AFOLU Requirements v3.4. VCS Non-Permanence Risk Tool v3.2.

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The AFOLU Requirements state "Projects shall prepare a non-permanence risk report in accordance with VCS document AFOLU Non-Permanence Risk Tool at both validation and verification. In the case of projects that are not validated and verified simultaneously, having their initial risk assessments validated at the time of VCS project validation will assist VCU buyers and sellers by providing a more accurate early indication of the number of VCUs projects are expected to generate. The non-permanence risk report shall be prepared using the VCS Non-Permanence Risk Report Template, which may be included as an annex to the project description or monitoring report, as applicable, or provided as a stand-alone document."

The VCS Non-Permanence Risk Tool states "This document shall be updated from time-to-time and readers should ensure that they are using the most current version of the document."

The project has not used the latest version of the VCS Non-Permanence Risk Tool and therefore is not in conformance with the VCS program documents.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team reviewed the amended risk report and confirmed it was completed in conformance with the latest version of the AFOLU non-permanence risk tool. The amended risk report using the appropriate tool is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.7 dated 11/23/2015

Standard Reference: VCS Non-Permanence Risk Tool v3.2 Section 2.2.1 (f)

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: For a mitigation score of -2 in the project management section of the VCS Non-Permanence Risk Tool an adaptive management plan must be in place.

Given that no adaptive management plan is currently in place the project is not in conformance with the risk tool.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team reviewed the amended PD and confirmed that section 8 now contains sufficient information to show that an adaptive management plan is in place and therefore meeting the criteria for selecting the mitigation score. The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.8 dated 11/23/2015

Standard Reference: VCS Non-Permanence Risk Tool v3.2 Section 2.2.3 (1)

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The Risk Tool states "Opportunity cost analysis shall be undertaken based on the alternative land uses identified in the project's additionality assessment (except where (2) applies). The onus is on the project proponent to demonstrate and substantiate what constitutes credible alternative land use scenarios within this area, and shall at a minimum include the activities identified in the baseline scenario. The opportunity cost analysis shall include a net present value (NPV) analysis, covering the project crediting period, of such alternatives as compared to the project, taking into consideration a conservative estimate of revenue from GHG credit sales and other project revenue streams, and potential price fluctuations of commodities impacted by the project. The financial discount rates used shall be based on published sources and represent the appropriate risk for the relevant land use scenario. Estimates of prices for GHG credit sales shall be based on published sources such as market intelligence reports. The analysis shall be undertaken in a transparent manner and shall provide all relevant assumptions, parameters, and data sources such that a reader may reproduce the analysis and determine the same results."

The project has not provided the NPV analysis in a transparent manner and does not provide all relevant assumptions, parameters, and data sources such that a reader may reproduce the analysis and determine the same results and therefore is non in conformance with the Tool.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with a detailed NPV analysis conducted by project personnel and confirmed that the analysis was performed correctly and includes verifiable assumptions and inputs to allow the reader to reproduce the results. The analysis provided to the audit team is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NIR 2015.9 dated 11/23/2015

Standard Reference: VCS Non-Permanence Risk Tool v3.2 Section 2.2.4 (3)

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The Risk Tool states "For all AFOLU project types, the entire project longevity shall be covered by management and financial plans as submitted to local government or financial institutions, or otherwise made public, in which the intention to continue management practices is stated and planned for, and may include external evidence such as municipal land-use plans, institutional structures, or tools such as ecological-economic zoning."

During the site visit, the audit team was provided with evidence that the project has submitted both management plans and financial plans to government institutions, however they were not provided with evidence that the financial plan covers the entire project longevity.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: While onsite, the audit team reviewed the concessions application submitted for the project and confirmed that it meets the requirements for management and financial plans and was submitted to the Indonesian government. The plans reviewed by the audit team and submitted to the government are sufficient for the closing of this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.10 dated 11/23/2015

Standard Reference: VCS Non-Permanence Risk Tool v3.2 Section 2.2.4 (5)

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The Risk tool requires that to claim item b) of the project longevity score that a legal agreement or requirement to continue the management practice be in place.

Whereas, the audit team understands that the concession provided to the audit team is by its nature legally binding, the concession does not cover the entire project area and therefore is not in conformance with the Tool.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with a revised risk report in which the clients are no longer claiming item a for the project longevity risk score and thus is in conformance with the risk tool. The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.11 dated 11/23/2015

Standard Reference: VCS Non-Permanence Risk Tool v3.2 Section 2.3.1 (10)

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The Risk Tool States "WRC projects unable to demonstrate that potential upstream and sea impacts that could undermine issued credits in the next 10 years are irrelevant or expected to be insignificant, or that there is a plan in place for effectively mitigating such impacts" receive a risk score of 5.

Additionally the Tool states "WRC projects are subject to upstream and sea impacts (eg, changes in water and sediment flows, tidal processes or sea level rise), whether driven by natural processes or resulting from policy decisions that may undermine credits that have been issued. Unless demonstrated that such impacts on issued credits are irrelevant or expected to be insignificant within the next 10 years, or that there is a plan in place for effectively mitigating such impacts, WRC projects shall apply the risk score listed in Table 6 below. Note that WRC projects must also demonstrate that hydrologically connected areas adjacent to the project boundary shall not have a significant negative impact on the project area (see the AFOLU Requirements for the full requirements).

Whereas, the audit team was provided with a justification as to why this score is not applicable to the project, no supporting evidence has been provided demonstrating such and therefore is not in conformance with the Tool.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team reviewed the amended risk report and confirmed that the justification provided is now consistent with observations on site and the expert knowledge of the audit team. The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NIR 2015.12 dated 11/23/2015

Standard Reference: VCS Non-Permanence Risk Tool v3.2 Section 2.3.2

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The Risk tool states "Community engagement shall be assessed for projects where local populations, including those living within or surrounding the project area (given as within 20 km of the project boundary), are reliant on the project area, such as for essential food, fuel, fodder, medicines or building materials. Where local populations are not reliant on the project area, the risk is not relevant to the project and the risk rating for community engagement (CE) shall be zero. Evidence may include social assessments such as household surveys and participatory rural appraisals."

Given that no evidence has been provided for this criterion, the audit team is unable to assess this and therefore the project is not in conformance with the Tool.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with the community consultation activity log used by project personnel and confirmed it to be consistent with the information gleaned through community interviews while on site. The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.13 dated 11/23/2015

Standard Reference: VCS Non-Permanence Risk Tool v3.2 Section 2.3.3

Document Reference: 2015-08-27 Final PD_RMU Appendix 2

Finding: The Risk Tool States "A governance score (of between -2.5 and 2.5) shall be calculated from the mean of Governance Scores across the six indicators of the World Bank Institute's Worldwide Governance Indicators (WGI), averaged over the most recent five years of available data. Governance scores shall be translated into risk scores as set out in Table 9."

During the site visit the audit team discovered that the risk analysis had been performed using years other than the most recent 5 years and therefore is not in conformance with the Tool.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with an updated risk report and confirmed the political risk score was performed using the most recent 5 years of data. The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.14 dated 11/23/2015

Standard Reference: VCS Standard v3.5 Section 3.1.1

Document Reference: N/A

Finding: The VCS Standard states "Projects shall meet all applicable rules and requirements set out under the VCS Program, including this document. Projects shall be guided by the principles set out in Section 2.4.1."

Additionally, Accuracy under section 2.4.1 is defined as "Reduce bias and uncertainties as far as is practical."

In reviewing the carbon stock estimates for tree biomass, the audit team noted that multiple sampling designs had been employed to estimate carbon stocks, however the statistical estimators employed to estimate the mean and total do not account for the multiple designs and therefore may be introducing bias into the estimates. Given the current statistical methods used to estimate tree biomass, the project is not in conformance with the Standard.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with a comparative analysis of the project sampling using weighted and unweighted estimates of carbon stocks and confirmed that the methods employed for the estimate of aboveground biomass stocks results in a conservative estimate of GHG reductions and thus is in conformance with the VCS rules. . The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.

NCR 2015.15 dated 11/23/2015

Standard Reference: VCS Standard v3.5 Section 3.1.1

Document Reference: N/A

Finding: The VCS Standard states "Projects shall meet all applicable rules and requirements set out under the VCS Program, including this document. Projects shall be guided by the principles set out in Section 2.4.1."

Additionally, Accuracy under section 2.4.1 is defined as "Reduce bias and uncertainties as far as is practical."

In reviewing the carbon stock estimates for peat biomass, the audit team noted that multiple sampling designs had been employed to estimate carbon stocks, however the statistical estimators employed to estimate the mean and total do not account for the multiple designs and therefore may be introducing bias into the estimates. Given the current statistical methods used to estimate peat biomass, the project is not in conformance with the Standard.

Client Response: The client has provided evidence for the closure of this finding outside the cover of this workbook.

Auditor Response: The audit team was provided with a detailed workbook showing the calculation of peat stock uncertainty, the audit team agrees that the Kriging process employed by the project produced the actual sample for the resulting reported stocks and the initial concern of bias in the sampling design is no longer a concern of the audit team. The information provided is sufficient for closing this finding.

Closing Remarks: The client's response adequately addresses the finding.