

YACUMAMA FOREST CARBON PROJECT

VCS VALIDATION REPORT



Document Prepared By: Environmental Services, Inc.

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Summary:

Environmental Services, Inc., (ESI) was contracted by Yacumama LTD S.A. (Project Proponent) on 20 May 2013 to conduct the project validation of the *Yacumama Forest Carbon Project*. The Yacumama Forest Carbon Project follows the framework of Reducing Emissions from Deforestation and Degradation (REDD) and is achieving Greenhouse Gas (GHG) emission reductions as well as tropical forest protection and conservation through payments for ecosystem services.

The *Yacumama Forest Carbon Project* aims to protect and conserve the tropical lowland floodplain forest on Yacumama for long-term carbon sequestration, avoidance of GHG emissions from deforestation and degradation, and conservation of biodiversity. The *Yacumama Forest Carbon Project* is located in the Peruvian Amazon Basin approximately 15 km straight line upstream from the confluence of the Rio Marañon and Rio Ucayali which join to form the Amazon River. The entire Yacumama property encompasses 3,202 hectares of tropical rainforest in three parcels: Yacumama (202 hectares), Yacurana (1425 hectares), and Santuario Privado (1575 hectares), of which the latter two parcels would be made available for conversion to agricultural uses in the absence of carbon financing. The forested area available for carbon accounting is 2,863 hectares, the size of the project area.

The VCS validation objective included an assessment of compliance under the Verified Carbon Standard (VCS) Version 3 (and all associated updates), the selected methodology, and the Project Description, and the likelihood that implementation of the planned GHG project will result in the GHG emission removal enhancements as stated by the Project Proponent (ISO 14064-3:2006). The *Yacumama Forest Carbon Project* was found to be appropriately eligible under Project Scope 14 for “Agriculture, Forestry, and other Land Use” (AFOLU), the project category “Reduction Emission from Deforestation and Degradation” (REDD), and activity type “Avoided Planned Deforestation” (APD). The *Yacumama Forest Carbon Project* achieves Greenhouse Gas (GHG) removals through APD by avoiding conversion of forest to agricultural lands. The project start date was 01 January 2012 and the project crediting period is 30 years (through 31 December 2041).

The scope of the VCS validation included the GHG project implementation; physical infrastructure, activities, technologies and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods covered. The validation scope was defined by the project boundary, the carbon reservoir types, management activities, inventory program, and contract periods.

A summary of all findings is included in Appendix B. There are no restrictions of uncertainty. ESI here confirms all validation activities including objectives, scope and criteria, level of assurance, monitoring and project documentation adherence to VCS Version 3 and all associated updates as documented in

this report are complete. ESI concludes without any qualifications or limiting conditions that the *Yacumama Forest Carbon Project PD* dated 29 December 2016, v1.7 meets the requirements of VCS Version 3.6 and all associated updates. The GHG assertion provided by the Conservation Management Institute at Virginia Tech-College of Natural Resources and Environment and validated by ESI will result in the expected GHG emissions reduction or removal of 729,827 tCO₂e reductions over the initial 10 year reporting period (2012 - 2021). The project will contribute 33% (240,843 tCO₂e) of the gross reductions to the buffer pool, and there will be a total expected emission reduction of 471,488 tCO₂e after accounting for leakage (17,500 tCO₂e).

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1 INTRODUCTION

1.1 Objective

Yacumama LTD S.A (Project Proponent) commissioned Environmental Services, Inc. (ESI) (Validator/Validation Team) to conduct the validation of emissions reductions from planned deforestation for the *Yacumama Forest Carbon Project* registered under the Verified Carbon Standard (VCS). The project proponent hired a technical consultant to develop the project, the Conservation Management Institute at Virginia Tech-College of Natural Resources and Environment, hereafter referred to as the “proponent” in this report and validation audit findings contained in Appendix B.

The project category is Reducing Emissions from Deforestation and Degradation (REDD), specifically “VM0007 REDD Methodology Modules”, and framework for activities related to Avoided Planned Deforestation (APD) within project scope 14: Agriculture, Forest and other Land Use (AFOLU) Requirements for the crediting period beginning on 01 January 2012 and ending on 31 December 2041. The validation objective included an assessment of compliance with the *Verified Carbon Standard (VCS) Version 3* and the likelihood that implementation of the planned Greenhouse Gas (GHG) project will result in the GHG emissions reductions/removal as stated by the Project proponent (ISO 14064-3:2006).

1.2 Scope and Criteria

The scope of a validation generally includes the GHG project and baseline scenarios; physical infrastructure, activities, technologies and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods covered. The geographic validation scope is defined by the project boundary, the carbon reservoir types, management activities, growth and yield models, inventory program, and contract periods. The scope of the *Yacumama Forest Carbon Project* was outlined by the Project Proponent within the Project Description and is re-defined as follows for the GHG emissions reduction/removals project:

Baseline Scenario	Forest conversion to agricultural crops (for example – rice, corn, beans, peanuts, plantains, and bananas). Agent of deforestation – the project proponent/landowner.
Activities/Technologies/Processes	Avoided planned deforestation VCS forest carbon project utilizing VM0007 v1.5
Sources/Sinks/Reservoirs	Aboveground tree biomass Belowground tree biomass (Please see PD Section 2.3 for full details of project boundary)
GHG Type	CO ₂
Time Period (start date, crediting period, verification period)	Start Date: 01 January 2012 Crediting Period: 01 January 2012 to 31

	December 2041 (30 years)
Project Boundary	Peruvian Amazon Basin Project Area: 2,863 hectares Project Property: 3,202 hectares Project activities will specifically focus on the subset Project Area of 2,863 hectares which are available for conversion to agriculture.
GHG credits expected to be eligible for issuance as VCUs for the initial 10-year baseline crediting period	471,488 tCO ₂ e

1.3 Level of Assurance

The level of assurance is used to determine the depth of detail that the validator places in the Validation and Sampling Plan to determine if there are any errors, omissions, or misrepresentations (ISO 14064-3:2006). For VCS validations, ESI will assess the project's description of general principles, eligibility, data sources, inventory plans, documentation, *ex ante* calculations, etc., for conformance with the VCS Program to meet *reasonable assurance*.

1.4 Summary Description of the Project

As stated in the Project Description (PD), the overall goal for the Yacumama Forest Carbon Project ("Project") is to protect and conserve the tropical lowland floodplain forest on Yacumama for long-term carbon sequestration, avoidance of GHG emissions from deforestation and degradation, and conservation of biodiversity. Yacumama is a privately held, former eco-tourist lodge and forestland located in the Amazon Basin of Peru whose current ownership ("project proponent") chose to alter its mission from tourism, supplemented by forest resource exploitation and agriculture, to ecological research, education, and conservation.

A majority of Yacumama would, by economic necessity, be harvested by the project proponent in the absence of funding from carbon financing in order to maintain ownership of the property. The project proponent began implementing the harvest of forest resources based upon an approved 12-month harvest Plan Operativo Anual Para Permiso Forestal De Propiedad Privada (Annual Operating Plan Forest Permit on Private Property). However, before pursuing a more aggressive approach to harvest the timber,

Yacumama management became aware of and investigated pursuing carbon offsets as an alternative income stream. The Yacumama management team ceased timber harvesting operations by 2011 and began to investigate carbon financing as a sustainable long-term solution to their financial situation. Yacumama began contacting various technical experts in late 2011 and sent the Virginia Tech Conservation Management Institute maps, a forest harvest plan, ownership documents, tax receipts, export licenses, photographs etc. to review for the purpose implementing a forest carbon project. The Project will use carbon financing to protect the forest and avoid harvesting of the forest for the valuable timber and conversion to agriculture. The primary methods employed to achieve the desired result is maintaining and increasing a robust presence both at the main facility and implementing regular patrols of the property to prevent incursions and illegal logging.

2 VALIDATION PROCESS

2.1 Method and Criteria

A project specific Validation and Sampling Plan was developed to guide the validation auditing process to ensure efficiency and effectiveness. The purpose of the Validation and Sampling Plan is to present a risk assessment for determining the nature and extent of validation procedures necessary to ensure the risk of auditing error is reduced to a reasonable level.

Unless otherwise indicated, the assessment was performed against the most recent version of the relevant VCS guidance document. According to the ISO14064-3, the validation criteria are the “policy, procedure or requirement used as a reference against which evidence is compared”. In accordance with Section 5.3.1 of the VCS Standard, the criteria for validation and verification was the VCS Version 3.6, including the documents below and the selected methodology (VM0007, v1.5). Reported project results were measured for compliance against the following criteria:

- VCS Standard v3.6
- VCS Program Guide v3.6
- VCS Program Definitions v3.6
- VCS Agriculture, Forestry and Other Land Use (AFOLU) Requirements v3.5
- VCS AFOLU Non-Permanence Risk Tool v3.3
- REDD+ Methodology Framework VM0007: REDD-MF v1.5
- Carbon pool modules:
 - CP-AB “VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools”
 - CP-W “VMD0005 Estimation of carbon stocks in the long-term wood products pool”
- Baseline module:
 - BL-PL “VMD0006 Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation”
- Leakage modules:
 - LK-ASP “VMD0009 Estimation of emissions from activity shifting for avoided planned deforestation”
 - LK-ME “VMD0011 Estimation of emissions from market-effects”,
- Monitoring module:
 - M-MON “VMD0015 Methods for monitoring of greenhouse gas emissions and removals”.
- Miscellaneous Modules:
 - E-BPB “VMD0013 Estimation of greenhouse gas emissions from biomass and peat burning”.
 - X -STR “VMD0016 Methods for stratification of the project area”.
 - X-UNC “VMD0017 Estimation of uncertainty for REDD project activities”.
- Tools:
 - T-SIG, CDM tool “Tool for testing significance of GHG emissions in A/R CDM project activities,”
 - T-ADD, “VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities,”

The validation process closely followed the VCS Standard; VCS Program Guide; Agriculture, Forestry and Other Land Use (AFOLU) Requirements; ISO14064-3 and ISO 14065, and ESI's Management System Manual. For this validation, the sample size for the desktop portion of the validation included a complete review of the PD and supporting documents.

The field validation, performed in conjunction with the first verification, included an onsite review of the project area (please refer to Section 2.4 of this report below for additional information). A risk-based approach was used for the field sampling effort to select key areas for direct measurement, observation, followed by ground assessment of leakage issues and review of project activities. The project areas and selected plots were visited and observed to allow a review of a sufficient sample to meet a reasonable level of assurance, as directed by the professional judgment of the Lead Validator.

During the course of the project validation in fall 2016 the project proponent elected to exclude the CCB components. As a result, a different VCS Project Description template from the earlier review was used and differs from the final Project Description. Section references to the Project Description (CCBA template) in the review prior to the template update persist as seen in Appendix B.

2.2 Document Review

A detailed review of all project documentation was conducted by the validation team to ensure consistency with, and identify any deviation from; VCS Program requirements, the VM0007 v1.5 methodological modules, and the Project Description (PD) document. The process of validation involved five (5) formal rounds of assessment by the validation team and resulted in a PD which was in conformance with VCS Rules. Desk review included an examination of the project details, data and parameters, and quantification of GHG emission reductions and removals. Documents reviewed included data used to set the baseline, carbon rights contracts, economic analysis, maps and aerial images, biomass and carbon calculation spread sheets. Modifications to the Validation and Sampling plan were made based upon the conditions observed in order to detect the processes with highest risk of material discrepancy.

Please see Appendix A for a complete list of documents and files provided by the client and reviewed by ESI during validation, including any items associated with the risk analysis.

2.3 Interviews

The objective of the interview process was to solicit important information from personnel related to the project and relevant to the validation process. The onsite validation site visit, performed in conjunction with the first verification, occurred between 10 September and 20 September 2013. Onsite interviews and informal discussions were conducted with project staff, members and leaders of the local communities. The interviews were performed by the validation team on-site and in the vicinity of the project area (within the project area and in the town of Puerto Miguel).

The project area, as stated above in Section 1.4 of this report, is a privately held, former eco-tourist lodge and forestland located in the Amazon Basin of Peru. As a result, the only nearby

community (Puerto Miguel) is not supported by the Yacumama property. The livelihood or subsistence of the community does not depend directly on the project area, but was formerly partially supported by eco-tourism activity employment from the Yacumama property.

In general, information provided in the PD was supported by interviews with project personnel, community members and other individuals. Several interviewees stated a preference to remain anonymous. A community meeting was held at Puerto Miguel with a large number of community members in attendance and as many interviews as possible were conducted. Additional interviews were also conducted via phone with the project proponent during the validation process. Individuals interviewed included:

Name	Title
Verl Emrick	Technical Lead; Research Scientist – VA Tech Conservation Management Institute
Lawrence Bishop	Project Proponent/Owner
Norman Walters	Site manager
Aaron Teets	Field team lead
Nixon Ahuanari Manihuari	Yacumama employee
Gloria Jacqueline Tello Tores de Rojas	Yacumama employee
Hugo Macauyama Pacaya	Yacumama employee
Perey Peña	Yacumama employee
Magno Macuyama Olimar	Yacumama employee
Juan Yaicate Macayo	Yacumama employee
Garcia Casique	Puerto Miguel Community Member
Geiner Paredos Pacuya	Puerto Miguel Community Member
Gloria Pizango Pacaya	Puerto Miguel Community Member
Arcadio Bardales Ahuanar	Puerto Miguel Community Member
Leonila Manihuari Tamani	Puerto Miguel Community Member
Kelly Melendez Ruiz	Puerto Miguel Community Member

2.4 Site Inspections

The validation site inspection followed the prepared Validation and Sampling Plan process and was conducted on 10-20 September 2013. A ground inspection of the project area was conducted during the site visit and members of the validation team visited several targeted areas within and surrounding the project area. The Puerto Miguel community was visited along the river near the project area to gain a sense of the risks associated with the proposed benefits from the project.

During the field review of the project, the following aspects of the project were assessed:

General

- Project boundaries
- Pre-project conditions, as evidenced by condition of adjacent or nearby non-project areas, by evidence of land-clearing activities, and related
- Baseline scenario and supporting assumptions and evidence
- Eligibility criteria and supporting assumptions and evidence
- Current project conditions, including reported tree species, expected current density, reported growth characteristics (diameter, or similar), and reported biomass volume (above- and/or below-ground)
- An evaluation of project boundaries using GPS and project proponent's KML or GPX files provided.
- An assessment of the performance of the project activities and operations through visual inspection and through interviews with the project proponent's staff.
- Re-measurement of selected 5 forest inventory sampling plots, which were part of the carbon stock inventory.
- ESI verified that operational, data collection procedures and monitoring methods were implemented in accordance with the SOP's as they are written.
- Assessment of the information flows for collection, collation and reporting of the baseline monitoring parameters.
- Confirmation that the quality control and quality assurance procedures are in place.
- An assessment of additionality in the project area through visual assessment and interviews with project proponents, community members and staff.
- Review of the Non Permanence Risk Report and all related elements.

Leakage

- Visit the leakage area, and confirmation of data collection methods in conformance with the stated SOP's for leakage monitoring
- Review and observation of high risk areas for leakage

- Review of leakage area monitoring, selection of leakage areas, justification for areas selected (on site visit)
- Activities for minimizing deforestation- what is planned, what is in process, what is being implemented

Management/Community

- Meet and interview project management team
- Review dispute and resolution process reporting
- Governance structure review and interviews with officials involved
- Interviews with community members, representatives of local administrative municipality, and other stakeholders regarding knowledge of the project, expectations and concerns (see interview list from sampling plan)
- Review Public Meeting notes and summaries
- Community training activities and associated planned activities

During the field visit, re-measurement was performed on 5 forest inventory sampling plots. The plots selected were: plots 1, 3, 11, 24, and 25. All plots in the inventory were from the same stratum. Sampling was designed to ensure a representative cross-section of the properties was assessed and that sampling took place in the areas of highest risk.

Inventory plots were sampled in the field using the same inventory methods as submitted to the validator with the project materials. The intention was to have the field crews who conducted the inventories originally resample the plots so the validation team could confirm Standard Operating Procedures (SOPs) were followed. The results of the plot data collected by ESI were compared to the project proponent's reported carbon per hectare estimate. Reasonable assurance was determined from the examination of means for those plots re-measured.

2.5 Resolution of Findings

The process of validation involved five (5) formal rounds of evaluation by the validation team and resulted in a PD which is in conformance to VCS rules. Findings related to corrective action, clarification requests or other findings were resolved during communication between the validation team and the project proponent. More specifically, where noted by the validation team, the project proponent implemented corrective actions by amending and providing written clarification responses. Types of findings were characterized in the following manner:

Non-Conformance Reports (NCRs) were issued as a response to material discrepancies in a part of the PD/calculations and generally fell into one of the following categories:

- Non-conformance to VCS guiding documents listed in Section 2.1
- Internal consistency among sections was lacking
- Mathematical formulae in sections were incorrect

- Additional information was required by the validation team in order to confirm reasonable assurance for compliance

Clarifications (CL) were issued when language within a section needed extra clarification to avoid ambiguity.

Opportunities for Improvement (OFI) were issued to the project proponents when an opportunity for improvement was identified.

During the course of the validation, 214 NCRs and CLs were identified. All validation NCRs/CLs were satisfactorily addressed. The NCRs/CLs provided necessary clarity to ensure the project was in compliance with the requirements of the VCS for GHG projects and the selected methodology. Detailed summaries of each finding, including the issue raised, responses and final conclusions are provided in Appendix B.

2.5.1 Forward Action Requests

A single forward action request was raised during the validation. During the validation site visit a community member from the Puerto Miguel area produced a paper map that appeared to show a boundary dispute or discrepancy between Puerto Miguel and the Project Area. As reported by the project when they followed up with the community member and individual, the community member declined to accompany a Yacumama project representative to the COFOPRI office in Iquitos or to provide a copy of the map. As a result of this interaction the validators are flagging this as a potential dispute over access/use rights under the “Land Tenure” requirement of the AFOLU Non-Permanence Risk Tool to be monitored in the future.

If monitoring and reporting for the first monitoring period and subsequent monitoring periods require consideration or adjustments, any additional forward action requests will be issued at that time.

3 VALIDATION FINDINGS

3.1 Project Details

The validation team confirmed that the PD provides a detailed description that conforms to the VCS Standard Section 3 and AFOLU Requirements and is accurate and complete. The validation team believes that the PD provides an inclusive and thorough understanding of the nature of the project.

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

The proposed project activity consists of protection and harvest avoidance of 2,863 hectares of Amazon basin tropical rainforest. The areas are described in the PD as “Amazon basin mixed-water flooded forest and riparian vegetation ecological system as defined by Josse et al. (2007¹).”

As stated in the PD, the project activities consist of “maintaining and increasing a robust presence both at the main facility and implementing regular patrols of the property to prevent incursions and illegal logging. In addition, an integrated monitoring program that addresses both carbon and biodiversity will be implemented to insure permanence for the climate and biodiversity benefits. Furthermore, the need to staff the facility, patrol the forest and river and monitor the forest biomass and biodiversity will require hiring and training of additional staff from the local community of Puerto Miguel.” The validation team was able to confirm during the site visit that the information and considerations reported in the PD are complete and accurate.

The project exists under sectoral scope 14 (AFOLU). As described in Section 4.2 of the VCS AFOLU Requirements, the project is categorized as the VCS AFOLU category APD: Avoided Planned Deforestation.

Thus, the validation team concludes that project is eligible and it has been classified in accordance with the VCS requirements.

3.1.2 Project proponent

According to the PD the project proponent is:

- Lawrence Bishop: Responsible for the project finance and owner of the carbon credits

Other entities involved in the project identified:

- Norman Walters: Site manager for the Yacumama property
- Virginia Tech Conservation Management Institute: Verl Emrick – Technical Lead
- Virginia Tech Conservation Management Institute: Aaron Teets – Field Team Lead

The validation team confirmed that the PD Section 1.4 includes full contact details of these entities, and that the description provided is in accordance with VCS requirements.

¹ Josse, C., G. Navarro, F. Encarnación, A. Tovar, P. Comer, W. Ferreira, F. Rodríguez, J. Saito, J. Sanjurjo, J. Dyson, E. Rubin de Celis, R. Zárate, J. Chang, M. Ahuite, C. Vargas, F. Paredes, W. Castro, J. Maco y F. Reátegui. 2007. Ecological Systems of the Amazon Basin of Peru and Bolivia. Classification and Mapping. NatureServe. Arlington, Virginia, USA

3.1.3 Project start date

The start date for the project is 01 January 2012, which corresponds “to the date on which a series of decisions were made by the Yacumama management team during 2010 and 2011 (personal communication Lawrence Bishop December 2011) to cease pursuing timber harvesting operations and pursue carbon financing as a sustainable long-term solution to their financial situation” (PD Section 1.5). As part of the desktop review, the validation team reviewed the forest harvest plan, ownership documents, etc. submitted to the Virginia Tech Conservation Management Institute for the purpose of developing the forest carbon project. The documentation and early January 2012 dated email communication evidence were reviewed by the validation team which initiate 01 January 2012 as evidence of the commencement of the project.

The change in management at Yacumama is directly linked to the baseline carbon stocks by which the project will be assessed in to the future. Therefore, the 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 in accordance with section 3.2.1 of The AFOLU Requirements.

3.1.4 Project crediting period

The validation team reviewed the PD and confirmed the project crediting period for this Avoided Planned Deforestation project is 30 years, beginning on 01 January 2012 and ending on 31 December 2041. The project conforms with Section 3.8.1 of the VCS Standard, falling between the 20 year minimum and 100 year maximum for AFOLU projects.

3.1.5 Project scale and estimated GHG emission reductions or removals

As stated in Section 1.7 of the PD, the project is not 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 729,827 tCO₂e over the first 10-year, baseline, project crediting period.

3.1.6 Project location

The project geographic location corresponds to private property parcels within the Loreto District of Peru, roughly 90 km south of the city of Iquitos. The validation team reviewed Section 1.2 of the PD and confirmed it provides an adequate description of the project location, in compliance with section 3.4.1 of the AFOLU requirements. The validation team was provided with a KML file and shapefiles of the project area boundaries, and was able to confirm the accuracy of the polygon delineation with reasonable assurance while on-site.

The project proponent has demonstrated control over the entire project area as required by Section 3.4.2 of the AFOLU requirements: VCS Version 3. The assessment of compliance can be found in Section 3.1.9 of this validation report.

3.1.7 Conditions prior to project initiation

Section 1.10 of the PD contains a comprehensive description of the conditions prior to project initiation. Although some project activities had been implemented prior to the validation and verification site visit, the validation team visited locations across the project area and confirmed the description in the PD to be accurate. A further description of the validation and verification 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 validation team interviewed project personnel, who provided access to what were, in their opinion, all of the laws and statutes and other regulatory frameworks applicable to the project activities. The PD for the *Yacumama Forest Carbon Project* is appropriately accompanied by documentary evidence establishing rights of use per the VCS Standard Section 3.11.1 and VCS Program Definitions. The validation team confirmed that the project proponent has maintained compliance with relevant laws, statutes, and regulatory frameworks. The *Yacumama Forest Carbon Project* was confirmed to abide by Peruvian national laws including the Peruvian Constitution. Peruvian labour laws were also confirmed to have been appropriately met.

The project proponent owns the land on which the Project is located fee simple per VCS Standard Section 3.11.1. The project follows all applicable environmental laws including the General Environmental Law (2005) which sets national environmental policy and management and ties together all previous legislation. The property boundary has been properly georeferenced and provided to the validation team. The validation team confirmed that no other emissions trading programs, GHG programs, or environmental credits are applicable for *Yacumama Forest Carbon Project* per VCS Standard Sections 3.11.3 - 3.11.9.

The validation team concludes that the description of the *Yacumama Forest Carbon Project* within Section 1 of the PD is accurate, complete and describes the true nature of the project.

3.2 Application of Methodology

3.2.1 Title and Reference

The *Yacumama Forest Carbon Project* was properly developed under the VCS REDD Methodology, entitled, “VM0007: REDD Methodology Modules (REDD-MF)” v1.5. The methodology applied, and associated tools were valid at the time of validation per VCS Rules. Modules and Tools applicable to the *Yacumama Forest Carbon Project* and properly invoked are listed below.

CP-AB “VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools”

BL-PL “VMD0006 Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation”

LK-ASP “VMD0009 Estimation of emissions from activity shifting for avoided planned deforestation”

LK-ME “VMD0011 Estimation of emissions from market-effects”. Mandatory where the process of deforestation involves timber harvesting for commercial markets

M-MON “VMD0015 Methods for monitoring of greenhouse gas emissions and removals”

E-BPB “VMD0013 Estimation of greenhouse gas emissions from biomass and peat burning”

X -STR “VMD0016 Methods for stratification of the project area”

X-UNC “VMD0017 Estimation of uncertainty for REDD project activities”

T-SIG, CDM tool “Tool for testing significance of GHG emissions in A/R CDM project activities,

T-ADD, “VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities,

3.2.2 Applicability

Compliance under the VM0007 modular applied methodology was evaluated for each applicability condition and the steps taken to assess are provided below.

Table. Applicability condition compliance

Applicability Conditions	Validation Team Findings/Compliance Evaluation
REDD-MF, REDD Methodology Framework Version 1.5	
Land in the project area has been qualified as forest at least 10 years before the project start date.	The project area was confirmed forest cover in the 10 years prior to project start date using a spatial dataset provided by project proponents to the validation team.
The project area can include forested wetlands (such as bottomland forests, floodplain forests, mangrove forests) as long as they do not grow on peat. Peat shall be defined as organic soils with at least 65% organic matter and a minimum thickness of 50 cm ³ . If the project area includes a forested wetlands growing on peat (e.g. peat swamp forests), this methodology is not applicable.	Project proponents established that no organic or peatland type soils exist in the project area. Validation team did not find that any areas in the project area can satisfy the definition of wetlands as defined by VCS Program Definitions v3.5 and confirmed during the site visit. Further, the soil organic carbon (SOC) pool was conservatively excluded and therefore the project is not subject to AFOLU WRC requirements.
Project proponents must be able to show control over the project area and ownership of carbon rights for the project area at the time of validation.	Validation team concluded that project proponents adequately demonstrate control over the project area per VCS Standard Section 3.11.1. The deeds clarify that on two separate periods the main parcels of the project area transferred ownership to the proponent. The maps

	provided with the deeds cover the appropriate number of hectares as reported by the deeds (2,999 ha total). Please see item #194 of Appendix B for further detail.
Baseline deforestation and baseline forest degradation in the project area fall within one or more of the following categories: Unplanned deforestation (VCS category AUDD); Planned deforestation (VCS category APD); Degradation through extraction of wood for fuel (fuelwood and charcoal production) (VCS category AUDD).	Project proponents asserted that the Baseline deforestation in the project area falls within the planned deforestation category, as the agent of deforestation is the project proponent.
Baselines shall be renewed every 10 years from the project start date.	Validation Team confirms that the project proponents will renew the baseline in year 2021.
All land areas registered under the CDM or under any other carbon trading scheme (both voluntary and compliance-orientated) must be transparently reported and excluded from the project area. The exclusion of land in the project area from any other carbon trading scheme shall be monitored over time and reported in the monitoring reports.	The Validation Team confirmed that no other emissions trading programs, GHG programs, or environmental credits are applicable for the <i>Yacumama Forest Carbon Project</i> per VCS Standard Sections 3.11.3 - 3.11.9.
If land is not being converted to an alternative use but will be allowed to naturally regrow (i.e. temporarily unstocked), this framework shall not be used.	The Validation Team confirms the project proponent's assertion that forest clearing in the baseline is followed by agricultural uses, thus preventing forest regrowth.
Leakage avoidance activities shall not include: Agricultural lands that are flooded to increase production (e.g. paddy rice); Intensifying livestock production through use of "feed-lots" and/or manure lagoons.	The Validation Team confirms the project proponent's assertion that leakage avoidance activities do not include flooding agricultural land, creating feed-lots, or manure lagoons.
BL-PL, "VMD0006 Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation", version 1.2	
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.	The validation team confirms the project proponent's assertion that baseline agents of deforestation have permission to clear the project property. The Project proponent and property owner has clear title to Project property and legal permission and an approved 2009 plan to harvest in the project area from the Government of Peru. The harvest plan only signifies permission to harvest one of the two project area parcels, "Yacurana I". However, the harvest plan has also been extended to the adjacent parcel in the project area "Santuario Privado". This action is a methodology exemption and

	ESI decided to allow this "exemption" to occur for the following reasons; the threat to deforestation is well substantiated in the region (e.g. common practice), the project's harvest plan represents a scenario that is entirely feasible, and justification was provided to demonstrate the appropriateness. By applying the harvest plan to both parcels, the <i>Yacumama Forest Carbon Project's</i> planned deforestation is in compliance with all Peruvian forestry laws.
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.	Project proponents have asserted that no fuelwood collection occurs as no residents live in the project area or close enough for efficient fuelwood collection. This was confirmed through the validation site visit where potential entry points were visited from the river.
M-MON, "VMD0015 Methods for monitoring of greenhouse gas emissions and removals,"	
Emissions from logging may be omitted if it can be demonstrated the emissions are de minimis using T-SIG.	Since no commercial harvest occurs in the project case no logging emissions are emitted and this tool is not applicable.
If emissions from logging are not omitted as de minimis, logging may only take place within forest management areas that possess and maintain a Forest Stewardship Council (FSC) certificate for the years when the selective logging occurs.	Not applicable
Logging operations may only conduct selective logging that maintains a land cover that meets the definition of forest within the project boundary.	Not applicable
All trees cut for timber extraction during logging operations must have a DBH greater than 30 cm.	Not applicable
During logging operations, only the bole/log of the felled tree may be removed. The top/crown of the tree must remain within the forested area.	Not applicable
The logging practices cannot include the piling and/or burning of logging slash	Not applicable

The validation team found that the *Yacumama Forest Carbon Project* appropriately selected and applied tools and modules for the Avoided Deforestation VCS REDD Methodology. The eligible activity "Avoided Planned Deforestation and Degradation" (APD) was selected because forestland in the baseline is expected to be converted to non-forest with legal permission.

Modules and tools were assessed individually for project compliance and all criteria evaluated systematically in a checklist format.

Table. Methodology module and tool appropriateness

Module/Tool	Validation Team Findings
BL-PL, "VMD0006 Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation"	Validation team concludes that this mandatory module is appropriate because it allows for estimates of carbon stock changes and GHG emissions for all projects in the planned deforestation category.
CP-AB, "VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools"	Validation team concludes that this mandatory module was appropriately selected because it estimates ex-ante and ex-post carbon stock change in above- and belowground tree and non-tree woody biomass for baseline and project cases.
CP-W "VMD0005 Estimation of carbon stocks in the long-term wood products pool"	Validation team concludes that this mandatory module was appropriately selected because it allows for <i>ex ante</i> estimation of carbon stocks in the long-term wood products pool in the baseline case. Carbon stocks are those stocks entering the wood products pool at the time of deforestation.
E-BPB, "VMD0013, Estimation of greenhouse gas emissions from biomass burning"	Validation team concludes that this module was appropriately selected because it estimates GHG emissions from biomass burning. For this project, CH ₄ and N ₂ O emissions are conservatively excluded in the baseline, but are included in the with-project case where fires occur.
LK-ASP "VMD0009 Estimation of emissions from activity shifting for avoided planned deforestation"	Validation team concludes that this mandatory module was appropriately selected for estimating emissions related to displacement of planned deforestation (or are legally authorized and documented to be converted to non-forest land).
LK-ME "VMD0011 Estimation of emissions from market-effects"	Validation team concludes that this mandatory module was appropriately selected for estimating emissions from market-effects as planned deforestation in the baseline scenario involves timber harvesting for commercial markets.
M-MON, "VMD0015 Methods for monitoring of greenhouse gas emissions and removals"	Validation team concludes that this mandatory module was appropriately selected because it provides methods for monitoring ex post emissions as a result of project implementation.
REDD-MF, "REDD Methodology Module: REDD Methodology Framework"	Validation team concludes that this mandatory module was appropriately selected because it provides the generic functionality of a modular REDD methodology.
T-ADD, "VT0001 Tool for the Demonstration and Assessment of	Validation team concludes that this mandatory tool was appropriately selected because it accounts for additionality in VCS AFOLU projects.

Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities"	
T-BAR, "Tool for AFOLU non-permanence risk analysis and buffer determination"	Validation team concludes that this mandatory tool was appropriately selected because it allows for a buffer withholding based on project overall risk classification.
T-SIG, CDM tool "Tool for testing significance of GHG emissions in A/R CDM project activities"	This tool is invoked from M-MON and other modules where emissions from certain pools are omitted if demonstrated as de minimis. For this project, the wood products pool (CP-W) was found to be de minimis using the T-SIG tool.
X –STR, "VMD0016 Methods for stratification of the project area"	Validation team concludes that this mandatory module was appropriately selected to improve accuracy and precision estimates of carbon stocks by examination of whether stratification is necessary in the project area.
X-UNC, "VMD0017 Estimation of uncertainty for REDD project activities"	Validation team concludes that this mandatory module was appropriately selected to estimate uncertainty in the estimation of emissions for REDD project activities.

3.2.3 Project Boundary

The VCS Standard requires that projects describe the project boundary and identify and select appropriate carbon pools; i.e. sources, sinks, and reservoirs relevant to the baseline. Procedures to quantify emissions are included for each of these pools and sources by demonstrating significance in using the appropriate VCS modules and tools. The project addresses the establishment of spatial, temporal, and gaseous boundaries to meet VCS AFOLU Requirements for the REDD project category under the APD project scenario. The Validation Team found that mandatory and optional pools in this project are appropriate for planned conversion of forest.

The spatial boundaries for the *Yacumama Forest Carbon Project* were assessed for conformance to VCS rules and found to be sufficiently detailed, appropriate, and adequate as well as in compliance with the REDD-MF methodological module. Similarly, temporal boundaries were reviewed within the context of VCS rules and found to be detailed and correct.

Significant pools, sinks, and reservoirs accounted for are in compliance with AFOLU Requirements section 4.3 and are appropriately justified for the project. The following tables present a brief review of all considered carbon pools, and the validation assessment findings:

Source	Gas	Project Justification	Validation Findings
Biomass burning	CO ₂	CO ₂ is a major source that is already considered for carbon stock changes and is therefore not included. CH ₄ and N ₂ O emissions are conservatively excluded in the baseline, they are included in the with-project case where fires occur.	AFOLU Requirements section 4.3.3.2 allows for REDD project emissions due to burning of herbaceous vegetation and section 4.3.5 allows for distinguishing CH ₄ and N ₂ O emissions due to biomass burning. CO ₂ source is appropriately excluded because it has already been accounted for.
	CH ₄		
	N ₂ O		
Fossil Fuel Combustion	CO ₂	Emissions from fossil fuel combustion in the baseline and project case are minimal and therefore not included for all gases. As per methodology module E-FCC "Fossil fuel combustion in all situations is an optional emission source."	Validation team concludes that fossil fuel combustion is minimal in all scenarios as this is an AUDD project and per AFOLU Requirements section 4.3.3.3.
	CH ₄		
	N ₂ O		
Use of fertilizers	CO ₂	All gases are not included. No fertilizer use is contemplated in the project case as part of leakage mitigation or any other activity	This is consistent with AFOLU Requirements section 4.3.3 where fertilizer use is not included as part of any anticipated project activities.
	CH ₄		
	N ₂ O		

Pool	Included	Project Justification	Validation Findings
Above-ground	Yes	Mandatory to include. Tree biomass only is included, which is the most significant pool. Non-tree woody biomass (e.g. shrubs) is less in the baseline (pasture and cropland) than the project case (forest) and is	Validation team concludes this is consistent with Table 2 of AFOLU Requirements section 4.3.1. This pool is appropriately required because of the likelihood of residual biomass cleared by

		conservatively excluded.	agents of deforestation. The module CP-AB "VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools" was appropriately selected to account for above-ground biomass.
Below-ground	Yes	Included and treated together with above-ground biomass for completeness to include whole tree (above-ground and below-ground) biomass.	Validation team concludes this is consistent with Table 2 of AFOLU Requirements section 4.3.1. This pool is appropriately required when decay from below-ground biomass is considered. The module CP-AB "VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools" was appropriately selected to account for below-ground biomass.
Dead wood	No	This pool was not included as it does not represent a significant component of forest biomass for the project area.	Validation team concludes this is consistent with Table 2 of AFOLU Requirements section 4.3.1. This pool is not required as project proponents have demonstrated that no dead wood is collected by local communities per Applicability Conditions in Module BL-PL.
Harvested Wood Products	No	Though this pool should be included as commercial harvesting for wood products takes place in the baseline as part of the forest conversion process.	Validation team agrees with project proponents that this pool does not need to be included because it was rendered de minimis.
Litter	No	Conservatively omitted, as allowed by methodology.	Validation team accepts that this pool is to be excluded per AFOLU Requirements Section 4.3.

Soil Organic Carbon	No	Conservatively omitted, as allowed by methodology.	Validation team agrees with project proponents that this pool is to be excluded per AFOLU Requirements Section 4.3.
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3.2.4 Baseline Scenario

The procedures for determination of the baseline scenario in the *Yacumama Forest Carbon Project* were applied using the VCS T-ADD tool, “VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities”. The project proponent properly selected applicable sub-steps 1a and 1b, “Identify credible alternative land use scenarios to the proposed VCS AFOLU project activity” and “Consistency of credible land use scenarios with enforced mandatory applicable laws and regulations”, respectively. Other sub-steps contained within the T-ADD tool deemed not applicable by project proponents and confirmed by the validation team. Project proponents correctly identified four alternative land use scenarios from the outcome of sub-step 1a:

1. **“Alternative A”**, harvest of forest and conversion to agriculture is legal under Peruvian law
2. **“Alternative B”**, Purchase of lodge infrastructure and property
3. **“Alternative C”**, Purchase of the entire property as a private protected area
4. **“Alternatives D and E”** No change in ownership and essentially no change in current land management

The assumption by project proponents that forest conservation of the project area is unlikely is substantiated by enactment of a harvest plan to convert the project area to agriculture. Other planned deforestation pressures exist from other large landowners in the region who have already deforested large portions of their property for profitable agriculture related production. Because Yacumama is private property, all alternatives presented in **1a** are legal under Peruvian law. Project proponents correctly establish the outcome of sub-step 1b as the four land use scenarios are in compliance with applicable Peruvian laws and regulatory requirements.

Overall, the procedures for identifying the baseline scenario have been correctly followed and the identified scenario is reasonable. The validation team concludes that procedures for determining the baseline are appropriate, adequate, and in compliance with VCS rules and AFOLU Requirements for REDD project activities applicable to this project.

3.2.5 Additionality

The procedures for determination of additionality in the *Yacumama Forest Carbon Project* were applied using the VCS T-ADD tool, “VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities”.

Project proponents performed Simple Cost and Common Practices analyses for demonstration of no financial benefit and credibility check, respectively. The validation team confirmed that no other revenues are produced for this VCS AFOLU project and therefore the simple cost analysis was appropriately selected. Due to the lack of financial benefits other than the VCS related income, the project proponent correctly proceeded to perform a common practice analysis.

The common practice analysis indicated that other lands managed as private protected areas are able to support the annual costs of management through outside means such as non-governmental organization (NGO) supported and endorsed ecotourism, direct support by NGO's, or private funds. Project proponents provided additional detail to the validation team to demonstrate that there is currently a lack of programs similar to those offered by the project. The evidence provided by project proponents and accurate application of the VCS T-ADD tool is deemed sufficient by the Validation Team for the project to be additional.

3.2.6 Quantification of GHG Emission Reductions and Removals

Procedures for quantifying the baseline emissions from planned deforestation were conducted in accordance with the BL-PL module. The validation team performed an intensive quantification review of all input data, parameters, formulas, calculations, conversions, statistics and resulting uncertainties and output data to ensure consistency with the VCS documentation, methodology modules, and the PD. Further, the validation team reproduced calculations for selected samples to ensure accuracy of the results. Conversion factors, formulas, and calculations were provided by project proponents in spreadsheet format to ensure all formulas were accessible for review. Members of the validation team recalculated subsets of the analysis to confirm correctness. Project proponents also provided a step-by-step overview of select calculations to ensure the validation team understood the approach and could confirm its consistency with the methodologies and PD. Where applicable, references for analysis methods or default values were checked against relevant scientific literature for best practice.

Inventory sampling

Sample design for the forest inventory was found to be in good forest measurement practice through data collection during the site visit and interviews with personnel on-site. Further, the accuracy and conservativeness of the inventory approach is addressed through the overall validation review. Data collected by the Validation Team was in sufficient agreement with project inventory data to justify reasonable assurance. The validation team concludes that review of all inventory data, inventory sampling procedures, and analysis methods indicates that the sampling approach is reasonably conservative and acceptable.

Baseline emissions

The *Yacumama Forest Carbon Project* has appropriately included baseline emissions calculations in the PD per the VCS Standard Section 3.18.2. Data and parameters selected for spatial and temporal boundaries were found to be properly selected and calculated accurately from verifiable sources. The Validation Team checked all processes for estimation of the rate of deforestation and confirmed the accuracy of remote sensing analysis.

The proponent proposed an alternative/conservative D%planned,i,t value or deforestation rate as the harvest plan deforestation rate would not result in clearing of the project area within the 10 year baseline period. ESI believes that the intent of BL-PL under multiple criteria is for baseline deforestation to be completed within 10 years. In addition, 10 years after validation the baseline is required to be re-visited. The VM0007 modular methodology and AFOLU Requirements are not specific therefore the proponent appropriately set the D%planned,i,t value or deforestation rate to 10% or 286.3 ha for annual area of baseline deforestation. Considering other criteria are readily met and unclear language in the methodology, this is permissible.

Project emissions

The *Yacumama Forest Carbon Project* has appropriately included project emissions calculations in the PD per the VCS Standard Section 3.18.2. The ex-ante project emissions were confirmed for adherence to module M-MON and checked as accurate. Data and parameters for calculating ex-ante emissions under the project scenario and with project case were individually confirmed to be correct for project area boundaries.

Leakage

Market leakage emissions from planned deforestation displacement were appropriately determined from the module LK-ME. Market leakage is equal to the sum of market effects leakage through decreased timber harvest and decreased harvest for fuelwood/charcoal production. Since there is no fuelwood/charcoal collection by the baseline agent of deforestation market leakage is limited to leakage through decreased timber harvest. Parameters and values used to calculate the annual GHG emissions for market leakage were individually checked for correctness and found to be accurate.

Net GHG emissions reductions or removals

Overall net GHG emissions reductions or removals were carefully scrutinized for correctness according to module REDD-MF. The estimate of GHG credits eligible for issuance as VCU's accounted for the proper parameters and resulted in a correct estimate of total emissions reductions.

Uncertainty

Uncertainty associated with the calculations of emissions was evaluated appropriately using the X-UNC module under VCS methodology VM0007 v1.5. Parameters factored into uncertainty calculations were assessed and the final buffer allocation was found to be correctly set at 33%. For example, the parameter for uncertainty in the baseline rate is set at zero because the long term average baseline rate of deforestation is utilized according to module BL-PL.

The project description contained sufficient information for the validation team to assess the accuracy of quantified GHG emission reductions and removals. Relevant assumptions made by project proponents are listed and include the appropriate references and sources. The Validation Team deemed data and parameters to be reasonable within the context of the project (see below). As part of the validation process, the Validation Team was able to successfully reproduce

all GHG emission calculations and conclude that information supplied in the project description is sufficiently transparent.

Data and Parameters available at validation:

Data Unit / Parameter	Validation Findings
$\Delta C_{BSL,PA,planned}$	This data/parameter was appropriately included because it pertains to net CO ₂ emissions in the baseline from planned deforestation in the project area. This value is relevant at the time of validation because it sets baseline carbon stock changes at the start of the baseline period.
CF	This data/parameter was appropriately included because it pertains to the carbon fraction of biomass. This default value was appropriately chosen per 2006 IPCC guidelines.
$f_j(X,Y)$	This data/parameter was appropriately included because it pertains to the allometric equation for species j linking measured tree variable(s) to aboveground biomass of living trees. The Pearson et al. 2005 ² equation was properly chosen from the validated methodology for the calculation of baseline and project emissions.
R	This data/parameter was appropriately included because it pertains to the root to shoot ratio for predicting root biomass density as a function of aboveground biomass density. The choice of the IPCC GPG-LULCF value was considered adequate by the validation team as it is a widely referenced method and suitable for the calculation of baseline and project emissions.
$AA_{planned,i,t}$	This data/parameter was appropriately included because it computes annual area of baseline planned deforestation for stratum i at time t . The project proponent has set this parameter to 286.3 hectares per year or 10% of the project area (2,863 hectares) based on a common practice analysis.
$A_{planned,i}$	This data/parameter was appropriately included because it pertains to total area of planned deforestation over the baseline period for stratum i . The project property value was correctly applied.
LIF	This data/parameter was appropriately included because it pertains to the Logging infrastructure factor. Project proponents correctly used the default value from within module LK-ME.

² Pearson, T., Walker, S. and Brown, S. 2005. Sourcebook for Land Use, Land-Use Change and Forestry Projects. Winrock International and the World Bank Biocarbon Fund. 57pp

LFME	This data/parameter was appropriately included because it pertains to the leakage factor for market-effects calculations. PMLFT was considered equal to PMPi and a value of LFME = 0.4 was applied. Please see findings under parameters PMLFT and PMPi for greater detail.
SLFty	This data/parameter was appropriately included because it pertains to the fraction of wood products that will be emitted to the atmosphere within 5 years of timber harvest for sawn wood. Project proponent correctly used the default value from within module CP-W.
OFts	This data/parameter was appropriately included because it pertains to the fraction of wood products that will be emitted to the atmosphere between 5 and 100 years of timber harvest for sawn wood. Project proponents correctly used the default value from within module CP-W.
WWs	This data/parameter was appropriately included because it pertains to the fraction immediately emitted through mill inefficiency for sawn wood. Project proponents correctly used the default value from within module CP-W.
VBSL,EX,i,t	This data/parameter was appropriately included because it pertains to the volume of timber projected to be extracted from within the project boundary during the baseline in stratum i at time t. These values were found to be correctly calculated using forest inventory data (VBSL) specific to the harvest plan.
Dmn	This data/parameter was appropriately included because it pertains to the mean wood density of commercially harvested species. Determination of Dmn used project specific data on commercial log volume and estimates of wood density from the harvest plan which falls under the appropriate sources of data to meet requirements.
PMLFT	This data/parameter was appropriately included because it pertains to the mean merchantable biomass as a proportion of total aboveground tree biomass for each forest type. The project assumes that "Mean merchantable biomass as a proportion of total aboveground tree biomass for each forest type" is generally equal to "Merchantable biomass as a proportion of total aboveground tree biomass for stratum i within the project boundaries." PMFLT and PMPi were demonstrated to be similar from the harvest plan.
EREDD_BSLSS, i, pool #	This data/parameter was appropriately included because it accounts for carbon stock or GHG sources (e.g. trees, dead wood, soil organic carbon, emission from fertilizer addition, emission from

	biomass burning etc.) in the baseline case.
U REDD BSLSS, i , pool #	This data/parameter was appropriately included because it accounts for percentage uncertainty (expressed as 95% confidence interval as a percentage of the mean where appropriate) for carbon stocks and greenhouse gas sources in the baseline case (1,2... n represent different carbon pools and/or GHG sources).
$EBSL_{SS,i}$	This data/parameter was appropriately included because it calculates the sum of combined carbon stocks and GHG sources in stratum i multiplied by the area of stratum i (A_i) in the baseline case.
$UBSL_{SS,i}$	This data/parameter was appropriately included because it determines the percentage uncertainty in the combined carbon stocks and greenhouse gas sources in stratum i in the baseline case.

In summary, the project proponent has correctly calculated all GHG emissions reductions and removals for baseline emissions, project emissions, leakage and net GHG emission reductions and removals.

3.2.7 Methodology Deviations

For this validation no formal methodology deviations were applied.

3.2.8 Monitoring Plan

Components of the monitoring plan were evaluated by the Validation Team for suitability and eligibility. Findings for individual data and parameters are presented:

Data and Parameters monitored:

Data Unit / Parameter	Validation Findings
$\Delta C_{P,Def,i,t}$	This data/parameter was appropriately included because it pertains to net carbon stock change as a result of deforestation in the project case in the project area in stratum i at time t . Project proponent does not expect deforestation to occur in the with-project scenario due to implementation of the project activities. As a result, project proponents calculated net carbon stock change ex-ante as 0. The validation team accepts this approach as the estimate is ex-ante and does not affect the baseline or ex-post emission estimates. This parameter will be evaluated again at monitoring for compliance to the requirement.
$\Delta C_{P,DistPA,i,t}$	This data/parameter was appropriately included because it pertains to net carbon stock change as a result of natural

	disturbance in the project case in the project area in stratum i at time t . Ex ante $\Delta CP, DistPA, i, t = 0$ (value applied was 0).
$A_{DefPA, u, i, t}$	This data/parameter was appropriately included because it pertains to the area of recorded deforestation in the project area stratum i converted to land use u at time t . This value was found to be not relevant at time of validation and will be monitored for each verification event.
$A_{DefLK, i, t}$	This data/parameter was appropriately included because it pertains to the total area of deforestation by the baseline agent of the planned deforestation in stratum I at time, t . This is a validation review and this value will be updated for each monitoring event.
$A_{DistPA, q, i, t}$	This data/parameter was appropriately included because it pertains to area impacted by natural disturbance in post-natural disturbance stratum q in stratum i , at time t . This value was found to be not relevant at time of validation and will be monitored for each verification event.
$C_{BSL, i}$	This data/parameter was appropriately included because it pertains to the carbon stock in all pools in the baseline case in stratum I and is estimated from the forest carbon inventory. This value was found to be calculated accurately according to project boundaries and appropriate pools.
$\Delta C_{pools, Def, u, i, t}$	This data/parameter was appropriately included because it pertains to the carbon stock in all pools in post-deforestation land use u in stratum i . This value was found to be calculated and reported correctly.
$A_{burn, q, i, t}$	This data/parameter was appropriately included because it estimates area burnt in post-natural disturbance stratum q in stratum i , at time t . This value was found to be not relevant at time of validation and will be monitored for each verification event.
dbh	This data/parameter was appropriately included because it gives the tree diameter at breast height. DBH values were measured and assessed ex ante (at validation). This value was found to be not relevant at time of validation.
dbasal	This data/parameter was appropriately included because it gives the basal diameter. Basal diameter values were measured and assessed ex ante (at validation). This value was found to be not relevant at time of validation.

H	This data/parameter was appropriately included because it gives the height of a tree. This value was found to be not relevant at time of validation.
$U_{P,SS,i,pool\#}$	This data/parameter was appropriately included because it calculates the percentage uncertainty (expressed as 95% confidence interval as a percentage of the mean where appropriate) for carbon stocks and greenhouse gas sources in the with-project case (1,2...n represent different carbon pools and/or GHG sources). This data/parameter represents a deviation noted in Section 3.2.7 of this report and will be reviewed at time of verification.
AGB	This data/parameter was appropriately included because it calculates the aboveground biomass density.
$CP,Dist,q,i$	This data/parameter was appropriately included because it determines carbon stock in all pools in post-natural disturbance q in baseline stratum i .
A_i	This data/parameter was appropriately included because it defines the total area of stratum i .

The *Yacumama Forest Carbon Project* was checked by the Validation Team for adherence to the M-MON module under VCS methodology VM0007 v1.5 and found to be in compliance. The project proponent has provided sufficient evidence that monitoring components including; deforestation, natural disturbance, and ex-post project emissions within project boundaries are established and procedures for monitoring efforts are in place.

3.3 Non-Permanence Risk Analysis

The *Yacumama Forest Carbon Project* utilized a non-permanence risk analysis tool, "T-BAR", to assess risk according to internal risk, external risk, natural risk, and mitigation measures for minimizing risk. At all levels, the validation team evaluated the rationale, appropriateness, and justifications of risk ratings chosen by the project proponent. As this is a validation and not verification the risk analysis was assessed for appropriateness and to provide additional context for the validation review of the project. A buffer is only applied at verification when this risk analysis will be reassessed, the actual scores are not summarised here. Steps taken to assess risk rationale are presented for each risk factor:

Risk Factor	Validation Findings
<u>Internal Risk</u>	
Project management	The management team includes individuals with skills necessary to undertake all project activities. Project proponents have experience

	in the global forest carbon thus also lowering overall internal risk. Other project management components were confirmed to have been applied during the site visit.
Financial viability	Project proponents have provided the validation team appropriate documentation to prove project financial breakeven is greater than 10 years. Items presented to the Validation Team by project proponents give reasonable assurance that the risk rating for financial viability is appropriately set. Note that the project proponent chose to exclude any revenue from credit sales and take the highest score possible.
Opportunity cost	NPV analysis was not required for the <i>Yacumama Forest Carbon Project</i> as baseline activities are subsistence-driven. As such, the risk rating from NPV was appropriately selected as high because the net community benefits have not been demonstrated yet.
Project longevity	The project proponent was unable to supply legal contractual agreements to address enforceability of carbon stock protection for the project. As such, the value applied was appropriate.
<u>External Risk</u>	
Land tenure and resource access/impacts	The project proponent has clear ownership title to the project area with accompanying resources access and use rights. The property was properly geo-referenced and the land title was reviewed for legality.
Community engagement	Site visit observations and discussions with community members indicated that they live entirely outside the project area. The project generates net positive impacts on the social and economic well-being of the local communities who derive livelihoods from the project area. For the larger community (i.e. residents of Puerto Miguel, staff and owners of other lodges etc.) there are direct and indirect benefits under the with-Project scenario. The validation team confirmed that the local communities have been consulted and are involved in the project, thus the mitigation score of less than zero is applicable.
Political risk	Validation Team deemed the political risk was appropriately rated at zero for an average governance score, participation in the Governors' Climate and Forest Taskforce, and completion of at least one CDM Afforestation/Reforestation project.
<u>Natural Risk</u>	

Fire	The risk rating given for fire was justified by scientific research which suggested that most fires in the project region are anthropogenic and natural fire incidence is low. The validation team agrees with this assessment as being conservative given a higher fire return interval is used to generate the risk rating.
Pest and disease	Validation Team agrees that the forests of the project area have a high species diversity and therefore resistant to catastrophic disturbance caused by insect pests or forests diseases.
Extreme weather	Project proponents appropriately base this risk rating off of the likelihood of wind disturbance which could have an effect on carbon stocks.
Geologic risk	Local geology (i.e. volcanos, fault lines) are not active in the project area and the risk rating was appropriately given as zero.

In summary, project proponents have accounted for risk factors in a reasonable manner and have reached an overall risk rating that encompasses all risks of non-permanence. As required, risk will be reassessed and given risk scores at each verification period.

4 SAFEGUARDS

4.1 No Net Harm

The proponent did not identify any potential negative environmental and socio-economic impacts associated with the project. The validation team agrees with this assertion as the goal of the project is forest conservation in exchange for climate benefits. No negative environmental and socio-economic impacts are anticipated in the future.

4.2 Environmental Impact

The environmental implications from the *Yacumama Forest Carbon Project* closely align with the REDD programme which seeks to achieve net environmental benefits by conserving forest and preventing conversion of tropical Amazonian rainforest.

4.3 Local Stakeholder Consultation

The project developed and implemented an extensive stakeholder consultation plan to inform and engage local stakeholders of the project and encourage comments on project. Potential stakeholders were identified using the procedural steps found in the “Community Development Toolkit” methodology. A Stakeholder Communications Plan was developed to provide a verbal assessment of the on-going project activities and solicit any input from the local community. The primary and most involved local stakeholders are the employees of the Yacumama lodge. As stated in the PD Section 5.3, several of the local lodge staff were actively involved in the collection of forest biomass data and will play a key role in patrolling the property and biodiversity

monitoring. Please see Section 4.4 below for details on stakeholder comments received by the project.

4.4 Public Comments

As noted in Section 4.3 above, the project proponent involved stakeholder groups in a series of meetings. The outcome of these meetings built a framework for project development and eventual implementation of the stated project goals. The validation team confirm during the site visit that outreach efforts were made as part of the communications plan based on verbal, print and web-based sources.

As stated in the PD, the Yacumama lodge employee stakeholder group has the greatest stake in the project and thus significant effort was expended in discussing the project, considering the implications of project design, and involving them in the implementation of the initial stages of the project. This stakeholder group had several main concerns;

1. Input received from the employee group led to an alteration in the aboveground carbon stock assessment. The employee group was concerned that the collection of palm fronds for roofing would be limited by the project. Thus the project decided not to include palms as part of the carbon stock assessment
2. How the project would affect future employment and if it would increase, decrease, or stay relatively constant. All employees have responsibility in the upkeep of the remaining lodge facilities and participate in patrolling the project area. Employees also participated and were trained in the forest inventory assessment of above ground biomass.
3. Two additional issues that were of interest to the village community group were: access to the Yarapa River for fishing and the collection palm thatch for roofing. Each will be specifically allowed under the project scenario

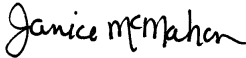
The responses by the proponent in each case above are appropriate as they address community member concerns while meeting the goals of the project. The validation team confirmed through conducting interviews with project personnel on-site that the public comments listed in the PD are comprehensive. The validation team agrees that the main conclusions were that stakeholders perceived the project activities to be overall beneficial.

5 VALIDATION CONCLUSION

A summary of all findings is included in Appendix B. There are no restrictions of uncertainty. ESI here confirms all validation activities including objectives, scope and criteria, level of assurance, monitoring and project documentation adherence to VCS Version 3 and all associated updates as documented in this report are complete. ESI concludes without any qualifications or limiting conditions that the *Yacumama Forest Carbon Project PD* dated 29 December 2016, v1.7 meets the requirements of VCS Version 3.6 and all associated updates. The GHG assertion provided by the Conservation Management Institute at Virginia Tech-College of Natural Resources and Environment and validated by ESI will result in the expected GHG emissions reduction or removal of 729,827 tCO₂e reductions over the initial 10 year reporting period (2012 - 2021). The project

will contribute 33% (240,843 tCO₂e) of the gross reductions to the buffer pool, and there will be a total expected emission reduction of 471,488 tCO₂e after accounting for leakage (17,500 tCO₂e).

Report Version 1, dated 31 December 2016, was submitted with the project documentation for registration with the VCS Program. Due to minor edits caught during the completeness check conducted by the VCS registry administrator, the report version was updated as well as the date of issue. However, the initial project validation date was 31 December 2016 and was completed in accordance with Section 3.7.3 of the VCS Standard, v3.6.

Report Submitted to:	Verified Carbon Standard Association 1730 Rhode Island Ave. NW, Suite 803, Washington, D.C. 20036 Lawrence Bishop (Yacumama Lodge) P.O. Box 1098 Nashville, Indiana 47448-1098
Report Submitted by:	Environmental Services, Inc. -Corporate Office 7220 Financial Way, Suite 100 Jacksonville, Florida 32257
ESI Lead Validator Name and Signature	 Shawn McMahon Lead Validator
ESI Division Regional Technical Manager Name and Signature	 Janice McMahon Sr. Vice President and Forestry, Carbon and GHG Division Technical Director
Date:	03 April 2017

SMM/EMJ/JPM/nrh: 038_Yacumama_VCS ValidationReport_Finalv2_20170403.doc
K: PF 04/03/2017f

Appendix A – Documents received from Client

Documents received 21 August 2013

- VCS+CCB+ Yacumama Forest Carbon Project_Version 1.1 Final.pdf

Documents received 28 August 2013

- VCS+CCB+Monitoring and Implementation Report_Yacumama forest Carbon Project 1.0.pdf
- Monitoring and Assessment Methods.pdf
- Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
- VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
- VCS+CCB+ Yacumama Forest Carbon Project_Version 1.2 Final.pdf
- GIS_Database

Documents received 15 January 2014

- VTCMI_Response to NCR for Yacumama CCB PD.docx

Documents received 29 August 2014

- Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
- Yacumama_Landcover
 - Yacumama_Landcover.shx
 - Yacumama_Landcover.dbf
 - Yacumama_Landcover.kml
 - Yacumama_Landcover.prj
 - Yacumama_Landcover.sbn
 - Yacumama_Landcover.sbx
 - Yacumama_Landcover.shp
 - Yacumama_Landcover.shp.xml
- Appendix C_COFOPRI Survey.pdf
- APPENDIX.PDF
- Copy of 038 Bishop Yacumama_Val Ver NCRs_Round 1_Responses from Technical Team.xlsx
- Project expense accounting_Yacumama.xlsx
- VCS Non-Permanence Risk Report Yacumama Forest Carbon Project_Post round 1 audit review.pdf
- VCS+CCB+ Yacumama Forest Carbon Project_Version 1.4_Post round 1 audit review_2014.pdf
- VCS+CCB+Monitoring and Implementation Report_Yacumama forest Carbon Project 1.2_Post round 1 audit review.pdf
- Yacumama_Allometric_Equation_Validation.xlsx

Documents received 09 September 2014

- Map 1.pdf

- Map 2.pdf
- Map 3.pdf
- Santuario Privado.pdf
- Yacuruna I 1499 hectares-#19458.pdf
- Yacuruna I 1500 hectares-#30178.pdf

Documents received 02 March 2015

- Questions for ESI.xlsx
- Additional clarification requests.pdf

Documents received 07 August 2015

- Yacumama_2013_Accuracy_Assessment__Locations.xlsx
- Yacumama_Allometric_Equation_Validation.xlsx
- Yacumama_Carbon_Stock_Calculations_2015_final.xlsx
- Imagery
 - log
 - gls2010
 - stk.adf
 - log
 - metadata.xml
 - prj.adf
 - gls2010c1
 - w001001x.adf
 - dblbnd.adf
 - hdr.adf
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 - log
 - prj.adf
 - sta.adf
 - vat.adf
 - w001001.adf
 - gls2010c3
 - w001001x.adf
 - dblbnd.adf
 - hdr.adf
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 - sta.adf
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 - w001001.adf
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 - arc0053.nit
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 - hdr.adf

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 - dblbnd.adf
 - hdr.adf
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 - prj.adf
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 - vat.adf
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 - vat.adf
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 - dblbnd.adf
 - hdr.adf
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 - dblbnd.adf
 - hdr.adf
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 - vat.adf
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 - w001001x.adf
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 - hdr.adf
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 - dblbnd.adf
 - hdr.adf
 - log
 - prj.adf
 - sta.adf
 - vat.adf
 - w001001.adf
- GLS2010.aux.xml
- GLS2010c1.aux.xml
- GLS2010c2.aux.xml
- GLS2010c3.aux.xml
- GLS2010c4.aux.xml
- GLS2010c5.aux.xml
- GLS2010c6.aux.xml
- GLS2010c7.aux.xml
- L52010.aux.xml
- l52010.idx
- l52010c2.aux.xml

- I52010c4.aux.xml
- I52010c5.aux.xml
- L82013.aux.xml
- I82013.idx
- I82013c2.aux.xml
- I82013c4.aux.xml
- I82013c5.aux.xml
- KMLs
 - Yacumama_Property_Boundary_2015.kmz
 - Accuracy_Assessment_points_2015.kmz
 - Forest_Plots_2015.kmz
 - Yacumama_Landcover_2015.kmz
 - Yacumama_Project_Area_2015.kmz
 - Yacumama_Project_Zone_2015.kmz
- Shapefiles
 - Yacumama_Property_Boundary_2015.shx
 - Accuracy_Assessment_2015.dbf
 - Accuracy_Assessment_2015.prj
 - Accuracy_Assessment_2015.sbn
 - Accuracy_Assessment_2015.sbx
 - Accuracy_Assessment_2015.shp
 - Accuracy_Assessment_2015.shx
 - Forest_Plots_2015.dbf
 - Forest_Plots_2015.prj
 - Forest_Plots_2015.sbn
 - Forest_Plots_2015.sbx
 - Forest_Plots_2015.shp
 - Forest_Plots_2015.shx
 - Yacumama_Landcover_2015.dbf
 - Yacumama_Landcover_2015.prj
 - Yacumama_Landcover_2015.sbn
 - Yacumama_Landcover_2015.sbx
 - Yacumama_Landcover_2015.shp
 - Yacumama_Landcover_2015.shx
 - Yacumama_Project_Area_2015.dbf
 - Yacumama_Project_Area_2015.prj
 - Yacumama_Project_Area_2015.sbn
 - Yacumama_Project_Area_2015.sbx
 - Yacumama_Project_Area_2015.shp
 - Yacumama_Project_Area_2015.shx
 - Yacumama_Project_Zone_2015.dbf
 - Yacumama_Project_Zone_2015.prj
 - Yacumama_Project_Zone_2015.sbn
 - Yacumama_Project_Zone_2015.sbx
 - Yacumama_Project_Zone_2015.shp
 - Yacumama_Project_Zone_2015.shx
 - Yacumama_Property_Boundary_2015.dbf
 - Yacumama_Property_Boundary_2015.prj
 - Yacumama_Property_Boundary_2015.sbn
 - Yacumama_Property_Boundary_2015.sbx

- Yacumama_Property_Boundary_2015.shp
- 038 Bishop Yacumama_Val Ver NCRs_Round 2_Final_Project Response 2015.xlsx
- CCBA NCR List for Yacumama_Round2DRAFTv2.docx_.docx
- Project expense accounting_Yacumama Veriosn 1.1.xlsx
- Project expense accounting_Yacumama Verision 1.2_2015_Conservative.xlsx
- Responses to Round 2 CCB_Yacumama Forest Carbon Project.docx
- VCS Non-Permanence Risk Report Yacumama Forest Carbon Project_Post round 2 audit review_May 2015.pdf
- VCS+CCB+ Yacumama Forest Carbon Project_Version 1.5_Post round 2 audit review_2015.pdf
- VCS+CCB+Monitoring and Implementation Report_Yacumama forest Carbon Project 1.5_Post round 2 audit review_2015.pdf
- WGI scores.xlsx

Documents received 20 October 2015

- Yacumama Summary Translation UPDATED 20151016.pdf
- VCS+CCB+ Yacumama Forest Carbon Project_Version 1.5_Post round 2 audit review_2015_CCB 3rd edition.pdf

Documents received 03 November 2015

- Yacumama Summary Translation UPDATED 20151016.pdf
- VCS+CCB+ Yacumama Forest Carbon Project_Version 1.5_Post round 2 audit review_2015_CCB 3rd edition.pdf

Documents received 09 September 2016

- VCS Non-Permanence Risk Report Yacumama Forest Carbon Project_Version 1.4_Post round 3 audit.pdf
- ESI Findings Spreadsheet_Risk Assessment_CMI response.xlsx
- Project expense accounting_Yacumama Verision 1.3_2016.xlsx
- YacumamaReadMe.txt
- KML's
 - Yacumama_Property_Boundary.kmz
 - KMLs\Forest_Plots.kmz
 - Yacumama_2011_Landcover.kmz
 - Yacumama_2011LC_Accuracy_Points.kmz
 - Yacumama_2013_Landcover.kmz
 - Yacumama_2013LC_Accuracy_GroundPoints.kmz
 - Yacumama_Project_Area.kmz
 - Yacumama_Project_Zone.kmz
- Map JPEGs
 - Project_Zone.jpg
 - Communities.jpg
 - Continental.jpg
 - Landcover_2011.jpg
 - Landcover_2013.jpg
 - Plot_Locations.jpg
 - Project_Area.jpg
- Shape Files

- Yacumama_Property_Boundary.shx
- Forest_Plots.cpg
- Forest_Plots.dbf
- Forest_Plots.prj
- Forest_Plots.sbn
- Forest_Plots.sbx
- Forest_Plots.shp
- Forest_Plots.shx
- Yacumama_2011_Landcover.cpg
- Yacumama_2011_Landcover.dbf
- Yacumama_2011_Landcover.prj
- Yacumama_2011_Landcover.sbn
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- Yacumama_2011_Landcover.shp
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- Yacumama_2011_Landcover.shx
- Yacumama_2011LC_Accuracy_PIpoints.cpg
- Yacumama_2011LC_Accuracy_PIpoints.dbf
- Yacumama_2011LC_Accuracy_PIpoints.prj
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- Yacumama_2013_Landcover.shx
- Yacumama_2013LC_Accuracy_GroundPoints.cpg
- Yacumama_2013LC_Accuracy_GroundPoints.dbf
- Yacumama_2013LC_Accuracy_GroundPoints.prj
- Yacumama_2013LC_Accuracy_GroundPoints.sbn
- Yacumama_2013LC_Accuracy_GroundPoints.sbx
- Yacumama_2013LC_Accuracy_GroundPoints.shp
- Yacumama_2013LC_Accuracy_GroundPoints.shp.xml
- Yacumama_2013LC_Accuracy_GroundPoints.shx
- Yacumama_Project_Area.cpg
- Yacumama_Project_Area.dbf
- Yacumama_Project_Area.prj
- Yacumama_Project_Area.sbn
- Yacumama_Project_Area.sbx
- Yacumama_Project_Area.shp

- Yacumama_Project_Area.shx
- Yacumama_Project_Zone.cpg
- Yacumama_Project_Zone.dbf
- Yacumama_Project_Zone.prj
- Yacumama_Project_Zone.sbn
- Yacumama_Project_Zone.sbx
- Yacumama_Project_Zone.shp
- Yacumama_Project_Zone.shx
- Yacumama_Property_Boundary.cpg
- Yacumama_Property_Boundary.dbf
- Yacumama_Property_Boundary.prj
- Yacumama_Property_Boundary.sbn
- Yacumama_Property_Boundary.sbx
- Yacumama_Property_Boundary.shp

Documents received 29 September 2016

- Yacumama_Carbon_Stock_Calculations_2016_final.xlsx
- Scanned Harvest plan_Yacumama.pdf
- 038 Bishop Yacumama_Val Ver NCRs_Round 3_Project proponent Responses_9_26_2016_PD.xlsx
- VCS+CCB+ Yacumama Forest Carbon Project_Version 1.6_Post round 3 audit review_2016_CCB 3rd edition.pdf
- Yacumama_2012_Accuracy_Assessment_Locations.xlsx

Documents received 31 October 2016

- Questions and Clarifications for NCRs Round 4.docx

Documents received 27 November 2016

- Copy of 038_Bishop_Yacumama_Val_NCRs_Round_4_Final_CMI_response_validation.xlsx
- VCS Project description Yacumama Forest Carbon Project_Version 1.6_Post round 4 audit review_2016_4th_edition.pdf
- Yacumama_Carbon_Stock_Calculations_2016_final.xlsx

Documents received 13 December 2016

- VCS Non-Permanence Risk Report Yacumama Forest Carbon Project_Version 1.5_Post round 4 audit.pdf

Documents received 14 December 2016

- Yacumama_Carbon_Stock_Calculations_2016_final.xlsx

Documents received 20 December 2016

- 038_Bishop_Yacumama_Val_NCRs_Round_5_Final_proponent responses 12_20_2016.xlsx
- VCS Non-Permanence Risk Report Yacumama Forest Carbon Project_Version 1.6_Post round 5 audit.pdf
- VCS Project description Yacumama Forest Carbon Project_Version 1.7_Post round 5 audit review_12_20_2016.pdf
- Yacumama_Carbon_Stock_Calculations_2016_final.xlsx

Documents received 22 December 2016

- VCS Project description Yacumama Forest Carbon Project_Version 1.7_Post round 5 audit review_ 12_20_2016.pdf
- Yacumama_Carbon_Stock_Calculations_2016_final.xlsx

Documents received 22 December 2016pm

- VCS Project description Yacumama Forest Carbon Project_Version 1.7_Post round 5 audit review_ 12_22_2016.pdf

Documents received 29 December 2016

- VCS Project description Yacumama Forest Carbon Project_Version 1.7_Post round 5 audit review_ 12_28_2016.pdf
- VCS Project description Yacumama Forest Carbon Project_Version 1.7_Post round 5 audit review_ 12_29_2016.pdf

APPENDIX B – VCS NCR/CL/OFI SUMMARY³

Item Number	1
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	1.1 VERSION
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	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.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD General
ESI Findings - Round 1	Project is using the most recent version of the PD VCS and CCB template.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	At this round the VVB noted that an incorrect VCS Standard version is cited in the PD Section 4.1. The most current version of the VCS Standard is v3.5.

³ Due to the overlap between validation and verification in some modules which were reviewed concurrently, ESI has included all verification findings in addition to those specific to the validation audit. Verification findings which remain open at validation will be addressed when the verification audit starts again and do not affect the results of validation.

Round 4 NCR/CL/OFI 8 November 2016	4 CL: Please address the findings and report the current and correct version of the VCS Standard in the PD.
Round 4 Response from Project Proponent 27 November 2016	Updated to correct version
ESI Findings - Round 5	The correct version is now cited in the PD. The item is addressed.

Item Number	2
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	2.2 LANGUAGE
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	2.2.1 The operating language of the VCS Program is English. The project and program description, validation report, monitoring report, verification report and all other documentation (including all and any appendices) required under the VCS Program shall be in English.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Appendix B
ESI Findings - Round 1	It's all in English.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Harvest plan was provided in Spanish.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide the harvest plan in English.
Round 2 Response from Project Proponent 07 August 2015	Translated and Provided in Appendix B of the PD. Supplementary documents are translated and provided in Appendix C, PD.
ESI Findings - Round 3	The Harvest Plan was provided in English in Appendix B of the PDD. The finding has been addressed.

Item Number	3
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	3.5 METHODOLOGY DEVIATIONS

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.5.1 Deviations from the applied methodology are permitted where they represent a deviation from the criteria and procedures relating to monitoring or measurement set out in the methodology (ie, deviations are permitted where they relate to data and parameters available at validation, data and parameters monitored, or the monitoring plan). Methodology deviations shall not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, except where they result in increased accuracy of such quantification. Deviations relating to any other part of the methodology shall not be permitted.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.3
ESI Findings - Round 1	PD section 4.3 states no deviations from methodology exist.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	At this round the VVB notes that the PP has reported methodology deviations for "1. Area of Deforestation (1.2 BL-PL) and 2. Rate of Deforestation (1.3 BL-PL)" in Section 4.3 of the PD. These items are not methodology deviations, VCS has historically treated instances like these as "exemptions." VCS indicated to ESI they would defer to our decision to approve the deforestation plan (23 June 2016 email to ESI Lead), please see the related finding within module BL-PL. For the rate of deforestation, the PD incorrectly states under parameter A planned, that a methodology deviation was approved. The rate of deforestation item is also not a methodology deviation. This current Round 4 is reviewing whether the exemptions are appropriate. Please see individual findings. A clarification request is issued here to remove reference to these "methodology deviations" from the PD and instead limit descriptions to the project's approach (deforestation plan was applied to the entire project area & a conservative deforestation rate was chosen) in the PD.
Round 4 NCR/CL/OFI 8 November 2016	4 CL: Please address all findings and remove references to the "methodology deviations" from the PD, describing the project's approach to these two items.
Round 4 Response from Project Proponent 27 November 2016	References to Methodology deviation removed
ESI Findings - Round 5	The VVB searched the newly submitted PD and noted that the proponent no longer references methodology deviations. No further action is needed. The item is addressed.

Item Number	4
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	3.11 OWNERSHIP AND OTHER PROGRAMS

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.11.1 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): 1) A right of use arising or granted under statute, regulation or decree by a competent authority. 2) A right of use arising under law. 3) A right of use arising by virtue of a statutory, property or contractual right in the plant, equipment or process that generates GHG emission reductions and/or removals (where such right includes the right of use of such reductions or removals and the project proponent has not been divested of such right of use). 4) A right of use arising by virtue of a statutory, property or contractual right in the land, vegetation or conservational or management process that generates GHG emission reductions and/or removals (where such right includes the right of use of such reductions or removals and the project proponent has not been divested of such right of use). 5) An enforceable and irrevocable agreement with the holder of the statutory, property or contractual right in the plant, equipment or process that generates GHG emission reductions and/or removals which vests the right of use in the project proponent. 6) An enforceable and irrevocable agreement with the holder of the statutory, property or contractual right in the land, vegetation or conservational or management process that generates GHG emission reductions or removals which vests the right of use in the project proponent. 7) A right of use arising from the implementation¹ or enforcement of laws, statutes or regulatory frameworks that require activities be undertaken or incentivize activities that generate GHG emission reductions or removals.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, Table 4
ESI Findings - Round 1	The Project proponent owns the land on which the Project is located fee simple. There are two oners listed in the PD. Yacumama Ltd. And Lawrence Bishop and finally Lawrence Bishop and Adriana Bishop, however no evidence is presented that supports this claim.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please present applicable evidence of ownership according to that listed in the PD.
Round 1 Response from Project Proponent 29 August 2014	Deeds are being sent via Mail

ESI Findings - Round 2	The deeds state that on 17 September 2004 Roxanne Kremer transferred 1,500 ha to Lawrence Allen Bishop. A second deed states that on 14 April 1995 the property Yacurina 1 of 1,499 ha was transferred by the Regional Director of Agriculture Carlos Garcia Mere to Lawrence Allen Bishop. The second parcel was previously owned by the minister of agriculture. The maps provided with the deeds appear to cover the appropriate number of hectares as reported by the deeds (2,999 ha total). This stated there are some issues between the deeded hectares and the hectares from the GIS files provided. These will be addressed in other sections of the verification checklist. This Item can be closed when all other related NCRs are closed. Additionally, the project proponent has stated that the Puerto Miguel have dropped their statement made while the onsite visit was conducted questioning whether the property boundaries shown by the project conflicted with their maps indicating where they believe their property lines are located. Additionally, according to the client Puerta Miguel is no longer pursuing their right to formal ownership of their lands. As the site visit has already taken place, forward action request is being included in the verification report for the next verifier to confirm that the boundary issue is no longer a issue.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the PP has prioritised validation. This element will be assessed at verification.

Item Number	5
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	3.16 MONITORING

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.16.5 Where measurement and monitoring equipment is used, the project proponent shall ensure the equipment is calibrated according to the equipment's specifications and/or relevant national or international standards.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 8, Monitoring Report and supporting documents
ESI Findings - Round 1	Not stated if any equipment used requires calibration.
Round 1 NCR/CL/OFI 14 November 2013	CL: Please clarify if calibration is needed for any measurement and monitoring equipment needed to complete monitoring. If any equipment utilized does require calibration, please include a statement within the monitoring plan that it will be calibrated.
Round 1 Response from Project Proponent 29 August 2014	No calibration is required
ESI Findings - Round 2	The verification team noted that the equipment presented in Section 8.2 of the PD, such as computer software, binoculars, remote field cameras, etc., does not typically require calibration.

Item Number	6
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	3.16 MONITORING
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.16.7 The verification period of the monitoring report shall be a distinct time period that does not overlap with previous verification periods. Projects shall not be eligible for crediting of GHG emission reductions generated in previous verification periods.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring and Implementation Report.
ESI Findings - Round 1	The project Monitoring Report does not indicate the specific time frames that were included in the verification period on the cover page where that information is requested. Section 6.4 mentions the credits from 2010 and 2011 but specific dates are not listed.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please complete all applicable elements of the cover page information boxes, especially with regards to the monitoring period. Please be sure to indicate the exact dates of the monitoring period in relevant sections, specifically in section 6.4 and other places where
Round 1 Response from Project Proponent 29 August 2014	completed where required (cover page and Section 6.4)
ESI Findings - Round 2	The cover page of the MR now states a monitoring period of "01-January-2010 to 01-January-2014." Section 6.4 now includes a table with estimated emission reductions for each year in the crediting period. This item is addressed.

Item Number	7
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	3.17 RECORDS AND INFORMATION
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.17.1 The project proponent shall ensure that all documents and records are kept in a secure and retrievable manner for at least two years after the end of the project crediting period.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring and Implementation Report.
ESI Findings - Round 1	It is not stated in either the PD or the Monitoring Report as to the status of this element. It may be a matter of locating the actual language, however verifiers could not find a confirmation of this item.
Round 1 NCR/CL/OFI 14 November 2013	NCR: To ensure records are secure and retrievable, please provide more detail on how and where data are archived.
Round 1 Response from Project Proponent 29 August 2014	clarified and included in the MR section 5.1
ESI Findings - Round 2	The MR describes a geodatabase, and also that data will be "archived electronically at the Virginia Tech Conservation Management Institute on secure servers that have been approved by the Virginia Tech Office of Export and Secure Research Compliance (OESRC) for maintenance of "not for public release" secure data." The data will be stored for two years, and a mirror archive will be kept with Yacumama management in OPeru and the US. The verifier finds this to sufficiently described the data storage process. However, all detail in Section 5.1 of the MR needs to match what is shown in Section 8.1 of the PD, since the PD is the actual location of the original plan. Please address.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please address the finding and by making both documents consistent.
Round 2 Response from Project Proponent 07 August 2015	Wording was made consistent between both documents.
ESI Findings - Round 3	The MR and PDD are consistent in wording when referring to archiving and storage of data. The finding has been addressed
Item Number	8
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Section)	3.18 PROJECT DESCRIPTION

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.18.1 The project description describes the project's GHG emission reduction or removal activities. The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD General
ESI Findings - Round 1	Project description is completed using the VCS+CCB Project Description Template and it appears that it is complete, excepting the completion of the items in the cover page block.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please complete the date of issue in the project description.
Round 1 Response from Project Proponent 29 August 2014	completed where required (cover page)
ESI Findings - Round 2	The verification team noted that the PD cover page now contains the date (15 August 2014) and other items from the template. Describe the procedure for quantification of baseline emissions and/or removals in accordance with the applied methodology. Include all relevant equations, and explain and justify all relevant methodological choices (eg, with respect to selection of emission factors and default values).
Round 2 NCR/CL/OFI 31 October 2014	For ease of use and as required by the template please include all relevant equations written out wherever they are mentioned in the PD or Monitoring Report instead simply referencing the document they are from.
Round 2 Response from Project Proponent 07 August 2015	Equations etc provided in Document
ESI Findings - Round 3	Equations are now reported in the PD and MR, but this element will remain pending until all equations assessed in other modules (including those with version adjustments) which have findings are closed. Auditors note that the line spacing of the PD does not follow the VCS template. Further, there is misc. bolding for some parameter headings in the data/parameters tables.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please adhere to the VCS PD template and ensure line spacing is appropriate. Please remove the sporadic bold headings in the data/parameter tables. Please update Table 9 of the PD to reflect the actual dates from validation/verification.
Round 3 Response from Project Proponent 29 September 2016	Have made headings consistent. Reveal codes in the VCS template shows line spacing as "Multiple" instructions do not contain reference to what is considered proper line spacing.

ESI Findings - Round 4	The VVB agrees that line spacing is not specified in the VCS template although the template has different spacing than is used by the PP. Table 9 does not reflect actual dates for validation/verification and therefore this finding remains open. Other components to this finding are addressed. The VVB noticed the term "reversal" is used improperly in the PD (Section 2.3 and 8.3) following the VCS definition. Instead the PP should refer to ex-post monitoring efforts from deforestation, natural disturbances etc. VCS will not permit the improper use of the term "reversal." In October 2016 the PP elected to drop the CCB component of this validation, as a result the combined VCS+CCB template is no longer relevant. The VCS template (VCS Project Description Template, v3.3-19Oct2016.doc) is now appropriate to use.
Round 4 NCR/CL/OFI 8 November 2016	CL: Please update Table 9 of the PD to reflect the actual dates from validation/verification. Please also remove the term "reversal" from the PD and replace with pertinent language. Finally, please use the appropriate VCS template for the Project Description with CCB components omitted.
Round 4 Response from Project Proponent 27 November 2016	Updated to appropriate VCS template and removed all references to CCB. Changed term reversal to "ex-post monitoring". Table nine removed in its entirety. Specific beginning and end dates and crediting period provided in section 1.6 as proscribed in the VCS project description template.
ESI Findings - Round 5	The VVB reviewed the newly submitted PD and noted that Table 9 timeline was removed, this is fine. Further, all references to "reversals" has been appropriately removed from the PD. The item is addressed.

Item Number	9
VCS AFOLU Requirements VCS Version 3 Requirements Document 08 October 2013, v3.4 (Section)	3.2 PROJECT START DATE
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.2.1 As set out in the VCS Standard, the project start date of an AFOLU project shall be the date on which activities that lead to the generation of GHG emission reductions or removals are implemented. Such activities may include preparing land for seeding, planting, changing agricultural or forestry practices, rewetting, restoring hydrological functions, or implementing management or protection plans.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 1.6 of PD
ESI Findings - Round 1	Project start date is January 1, 2010. Project start date is based upon decisions made by the Yacumama management team to cease pursuing timber harvesting operations and pursue carbon financing as a more sustainable long-term solution to their financial situation. This start date was validated during the site visit thorough interviews with project proponents
Round 1 NCR/CL/OFI 14 November 2013	

Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Harvest plan now provided so the proposed project start date is 1 January 2010, however the harvest plan the project references is dated 14 June 2010, which would indicate that "Changing agricultural practices" took place after 1 January 2010.
Round 2 NCR/CL/OFI 31 October 2014	2 Please provide documentation supporting the date chosen as the project start (change in management plans, contracts, agreements, correspondence, etc.). Please provide a clear timeline of events/documents/approvals (e.g. when harvest application was applied for, when approval was received, when a revision to the application was applied for, when this approval was received, etc.).
Round 2 Response from Project Proponent 07 August 2015	Making start date August 1, 2010.
ESI Findings - Round 3	There are conflicting start dates between the PD and MR. The PP changed the project start date to 01 August 2010 in the PD (Section 1.6). However, it still is reported as 01 January 2010 in the MR (Section 1.5). In conversations with the developer, the start date was asserted to be 01 January 2011 to meet this VCS Standard requirement "3.7.3 AFOLU projects with a project start date on or after 8 March 2008 shall complete validation within five years of the project start date." Responses to Round 2 findings were submitted to the validation/verification team in August 2015 from audit requests issued to the developer on 31 October 2014. The project must complete validation by 01 January 2016, to be in compliance with this requirement using the start date of 01 January 2011, but reported incorrectly. Further, the PD shows 01 August 2010 for a start date in Section 1.6, the Monitoring Report shows 01 January 2010 for a start date in Section 1.5. Previously, the project asserted that a harvest plan, for "Changing agricultural practices" and referenced for date 14 June 2010. This would suggest that it took place took place after 1 January 2010, the new revised start date will require different evidence to meet this requirement.
Round 3 NCR/CL/OFI 25 September 2015	3 NCR: Following this requirement, please revise the project start date in order to complete validation within 5 years. Please also ensure that reporting of the project start date is consistent across project documentation. Finally, please supply evidence as needed to support a date for the project start with activities that lead to the generation of GHG emissions reductions.
Round 3 Response from Project Proponent 29 September 2016	January 1, 2012 was agreed to by VCS, Project Proponent and Audit team

ESI Findings - Round 4	As stated in the Round 3 finding, the baseline harvest plan is dated 14 June 2010, which was previously intended to encompass "changing agricultural practices" and substantiate the project start date. As a result of delays in the validation process, the project start date is now 1.5 years later and set at January 1, 2012. The PP has proposed an alternative start date based on the project technical consultant's receipt of maps, harvest plan, pictures etc. from the PP for the purposes of development of a carbon project. The change in management is signified by the initiation of activities to develop the carbon project. This issue was discussed between the project technical consultant and VCS in an email. The VVB agrees with the revised start date. However, the current description of the start date activities in Section 1.6 of the PD do not completely align with activities for the revised start date.
Round NCR/CL/OFI 8 November 2016	4 CL: Please address the findings and include additional detail for start date activities in Section 1.6 of the PD.
Round 4 Response from Project Proponent 27 November 2016	updated the start date description to reflect the new start date
ESI Findings - Round 5	The project start date is set at January 1, 2012 and the newly submitted PD reflects an appropriate description of the start date based on the project technical consultant's receipt of maps, harvest plan, pictures etc. from the PP for the purposes of development of a carbon project. The change in management is signified by the initiation of activities to develop the carbon project. The item is addressed.

Item Number	10
VCS AFOLU Requirements VCS Version 3 Requirements Document 08 October 2013, v3.4 (Section)	4.2.9 Eligible REDD activities include:
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	b) Planned deforestation can encompass a wide variety of activities, including inter alia: i) National resettlement programs from non-forested to forested regions. ii) National land plans to reduce the forest estate and convert it to industrial-scale production of commodities such as soybeans, pulpwood and oil palm. iii) Plans to convert community-owned forests to other non-forest uses. iv) Planned forest conversion for urban, rural and infrastructure development.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	General, and use of VM0007 for Planned deforestation, and PD
ESI Findings - Round 1	While the project description indicates that the project area would have been converted to non-forest uses, the project has not supplied any plans for such an activity. APD: The criteria and procedures for identifying the baseline scenario shall require the project proponent to provide verifiable evidence to demonstrate landowner plans (for privately owned land), that the project area was intended to be cleared.

Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please supply one of the following examples of evidence that will allow verifiers to confirm the baseline scenario. i) National resettlement programs from non-forested to forested regions. ii) National land plans to reduce the forest estate and convert it to industrial-scale production of commodities such as soybeans, pulpwood and oil palm. iii) Plans to convert community-owned forests to other non-forest uses. iv) Planned forest conversion for urban, rural and infrastructure development.
Round 1 Response from Project Proponent 29 August 2014	Appendix B PD Yacumama harvest plan created by the Peruvian forestry department and through out the PD. Provides a plan for yearly harvest and identifies the type of agriculture that is suitable on the Post Harvest
ESI Findings - Round 2	The response from the Project Proponent appears to be incomplete. However, the validation/verification team reviewed Appendix B for the required evidence of deforestation/degradation. Appendix B was submitted as the file "APPENDIX.PDF." This file was a scan and was in Spanish. Therefore, the validation/verification team was unable to confirm compliance with the requirement.
Round 2 NCR/CL/OFI 31 October 2014	2 Per Section 2.2.1 of the VCS Standard, all project documentation, including all and any appendices, must be in English. Please provide Appendix B in English so that the validation/verification team may confirm compliance with Section 4.2.9(b) of the AFOLU Requirements and Section 2.2.1 of the Standard.
Round 2 Response from Project Proponent 07 August 2015	Translated and Provided in Appendix B of the PD. Supplementary documents are translated and provided in Appendix C, PD.
ESI Findings - Round 3	Appendix B and C of the PD now include English translations of the harvest plan. The harvest plan is assessed in greater detail within module BL-PL. The item is addressed.

Item Number	11
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	General
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	General - application of current version of tool, completeness of the Non Permanence Risk Report and any other items not listed in this checklist relating to the Risk Report
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Porject.pdf
ESI Findings - Round 1	It appears the project is using the most recent version of the Risk Tool and the v3.1 of the risk report template. The project did not complete the first informaiton box on the title page.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please complete the Version, Date of Issue, Project ID and Monitoring Period items on the title page of the report.
Round 1 Response from Project Proponent 29 August 2014	Information completed

ESI Findings - Round 2		The cover page has been appropriately completed. The risk factors throughout the report are not detailed in the the individual risk tables, so the readership of the report is difficult.
Round 2 Response from Project Proponent	2	OFI: Please consider adding the actual risk factor into each row of the table, as it is difficult to follow the mitigation and arguments presented without the over-arching risk factor description.
Round 2 Response from Project Proponent		Added risk factor to tables
ESI Findings - Round 3		Descriptions of the individual risk factors were added to the Risk Report. The item is addressed. To simplify reporting in Section 4.1 of the Risk report, the project proponent can simply reference ex-ante estimates of the deductions to be deposited in the AFOLU pooled buffer account in the PD.
Round 3 Response from Project Proponent	3	OFI: To simplify reporting, the project proponent can simply reference ex-ante estimates of the deductions to be deposited in the AFOLU pooled buffer account to the PD.
Round 3 Response from Project Proponent		Inserted the number of buffer credits to be deposited from project PD
ESI Findings - Round 4		Credits listed in Risk Report under section 4.2. This item remains open to ensure the buffer totals listed remain accurate.
Round 4 Response from Project Proponent	4	
Round 4 Response from Project Proponent		
ESI Findings - Round 5		Credits listed in Risk Report under section 4.2. This item remains open to ensure the buffer totals listed remain accurate.
Round 5 Response from Project Proponent	5	
Round 5 Response from Project Proponent		
ESI Findings - Round 6		At this round the proponent has elected to report buffer totals along side ex-ante VCU estimates within the PD Section 3.4. The Risk Report refers to the PD and this is acceptable. The item is addressed.

Item Number	12
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 1 Project Management

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Species planted (where applicable) associated with more than 25% of the stocks on which GHG credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zone(s) in which the project is located.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Client states not Applicable. "The Yacumama REDD Project is based upon the conservation of existing forest." However, there are some plantings planned along the banks.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please describe the species proposed to be planted along the banks of the river and whether they are native/non-native.
Round 1 Response from Project Proponent 29 August 2014	There are no written plans to plant any species. The auditor was part of a discussion where a purported Peruvian Agricultural representative made an unannounced visit to Yacumama suggesting the planting of a native fruit tree in the floodplain. That individual was neither seen or heard from again and there are no plans to plant any species on the Yacumama floodplain or elsewhere.
ESI Findings - Round 2	The explanation of the conversation that occurred on-site sufficiently describes that no trees will be planted as part of the project. This item is addressed.

Item Number	13
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 1 Project Management
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Management team does not include individuals with significant experience in all skills necessary to successfully undertake all project activities (ie, any area of required experience is not covered by at least one individual with at least 5 years experience in the area).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Management and technical team have > than 5 years experience in all aspects of the Project. Professional CV's are available for all staff involved in the project and will be made available to the audit team.
Round 1 NCR/CL/OFI 14 November 2013	NCR: In the risk analysis please provide a full description of the skills needed to undertake the project and a discussion of the significant experience for each relevant team member in each of these areas.
Round 1 Response from Project Proponent 29 August 2014	Information provided
ESI Findings - Round 2	The information provided and field visit interviews are sufficient for the validator/verifier to agree that the management team includes personnel with the required experience level. However, the summaries for the latter two individuals does not detail the years of experience in their respective areas, and the newly added text contains many spelling and formatting errors.

Round 2 NCR/CL/OFI 31 October 2014	2	NCR: Please include the years of experience for each team member detailed. Please correct spelling, grammar and formatting, as this is a requirement of the VCS Program.
Round 2 Response from Project Proponent 07 August 2015		Corrected as requested
ESI Findings - Round 3		Years of experience are appropriately included per this requirement. Spelling and formatting errors have mostly been fixed, with the exception that table formatting has not been applied consistently (i.e. financial viability) and does not follow the VCS Non-Permanence Risk Report template. For instance, the VCS template requires explanations to be listed under table heading "Risk Factor and/or Mitigation Description" for a given risk factor. Other formatting persist as well, for instance a period is absent from "the risk of fire in the project area in was rated "0"
Round 3 NCR/CL/OFI 25 September 2015	3	NCR: Please fix the formatting in tables of the Risk Report as noted in the finding and follow the template for the VCS Non-Permanence Risk Report.
Round 3 Response from Project Proponent 29 September 2016		Formatting fixed
ESI Findings - Round 4		Formatting has been addressed and the full VCS template appears to be used. This item is addressed.

Item Number	14
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 1 Project Management
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Mitigation: Management team includes individuals with significant experience in AFOLU project design and implementation, carbon accounting and reporting (eg, individuals who have successfully managed projects through validation, verification and issuance of GHG credits) under the VCS Program or other approved GHG programs.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	The Yacumama REDD Project was developed by a professional team with substantial experience in the development and implementation of REDD and CCB projects. The team has performed the technical and management work for two validated and Verified REDD projects in Belize. Both of which also achieved CCB Gold status.
Round 1 NCR/CL/OFI 14 November 2013	1
Round 1 Response from Project Proponent 29 August 2014	Information provided
ESI Findings - Round 2	The validation/verification team is satisfied that the personnel working on the project have the required experience with AFOLU project design and implementation.

Item Number	15
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 2 Financial Viability
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Project cash flow breakeven point is less than 4 years from the current risk assessment
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Since no information was provided to verifiers that would help to confirm any of these items, they will all be considered to be pending receipt of supporting documentation. At least one of these items must be scored as the project clearly needs funding to pursue and manage the project.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide supporting documentation that serves as evidence that verifiers can use to confirm the scores in the financial viability section of the Risk tool.
Round 1 Response from Project Proponent 29 August 2014	Information provided in Risk report and MS Excel Spreadsheet
ESI Findings - Round 2	Spreadsheet has been provided showing the cost/revenue analysis. The project proponent has provided what appear to be reasonable/conservative assertions regarding expenditures. Estimates of prices for GHG credit sales are based on published sources, however no contracts or agreements have been provided in support of the projected sales of carbon credits. As required by the Risk Tool page 6 and 7 "Projects may demonstrate that funding has been secured through, for example, financial statements, bank records, executed commodity purchase agreements, executed emission reduction purchase agreements, or other signed contractual agreements. Evidence shall be provided that agreement counterparties are in good financial standing, to demonstrate the ability to meet the financial obligations. Given execution uncertainties, options contracts shall not be counted as secured funding."
Round 2 NCR/CL/OFI 31 October 2014	As carbon credit sales are provided as the demonstration of revenue for achieving breakeven point, please provide evidence (contracts/agreements) of carbon credit sales.
Round 2 Response from Project Proponent 07 August 2015	Because the Project cannot use estimated income from secondary market VCUs sales for financial accounting, the Yacumama forest carbon project is in the rather odd position of stating that there will be no future income from VCU sales. Thus for the purposes of financial viability, the project selected the most conservative choices in calculating financial viability.

ESI Findings - Round 3	The VCU price is reasonably substantiated by evidence, from REDD+ market reports or similar for Secondary Market REDD+ price estimates. Since the project has taken the most conservative scores for cashflow breakeven point and funding procurement, the score chosen by the project allows the original finding to be addressed. However, the proponent has inserted unclear language into the Risk Report, "Because the Project by VCS rule cannot use estimated income from secondary market VCUs sales for financial accounting in the risk assessment, the Yacumama forest carbon project is in the position of stating that there will be no future income from VCU sales under this risk assessment."
Round 3 NCR/CL/OFI 25 September 2015	CL: Please clarify the VCS rule or guidance which stipulates that secondary market VCU estimates are not permissible for use in assessment of financial viability. If communication from VCS on this matter was provided, please submit to auditors in response to this finding. Otherwise, please remove this confusing language from the Risk Report.
Round 3 Response from Project Proponent 29 September 2016	Wording removed
ESI Findings - Round 4	Wording was confirmed to be removed. The lower the project NPV, the higher the risk score in this category. Accordingly the decision to not include revenue from credit sales is conservative. Issue addressed.

Item Number	16
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 2 Financial Viability
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Since no information was provided to verifiers that would help to confirm any of these items, they will all be considered to be pending receipt of supporting documentation. At least one of these items must be scored as the project clearly needs funding to pursue and manage the project.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide supporting documentation that serves as evidence that verifiers can use to confirm the scores in the financial viability section of the Risk tool.
Round 1 Response from Project Proponent 29 August 2014	Information provided in Risk report and MS Excel Spreadsheet

ESI Findings - Round 2	Project states "Because the owners already had clear title to the land prior to initiating the project the owners have secured 100% of the funding to implement project. Based upon a reasonable assessment of secondary REDD and potential compliance markets the project cash flow breakeven point is less than 4 years from the current risk assessment.". As required by the Risk Tool page 6 and 7 "Projects may demonstrate that funding has been secured through, for example, financial statements, bank records, executed commodity purchase agreements, executed emission reduction purchase agreements, or other signed contractual agreements. Evidence shall be provided that agreement counterparties are in good financial standing, to demonstrate the ability to meet the financial obligations. Given execution uncertainties, options contracts shall not be counted as secured funding." In order to meet this requirement, evidence evidence that funding has been secured must be provided.
Round 2 NCR/CL/OFI 31 October 2014	As carbon credit sales are provided as the demonstration of revenue for securing funding, please provide evidence (contracts/agreements) of carbon credit sales. If not, other sources can include financial statements, bank records, executed commodity purchase agreements, executed emission reduction purchase agreements, or other signed contractual agreements.
Round 2 Response from Project Proponent 07 August 2015	Because the Project cannot use estimated income from secondary market VCUs sales for financial accounting, the Yacumama forest carbon project is in the rather odd position of stating that there will be no future income from VCU sales. Thus for the purposes of financial viability, the project selected the most conservative choices in calculating financial viability.
ESI Findings - Round 3	The VCU price is reasonably substantiated by evidence, from REDD+ market reports or similar for Secondary Market REDD+ price estimates. Since the project has taken the most conservative scores for cashflow breakeven point and funding procurement, this finding no longer needs to remain open. The item is addressed.

Item Number	17
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 3 Opportunity Cost
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	NPV from the most profitable alternative land use activity is expected to be between 50% and up to 100% more than from project activities
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Prorect entered a score of 4 in the Risk Report, however it appears that this was a typo as it was not accounted for in the final score.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please confirm if this score was intentional. If so, please provide all needed supporting documentation as defined in the AFOLU Non-Permanence Risk tool, v3.2

Round 1 Response from Project Proponent 29 August 2014	Information provided in Risk report and MS Excel Spreadsheet
ESI Findings - Round 2	Spreadsheet has been provided showing the cost/revenue analysis. The project proponent has provided what appear to be reasonable/conservative assertions regarding expenditures. Estimates of prices for GHG credit sales are based on published sources. No basis for the price of the rice or the rice production cost could be located. Additionally Page 8 states "The financial discount rates used shall be based on published sources and represent the appropriate risk for the relevant land use scenario." The basis was provided for the discount rates used for both rice and carbon however the Anderson document referenced for the rice discount rate states "Estimates were calculated for both a low discount rate of 2% and a higher discount rate of 6%. <u>The low discount rate is most compatible with the rate a global social planner would adopt.</u>" Accordingly it is not clear why 6% was selected. Further, the study was conducted in 1997 nearly 17 years ago. Further the Covell paper gives some examples for carbon at a 12% discount rate, but states "Private enterprises with stable, predictable income in stable, low-inflation economies might discount future cash flows at a rate of 12%, with moderate risk at 18 to 24%, and with high risk frequently at over 50%. In relatively unstable economies, discount rates would be higher to accommodate the risk of doing business in those countries." Covell goes further to states: Low: Project validated, with history of carbon credit delivery, stable business environment = 10% Medium: Project validated, emission reductions not yet verified 20%" Given these bounds it would seem greater than 12% is appropriate. More discussion is needed to be certain how 12% was derived from the Covell paper.
Round 2 NCR/CL/OFI 31 October 2014	Please clarify why the 6% discount rate was applied from the Anderson paper when the article states throughout that the 2% rate is the most compatible with the rate a global social planner would adopt. Also, please support the use of this paper given it was developed 17 years ago. Further, as the Covell paper seems to indicate that greater than 12% discount may be warranted, please provide additional detail as to how the 12% rate is appropriate.
Round 2 Response from Project Proponent 07 August 2015	Because the Project cannot use estimated income from secondary market VCUs sales for financial accounting, the Yacumama forest carbon project is in the rather odd position of stating that there will be no future income from VCU sales. Thus any discussion of the proper selection of discount rates for rice or carbon is rendered moot. Thus the project selected the most conservative choice.

ESI Findings - Round 3	A lower discount rate of 2% has now been adopted to compare NPV of rice and VCU generation over the 30 year crediting period. The highest and most conservative risk rating has been chosen as the NPV from the most profitable alternative land use activity (rice production) is expected to be at least 100% more than that associated with project activities. Here an NPV analysis is not required as the chosen risk rating is the highest and most conservative, therefore auditors suggest the proponent omit details from the risk report pertaining to rice to avoid confusing the reader. However, the proponent has inserted unclear language into the Risk Report, "However, since the Project cannot use estimated income from secondary market VCUs sales for financial accounting, the Yacumama forest carbon project is in the position of stating that there will be no future income from VCU sales. Thus any discussion of the proper selection of discount rates for rice or carbon is rendered moot. Thus the project selected "a", the most conservative choice."
Round 3 NCR/CL/OFI 25 September 2015	3 CL: Please remove details of the NPV analysis for rice in the Risk Report. A statement that the highest risk rating was chosen as the NPV from the most profitable alternative land use activity rice is expected to be at least 100% more than that associated with project activities is all that is required here as the chosen risk rating is the highest and most conservative. Please also clarify the VCS rule or guidance which stipulates that secondary market VCU estimates are not permissible for use in assessment of opportunity cost. If communication from VCS on this matter was provided, please submit to auditors in response to this finding. Otherwise, please remove this confusing language from the Risk Report.
Round 3 Response from Project Proponent 29 September 2016	Wording removed
ESI Findings - Round 4	Wording was confirmed to be removed. The lower the project NPV, the higher the risk score in this category. Accordingly the decision to not include revenue from credit sales is conservative. Issue addressed.

Item Number	18
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 3 Opportunity Cost
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	NPV from project activities is expected to be at least 50% more profitable than the most profitable alternative land use activity
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	The project indicated "The profit from multi-crop / short-term fallow' agriculture, which is significantly less profitable than what the project proponent anticipates receiving from carbon credits." Project has not provided any information or evidence that would allow verifiers to confirm this score.

Round 1 NCR/CL/OFI 14 November 2013	1	NCR: Please provide all relevant and required documentation to support this score as defined in the AFOLU Non-Permanence risk Tool v3.2.
Round 1 Response from Project Proponent 29 August 2014		Information provided in Risk report and MS Excel Spreadsheet
ESI Findings - Round 2		Spreadsheet has been provided showing the cost/revenue analysis. The project proponent has provided what appear to be reasonable/conservative assertions regarding expenditures. Estimates of prices for GHG credit sales are based on published sources. No basis for the price of the rice or the rice production cost could be located. Additionally Page 8 states "The financial discount rates used shall be based on published sources and represent the appropriate risk for the relevant land use scenario." The basis was provided for the discount rates used for both rice and carbon however the Aderson document referenced for the rice discount rate states "Estimates were calculated for both a low discount rate of 2% and a higher discount rate of 6%. <u>The low discount rate is most compatible with the rate a global social planner would adopt.</u>" Accordingly it is not clear why 6% was selected. Further, the study was conducted in 1997 nearly 17 years ago.
Round 2 NCR/CL/OFI 31 October 2014	2	Pending requirement "NPV from the most profitable alternative land use activity is expected to be between 50% and up to 100% more than from project activities" above.
Round 2 Response from Project Proponent 07 August 2015		
ESI Findings - Round 3		
Round 3 NCR/CL/OFI 25 September 2015	3	
Round 3 Response from Project Proponent 29 September 2016		
ESI Findings - Round 4		This finding is no longer applicable as the most conservative risk score was selected.

Item Number	19
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 3 Opportunity Cost
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Final Opportunity Cost Score. May be less than 0 *See Errata and Clarifications 24 July 2014

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Score is NOT confirmed. Project indicated a score of -4 in the VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf.
Round 1 NCR/CL/OFI 14 November 2013	NCR: While the score here may not be less than 0, and the project is clearly not claiming a -4 based on review of the total Internal Risk score, it is necessary to actually report the correct score of 0 for this item in the Non-Permanence Risk report for clarity. Please revise.
Round 1 Response from Project Proponent 29 August 2014	Corrected in appropriate locations
ESI Findings - Round 2	Pending findings for opportunity cost scoring above.
Round 2 NCR/CL/OFI 31 October 2014	Pending findings for opportunity cost scoring above.
Round 2 Response from Project Proponent 07 August 2015	project assigned the most conservative opportunity cost "8"
ESI Findings - Round 3	Here an NPV analysis is not required as the chosen risk rating is the highest and most conservative. The item is addressed.

Item Number	20
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 6: Land Tenure
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Ownership and resource access/use rights are held by same entity(s)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Project is claiming this score. However, it has not provided any supporting evidence to demonstrate this claim.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide evidence of ownership/resource access/use rights.
Round 1 Response from Project Proponent 29 August 2014	Deeds provide via mail

ESI Findings - Round 2	The deeds state that on 17 September 2004 Roxanne Kremer transferred 1,500 ha to Lawrence Allen Bishop. A second deed states that on 14 April 1995 the property Yacurina 1 of 1,499 ha was transferred by the Regional Director of Agriculture Carlos Garcia Mere to Lawrence Allen Bishop. The second parcel was previously owned by the minister of agriculture. The maps provided with the deeds appear to cover the appropriate number of hectares as reported by the deeds (2,999 ha total). This stated there are some issues between the deeded hectares and the hectares from the GIS files provided. These will be addressed in other sections of the verification checklist. This item is addressed.
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Item Number	21
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 6: Land Tenure
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	There exist disputes over access/use rights (or overlapping rights)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Project is not claiming a score for this item, however the project has not provided any evidence to support this claim. During the site visit, it was learned that there may be an overlap of ownership boundaries as the adjacent community is trying to register their property for ownership which is immediately adjacent and apparently the boundaries don't match perfectly which they and the project proponent are working on.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide a discussion and evidence that there are not disputes over access/use rights and or land tenure and ownership.
Round 1 Response from Project Proponent 29 August 2014	Discussion provided in PD and Risk tool.
ESI Findings - Round 2	The project asserts the boundary disputes are minimal and of low risk. However, the VCS tool does not give a scale for what can be considered minimal. It simply states "there exist disputes over access/use rights (or overlapping rights)." Therefore, all disputes are relevant and cannot be considered inconsequential. If the disputes no longer exist, then the project needs to provide evidence of this from the Puerto Miguel representatives.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Since a dispute exists/existed, the project must either accept this risk score or prove that the dispute has been resolved with supporting evidence.
Round 2 Response from Project Proponent 07 August 2015	The project provided evidence in the risk assessment that no boundary dispute exists. Furthermore, the purported boundary dispute that the NCR was based upon was with the Yacumama lodge property, (as best as could be derived since there is no tangible evidence available to the project or audit team) which is not included in the project area.

ESI Findings - Round 3	The issue of boundary disputes, within the context of land tenure for this risk element is still not sufficiently explained in the Risk Report. The landowners own the project area outright and thus auditors assume have full resource access/use rights. Securing the title to the land would have required geo-referencing or similar and official registration with the government. This fact should be stated in the risk report and for instance whether the ownership transfer process had involved on the ground assessment of all property boundaries and any consultations with neighboring landowners and resolution of any existing boundary disputes etc. Other details listed in this section may not be relevant and should be removed from the discussion. Also, the criteria under which the project falls (a.) incorrectly states "Not Applicable."
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address all findings.
Round 3 Response from Project Proponent 29 September 2016	The project asserts that there is no boundary issue to address. When ESI auditor (Shawn) was at Yacumama and individual visited and had a map that appeared to show a boundary dispute with the lodge property that could be an issue if the Puerto Miguel community pursued title to lands. This individual declined to accompany Norman Walters to the COFOPRI office in Iquitos or provide a copy of the map. No additional contact on this matter was made by anyone from Puerto Miguel with Yacumamanor COFOPRI. Thus we have determined no boundary disputes exist. Extraneous wording was removed but one paragraph essentially relating the above was left in for explanation purposes. Criteria wording updated.
ESI Findings - Round 4	Based on the information provided in the response, it appears a reasonable effort was made by the project proponent to gain clarity on the boundary issue originally identified by the Puerto Miguel resident. As the information provided is not verifiable from the desktop, the finding is being closed and a Forward Action request instead is being issued in the verification report so that the issue can be followed up on at the next onsite verification event.

Item Number	22
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 7: Community Engagement
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Less than 50 percent of households living within the project area who are reliant on the project area, have been consulted
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	The project is not claiming this score. However, the project has not provided any evidence of consultations with communities living within the project area.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide evidence that MORE than 50 percent of households living within the project area who are reliant on the project area, have been consulted.

Round 1 Response from Project Proponent 29 August 2014	The project area is entirely forested with no households living within the project area.
ESI Findings - Round 2	Evidence from the site visit supports that there are no communities living on the project area. There are communities who camp along the river but they did not appear to be homesteads but instead very temporary sites.

Item Number	23
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 7: Community Engagement
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Less than 20 percent of households living within 20 km of the project boundary outside the project area, and who are reliant on the project area, have been consulted
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	The project is claiming a score of 0 for this item, however the project has not provided any evidence of consultations or information about the communities living outside of the project area and within 20km of the project area.
Round NCR/CL/OFI 14 November 2013	1 NCR: Please provide evidence that MORE than 20 percent of households living within 20 km of the project boundary outside the project area, and who are reliant on the project area, have been consulted, or please explain if any communities living outside of the project boundary are reliant on the project area.
Round 1 Response from Project Proponent 29 August 2014	The project is seeking combined VCS-CCBA certification. Certification against Climate Community and Biodiversity Standards will satisfy this requirement according to the AFOLU Non-permanence Risk Tool v3.2.
ESI Findings - Round 2	The Project Proponent appeared to misread the note. The CCB certification will serve to obtain the <i>mitigation credit</i> , but the other aspects of risk scoring in this table must be addressed directly in this tool. It is likely that support of this risk score exists in the CCB Project Design Documentation, so at least a summary of how this risk factor was determined must be included in this section of the VCS Risk Report.
Round NCR/CL/OFI 31 October 2014	2 NCR: Please address the finding and include the appropriate discussion regarding the percent of communities that have been consulted in this section of the Risk Report.
Round 2 Response from Project Proponent 07 August 2015	Added appropriate information and justification for scores
ESI Findings - Round 3	This finding request has been addressed where the risk report now states sufficient details of households consulted. Local populations are not reliant on the project area. The item is addressed.

Item Number	24
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VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 8: Political Risk
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Governance score of -0.32 to less than 0.19
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf World Bank Institute's Worldwide Governance Indicators (WGI)
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	It appears that there is data available as recently as 2013 (not 2012 as the Risk Report states).
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please ensure the most recent WGI data is being applied for the calculation of this score.
Round 2 Response from Project Proponent 07 August 2015	Updated through 2013
ESI Findings - Round 3	The values for "Rule of law" are reported incorrectly and average score is incorrect.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	Used correct numbers and updated through 2014
ESI Findings - Round 4	The final governance score as calculated by the validator was -0.22. Though the client has used the 2014 numbers and the Risk Tool requires that "the most recent five years of available data" be used, range of values results in the same score. As any correctable errors need to be revised, the correct values still do need to be reported.
Round 4 NCR/CL/OFI 8 November 2016	NCR: As the score of -.13 (P14) and -0.231 (P15) are reported in the Risk Report, please revise the averaged Governance Score to reflect the average of all six indicators over the most recent five years of data available.
Round 4 Response from Project Proponent 27 November 2016	updated
ESI Findings - Round 5	The correct governance scores are now reported in the updated risk report. No further action is needed. The item is addressed.

Item Number	25
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VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Table 8: Political Risk
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Mitigation: Country is implementing REDD+ Readiness or other activities, as set out in this Section 2.3.3.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	Project is claiming this mitigation score, however has not provided any information as to what element of the qualifications for this score apply.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide a description of what element listed in the VCS Non-Permanence Risk Tool is being claimed for this mitigation score. Please provide and explanation, supporting evidence or a website that confirms the qualification for this credit.
Round 1 Response from Project Proponent 29 August 2014	Evidence provided in document
ESI Findings - Round 2	In addition to having a DNA, the country must also have at least one registered CDM AR project.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Please demonstrate that at least one registered CDM AR project has been approved in Peru.
Round 2 Response from Project Proponent 07 August 2015	Identified the project "Ignacio Tavera Dry Forest Reforestation, Sustainable Production and Carbon Sequestration", was established on 8989 ha of the communal land of the Ignacio Tavera Pasapera Community. It is located in Chulucanas District, department of Piura. The project was registered in 2009 with the Clean Development Mechanism (CDM) of the UNFCCC and it employs native species from the dry tropical forest, such as algarrobo (<i>Prosopis pallida</i>), zapote (<i>Capparis scabrida</i>) and overo (<i>Cordia lutea</i>).
ESI Findings - Round 3	Auditors confirmed this project is eligible by having a Designated National Authority and at least one registered CDM AR project. A finding was issued to revise this content in the Risk Report to be placed in the correct section. The item is addressed.

Item Number	26
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Natural Risks
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Fire

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	The project is scoring this item as a 0 however it has not offered any evidence or description of any kind that would support this rating.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide justification for each of these scores using the tools, tables and information provided in the AFOLU Non-Permanence Risk tool v3.2. Verifiers can not confirm these scores without appropriate evidence and justification.
Round 1 Response from Project Proponent 29 August 2014	Evidence provided in document
ESI Findings - Round 2	Cochrane and Laurence 2002 (3Cochrane M.A. & Laurence W.F., 2002. Fire as a large-scale edge effect in Amazonian forests, Journal Of Tropical Ecology, 18:311-325) state that "droughts or rainfall deficits appear to be relatively common occurrences in the eastern Amazon" and that droughts have to be present prior to the initiation of forest fires, noting these tend to be from anthropogenic sources. Similar VCS projects in the eastern Amazon reasonably close to the Yacumama project (e.g. The Purus Purus) have supported a fire significance of 5-25% and Likelihood of 10 - 25 years, with a score of 2.
Round 2 NCR/CL/OFI 31 October 2014	Please review the Purus project Risk assessment and the Cochrane paper and adjust risk score accordingly.
Round 2 Response from Project Proponent 07 August 2015	Appropriate justification included in the risk document
ESI Findings - Round 3	Auditors should have been more clear in the previous finding request. Natural Risks as described in the project Risk Report need to follow the VCS template, where significance and likelihood are explicitly stated using the language in Table 10 of the Risk tool to justify the score. In the case of fire, the likelihood and significance as currently described are still unclear to justify the score of 0.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please address the findings and describe all natural risks using the VCS Risk tool template and in terms of likelihood and significance to justify scores obtained, including fire.
Round 3 Response from Project Proponent 29 September 2016	Updated to use VCS template to describe likelihood and significance
ESI Findings - Round 4	Sufficient narrative provided and literature referenced to support the frequency and likelihood rankings. The LS score is 1. As there is no mitigation proposed, the mitigation score should be 1, which would result in a total fire risk of 1.
Round 4 NCR/CL/OFI 8 November 2016	NCR: Please revise and add the score of 1 to the total natural risk score.
Round 4 Response from Project Proponent 27 November 2016	updated
ESI Findings - Round 5	The correct natural risk score (1) is now reported in the updated risk report. However, the score is still noted as 0 for Natural Risk- Fire up above and should reflect a 1.

Round NCR/CL/OFI 15 December 2016	5	CL: Please update the Natural Risk- Fire score to 1.
Round 5 Response from Project Proponent		Updated, Page 17 Risk Report
ESI Findings - Round 6		The correct risk score for Natural Risk- Fire is now reported throughout the Risk Report and reflected in the updated overall risk score. No further action is needed. The item is addressed.

Item Number	27	
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)		Natural Risks
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)		Pest and Disease
Evidence Used to Assess (Location in PD/MR or Supporting Documents)		VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1		The project is scoring this item as a 0 however it has not offered any evidence or description of any kind that would support this rating.
Round NCR/CL/OFI 14 November 2013	1	NCR: Please provide justification for each of these scores using the tools, tables and information provided in the AFOLU Non-Permanence Risk tool v3.2. Verifiers can not confirm these scores without appropriate evidence and justification.
Round 1 Response from Project Proponent 29 August 2014		Evidence provided in document
ESI Findings - Round 2		The narrative provided along with the referenced articles supports the score. Addressed.
Round NCR/CL/OFI 31 October 2014	2	
Round 2 Response from Project Proponent 07 August 2015		
ESI Findings - Round 3		
Round NCR/CL/OFI 25 September 2015	3	
Round 3 Response from Project Proponent 29 September 2016		
ESI Findings - Round 4		Sufficient narrative provided and literature referenced to support the frequency and likelihood rankings. The LS score is 0 with no mitigation the total pest and disease score is 0.

Item Number	28
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Natural Risks
VCS Standard Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Extreme Weather – Changes in Weather Patterns
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	The project is scoring this item as a 0 however it has not offered any evidence or description of any kind that would support this rating.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide justification for each of these scores using the tools, tables and information provided in the AFOLU Non-Permanence Risk tool v3.2. Verifiers can not confirm these scores without appropriate evidence and justification.
Round 1 Response from Project Proponent 29 August 2014	Evidence provided in document
ESI Findings - Round 2	The narrative provided along with the referenced articles supports the score. Addressed.
Round 2 NCR/CL/OFI 31 October 2014	2
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	3
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	Sufficient narrative provided and literature referenced to support the frequency and likelihood rankings. The LS score is 0 with no mitigation the total extreme weather score is 0.

Item Number	29
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Natural Risks

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Geological Risk)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf
ESI Findings - Round 1	The project is scoring this item as a 0 however it has not offered any evidence or description of any kind that would support this rating.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide justification for each of these scores using the tools, tables and information provided in the AFOLU Non-Permanence Risk tool v3.2. Verifiers can not confirm these scores without appropriate evidence and justification.
Round 1 Response from Project Proponent 29 August 2014	Evidence provided in document
ESI Findings - Round 2	The narrative provided along with the referenced articles supports the score. Addressed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	Sufficient narrative provided and literature referenced to support the frequency and likelihood rankings. The LS score is 0 with no mitigation the total geologic score is 0.

Item Number	30
VCS AFOLU Non-Permanence Risk Tool 04 October 2012, v3.2 (Section)	Natural Risks
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Other natural risk factors
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	VCS Non-Permanence Risk Report Yacumama Forest Carbon Project.pdf

ESI Findings - Round 1	The project is scoring this item as a 0 however it has not offered any evidence or description of any kind that would support this rating.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide justification for each of these scores using the tools, tables and information provided in the AFOLU Non-Permanence Risk tool v3.2. Verifiers can not confirm these scores without appropriate evidence and justification.
Round 1 Response from Project Proponent 29 August 2014	Evidence provided in document
ESI Findings - Round 2	The narrative provided along with the referenced articles supports the score. Addressed.
Round 2 NCR/CL/OFI 31 October 2014	2
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	3
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	n/a

Item Number	31
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.1.1 Sub-step 1a. Identify credible alternative land use scenarios to the proposed VCS AFOLU project activity
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	i) Continuation of the pre-project land use;
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.6
ESI Findings - Round 1	Scenario A and Scenario D
Round 1 NCR/CL/OFI 14 November 2013	1

Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	In reviewing the scenarios, it is unclear what the difference between scenario A and Scenario D is as they both appear to be the same (ie continuation of the pre-project land use).
Round 2 NCR/CL/OFI 31 October 2014	2 CL: Please clarify the difference between scenario A and Scenario D as they both appear to be the same (ie continuation of the pre-project land use).
Round 2 Response from Project Proponent 07 August 2015	Clarified differences between two scenarios
ESI Findings - Round 3	Proponents clarified the difference in land uses by eliminating language in Scenario D which mentions agricultural conversion and noting the expenses associated of doing nothing with the property. This is sufficient to distinguish the two scenarios. The item is addressed.

Item Number	32
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.1.1 Sub-step 1a. Identify credible alternative land use scenarios to the proposed VCS AFOLU project activity
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Legal requirements; or
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.7
ESI Findings - Round 1	There do not appear to be any legal requirements to keep the forest standing, however this is described in several areas in the PD. All other selected alternatives appear to be legal and verifiers have no reason to doubt their permissibility. Sub-step 1b states that "All alternatives presented are legal under Peruvian law." an NCR was drafted for this in substep 1b below.
Round 1 NCR/CL/OFI 14 November 2013	1 CL: Please provide a listing and analysis of the laws that govern forests in Peru, specifically, please describe the legal basis for the baseline scenario as a means to justify that the project area is not legally required to remain standing.
Round 1 Response from Project Proponent 29 August 2014	Discussed in appropriate section and confirmed by the inclusion of an approved Harvest plan for Yacumama in Appendix B
ESI Findings - Round 2	Laws now described in the PD. Harvest plan conversion still underway.

Item Number	33
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.1.2 Sub-step 1b. Consistency of credible land use scenarios with enforced mandatory applicable laws and regulations
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	i) Demonstrate that all land use scenarios identified in the sub-step 1a: are in compliance with all mandatory applicable legal and regulatory requirements;
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.6
ESI Findings - Round 1	There do not appear to be any legal requirements to keep the forest standing, however this is described in several areas in the PD. All other selected alternatives appear to be legal and verifiers have no reason to doubt their permissability. Sub-step 1b states that "All alternatives presented are legal under Peruvian law."
Round 1 NCR/CL/OFI 14 November 2013	CL: Please provide a listing and analysis of the laws that govern forests in Peru, specifically, please describe the legal basis for the baseline scenario as a means to justify that the project area is not legally required to remain standing.
Round 1 Response from Project Proponent 29 August 2014	Discussed in appropriate section and confirmed by the inclusion of an approved Harvest plan for Yacumama in Appendix B
ESI Findings - Round 2	Laws now described in the PD. Harvest plan has been converted and supports compliance with legal and regulatory requirements.

Item Number	34
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.2.1 Sub-step 2a. Determine appropriate analysis method
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Determine whether to apply simple cost analysis, investment comparison analysis or benchmark analysis (sub-step 2b).

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.6
ESI Findings - Round 1	The PD states "Because the Project generates no financial or economic benefits other than VCS related income, simple cost analysis is selected."
Round 1 NCR/CL/OFI 14 November 2013	NCR: The project has not provided verifiers with any information other than that stated in the PD. Verifiers need to see all of the costs and revenue projections in order to confirm this statement. Please provide all appropriate details of this simple cost analysis.
Round 1 Response from Project Proponent 29 August 2014	See MS Excel spreadsheet Project expense accounting
ESI Findings - Round 2	Financial analysis now provided. Pending rows 21 and 26 of the Risk Tool tab. The item here is addressed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	The simple cost analysis was applied and this selection is appropriate.

Item Number	35
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.2.2 Sub-step 2b. – Option I. Apply simple cost analysis
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Document the costs associated with the VCS AFOLU project and demonstrate that the activity produces no financial benefits other than VCS related income.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.6
ESI Findings - Round 1	The PD states "Costs have been documented for the Project and audited to demonstrate no financial benefits other than VCS related income." NCR issued in line 45, however it is understood by verifiers that the eco-lodge will continue to operate, which would conceivably generate some revenue over and above the carbon credits. If the project is found to generate income other than from the sale of the carbon credits, then an investment analysis or benchmark analysis is required.

Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide all costs and revenue projections for this project. Please add a description to the PD that outlines if the lodge will continue to operate and what revenues are associated with this operation. If the project is found to generate income other than from the sale of the carbon credits, then an investment analysis or benchmark analysis is required. If this is the case, please provide these analyses according to the requirements.
Round 1 Response from Project Proponent 29 August 2014	See MS Excel spreadsheet Project expense accounting
ESI Findings - Round 2	Financial analysis now provided. Need clarification if any anticipated revenues from the lodge are expected in the with project scenario. The financial analysis spreadsheet shows no revenues from the lodge however discussions with the lodge manager indicated that the money from the VCS project would help to reestablish the lodge for use with ecotourism and education support in conjunction with universities.
Round 2 NCR/CL/OFI 31 October 2014	2 Please amend the financial analysis to include any potential revenues from the operation of the lodge in the with project scenario. If any revenues will be generated please apply the investment comparison, barrier or benchmark analysis.
Round 2 Response from Project Proponent 07 August 2015	The following wording was inserted " The lodge property adjacent to the project area will be run as a not-for profit business in the future with all student groups and researchers only charged the costs of providing lodging, meals, and maintenance. Any funds generated through the selling of VCUs are completely separate from lodge related activities."
ESI Findings - Round 3	The response from the proponent indicated that revenues generated from operation of the lodge are only to sustain lodge operation and are independent of the carbon project. This element is low risk since the lodge is not currently operating for selection of the appropriate analysis method but should be checked at the next verification. The item is addressed.

Item Number	36
Approved VCS Tool VT0001,Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.4 Step 4. Common practice analysis
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	2.4.2 Provide an analysis to which extent similar activities to the one proposed as the VCS AFOLU project activity have been implemented previously or are currently underway.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.7

ESI Findings - Round 1	The project description indicates "There are multiple private properties officially recognized as private protected areas and numerous privately held preserves within national protected areas in Peru (Solano 2009). A key distinction between the Project and other lands managed as private protected areas is that, at least in some cases, other areas are able to support the annual costs of management through outside means such as non-governmental organization (NGO) supported and endorsed ecotourism (e.g. the American Bird Conservancy), direct support by NGO's, or private funds. Income from these sources is not available to Yacumama landowners and therefore the Project activity is additional." While this description is plausible, there needs to be more information presented as to why this funding is not available to the project proponents, what funding is provided to all of these properties rather than "in some cases" and if other projects are currently underway that are similar to this project.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please offer more discussion on this issue in the PD as the current analysis is not thorough enough. Please describe what other funding sources are available to the other privately held preserves, other than the NGO funding, why this funding is NOT available to the project proponents and what other projects similar to this project are currently underway in the region. Please specifically point out any reference materials that were used in this analysis.
Round 1 Response from Project Proponent 29 August 2014	Provided in the appropriate section in the PD
ESI Findings - Round 2	Sufficient discussion is now provided in section 4 of the PD to demonstrate the complexity and reasons why the project proponent believes a privately held preserve would not be possible. The argument is largely that while Yacumama has considerable biodiversity is not unique regionally within Peru and because of the relative ecological uniqueness of the two examples, they are able to attract funding and support from several NGO's. Addressed.

Item Number	37
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.4 Step 4. Common practice analysis
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Provide documented evidence and, where relevant, quantitative information.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.7

ESI Findings - Round 1	The project description indicates "There are multiple private properties officially recognized as private protected areas and numerous privately held preserves within national protected areas in Peru (Solano 2009). A key distinction between the Project and other lands managed as private protected areas is that, at least in some cases, other areas are able to support the annual costs of management through outside means such as non-governmental organization (NGO) supported and endorsed ecotourism (e.g. the American Bird Conservancy), direct support by NGO's, or private funds. Income from these sources is not available to Yacumama landowners and therefore the Project activity is additional." Quantitative information is not provided.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide quantitative information regarding the analysis of common practice. Please indicate what other funding sources are available to these other protected areas. Please indicate what costs are associated with protected areas.
Round 1 Response from Project Proponent 29 August 2014	Provided in the appropriate section in the PD
ESI Findings - Round 2	Sufficient discussion is now provided in section 4 of the PD to demonstrate the complexity and reasons why the project proponent believes a privately held preserve would not be possible. Additionally the narrative topically discusses the costs these types of conservation projects must bear. The argument is largely that while Yacumama has considerable biodiversity is not unique regionally within Peru and because of the relative ecological uniqueness of the two examples, they are able to attract funding and support from several NGO's. Addressed.

Item Number	38
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.4 Step 4. Common practice analysis
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Considerations shall be limited to the period beginning 10 years prior to the project start date.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.7

ESI Findings - Round 1	The project description indicates "There are multiple private properties officially recognized as private protected areas and numerous privately held preserves within national protected areas in Peru (Solano 2009). A key distinction between the Project and other lands managed as private protected areas is that, at least in some cases, other areas are able to support the annual costs of management through outside means such as non-governmental organization (NGO) supported and endorsed ecotourism (e.g. the American Bird Conservancy), direct support by NGO's, or private funds. Income from these sources is not available to Yacumama landowners and therefore the Project activity is additional." No time period is listed in the analysis of common practice offered in the PD.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please confirm the time period being considered in the common practice analysis.
Round 1 Response from Project Proponent 29 August 2014	Provided in the appropriate section in the PD
ESI Findings - Round 2	The PD now states "Similar activities to the proposed project occurring in Peru over the previous 10 years from project initiation were analyzed for common practice." in section 4. The Solano 2009 paper was not cited in the literature list and so could not be reviewed to confirm the time period.
Round 2 NCR/CL/OFI 31 October 2014	Please provide the Solano 2009 reference in the literature section so the time period of the referenced projects can be confirmed.
Round 2 Response from Project Proponent 07 August 2015	Reference inserted
ESI Findings - Round 3	The previous request was intended for the proponent to supply the actual Solano 2009 reference. However, auditors located the Solano 2009 document and confirmed that private reserves exist within nationally registered reserves and require a master plan. In other words, responsibility of conservation area development largely falls upon private enterprise/NGOs. Financial support of these efforts does not exist for the project. The item is addressed.

Item Number	39
Approved VCS Tool VT0001, Version 3.0 (1 February 2012), Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Sectoral Scope 14 (Section)	2.4 Step 4. Common practice analysis

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	2.4.3 If activities similar to the proposed VCS AFOLU project activity are identified, then compare the proposed project activity to the other similar activities and assess whether there are essential distinctions between them. Essential distinctions may include a fundamental and verifiable change in circumstances under which the proposed VCS AFOLU project activity will be implemented when compared to circumstances under which similar activities were carried out. If certain benefits rendered the similar activities financially attractive (e.g., subsidies or other financial flows), explain why the proposed VCS AFOLU project activity cannot use the benefits. If applicable, explain why the similar activities did not face barriers to which the proposed VCS AFOLU project activity is subject.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 4.7
ESI Findings - Round 1	The project description indicates "There are multiple private properties officially recognized as private protected areas and numerous privately held preserves within national protected areas in Peru (Solano 2009). A key distinction between the Project and other lands managed as private protected areas is that, <u>at least in some cases</u>, other areas are able to support the annual costs of management through outside means such as non-governmental organization (NGO) supported and endorsed ecotourism (e.g. the American Bird Conservancy), direct support by NGO's, or private funds. Income from these sources is not available to Yacumama landowners and therefore the Project activity is additional." No other distinctions are pointed out and it appears from the description that there are other key distinctions between these other protected areas that need to be explained.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please thoroughly describe all key distinctions that illustrate the differences between the other protected areas in the region. Please refer to the requirements listed here for reference when addressing this request.
Round 1 Response from Project Proponent 29 August 2014	Provided in the appropriate section in the PD
ESI Findings - Round 2	Sufficient discussion is now provided in section 4 of the PD to demonstrate the complexity and reasons why the project proponent believes a privately held preserve would not be possible. Additionally the narrative topically discusses the costs these types of conservation projects must bear. The argument is largely that while Yacumama has considerable biodiversity is not unique regionally within Peru and because of the relative ecological uniqueness of the two examples, they are able to attract funding and support from several NGO's. Addressed.

Item Number	40
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VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	II. PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Measurements of initial stocks employed in the baseline must take place within ± 5 years of the project start date, for simplicity referred to here as stocks at $t=0$.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.3 of the PD and Appendix A: Monitoring and Assessment Methods; PD: Section 6
ESI Findings - Round 1	The mean total carbon pool in 2013 was based on field data collected in 2013. the PD does not explain the process used for the field measurements, nor does it reference any document.
Round 1 NCR/CL/OFI 14 November 2013	CL: Please indicate in the PD where the information can be found concerning the field methods used for the collection of data. Please indicate in the PD that there is an Appendix A that describes the process.
Round 1 Response from Project Proponent 29 August 2014	Referenced in the main body of the PD
ESI Findings - Round 2	References to Appendix A have been included. The item has been addressed. PDD states that sampling was done in 2013, however Aboveground plot data in the Excel workbook reads "2011 DBH". It is unclear why this is the case.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please clarify why aboveground plot data in the Excel workbook reads "2011 DBH"
Round 2 Response from Project Proponent 07 August 2015	Year was entered incorrectly and has been changed to the correct year.
ESI Findings - Round 3	The worksheet "Yacumama_Carbon_Stock_Calculations_2015_final.xlsx" was provided for this round and continues to show 2011 for AG biomass, though the document "Monitoring and Assessment Methods.pdf" and the PD Section 5.3 states the inventory was performed in 2013. The requirement here is met although the calc worksheet is misleading with a date labeled as 2011. Section 5.3 of PD states "was based on field data collected in 2013 and independently verified ²⁴ ."
Round 3 NCR/CL/OFI 25 September 2015	CL: Please revise language in the PD referring to verification as the PD contains validation elements.
Round 3 Response from Project Proponent 29 September 2016	language revised to reflect validation. The term verification is used when necessary to refer to future events

ESI Findings - Round 4	The response from the PP is incomplete and the VVB was unable to locate revisions within the PD. As stated in the previous finding the requirement is met and mention of measurement timing (2013) is adequate in the PD. The item is addressed.
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Item Number	41
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	II. PROCEDURES
VCS Standard Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Part 1: Aboveground tree biomass: Estimation of carbon stocks in aboveground tree biomass (CAB_tree,i)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Yacumama_Carbon_Stock_Calculations_2016_final.xlsx, PD Section 8.3
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	The format of the parameter table for this parameter in Section 8.2 of the PD is incorrect and does not follow the VCS + CCB template. It is also incorrect for the monitoring report VCS + CCB template.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please correct the table formatting for this parameter as noted in the finding within the PD and monitoring report.
Round 3 Response from Project Proponent 29 September 2016	format changed to reflect VCS template

ESI Findings - Round 4	The VVB confirmed that table formatting has been appropriately updated. However, the computed value for CAB_tree,i is reported incorrectly in the PD Section 8.3. As part of review at this round, the VB noticed that tree species were not identified in the inventory data. An email was sent to the proponent on Sept. 30 2016 to confirm whether cecropia or palms were included in biomass quantification since these tree forms are quantified differently than the allometric chosen. the PD states, "Although the DBH and height were recorded for all palms inside forest plots, the palm biomass was being conservatively excluded from total biomass calculations. Liana biomass was similarly excluded from biomass estimates."" The proponent confirmed that palms and cecropia were excluded from biomass quantification.
Round 4 NCR/CL/OFI 8 November 2016	CL: Please address the findings the report the correct value for CAB_tree,l in the parameter table of PD Section 8.3.
Round 4 Response from Project Proponent 27 November 2016	Inserted the correct value
ESI Findings - Round 5	The value for parameter CAB_tree,l is now correctly reported in Section 8.3 of the PD. The item is addressed.

Item Number	42
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	II. PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 3: Estimate carbon stock in aboveground biomass for each individual tree of species group j in the sample plot located in stratum i using the selected or developed allometric equation applied to the tree dimensions resulting from Step 1 and sum the carbon stocks in the sample plot
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data calculations.xls file- Above Ground biomass tab
ESI Findings - Round 1	This step appears to have been performed correctly. All calculations were followed on the excel file and found no abnormalities. The process stated in this module was followed on a tree by tree basis. The expansion factors were correctly applied and all of these steps are described in the Raw Data Calculations file from the client.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Equation 1 is not referenced within the PDD.

Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include reference to equation 1 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Inserted
ESI Findings - Round 3	The description of the calc steps are included satisfactorily in the PD. The calc was performed correctly. The item is addressed

Item Number	43
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	II. PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 4: Calculate the mean carbon stock in aboveground biomass for each stratum, converted to carbon dioxide equivalents
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data calculations.xls file- totals tab, Yacumama_Carbon_Stock_Calculations_2016_final.xlsx
ESI Findings - Round 1	Contained in D29 and E29 of the totals tab of the Raw Data Calculations excel file from client. This all appears to have been performed correctly.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Equation 2 is not included in the PDD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include reference to equation 2 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Inserted Equation and Reference
ESI Findings - Round 3	The description of the calc steps for Equation 2 are included satisfactorily in the PD. However, the calc was not performed correctly.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please fix computations for Equation 2.

Round 3 Response from Project Proponent 29 September 2016	Computations corrected in PD and accompanying XL spreadsheet (Yacumama_Carbon_Stock_calculations_final_2016"
ESI Findings - Round 4	The VVB reviewed the revised carbon stock quantification worksheet. The proponent is now dividing by the correct number of plots to determine CAB_tree,i. The item is addressed.

Item Number	44
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	II. PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 1: Calculate the belowground tree biomass carbon stock for each plot by multiplying the root to shoot ratio by the AGB calculated in Part 1
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.3 of the PD and Appendix A: Monitoring and Assessment Methods Raw Data Calculations Excel file
ESI Findings - Round 1	This is all performed in the below ground biomass tab of the Raw Data Calculations file sent by the client. Columns D through H. Use of the .37 below ground biomass ratio is confirmed from page 4.47 of the draft 2006 IPCC Guidelines for National Greenhouse Gases Inventories, however this factor is incorrect since the CP-AB module requires the use of the factors listed on page 17 of CP-AB. These are modified factors that must be used in place of the factors listed in the IPCC document. NCR is listed in row 99 and this item will be pending until that one is cleared.
Round NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Equation 5 is not included in the PDD. Additionally PDD states that Pearson 2005 belowground computation was used for the computation of belowground biomass. This would constitute as a methodology deviation. Justification for the methodology deviation has not been provided nor has it been included as such in the PDD.
Round NCR/CL/OFI 31 October 2014	2
Round 2 Response from Project Proponent 07 August 2015	NCR: Please include reference to equation 5 in the PDD, as required by the methodology. Equation 5 was referenced in the PD. Pearson calculation was replaced by root-to-shoot ratio calculations from CP-AB

ESI Findings - Round 3	The description of the calc steps for Equation 5 are included satisfactorily in the PD. Item is addressed.
Item Number	45
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	II. PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 1: Calculate the belowground tree biomass carbon stock for each plot by multiplying the root to shoot ratio by the AGB calculated in Part 1
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.3 of the PD, Appendix A: Monitoring and Assessment Methods, Yacumama_Carbon_Stock_Calculations_2016_final.xlsx
ESI Findings - Round 1	This is all performed in the below ground biomass tab of the Raw Data Calculations file sent by the client. Columns D through H. Use of the .37 below ground biomass ratio is confirmed from page 4.47 of the draft 2006 IPCC Guidelines for National Greenhouse GAs Inventories, however this factor is incorrect since the CP-AB module requires the use of the factors listed on page 17 of CP-AB. These are modified factors that must be used in place of the factors listed in the IPCC document. NCR is listed in row 99 and this item will be pending until that one is cleared.
Round NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Equation 5 is not included in the PDD. Additionally PDD states that Pearson 2005 belowground computation was used for the computation of belowground biomass. This would constitute as a methodology deviation. Justification for the methodology deviation has not been provided nor has it been included as such in the PDD.
Round NCR/CL/OFI 31 October 2014	NCR: Please use the approach described in the methodology (defined by equation 5) or include a methodology deviation in the PDD along with justification that the described approach shall not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, except where they result in increased accuracy of such quantification.
Round 2 Response from Project Proponent 07 August 2015	Equation 5 was referenced in the PD. Pearson calculation was replaced by root-to-shoot ratio calculations from CP-AB
ESI Findings - Round 3	The calc for Equation 5 was not performed correctly for sample plots.

Round 3 NCR/CL/OFI 25 September 2015	NCR: Please fix computations for Equation 5.
Round 3 Response from Project Proponent 29 September 2016	Computations corrected in PD and accompanying XL spreadsheet (Yacumama_Carbon_Stock_calculations_final_2016"
ESI Findings - Round 4	The VVB re-reviewed application of the root to shoot ratio in Equation 5 and average for all plots. The correct number of sample plots is now applied. The item is addressed.

Item Number	46
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	II. PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 2: Calculate the mean belowground tree biomass carbon stock for each stratum, converted to carbon dioxide equivalents
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.3 of the PD and Appendix A: Monitoring and Assessment Methods Raw Data Calculations Excel file
ESI Findings - Round 1	This is all performed in the below ground biomass tab of the Raw Data Calculations file sent by the client. Columns D through H.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Equation 6 is not included in the PDD. An examination of the PDD shows that the equation is computed
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include reference to equation 6 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Reference inserted
ESI Findings - Round 3	The description of the calc steps for Equation 6 are included satisfactorily in the PD. However, the parameter CBB_tree,l does not have the proper formatting in the parameter table following the template

Round NCR/CL/OFI 25 September 2015	3	CL: Please fix the parameter table as noted in the finding to follow the template.
Round 3 Response from Project Proponent 29 September 2016		template updated to VCS template
ESI Findings - Round 4		The VVB confirmed that table formatting has been appropriately updated. However, the computed value for CBB_tree,i is reported incorrectly in the PD Section 8.3.
Round NCR/CL/OFI 8 November 2016	4	CL: Please address the findings the report the correct value for CBB_tree,i in the parameter table of PD Section 8.3.
Round 4 Response from Project Proponent 27 November 2016		Inserted the correct value
ESI Findings - Round 5		The value for parameter CBB_tree,i is now correctly reported in Section 8.3 of the PD. The item is addressed.

Item Number	47
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	6.1 Data and Parameters Available at Validation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Carbon fraction of dry matter in t C t-1 d.m. (CF):
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	
ESI Findings - Round 1	
Round NCR/CL/OFI 14 November 2013	1
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The data/parameter is used but not included in the parameters not monitored section of the PDD.
Round NCR/CL/OFI 31 October 2014	2 Please include the parameter CF in the Data and Parameters Section of the PDD.

Round 2 Response from Project Proponent 07 August 2015	Parameter inserted
ESI Findings - Round 3	Parameter was appropriately inserted in the PD. The item is addressed.

Item Number	48
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	6.1 Data and Parameters Available at Validation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Allometric equation for species j linking measured tree variable(s) to aboveground biomass of living trees, expressed as $t \text{ d.m. tree}^{-1} (f_j(X,Y))$
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The data/parameter is used but not included in the parameters not monitored section of the PDD.
Round 2 NCR/CL/OFI 31 October 2014	Please include the parameter $(f_j(X,Y))$ in the Data and Parameters Section of the PDD.
Round 2 Response from Project Proponent 07 August 2015	Parameter inserted
ESI Findings - Round 3	Parameter was appropriately inserted in the PD. The item is addressed.

Item Number	49
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VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	Parameter $f_j(X,Y)$
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Select at least 30 trees (if validating forest type-specific equation, selection should be representative of the species composition in the project area, i.e. species representation in roughly in proportion to relative basal area). Minimum diameter of measured trees shall be 20cm and maximum diameter shall reflect the largest trees present or potentially present in the future in the project area (and/or leakage belt)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.3 of the PD and Appendix A: Monitoring and Assessment Methods; PD: Section 6
ESI Findings - Round 1	The project used the appropriate methods. They selected 43 trees. The full description is in Appendix A, A.1.2. The appropriate and referenced average density factor and taper factors were used and reference documents were reviewed by verifiers and found to be accurate. The project did not provide any of the raw data for this process that would allow verifiers to confirm this information.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide the raw data collected for the trees that were used for the allometric equation validation. This needs to include the tree DBH, heights, species and an explanation and supporting documentation that supports the selection of the tree species as being relatively representative of the species mix encountered on site.
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Forty-three trees were used for the allometric validation procedure. Verifiers confirmed that the distributions roughly match distributions in the carbon computations. Additionally, description of the procedure has been included within Appendix A of the PDD, describing equation validation. The item has been addressed.

Item Number	50
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	Parameter $f_j(X,Y)$

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Calculate stem volume from measurements and multiplying by species-specific density to gain biomass of bole.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Appendix A: Monitoring and Assessment Methods; Yacumama_Allometric_Equation_Validation.xlsx
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Stem volume is calculated based on a non-local equation from IUFRO. The approach used is sound. PDD states that Reyes 1992 was used to determine an average specific density value of 0.55g/cm ³ . It is unclear how this value was determined. Additionally, for identified species, species-specific values from Reyes should be used.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please clarify how the value of 0.55g/cm ³ was determined as the average specific density.
Round 2 Response from Project Proponent 07 August 2015	Changed 0.55 to tropical america mean to 0.60. Added species specific density.
ESI Findings - Round 3	Most trees for allometric validation used the unknown tree category set as 0.60g/cm ³ for density which is correctly obtained from Reyes et al 1992. The item is addressed.

Item Number	51
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	Parameter $f_j(X,Y)$
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Calculate stem volume from measurements and multiplying by species-specific density to gain biomass of bole.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Appendix A: Monitoring and Assessment Methods; Yacumama_Allometric_Equation_Validation.xlsx
ESI Findings - Round 1	

Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Stem volume is calculated based on a non-local equation from IUFRO. The approach used is sound. PDD states that Reyes 1992 was used to determine an average specific density value of 0.55g/cm ³ . It is unclear how this value was determined. Additionally, for identified species, species-specific values from Reyes should be used.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please ensure that identified species are utilizing species-specific density values.
Round 2 Response from Project Proponent 07 August 2015	Added species specific density.
ESI Findings - Round 3	Species specific density values from Reyes are sufficient and the regression for the wet tropical equation Pearson equation selected is in compliance. The item is addressed.

Item Number	52
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	Parameter $f_j(X,Y)$
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Apply a biomass expansion factor to estimate total aboveground biomass from stem biomass. For broadleaf tropical trees this factor shall be:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Appendix A: Monitoring and Assessment Methods; Yacumama_Allometric_Equation_Validation.xlsx
ESI Findings - Round 1	The project claims to have used a factor for density and for stem taper, however no BEF appears to have been used. This does not appear to be a correct process to follow.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide the tree level calculations for the process of calculating the stem volume. Please indicate which one of the selections for the biomass expansion factor was used.
Round 1 Response from Project Proponent 29 August 2014	BEF incorporated in calculation Spreadsheets "Yacumama_Allometric_Equation_Validation"

ESI Findings - Round 2	Biomass expansion factors are correctly applied, based on stem diameter, as described in the methodology. The item has been addressed.
Item Number	53
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	Parameter $f_j(X,Y)$
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Plot all the estimated biomass of all the measured trees along with the curve of biomass against diameter as predicted by the allometric equation. If the estimated biomass of the measured trees are distributed both above and below the curve (as predicted by the allometric equation) the equation may be used. The equation may also be used if the measured individuals have a biomass consistently higher than predicted by the equation. If plotting the biomass of the measured trees indicates a systematic bias to overestimation of biomass (>75% of the trees above the predicted curve) then destructive sampling must be undertaken, or another equation selected. or
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.3 of the PD and Appendix A: Monitoring and Assessment Methods
ESI Findings - Round 1	The project appears to have followed this process correctly, however there are a few NCRs pending completion and submission of data. Until this information is reviewed by verifiers, this item will remain open. The project does plot the 43 trees selected for sampling and finds that the allometric for Pearson et al, 2005 was the most plausible equations to use. This equation is used for areas with more than 4000 mm of rain per year. However this rainfall amount is admittedly just a guide (according to the publication) and the project area receives close to that amount. Verifiers find that since the project trees so closely align with this allometric and the area is regularly flooded, that this allometric represents the closest fitting equation that the project could have used, short of creating a completely new one. The Appendix A does indicate that the project found the selected allometric to be the most well fitting, however no information is provided on the comparison between the measured trees and the allometric predictions.
Round NCR/CL/OFI 14 November 2013	1 NCR: Please provide the details of each tree measured and please provide the information that shows the distribution of the trees against the predictions by the allometric equation. The image in appendix A is not clear enough to make a determination with certainty.
Round 1 Response from Project Proponent 29 August 2014	BEF incorporated in calculation Spreadsheet "Yacumama_Allometric_Equation_Validation"
ESI Findings - Round 2	Provided plot of regression confirms that the Pearson 2005 equation is appropriate. Additionally, the verifier examined residuals and noted no discernable bias. The item has been addressed.

Item Number	54
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	Parameter R
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Root to shoot ratio appropriate to species or forest type / biome; note that as defined here, root to shoot ratio is applied as belowground biomass per unit area:aboveground biomass per unit area (not on a per stem basis) - R
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Root to shoot ratio parameter is not included in the PDD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include the parameter R, Root to shoot ratio in the data and parameters section of the PDD, unless methodology deviation is utilized.
Round 2 Response from Project Proponent 07 August 2015	Included proper root to shoot ratio in parameters and in calculations
ESI Findings - Round 3	Parameter was appropriately added to the PD. The item is addressed.

Item Number	55
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	Parameter R
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	2. Global values may be selected from Table 4.4 (modified as given above) of the AFOLU Guidelines (IPCC 2006), by choosing a climatic zone and forest type that most closely matches the project circumstances.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring And Assessment Methods.doc
ESI Findings - Round 1	The project uses the factor of .37 that is taken from the IPCC document listed previously (table 4), however the project is supposed to use the modified values as presented in v1.1 of CP-AB, page 17.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please use the factors listed on page 17, as modified from table 4.4 of the IPCC GL AFOLU. The factor of .37 is not an option.
Round 1 Response from Project Proponent 29 August 2014	Corrected. Regression equation from Pearson et al 2005 used.
ESI Findings - Round 2	The PDD was modified to use the regression equation from Pearson et al. 2005. This would constitute a methodology deviation and would require justification. The item has been addressed.

Item Number	56
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Monitoring must occur at least every ten years for baseline renewal. Where carbon stock enhancement is included monitoring shall occur at least every five years.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	general PD
ESI Findings - Round 1	No carbon stock enhancement. Monitoring is occurring according to the timing. Number of sample plots was established using average data from an adjacent project and the project included what appears to be a sufficient number of plots to capture the different conditions on site. Site visit observations helped to confirm this finding, along with the uncertainty and sampling error levels calculated.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The parameter N does not include the frequency of monitoring as required by the methodology.

Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include the frequency of monitoring of the parameter N.
Round 2 Response from Project Proponent 07 August 2015	Included the frequency of monitoring
ESI Findings - Round 3	Frequency of monitoring as mentioned in the parameter table in the MR is sufficient. The item is addressed.

Item Number	57
VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Monitoring must occur at least every ten years for baseline renewal. Where carbon stock enhancement is included monitoring shall occur at least every five years.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring And Assessment Methods.doc
ESI Findings - Round 1	The document listed contains a description of how DBH was measured and appears to contain enough information for replication of this process to occur. The process described is reasonable given industry standards and common practice.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The parameter DBH does not include the frequency of monitoring as required by the methodology.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include the frequency of monitoring of the parameter DBH.
Round 2 Response from Project Proponent 07 August 2015	Included the frequency of monitoring
ESI Findings - Round 3	Frequency of monitoring as mentioned in the parameter table in the MR is sufficient. The item is addressed.

Item Number	58
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VCS Module VMD0001, REDD Methodological Module: Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), Version 1.1, (11 October 2013), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Standard quality control / quality assurance (QA/QC) procedures for forest inventory including field data collection and data management shall be applied. Use or adaptation of QA/QCs already applied in national forest monitoring, or available from published handbooks, or from the IPCC GPG LULUCF 2003, is recommended.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring And Assessment Methods.doc
ESI Findings - Round 1	The project claims that QA/QC occurred. "During data collection, trees within 0.2cm from diameter cut offs (5.0, 20.0, and 50.0cm) were re-measured by another field worker for QA/QC purposes. Additionally, random trees were selected throughout the measuring process to be re-measured for QA/QC." No information is given as evidence of this process nor of any outcome or adjustments made.
Round 1 NCR/CL/OFI 14 November 2013	CL: Please provide details of the QA/ QC process. Please provide the remeasurements performed so that verifiers can confirm the accuracy of the original measurements as compared to the quality control measurements.
Round 1 Response from Project Proponent 29 August 2014	More detail provided in Appendix A PD and MR
ESI Findings - Round 2	Additional detail has been provided in Appendix A of the PDD. QA/QC details and remeasurements were examined. The described approach is sound. The item has been addressed.

Item Number	59
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	4 PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The baseline net GHG emissions for planned deforestation will be determined using <u>equation 1 on page 5.</u>

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5.1, 5.3
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	Reference inserted. Calculations provided in Yacumama_Carbon_Stock_Calculations_5_2014" Summary worksheet
ESI Findings - Round 2	A reference for equation 1 was included in Section 5.1 of the PDD. The verifier was unable to see transparent computation of equation 1 ($\Delta\text{CBSL}_{\text{planned}}$).
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent computation of the value $\Delta\text{CBSL}_{\text{planned}}$, computed in equation 1 of the methodology.
Round 2 Response from Project Proponent 07 August 2015	Inserted in section 5.1
ESI Findings - Round 3	Equation 1 is now appropriately included in the PD, Section 5.1. The item is addressed.

Item Number	60
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	In the simplest scenario the agent is an already defined individual, organization or corporation.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.6
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	

ESI Findings - Round 2		The PDD states that the landowners will harvest the property in the absence of the project. The document also states that the land may be sold to another entity that will also harvest. For the purpose of the rest of this review the verifier assumes that the former case is correct.
Round 2 Response from Project Proponent 07 August 2015		Landowner
ESI Findings - Round 3		The agent of deforestation is defined as the landowner though this is not immediately clear in the PD. The item is addressed.
Round 3 Response from Project Proponent 29 September 2016		explicitly stated in section "4.6 Addtionality"
ESI Findings - Round 4		No action is needed by the proponent. The item is addressed.

Item Number	61
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The selection of class of agent must be justified through stratification of the region and demonstration with historical records that the identified class of agent is the most common purchaser of similar lands in the identified strata. Stratification shall follow the following guidance and procedures:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.5 of PD
ESI Findings - Round 1	This is only mentioned in section 5.5 of the PD and nowhere else. None of this information appears to have been justified.
Round 1 Response from Project Proponent 29 August 2014	Because of the existence of an approved Harvest Plan the proponents are the deforestation agent

ESI Findings - Round 2	PDD states that landowner will be doing the harvesting and thus the agent is defined. The item has been addressed.
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Item Number	62
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Strata must be spatially discrete and defined on the basis of forest carbon stocks. Strata shall reflect biophysical parameters relating to forest productivity, and activity-driven parameters relating to distinct conversion practices. Illustrative parameters include:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.5 of PD
ESI Findings - Round 1	This is only mentioned in section 5.5 of the PD and nowhere else. None of this information appears to have been justified.
Round NCR/CL/OFI 14 November 2013	NCR: Please include a discussion of this item in the PD.
Round 1 Response from Project Proponent 29 August 2014	Because of the existence of an approved Harvest Plan the proponents are the deforestation agent thereby this analysis was rendered moot.
ESI Findings - Round 2	PDD states that landowner will be doing the harvesting and thus the agent is defined. The item has been addressed.

Item Number	63
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Legal permissibility for deforestation ³

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Sections 4.5,4.6,5; Appendix B.
ESI Findings - Round 1	EMJ: The Project proponent and property owner appear to have clear title to Project property and legal permission to harvest timber from the Government of Peru, but no documentary proof is provided
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide documentary proof that deforestation is legally permitted in project area
Round 1 Response from Project Proponent 29 August 2014	Appendix B
ESI Findings - Round 2	A harvesting plan has been provided that allows for the harvesting of the property by Peruvian law. This has been included in Appendix B of the PD for the Yacurina I property. Verifiers were unable to locate documentary evidence that the 1500 hectare "Santuario Privado" has been approved for harvesting.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Please provide documentary evidence that the "Santuario Privado" area can be legally deforested.
Round 2 Response from Project Proponent 07 August 2015	Translated Document provided in Appendix B. Permission for including the " Private Sanctuary" and Lodge property on Page 19 of Plan (highlighted and in bold).
ESI Findings - Round 3	Page 19 of Appendix B in the PD is a translation of the geographic scope component of the deforestation plan. Here, the Yacaruna and Santuario Privado (private sanctuary) parcels are mentioned with hectares, but differing from Section 1.2 of the PD, "Yacumama (202 ha), Yacurana (1425 ha), and Santuario Privado (1575 ha)." Reporting of these hectares in Section 1.2 of the PD are assessed elsewhere in this review. The 1,499 and 1,500 ha as reported in Appendix B are greater than the project area and total are of planned deforestation (2,867ha). Page 19 of Appendix B translation states, "They are for private contract or public deed, especially in the signing of documents in order to obtain permission before logging." This statement suggests either additional documentation are needed to obtain permission for logging, or that signing of that document indicates permission for logging.
Round 3 NCR/CL/OFI 25 September 2015	3 CL: Please confirm the intent of the statement, "They are for private contract or public deed, especially in the signing of documents in order to obtain permission before logging." as noted in the finding. Please also fix the translation error on Page 19 of the translated Appendix B for the "Sanctuary Private-Rio Yarapa" parcel, stated incorrect number of hectares encompassed. Also, though not required to do so, auditors suggest removing Appendix B from the Monitoring Report as this item pertains to validation. Legal permissibility to deforest is set at validation.

Round 3 Response from Project Proponent 29 September 2016	As discussed previously in the PD, the area of each parcel reported in official documents were based upon COFOPRI maps that were incorrect based upon a comparison of original survey maps, known points, river locations etc. Thus CMIVT used original survey maps, imagery etc and re-mapped the two parcels to the correct survey points. This resulted in a change in the area of the individual parcels reported in the PD. However the total area of two parcels is the same (ie. 3000ha). The total area of planned deforestation (after updates for this round is now 2863 ha) is the actual area of forest in the two parcels (i.e. minus permanent water and small nonforested areas detected). At the time the plan was written by the Peruvian Forestry department the area in question (1499) was believed to be correct. Since this is a translation of an official Peruvian document changing the area would at the very least be inappropriate to change. Furthermore the discrepancy and how it has been addressed is explained in the PD. The passage in question is granting power of signature from Lawrence Bishop (poderdante) to Norman Walters and their attorney. The original Spanish document, which has been provided to the audit team, is a signed and officially stamped document.
ESI Findings - Round 4	The VVB understands the difference in geographic boundaries between the officially signed deforestation plan and geospatial project area boundaries that were revised for accuracy. The intention of the CL was to correct "1,5000 hectares," but this is not necessary. The VVB agrees with the proponent that the intent of page 19 of the translated deforestation plan is to clarify that the Attorney Norman Walters has power to sign documents on behalf of Lawrence Bishop for purposes of logging. The item is addressed.

Item Number	64
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Suitability of project area for conversion to alternative non-forest land use ⁴
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Sections 4.5, 4.6, 5; Appendix B.
ESI Findings - Round 1	EMJ: PD indicates that harvesting the valuable trees and clear the land of remaining woody vegetation will create open land with fertile soils that would be suitable for extensive commercial agriculture
Round NCR/CL/OFI 14 November 2013	1 NCR: Please provide documentary proof that the project area is suitable for deforestation

Round 1 Response from Project Proponent 29 August 2014	Appendix B and through the PD
ESI Findings - Round 2	A review of Appendix B shows that 909 hectares are convertible to Permanent cultivation and 589 hectares are convertible to pasture land. The verifier has been unable to find documentary evidence that the rest of the area is suitable for conversion.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide documentary evidence that the entire area is suitable for conversion to alternative non-forest land use, as the harvest plan (Appendix B.) only accounts for 1498 hectares.
Round 2 Response from Project Proponent 07 August 2015	Santuario-Privada is immediately adjacent to Fundo Yacurana I (see Figure 3), has the same soils, climate, and hydrologic regime and is thus also suitable for "agricultural exploitation". This point is in addition to the numerous citations throughout the document that identifies floodplains and riparian areas, which encompasses the entirety of Santuario privada, in the the Peruvian amazon as highly desirable for agricultural purposes.
ESI Findings - Round 3	The response from the project proponent sufficiently explains that Santuario Privado is suitable for conversion to agriculture and proximity to the other suitable tract makes this a reasonable assertion. This requirement references (subscript 4) accessibility to relevant markets, suitability of soils, topography and climate for the Santuario parcel, which are noted in Section 4.5 of the PD. The item is addressed.

Item Number	65
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Evidence of likely transfer of ownership to baseline agent of deforestation or class of agent of deforestation must be demonstrated by one of the following forms of evidence originating prior to the date of all evidence on pursuit of carbon finance/consideration of REDD: -Evidence that control of the project area would have been transferred to the baseline agent or class of agents in the absence of the project
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 4.6
ESI Findings - Round 1	EMJ: PP and owner is same as potential agent of deforestation. No evidence has been provided that would allow verifiers to confirm the probability of deforestation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide evidence that control of the project area would have been transferred to the baseline agent or class of agents in the absence of the project

Round 1 Response from Project Proponent 29 August 2014	Because of the existence of an approved Harvest Plan the proponents are the deforestation agent
ESI Findings - Round 2	PDD states that landowner will be doing the harvesting and thus the agent is defined and will be doing the harvesting. The item has been addressed.

Item Number	66
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	o Recent approval from relevant government department (local to national) for conversion of forest to an alternative land use; <u>or</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Sections 4.5,4.6,5; Appendix B.
ESI Findings - Round 1	EMJ: The Project proponent and property owner has clear title to Project property and legal permission to harvest timber from the Government of Peru, however nothing has been discussed in the PD to describe this permissibility.
Round NCR/CL/OFI 14 November 2013	NCR: Please provide a legal opinion or other evidence to show that the project area can legally be deforested at the rate suggested and please provide any permits for such, as needed.
Round 1 Response from Project Proponent 29 August 2014	Appendix B
ESI Findings - Round 2	Appendix B has been provided to demonstrate that harvesting and alternative land use conversion has been approved by the Peruvian government for the 1499 hectare "Yacurina I" property. Verifiers witnessed no documentary evidence to support the same for the "Santuario Privado" area comprised of 1500 hectares.
Round NCR/CL/OFI 31 October 2014	NCR: Please provide documentary evidence that the 1500 hectare "Santuario Privado" area has been approved for the conversion of the forest to an alternative land use.
Round 2 Response from Project Proponent 07 August 2015	Translated Document provided in Appendix B. Permission for including the " Private Sanctuary" and Lodge property on Page 19 of Plan (highlighted and in bold).

ESI Findings - Round 3	Page 19 of Appendix B in the PD is a translation of the geographic scope component of the deforestation plan. Here, the Yacaruna and Santuario Privado (private sanctuary) parcels are mentioned with hectares, but differing from Section 1.2 of the PD, "Yacumama (202 ha), Yacurana (1425 ha), and Santuario Privado (1575 ha)." Reporting of these hectares in Section 1.2 of the PD are assessed elsewhere in this review. The 1,499 and 1,500 ha as reported in Appendix B are greater than the project area and total are of planned deforestation (2,867ha). The item is addressed.
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Item Number	67
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	o Where deforestation is by an identified class of agents: A documented history (for example government data or maps) of similar planned deforestation activities by class of agents, of planned deforestation within the five years previous to without-project deforestation.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 5.5
ESI Findings - Round 1	This does not appear to be provided in the PD.
Round 1 NCR/CL/OFI 14 November 2013	NCR: As per the module, please provide a documented history (for example government data or maps) of similar planned deforestation activities by class of agents, of planned deforestation within the five years previous to without-project deforestation.
Round 1 Response from Project Proponent 29 August 2014	Because of the existence of an approved Harvest Plan the proponents are the deforestation agent
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	68
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	o Where a specific baseline agent has been identified: Either a valid and verifiable land use management plan for deforesting the project area, or a documented history (for example government data or maps) of similar planned deforestation activities by the baseline agent of planned deforestation within the five years previous to without-project deforestation.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Sections 4.5,4.6,5; Appendix B.
ESI Findings - Round 1	EMJ: No part of the Project Area is currently restricted from development due to government regulation or other legal requirement
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	A harvesting plan has been provided that allows for the harvesting of the property by Peruvian law. This has been included in Appendix B of the PDD. A review of the document indicates that it is only for the 1499 hectare "Yacurina I" property. No similar evidence was provided for the "Santuario Privado" area of 1500 hectares. For the "Yacurina I" harvest plan it appears as though the plan was approved on 10 March 2010. This conflicts with the requirement that evidence be prior to the start of carbon finance.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide evidence for both the "Yacurina I" and "Santuario Privado" areas that either a valid and verifiable land use plan for deforesting the project area or a documented history of similar planned deforestation by the baseline agent existed prior to the date of the pursuit of carbon financing.
Round 2 Response from Project Proponent 07 August 2015	Translated Document provided in Appendix B. Permission for including the " Private Sanctuary" and Lodge property on Page 19 of Plan (highlighted and in bold). Start date for Project has been changed to post date the latest activities related to harvest of timber.
ESI Findings - Round 3	Appendix B shows a silvicultural and land use management plan for a portion of the project area, Fundo Yacaruna I. The maps, use plan, cutting descriptions etc. all reference the 1,499ha of the Tacaruna tract but not the Santuario Privado. The proponent has asserted that the intentions to deforest the Pravado tract are the same because the ownership, tax, land classification (productive) are the same (PD page 77). They are also asserting that the lands are not restricted from clearing per the BLUC classification from the Peruvian government. Though these assertions are reasonable, the requirement for parameter A planned,i states, "Either a valid and verifiable land use management plan for deforesting the project area." Auditors interpret this requirement to mean that the plan must extend to the entire project area. This finding is also pending resolution of start date finding, AFOLU Requirements Section 3.2.1.

Round 3 NCR/CL/OFI 25 September 2015	3 NCR: Please provide evidence for a valid and verifiable land use plan to deforest the entire project area or a documented history of similar planned deforestation by the baseline agent within the last 5 years following this requirement. Else, please describe in the PD and justify a methodology deviation to deviate from the requirements for a demonstration of the intention to deforest for parameter A planned, i. In response to this finding, please identify location of changes made in project documentation.
Round 3 Response from Project Proponent 29 September 2016	Issue was resolved with the methodology deviation approved by VCS
ESI Findings - Round 4	The PD describes a methodology deviation for allocating the deforestation plan for "Yacurana I" to the adjacent parcel in the project area "Santuario Privado." The VVB agrees that the lands are similar in many respects, and also legal permissibility to deforest is well substantiated in Peru (http://www.coha.org/deforestation-in-peru-building-a-dramatic-future-in-the-amazon-and-the-andean-region/). In contrast to the response by the PP, VCS did not approve a deviation for applying the deforestation plan to the entire project area. Instead, they deferred to the VVB to decide whether applying the deforestation plan to the entire project area is appropriate. ESI decided to allow this "exemption" to occur for the following reasons; the threat to deforestation is well substantiated in the region (e.g. common practice), the project's harvest plan represents a scenario that is entirely feasible, and justification was provided to demonstrate the appropriateness. Since applying the deforestation plan to the entire project area to demonstrate intent to deforest is not a methodology deviation but instead an exemption, the VVB has requested under the VCS Standard Section 3.5.1 that all references to methodology deviations be removed from the PD. Another "exemption" was proposed by the PP for an alternative D%planned,i,t value or deforestation rate. Please see the finding below under criteria "Where a valid verifiable plan exists for rate at which deforestation" Section 1.3 of BL-PL for the VVB's assessment. The item is addressed.

Item Number	69
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The proportion of the total parcel area planned to be deforested cannot exceed the legal mandate unless common practice in a proxy area shows that the mandates are not enforced.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 4.6, 5.3
ESI Findings - Round 1	EMJ: No legal mandate from government of Peru seems to exist
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	A common practice analysis was included for cocoa and oil palm plantations. The common practice was not used in determination of the final rate, instead the harvest plan rate applied to the Yacurana tract was used. The land use classification Peru BLUC of all lands in the project area, as described in the harvest plan are asserted to be eligible. It is not clear from the PD Section 5.3 whether the project area baseline deforestation, or nearby common practice deforestation exceed the legal mandate.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please state in the PD Section 5.3 explicitly whether deforestation for the project baseline, or described as common practice, exceeds Peru legal mandates.
Round 3 Response from Project Proponent 29 September 2016	inserted wording
ESI Findings - Round 4	The VB notes that the harvest plan deforestation rate is no longer used for parameter D%Planned,It as mentioned in the previous finding but instead a common practice-derived method (see previous finding) based on a methodology deviation. As stated in the previous finding, legal permissibility to deforest is well substantiated in Peru (http://www.coha.org/deforestation-in-peru-building-a-dramatic-future-in-the-amazon-and-the-andean-region/) and it is the VB's understanding that the law is either not enforced or intends to protect forest on paper but in practice allows nearly unabated deforestation. The PD mentions that project baseline deforestation does not exceed legal mandates but could go into greater details as to the reasons. Wording was appropriately added to the PD Section 5.3 that project area baseline deforestation does not exceed the legal mandate. The item is addressed

Item Number	70
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Where a valid verifiable plan exists for rate at which deforestation is projected to occur, this rate shall be used.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ: A verifiable deforestation plan was not mentioned in PD, therefore deforestation rates were calculated based upon 6 proxy areas located in the Amazon basin of Peru and neighbouring areas of Brazil.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The PDD states that a rate of 4.25% annually. The harvest plan provided in Appendix B states that 63.76 hectares can be harvested per year. Based on that value a 4.25% deforestation rate is incorrect.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please correct the deforestation rate based on the value described in the harvest plan (63.76 hectares/year), else provide documentation to support a greater annual harvest rate. Additionally, please provide justification to support the rate in the "Santuario Privado" area.
Round 2 Response from Project Proponent 07 August 2015	Justification and common practice evidence provided in section 5.3 of PD for a higher deforestation rate.

ESI Findings - Round 3	Auditors understand that the 63.76ha area described in the harvest plan pertains to area able to be harvested for the year 10.07.09 - 30.08.09. The deforestation rate in Section 5.3 of the PD is now set at 63.76 ha/yr or 4.5% over the 30 year life of the project and based on the yearly rate for the only tract with a verifiable deforestation plan, Yacurana. Proponents have justified that since the Santuario Pravado parcel is similar to Yacurana tract and legally permissible to deforest, that the same deforestation rate be applied. There is no requirement against this approach, but is pending approval of applying the "valid and verifiable" harvest plan to the Santuario Pravado tract. The area however of Yacurana used to determine D%planned,i,t does not appear to be based on the correct area of the harvest plan, which is 1,499ha.
Round 3 NCR/CL/OFI 25 September 2015	3 CL: Please justify use of 1425ha for computation of D%planned,i,t instead of the deed and harvest plan area for Yacurana of 1499ha.
Round 3 Response from Project Proponent 29 September 2016	The project requested and received a methodology deviation to include the entirety of both parcels minus permanent water bodies. Differences in area between the deed and mapped areas of each parcel were explained in the PD.
ESI Findings - Round 4	The PP proposed an alternative/conservative D%planned,i,t value or deforestation rate as a deviation. However, this criteria is not eligible as a methodology deviation and instead would be considered an exemption per VCS. The VVB was unable to find reference to a VCS email where a formal exemption was granted to use an alternative value for baseline deforestation rate. Also, the response from the PP to this finding does not quite address the clarification request and is related to the "Where a specific baseline agent has been identified" finding. Using the PP's parameter D%planned value, only 80% of the project area is to be deforested in the 10 year baseline period. Though the VM0007 modular methodology and AFOLU Requirements are not specific, the VVB believes that deforesting the entire project area within the 10 year baseline period is more appropriate. The VVB believes that the intent of BL-PL under multiple criteria is for baseline deforestation to be completed within 10 years and also 10 years after validation the baseline is required to be re-visited. The current value reported for parameter D%planned,i,t is also slightly mis-reported throughout the PD as independently computed by the VVB. Further, the explanation for the conservative derivation of parameter D%planned is located in the wrong section of the PD.
Round 4 NCR/CL/OFI 8 November 2016	4 CL: Please address the findings and justify a D%planned value which results in less than the entire project area to be deforested in the 10 year baseline period. Else, please adjust the D%Planned value for a fully deforested project area in the 10 year baseline period. Please also ensure reported values for parameter D%planned,i,t are correct throughout the PD, in the correct location, and noting in the PD locations of all changes in response to this finding. Finally, please provide transparent calculations as a spreadsheet which align with reported values in the PD.
Round 4 Response from Project Proponent 27 November 2016	Updated figures to deforest the entire project area in 10 years as suggested by the audit team. Calculations provided in XL workbook BL-PL calculations.

ESI Findings - Round 5	The D%Planned value has been adjusted to allow the project area to be completely deforested in the 10 year baseline period. Deforestation rate is based on a common practice analysis, please see Item #68 for details on the derivation of the deforestation rate. The PD now reports D%planned as 10% or 286.3ha for annual area of baseline deforestation throughout the PD. The item is addressed.
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Item Number	71
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	1. Land conversion practices shall be the same as those used by the baseline agent or class of agent
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ/MPP: Per the PD, the standard practice in Peru for conversion of forest to agricultural lands is to remove valuable timber species and then bulldoze and burn the remaining trees. (This was mentioned in a general context, possibly applicable to the project area).
Round 1 NCR/CL/OFI 14 November 2013	CL: Please confirm that the standard land conversion practice described in the PD also applies to the proxy areas.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	72
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	2. The post-deforestation land use shall be the same in the proxy areas as expected in the project area under business as usual
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ/MPP: Per the PD, conversion to agriculture is the most probable land use under the baseline scenario.
Round 1 NCR/CL/OFI 14 November 2013	CL: Please confirm the post-deforestation land use of the proxy areas.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	73
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3. The proxy areas shall have the same management and land use rights type as the proposed project area under business as usual
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ: While it is likely that large areas of the Project would be subject to conversion to monocultures of rice or other intensive cropping system, under the baseline scenario PP identified a 'multi-crop / short-term fallow' as our baseline agriculture system. The 'multi-crop / short-term fallow' agriculture system is the most widespread in the Loreto province followed by intensive cropping systems (Henman et al. 2008)
Round 1 NCR/CL/OFI 14 November 2013	CL: Please confirm that the proxy areas have the same management and land use rights type as the project area under business as usual.

Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	74
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	4. 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
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ: Suitable sites for deforestation conversion to agriculture exist in immediate project area
Round 1 NCR/CL/OFI 14 November 2013	CL: Please confirm if suitable sites existed in the immediate area of the project. Otherwise, please confirm the location of the proxy areas.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	75
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	5. Agents of deforestation in proxy areas must have deforested their land under the same criteria that the project lands must follow (legally permissible and suitable for conversion—see section 1.1 above).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ: Assumed that agents of deforestation for proxy areas abided by Peruvian law which allows deforestation to agriculture and on suitable fertile sites like the project area
Round 1 NCR/CL/OFI 14 November 2013	CL: Please confirm that post deforestation land use in the proxy areas is the same as that planned in the baseline scenario.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	76
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	6. Deforestation in the proxy area shall have occurred within the 10 years prior to the baseline period.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ: No evidence in PD that proxy areas experienced deforestation with 10 years of baseline
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide evidence that confirms proxy area deforestation occurred within 10 years of baseline
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	77
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· 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 ($\pm 20\%$).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ: Not clear if forest types/soil types/elevation classes within proxy area are in same proportion as project area
Round 1 NCR/CL/OFI 14 November 2013	NCR: please confirm if forest types/soil types/elevation classes within proxy area are in same proportion as project area
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	78
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Examination of proxy areas may be through original data collection (field measurements and/or remote sensing analysis) or where appropriate use of directly applicable existing data generated from credible sources.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5
ESI Findings - Round 1	EMJ: PD does not seem to mention where proxy data for deforestation came from, proxy data is contained within Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please confirm source of proxy data and how the data was generated
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	79
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The annual deforestation is calculated with <u>Equation 2 on page 8</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3 number 3 Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
ESI Findings - Round 1	EMJ: Equation 2 appears to be calculated correct, checked within Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx MPP: There is no reference to the equation in the PDD.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include Equation 2 in the PDD.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	80
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	For all other planned deforestation areas (i.e. areas not both under government control and zoned for deforestation), L-Di shall be equal to 100%.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 8.2
ESI Findings - Round 1	MPP: Verifier was unable to find the calculation of the file likelihood of deforestation or its value.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include the calculation/value of the likelihood of deforestation in the PDD.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	A n L-Di value of 100% was taken in accordance with the methodology.

Item Number	81
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Identify a minimum of 5 proxy areas deforested by the same 'class of deforestation agent'9 at least ten years previously. If any of the proxy areas have been abandoned to forest regrowth then the planned deforestation activity is not eligible and this module shall not be used.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5, Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
ESI Findings - Round 1	EMJ: not clear if any of the proxy areas have been abandoned to forest regrowth
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please confirm if any of the proxy areas have been abandoned to forest regrowth
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	N/A as the project area will be harvested by the landowner. The item has been addressed.

Item Number	82
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 1. Calculating annual area of land deforested
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The annual area of deforestation in the baseline case is calculated using equation 3 on Page 9
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3, Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
ESI Findings - Round 1	EMJ: The calculated deforestation rate was 33.3% per year, averaged from 6 proxy deforestation areas. Checked calculations within deforestation spreadsheet
Round 1 NCR/CL/OFI 14 November 2013	NCR: The project is calculating this equation incorrectly by not discounting the amount of acres available for deforestation relative to the previous year's deforestation area. The project needs to calculate deforestation only equal to 100% of the project area within the lifetime of the project and according to the annual rate of deforestation. If the rate is calculated at 33.3% each year, then the project can only claim 100% of carbon credits within the first three years of the project. Please correct the calculations so that this concept and calculation is accurate and does not double count any credits in the project.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	The verifier was unable to locate the computation of equation 3. Additionally, no reference to equation 3 was made in the PDD.

Round NCR/CL/OFI 31 October 2014	2	NCR: Please include in the PDD and provide computation for equation 3, as described in the methodology.
Round 2 Response from Project Proponent 07 August 2015		Area calculated using Equation 3 in Section 5.3 of PD
ESI Findings - Round 3		Parameter $A_{planned,i,t}$ (Annual area of baseline planned deforestation for stratum i at time t ; ha) is now included in the PD Section 5.3 but is lacking the unit for time t . This finding is also pending derivation method for parameter $D\%_{planned,i,t}$.
Round NCR/CL/OFI 25 September 2015	3	CL: Please include the temporal unit for reporting parameter $A_{planned,i,t}$. Also, auditors suggest including a short description of each BL-PL Equation 3 parameter in Section 5.3 of the PD to assist the reader. For example $D\%_{planned,i,t}$, per BL-PL (Projected annual proportion of land that will be deforested in stratum i during year t).
Round 3 Response from Project Proponent 29 September 2016		Inserted temporal unit in the parameter table. Added parameter description in section 5.3
ESI Findings - Round 4		Parameter $A_{planned,i,t}$ is slightly incorrectly computed and misreported in Section 5.6 of the PD as well as the parameter table, resulting in an incorrect computed value for $\Delta CBSL_{i,t}$. As stated below for Equation 11, this quantification could be performed within the calc worksheet to enable transparent and efficient review.
Round NCR/CL/OFI 8 November 2016	4	CL: Please address the findings and fix the slightly mis-computed value for $A_{planned,i,t}$ as well as reporting throughout the PD. In responding to this finding please identify the location of changes made in the PD.
Round 4 Response from Project Proponent 27 November 2016		Updated calculations . The following are equations/locations where the new $A_{planned}$ was incorporated: 1. parameters available at validation, 2. calculation of $NewR_{i,t}$, 3. calculation of $VBSL_{EX,i,t}$, 4. calculation of $\Delta CBSL_{i,t}$.
ESI Findings - Round 5		The VVB noted that the following revisions have been correctly made to the PD; Data and Parameters, $NewR$ calculations under Step 2 in Leakage, market effects leakage, and $\Delta CBSL_{i,t}$.
Round NCR/CL/OFI 15 December 2016	5	
Round 5 Response from Project Proponent		
ESI Findings - Round 6		At this round the result of Equation 11 has been corrected. No further action is needed. The item is addressed.

Item Number	83
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Post-deforestation carbon stocks can be measured in proxy areas or values may be taken from credible and representative literature sources (e.g. the peer-reviewed literature or data published by the IPCC or the FAO).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5.3, Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	RFI: Please provide the literature (Henman et. al 2008) sourced for the post defoliation carbon stocks.
Round 1 Response from Project Proponent 29 August 2014	The approved Yacumama Harvest Plan which contained rates of harvest has negated the need to use proxy areas.
ESI Findings - Round 2	The harvest plan and conversion to agriculture would permanently remove all trees and is zero for both above and below ground carbon computations.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has appropriately selected Cpost values from the literature, see findings elsewhere in the review. The item is addressed.

Item Number	84
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Carbon pools excluded from the project can be accounted as zero. Herbaceous non-tree vegetation is considered to be de minimis in all instances. For the determination which carbon pools must be included in the calculations as a minimum, see tool T-SIG and the Framework module – REDD-MF.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 1.3, Project Area
ESI Findings - Round 1	EMJ: See REDD-MF line 93, all carbon pools other than AG and BG biomass excluded. Also see PD: Table 2 The project is accounting for 18 tons of C per ha as post deforestation carbon stocks due to multi crop agriculture. This appears to be unneeded due to these carbon stocks likely being non woody. This aspect does not need to be deducted from the project carbon stocks.
Round 1 NCR/CL/OFI 14 November 2013	NCR: The project does not need to account for non woody post deforestation carbon stocks. If this includes non woody agricultural products, then it does not need to account for this deduction against the project VCUs. Please confirm and correct this item if needed.
Round 1 Response from Project Proponent 29 August 2014	Removed from calculations
ESI Findings - Round 2	Non-woody calculations were removed from the project. The item has been addressed.

Item Number	85
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Equation 4
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama_PDD_version 1.1.xlsx - Totals; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	Reference inserted. Calculations provided in Yacumama_Carbon_Stock_Calculations_5_2014" Summary worksheet
ESI Findings - Round 2	Reference has been included in the PDD to indicate that equation 4 was used. The verifier was unable to see transparent computation of equation 4 in the described workbook.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent computation of equation 4.
Round 2 Response from Project Proponent 07 August 2015	Calculation of equation 4 included in section 5.3
ESI Findings - Round 3	Calculation of BL-PL Equation 4 is now included in Section 5.3 of the PD. The value reported in the PD, and used for parameter CAB tree bsl,i was sourced to the Total Carbon Stock tab of "Yacumama_Carbon_Stock_Calculations_2015_final.xlsx" where this value should be reflective of aboveground biomass. The proponent appears to have assumed CAB_tree,post,i is equal to 0. Auditors understand that the post-deforestation landuse in baseline is ranching/agriculture development.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please address the findings and report the correct value for the result of Equation 4. Please justify a value of 0 for parameter CAB tree post,i.
Round 3 Response from Project Proponent 29 September 2016	Under the baseline scenario we identified a 'multi-crop / short-term fallow' as our baseline agriculture system. The 'multi-crop / short-term fallow' agriculture system is the most widespread in the Loreto province followed by intensive cropping systems (Henman et al. 2008). In addition the 'Land Use Capacity Description' (Yacumama Harvest Plan) classifies the entire area of Yacurana I as suitable for either 'Pasture' or 'Standing Crop' agriculture. For the "Private sanctuary" parcel, ownership and tax documents on page 23 of the 2009 harvest plan classify the property 'type' as S. Productiva (productive) the same as Yacurana I and thus can be reasonably assumed to be suitable for the same type of agriculture. However since this agricultural system is comprised of herbaceous non tree vegetation it is considered de minimis... According to part 2 page 10 BL-PL. Thus CAB tree post,i is given a value of 0.

ESI Findings - Round 4	The proponent has assumed that CAB_tree,post,I and CBB_tree,post,i are 0. These assumptions are not conservative per VCS principles, with avoided emission projects, the higher the net carbon stock changes in the baseline, the higher the amount of net ghg emission reductions/removals. Quantification of CABtree,post,i, as noted in BL-PL is permitted to be derived from a literature source. The proponent also stated in the response that per BL-PL page 10, "Herbaceous non-tree vegetation is considered to be de minimis in all instances." However, this language pertains to inclusion of herbaceous as a carbon pool for the baseline carbon stock change, not Cpost. The VVB recognizes there is some confusion here around two separate issues; A) CAB_tree,post,I parameter and B) CAB_non-tree, post, I. The project has appropriately excluded the non-tree pool, therefore the Cpost values for equations 4 and 6 of BL-PL should be used. Cpost values are distinct from the non-tree pool. Here the VVB is requesting that Cpost values for equations 4 and 6 be used as it is conservative and follows the requirements of BL-PL. As stated above Cpost values can be derived from "from credible and representative literature sources". Email correspondence was received from the correspondent and additional detail was added to this finding (line 92 Round 4 NCRs).
Round 4 NCR/CL/OFI 8 November 2016	NCR: Please address the findings and determine CAB tree post,I using a verifiable, conservative estimate for post-deforestation stock change estimates in applying Equation 4.
Round 4 Response from Project Proponent 27 November 2016	Used data from Markewitz et al. (2004) for 'degraded pasture with tree islands' (i.e. silvo-pasture) 19 years after deforestation in the Brazilian Amazon to calculate CAB_tree_post. This silvo-pasture system closely resembles the agro-ecosystem described above under the baseline scenario and has likely reached equilibrium with respect to C fluxes due to the time elapsed since deforestation. Updated tables in "Data Monitored" Section
ESI Findings - Round 5	The VVB independently obtained the Markewitz et al. 2004 paper and confirmed the 7.8 +/- 5.2 Mg/ha of biomass for a degraded pasture. The proponent assumed conservatively a higher value of aboveground post deforestation stocks based on the literature source. Pending application of Equation 11.
Round 5 NCR/CL/OFI 15 December 2016	
Round 5 Response from Project Proponent	
ESI Findings - Round 6	The result of this equation is correctly applied in Equation 11, no action is needed. The item is addressed.

Item Number	86
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Equation 5
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx - Totals
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	pool not assessed
ESI Findings - Round 2	This pool was not assessed as it was conservatively omitted. The item has been addressed.

Item Number	87
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Equation 6

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama_PDD_version 1.1.xlsx - Totals; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	Reference inserted. Calculations provided in Yacumama_Carbon_Stock_Calculations_5_2014" Summary worksheet
ESI Findings - Round 2	Reference has been included in the PDD to indicate that equation 4 was used. The verifier was unable to see transparent computation of equation 6 in the described workbook.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent computation of equation 6.
Round 2 Response from Project Proponent 07 August 2015	Calculation of equation 6 included in section 5.3
ESI Findings - Round 3	Calculation of BL-PL Equation 6 is now included in Section 5.3 of the PD. The value reported in the PD used for parameter CBB tree bsl,i was sourced to the Total Carbon Stock tab of "Yacumama_Carbon_Stock_Calculations_2015_final.xlsx" where this value was correctly reflective of belowground biomass. The proponent appears to have assumed CBB_tree,post,i is equal to 0. Auditors understand that the post-deforestation landuse in baseline is ranching/agriculture development.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please justify a value of 0 for parameter CBB tree post,i.
Round 3 Response from Project Proponent 29 September 2016	under the baseline scenario we identified a 'multi-crop / short-term fallow' as our baseline agriculture system. The 'multi-crop / short-term fallow' agriculture system is the most widespread in the Loreto province followed by intensive cropping systems (Henman et al. 2008).In addition the 'Land Use Capacity Description' (Yacumama Harvest Plan) classifies the entire area of Yacurana I as suitable for either 'Pasture' or 'Standing Crop' agriculture. For the "Private sanctuary" parcel, ownership and tax documents on page 23 of the 2009 harvest plan classify the property 'type' as S. Productiva (productive) the same as Yacurana I and thus can be reasonably assumed to be suitable for the same type of agriculture. However since this agricultural system is comprised of herbaceous non tree vegetation it is considered de minimis... According to part 2 page 10 BL-PL. Thus CBB tree post,i is given a value of 0

ESI Findings - Round 4	The proponent has assumed that CAB_tree,post,i and CBB_tree,post,i are 0. These assumptions are not conservative per VCS principles, with avoided emission projects, the higher the net carbon stock changes in the baseline, the higher the amount of net ghg emission reductions/removals. Quantification of CBBtree,post,i, as noted in BL-PL is permitted to be derived from a literature source. The proponent also stated in the response that per BL-PL page 10, "Herbaceous non-tree vegetation is considered to be de minimis in all instances." However, this language pertains to inclusion of herbaceous as a carbon pool for the baseline carbon stock change, not Cpost. The VVB recognizes there is some confusion here around two separate issues; A) CBB_tree,post,i parameter and B) CBB_non-tree, post, i. The project has appropriately excluded the non-tree pool, therefore the Cpost values for equations 4 and 6 of BL-PL should be used. Cpost values are distinct from the non-tree pool. Here the VVB is requesting that Cpost values for equations 4 and 6 be used as it is conservative and follows the requirements of BL-PL. As stated above Cpost values can be derived from "from credible and representative literature sources". Email correspondence was received from the correspondent and additional detail was added to this finding (line 92 Round 4 NCRs).
Round 4 NCR/CL/OFI 8 November 2016	NCR: Please address the findings and determine CBB tree post,i using verifiable, conservative estimates for post-deforestation stock change estimates in applying Equation 6.
Round 4 Response from Project Proponent 27 November 2016	Below ground biomass was not directly measured by Markewitz et al. (2004) thus the project calculated CBB tree post,i in the same manner as in the project scenario using the above ground biomass estimates.
ESI Findings - Round 5	The VVB independently obtained the Markewitz et al. 2004 paper and confirmed the 7.8 +- 5.2 Mg/ha of biomass for a degraded pasture. The proponent assumed conservatively a higher value of post deforestation stocks based on the literature source, this belowground value is simply a ratio of the aboveground Cpost estimate. Pending application of Equation 11.
Round 5 NCR/CL/OFI 15 December 2016	
Round 5 Response from Project Proponent	
ESI Findings - Round 6	The result of this equation is correctly applied in Equation 11, no action is needed. The item is addressed.

Item Number	88
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Equation 7
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx - Totals
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	pool not assessed
ESI Findings - Round 2	This pool was not assessed as it was conservatively omitted. The item has been addressed.

Item Number	89
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Equation 8

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx - Totals
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	pool not assessed
ESI Findings - Round 2	This pool was not assessed as it was conservatively omitted. The item has been addressed.

Item Number	90
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Equation 9
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx - Totals
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	pool not assessed
ESI Findings - Round 2	This pool was not assessed as it was conservatively omitted. The item has been addressed.

Item Number	91
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Equation 10
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx - Totals
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	pool not assessed
ESI Findings - Round 2	This pool was not assessed as it was conservatively omitted. The item has been addressed.

Item Number	92
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	In the situation where the baseline includes harvesting of long-lived wood products the harvested wood products carbon pool (CP-W) shall be included. For calculation of carbon stock sequestered in wood products, see CP-W.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 1.1 and 1.3
ESI Findings - Round 1	The project appears to mention that the baseline scenario will include harvest of valuable timber and sales of wood products. "Because the owners have legal permission to harvest the entire property, which under Peruvian law transfers with the sale, the most likely buyer would be a company who would harvest the entire property, sell the valuable wood, burn the remaining woody biomass, and implement agricultural conversion on the fertile floodplain soils." The project goes on to state in section 1.3 that the project has many valuable hardwood trees and this was a viable economic option of the project owners. It seems that there are significant wood products that should be accounted for in the project. This is counter intuitive to deciding that this carbon pool is de minimus.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide evidence of why the wood products pool was not considered to be significant if the project owners have logged parts of the property already, and felt that further harvest would have been a viable economic option, and further that the agent of deforestation would likely do the same. This appears to show evidence of the need to account for carbon in long term wood products.
Round 1 Response from Project Proponent 29 August 2014	CP-W applied and calculations included in PD
ESI Findings - Round 2	CP-W was applied however was included in the PDD. The item has been addressed.

Item Number	93
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 2. Baseline carbon stock change
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Stock changes in aboveground biomass and litter are emitted at the time of deforestation. Following deforestation, emissions from belowground biomass, dead wood, soil and wood products take place gradually over time. Stock changes in belowground biomass and dead wood are emitted at an annual rate of 1/10 of the stock change for 10 years, and at an annual rate of 1/20 of the stock change for 20 years for soil organic carbon. Carbon stocks entering the wood products pool at the time of deforestation and that are expected to be emitted over 100-years are emitted at an annual rate of 1/20 of the stock for 20 years. Thus, for a given year t, emissions are summed across areas deforested from time t-10 up to time t (for belowground biomass and dead wood) and from time t-20 up to time t (for soil organic carbon and wood products), <u>using Equation 11 on Page 12.</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 5.6;Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx - Totals;Yacumama_Carbon_Stock_Calculations_5_2014.xlsx

ESI Findings - Round 1	MPP: The verifier was unable to find the calculation of equation 11, as described in the BL-PL methods.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include the equation in the PDD. Additionally, please provide transparent calculation of equation 11, as described in the BL-PL methodology that shows the application of the allocation of 1/10th of the below ground carbon stocks being emitted in the ten years following the deforestation activities.
Round 1 Response from Project Proponent 29 August 2014	Reference inserted. Calculations provided in Yacumama_Carbon_Stock_Calculations_5_2014" Summary worksheet
ESI Findings - Round 2	Equation 11 has been added but is incorrectly written in the PDD. Additionally, the computation described in the excel document is incorrect, based on verifier computation.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please correct the reference to equation 11 in the PDD. Additionally, please ensure that correct computation of equation 11 is performed and transparently provided.
Round 2 Response from Project Proponent 07 August 2015	Corrected in section 5.6 PD with calculation.
ESI Findings - Round 3	Equation 11 is still written incorrectly, missing multiplication and necessary notations around the sum notations. Further, quantification of Equation 11 is incorrect, the result should be "Sum of the baseline carbon stock change in all pools in stratum i at time t, t CO ₂ -e." Auditors suggest that this quantification be performed within the calc worksheet to enable transparent and efficient review.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please correct the reference to equation 11 in the PDD. Additionally, please ensure that correct computation of equation 11 is performed and transparently provided.
Round 3 Response from Project Proponent 29 September 2016	Corrected the equations and provided a transparent calculation
ESI Findings - Round 4	Quantification of Equation 11 is still incorrect in multiple areas. AAplanned,i,t at time t is not multiplied by baseline carbon stock changes and emissions and then summed across areas deforested from time t-10 up to time t for belowground biomass. Parameter CWP100,i is deemed de minimis using T-SIG as noted in the Applicability Conditions of module CP-W and also in REDD-MF Section 5.3.2. However the project has not quantified the pool properly here at Round 4 (See CP-W findings). The VVB also notes that it is conservative accounting to omit CWP100,i. As a result of the project currently deeming CWP100,i de minimis, this parameter is not included in Equation 11 quantification. Upon correction of all outstanding CP-W items the T-SIG de minimis analysis for parameter CWP100,i will be re-assessed. Please note this finding was adjusted following email correspondence with the proponent. The intention of the previous request for transparency was that this quantification be performed within the calc worksheet to enable transparent and efficient review. It is sufficient for equations and the tabular results to be reported in the PD.

Round 4 NCR/CL/OFI 8 November 2016	4	NCR: Please correctly apply BL-PL Equation 11 to quantify the baseline carbon stock change in all pools in stratum i at time t. Please clearly identify where this is implemented in the calculations file.
Round 4 Response from Project Proponent 27 November 2016		Corrected equation and provided it in XL worksheet (Workbook BL-PL Calculations). Removed Long Lived wood products from calculations.
ESI Findings - Round 5		The VVB re-checked application of Equation 11 for incorporation of equations 4 and 6. Cpost for above and belowground biomass estimates are not included in application of Equation 11. Further, although $\Delta\text{CBSL}_{i,t}$ is the same for each year of the 10 year baseline, it is an important parameter (same value as Equation 1 of BL-PL - $\Delta\text{CBSL}_{\text{planned}}$) and should be quantified and reported annually as it is a time t parameter following BL-PL.
Round 5 NCR/CL/OFI 15 December 2016	5	NCR: Please correctly apply BL-PL Equation 11 to quantify the baseline carbon stock change in all pools in stratum i at time t. Please clearly identify where this is implemented in the calculations file. Please also appropriately report annual values for $\Delta\text{CBSL}_{i,t}$ (or $\Delta\text{CBSL}_{\text{planned}}$) in the PD.
Round 5 Response from Project Proponent		Annual Values reported in Table 9 page 63 PD. Calculations in XL spreadsheet "calculations" tab.
ESI Findings - Round 6		Equation 11 is now correctly computed following BL-PL where the belowground biomass are emitted at an annual rate of 1/10. Cpost values are correctly applied. The result of Equation 11 is now correctly reported in the PD Table 9. The item is addressed.

Item Number	94
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 3. Greenhouse gas emissions
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The GHG emissions in the baseline within the project boundary shall be estimated using <u>equation 12 on page 12</u> .
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.4
ESI Findings - Round 1	MPP: Verifier was unable to find transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide reference to the equation in the PDD. Additionally, please provide transparent calculation of the equation, as required by the methodology.
Round 1 Response from Project Proponent 29 August 2014	pool not assessed

ESI Findings - Round 2		The PDD includes a reference to this equation. While the pools were not assessed and thus have a value of zero they are an input for equation 1. The item has been addressed.
Round 2 NCR/CL/OFI 31 October 2014	2	
Round 2 Response from Project Proponent 07 August 2015		
ESI Findings - Round 3		
Round 3 NCR/CL/OFI 25 September 2015	3	
Round 3 Response from Project Proponent 29 September 2016		
ESI Findings - Round 4		The emissions from biomass burning do not appear to have been quantified and are not presented in the PD Section 5.3. The VVB notes that parameter EBiomassBurn,i,t is the only relevant parameter in BL-PL equation 12 but this must still be reported. Please refer to REDD-MF Table 3 for additional guidance on the required biomass burning pool. Please see E-BPB tab for main finding. This finding was issued and will be reviewed under Task 1.
Round 4 NCR/CL/OFI 8 November 2016	4	NCR: Please describe the procedure(s) for quantification of the emissions as a result of deforestation activities within the project boundary in the stratum i in year t (GHGBSL,E) in PD Section 5.3. Please be sure to include the relevant equation(s) as per the template.
Round 4 Response from Project Proponent 27 November 2016		Because emissions from biomass burning is always optional according to module E-BPB the project has chosen to conservatively omit these emissions.
ESI Findings - Round 5		The VVB agrees that omission of biomass burning from the baseline is conservative as burning represents an emission. However, the biomass burning source in project boundary table 4 in the PD for the baseline is not correct as it describes the project case, not the baseline case. Section 3.1 of the PD correctly states that biomass burning is conservatively excluded as a baseline emission.
Round 5 NCR/CL/OFI 15 December 2016	5	CL: Please address the findings and revise the language for the biomass burning baseline source in Table 4 of the PD.
Round 5 Response from Project Proponent		Wording corrected in table 4.
ESI Findings - Round 6		The language has been confirmed revised in Table 4 of the PD. No further action is needed. The item is addressed.

Item Number	95
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	Part 3. Greenhouse gas emissions
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	For the determination which sources of emissions must be included in the calculations as a minimum, see tool T-SIG and the framework module – REDD-MF.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 4.3
ESI Findings - Round 1	MPP: Emission sources were treated as de minimis or conservatively omitted.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide T-Sig calculations to show that the emissions carbon stocks are not required.
Round 1 Response from Project Proponent 29 August 2014	All required pools were measured and accounted for.
ESI Findings - Round 2	T-sig computations were not provided.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide T-Sig calculations to show that the emissions carbon stocks are not required.
Round 2 Response from Project Proponent 07 August 2015	All required pools are calculated and included based on VM0007. Excluded pools are those identified in Table 2 VM0007 as "negligibly small" for CH ₄ and N ₂ O or in the case of CO ₂ from combustion of fossil fuels "can be neglected if not included in baseline".
ESI Findings - Round 3	T-SIG calculations were included in the calc worksheet "Yacumama_Carbon_Stock_Calculations_2015_final.xlsx." Please note, due to other issues with quantification estimates by pool of AG, BG, CP-W and LK-ME this finding will remain open.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	

Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	Equation 12 is not applicable as biomass burning has been excluded from baseline accounting.

Item Number	96
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	5.1. Data and Parameters Not Monitored
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Total area of planned deforestation over the fixed baseline period for stratum I (Aplanned,i)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.2
ESI Findings - Round 1	MPP: The total area of planned deforestation over the fixed baseline period for stratum I is not included in the PDD
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include the parameter total area of planned deforestation over the fixed baseline period for stratum I into the PDD in the data and parameters available at validation section.
Round 1 Response from Project Proponent 29 August 2014	included
ESI Findings - Round 2	Parameter has been included. The item has been addressed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Although this item was previously closed, auditors noticed that this parameter set at validation is missing from Section 8.2 of the PD.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include required parameter Aplanned,I in Section 8.2 of the PD in the parameter tables.

Round 3 Response from Project Proponent 29 September 2016	Included in section 8.2
ESI Findings - Round 4	This parameter was confirmed to have been appropriately included in Section 8.2. The item is addressed.

Item Number	97
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	5.1. Data and Parameters Not Monitored
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	GPS coordinates and/or Remote Sensing data and/or legal parcel records (Aplanned,i)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Yacumama_GIS.gdb, PD Section 8.2
ESI Findings - Round 1	EMJ: I calculated 2909.6 ha for project area based on property boundary.shp and creating a new field in attribute table and then calculating geometry (ha)
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please explain how you were able to calculate 2992 ha for project area
Round 1 Response from Project Proponent 29 August 2014	Udated area and how calcuated included in the PD
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	The area of planned deforestation over the baseline period has been revised during the review and is now reflective of the project area geographic boundaries. No action is needed by the PP. The item is addressed.
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Item Number	98
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	5.1. Data and Parameters Not Monitored
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Projected annual proportion of land that will be deforested in stratum i at year t (D%planned,i,t)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.2
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Auditors noticed that this parameter set at validation is missing from Section 8.2 of the PD.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include required parameter D%planned,i,t in Section 8.2 of the PD in the parameter tables.
Round 3 Response from Project Proponent 29 September 2016	Included in section 8.2
ESI Findings - Round 4	This parameter was confirmed to have been appropriately included in Section 8.2. The item is addressed.

Item Number	99
Approved VCS Module VMD0006, Version 1.2 (3 May 2013), Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation and planned degradation (BL-PL), Sectoral Scope 14 (Section)	5.1. Data and Parameters Not Monitored
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Likelihood of deforestation in stratum I (L-D,i)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.2
ESI Findings - Round 1	MPP: The likelihood of deforestation in stratum I (L-Di,I) is not included in the PDD.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include the parameter likelihood of deforestation in stratum I into the PDD in data and parameters available at validation section.
Round 1 Response from Project Proponent 29 August 2014	included
ESI Findings - Round 2	The parameter has been included. The item has been addressed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	This parameter was appropriately included in Section 8.2 of the PD. the project area is not under government control, "L-Di shall be equal to 100%" as set by the methodology. However, the parameter itself (L-D,i) was not listed.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	included in section 8.2 and parameter listed in PD
ESI Findings - Round 4	This parameter was confirmed to have been appropriately included in Section 8.2. The item is addressed.

Item Number	100
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	II. PROCEDURE
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Use <u>Equation 1 on page 4</u> to calculate Net greenhouse gas emissions due to activity shifting leakage where the specific deforestation agent has been identified. The options and steps below determine the parameters used in equation 1.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 5.5
ESI Findings - Round 1	A specific agent of deforestation was not able to be identified, therefore they identified a class of deforestation agents.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The PD states "The deforestation agent was determined to be the current landowner based upon the approved Operativo Anual Para Permiso Forestal De Propiedad Privada"
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Validation: Since the PD exists to establish the leakage accounting framework, this equation (for derivation of $\Delta\text{CLK-AS,planned}$) needs to be reported in the PD.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	Added the equation to the PD
ESI Findings - Round 4	Equation 1 from LK-ASP is now reported in the PD. The item is addressed.

Item Number	101
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	Step 1. Determine the baseline rate of forest clearance for the deforestation agent.
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Where there is no history of deforestation and no verifiable plans for controlled lands and future-controlled lands then WoPR should be set to planned baseline rate for the project ($D\%planned * A_{planned}$ from the planned deforestation baseline module).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	See round 2 finding.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Project proponent applied this method where $D\%planned * A_{planned}$, resulting in 122.36ha. Transparent computations are needed for verification.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide the transparent computations to determine WoPR.
Round 2 Response from Project Proponent 07 August 2015	Provided in appropriate section
ESI Findings - Round 3	Auditors intention in the last finding was for calculations within the project computation worksheet, as the computation is simple this is not needed. Validation: As WoPR is set to the planned baseline deforestation rate, the methods described for the derivation of WoPR in the PD Section 5.5 are sufficient. Verification: As this step is for determination of the baseline rate of forest clearance by the agent, it does not belong in the MR. The proponent simply copied and pasted all leakage content from the PD to the MR. The MR outlines the results of leakage tracked by monitoring areas of deforestation ($A_{defLK,i,t}$), across all lands outside of the project area owned by the baseline agent.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings and remove validation content from the monitoring plan for this step.

Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	No response was received for this item at this round as the proponent has elected to focus on validation and the Project Description. The finding will not be re-issued at this round but may be re-issued at subsequent rounds when the new VCS PD template is submitted.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	This finding is no longer relevant as parameter WoPR is only described in Section 3.3 of the PD, and is appropriately set to the baseline deforestation rate. The item is addressed.

Item Number	102
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	STEP 2: Estimate new projection of forest clearance by the baseline agent of deforestation with project implementation if no leakage is occurring
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Subtract the total project area of planned baseline deforestation from the historic area of deforestation to calculate the new area. This is represented by <u>Equation 4 on page 6</u> .
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	See round 2 finding.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	NewRi,t is noted as 0 in the PD. This is appropriate.
Round 2 NCR/CL/OFI 31 October 2014	

Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Validation: The result of Equation 4 $NewR_{i,t}$ in the ex-ante case, although 0, needs to be reported by year (D%planned,i,t is year t parameter) for the first baseline period. It would be useful to the reader to state the values reported in the PD for validation are ex-ante and to report the other parameters for equation 4 by year as well. Verification: Although there was no activity shifting leakage during this monitoring period, the values for $NewR_{i,t}$ for the monitoring period (2011-2013) need to be reported as 0.
Round 3 NCR/CL/OFI 25 September 2015	3 CL: Please address the findings
Round 3 Response from Project Proponent 29 September 2016	Reported equation in PD to make clear it was ex ante.
ESI Findings - Round 4	The Round 3 finding requested that the ex-ante results for Equation 4 be reported for the 10 year baseline period. The result is time t (annual) but only reported as "0". Since these values are inherently 0 for all 10 years of the baseline period this is permissible. Equation 4 was reported in the PD. The item is addressed.

Item Number	103
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	STEP 3: Monitor all areas deforested by baseline agent of deforestation through the years in which planned deforestation was forecast to occur
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The area of activity shifting leakage in stratum i at time t; ha_i is calculated using <u>equation 5 on page 7</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	See round 2 finding.
Round 1 NCR/CL/OFI 14 November 2013	1
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	If leakage is detected in the imagery then this equation is required to be followed.

Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Validation: The result of Equation 5 $LK_{Aplanned,i,t}$ in the ex-ante case, although 0, needs to be reported by year (New $R_{i,t}$ is a by year parameter due to $D\%_{planned,i,t}$) for the first baseline period. It would be useful to the reader to state the values reported in the PD for validation are ex-ante and to report the other parameter for equation 5 ($A_{defLK,i,t}$) as well. Again, the PD serves to describe methods for monitoring for this requirement and projections of parameters, not reporting of elements. Verification: Although there was no activity shifting leakage during this monitoring period, the values for $LK_{Aplanned,i,t}$ for the monitoring period (2011-2013) should be reported as 0.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings
Round 3 Response from Project Proponent 29 September 2016	Reported equation in PD
ESI Findings - Round 4	The Round 3 finding requested that the ex-ante results for Equation 5 be reported for the 10 year baseline period. The result is time t (annual) but only reported as "0". Since these values are inherently 0 for all 10 years of the baseline period this is permissible. Equation 5 was reported in the PD. The item is addressed.

Item Number	104
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	STEP 4: Monitor greenhouse gas emissions outside the project boundary by baseline agent of deforestation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Where a specific agent of deforestation has been identified fertilizer use and biomass burning shall be monitored.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	See round 2 finding.

Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The PD states "The landowner's property will be monitored as indicated in LK-ASP and M-MON using a combination of remote sensing and ground observations." This does not mention the sources of emissions accounted for in this step, biomass burning and N ₂ O.
Round 2 NCR/CL/OFI 31 October 2014	CL: Per this step, please explicitly state the sources accounted for in the monitoring of this step per this requirement.
Round 2 Response from Project Proponent 07 August 2015	Inserted biomass and N ₂ O as sources of emissions
ESI Findings - Round 3	Validation: The result of Equation 6 GHGLKE,i,t (tCO ₂ -e) is reported in the PD in the ex-ante case. Again, the PD serves to describe methods for monitoring for this requirement and projections of parameters, not reporting of monitored elements. Verification: Although GHGLKE,i,t (tCO ₂ -e) was 0 for the years in the monitoring period, they need to be reported in the MR.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings
Round 3 Response from Project Proponent 29 September 2016	Reported equation in PD
ESI Findings - Round 4	The Round 3 finding requested that the ex-ante results for Equation 6 be reported for the 10 year baseline period. The result is time t (annual) "0". Since these values are inherently 0 for all 10 years of the baseline period this is permissible. Equation 6 was reported in the PD. The item is addressed.

Item Number	105
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	PART 2: WHERE ONLY A CLASS OF DEFORESTATION AGENTS CAN BE IDENTIFIED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	For many classes of agents it is likely that a single commodity will be associated (e.g. oil palm producers or cattle ranchers) and thus this commodity shall be used for the leakage analysis.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 5.6 and site visit observations and interviews.
ESI Findings - Round 1	The commodity identified by the project is multi-crop agriculture. This appears to be valid given that during the site visit, direct observations of similar conversion activities was obvious. Site visit interviews and observations were used to confirm this element. We could not open up the reference material on the internet.
Round 1 NCR/CL/OFI 14 November 2013	CL: Please provide a copy of the reference material mentioned in the PD.
Round 1 Response from Project Proponent 29 August 2014	provided digitally
ESI Findings - Round 2	The project proponent has made revisions to the PD so the deforestation agent is identified (as being the project proponent). Therefore this finding request is no longer relevant.

Item Number	106
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	PART 2: WHERE ONLY A CLASS OF DEFORESTATION AGENTS CAN BE IDENTIFIED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Determine areas in the country currently potentially available for production of the commodity(ies) specified in STEP 1.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 5.5 of PD, step 2
ESI Findings - Round 1	The project identifies that it used publicly available materials for the purpose of this determination. The project indicates that it calculated the total area in the Andes-Amazon region with forest types similar to the project area. The reference website is provided, however no actual calculations, maps or other supporting information is provided.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide the details of the determination to include a map of the area of interest, the forest types identified, the soil, elevation, precipitation and access to market information that was calculated. Please include the total area in terms of Ha.
Round 1 Response from Project Proponent 29 August 2014	Because the owners are the agents of deforestation activity shifting leakage analysis has changed to where this step is not included.

ESI Findings - Round 2	The project proponent has made revisions to the PD so the deforestation agent is identified (as being the project proponent). Therefore this finding request is no longer relevant.
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Item Number	107
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	STEP 3: Evaluate project area relative to other forested areas for commodity production in the country
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	3.2 Assess productivity of alternative areas in the country for commodity production
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 5.5, step 3.
ESI Findings - Round 1	The project concludes that the project area is considered a highly productive for agriculture and appears to be similar to all other areas in the region where regular inundation of flood waters creates nutrient rich soils. Some reference materials were named, however these reference materials can not be accessed via the internet and are not provided to verifiers.
Round NCR/CL/OFI 14 November 2013	CL: Please provide a copy of the reference material mentioned in the PD.
Round 1 Response from Project Proponent 29 August 2014	provided digitally
ESI Findings - Round 2	The project proponent has made revisions to the PD so the deforestation agent is identified (as being the project proponent). Therefore this finding request is no longer relevant.

Item Number	108
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	STEP 4: Assess proportional leakage factor

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	If average productivity of alternative lands is the same $\pm 15\%$ as the relevant strata in the project area then: $LKCP-ME,c,i = 0.4$
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD section 5.5, step 3.
ESI Findings - Round 1	The project is claiming that the average productivity of the alternative lands is very similar to the project areas and therefor is claiming a leakage factor of .4. Without the reference materials, it is not possible for verifiers to confirm this element.
Round 1 NCR/CL/OFI 14 November 2013	CL: Please provide a copy of the reference material mentioned in the PD so that a confirmation of this situation can be performed by verifiers.
Round 1 Response from Project Proponent 29 August 2014	provided digitally
ESI Findings - Round 2	The project proponent has made revisions to the PD so the deforestation agent is identified (as being the project proponent). Therefore this finding request is no longer relevant.

Item Number	109
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	IV. DATA AND PARAMETERS MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	GPS coordinates and/or Remote Sensing data and/or legal parcel records (Aplanned,i)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 8.2 and 8.3 of the Pd
ESI Findings - Round 1	While this element appears to be a basic description and delineation of the project area, this specific item is not included in the PD.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include this item along with all needed parameters in the Data and Parameters Monitored section of the PD and Monitoring Report.
Round 1 Response from Project Proponent 29 August 2014	included
ESI Findings - Round 2	This parameter has been requested to be included in the BL-PL tab of this workbook.

Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	This parameter has been requested to be included in the BL-PL tab of this workbook.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	This parameter was confirmed to have been appropriately included in Section 8.2. The item is addressed.

Item Number	110
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	IV. DATA AND PARAMETERS MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Analysis of Remote Sensing data and/or legal records and/or survey information for lands owned or controlled or previously owned or controlled by the baseline agent of deforestation, (AdefLK,i,t)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 8.2 and 8.3 of the Pd
ESI Findings - Round 1	Included in sufficient detail to cover this item.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	included
ESI Findings - Round 2	This required parameter was not included in the MR, even though value is effectively set to 0.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include this required parameter in the MR and PD (ex-ante). Please follow the requirements for all elements of the parameter, including justification for the likelihood of leakage in the ex-ante case ("Any comment").

Round 2 Response from Project Proponent 07 August 2015	Inserted required parameters and language for the likelihood of leakage.
ESI Findings - Round 3	The parameter AdefLK,i,t could not be found in monitored parameters in the PD or MR.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	Added to the parameter tables
ESI Findings - Round 4	This parameter was appropriately added to the PD Section 8.3. The item is addressed.

Item Number	111
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	IV. DATA AND PARAMETERS MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Legal records will include government permits to deforest including concession licenses (AdefLK,i,t)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 8.2 and 8.3 of the Pd
ESI Findings - Round 1	Examination of legal records is not mentioned as an aspect of this monitoring item.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include the examination of legal records, as applicable to determine the actions of the likely agents of deforestation.
Round 1 Response from Project Proponent 29 August 2014	included
ESI Findings - Round 2	Legal records are not necessary as no deforestation has been performed by the project proponent (agent of deforestation). Finding closed.

Item Number	112
Approved VCS Module VMD0009, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of emissions from activity shifting for avoiding planned deforestation and planned degradation (LK-ASP), Sectoral Scope 14 (Section)	IV. DATA AND PARAMETERS MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Ex-ante, project proponents shall determine and justify the likelihood of leakage based on characteristics of the baseline agent or class of agent (AdefLK,i,t)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 8.2 and 8.3 of the Pd
ESI Findings - Round 1	This was not covered in the PD.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include an analysis of the likelihood of leakage based on characteristics of the class of deforestation agent, according to this requirement.
Round 1 Response from Project Proponent 29 August 2014	included
ESI Findings - Round 2	Though justification is provided within the PD, section 5.5, justification is needed within the parameter table. See higher level finding and this finding is closed.

Item Number	113
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	I. SCOPE, APPLICABILITY AND PARAMETERS
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Applicability This module is applicable for calculating market-effects leakage from REDD projects that are anticipated to reduce levels of wood harvest substantially and permanently. When REDD project activities result in reductions in wood harvest, it is likely that production could shift to other areas of the country to compensate for the reduction.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 6.3
ESI Findings - Round 1	This module was deployed by the project proponent at Round 2 and is therefore assessed there.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The project is anticipated to reduce levels of harvesting that may increase pressures elsewhere in the country. The particulars will be assessed in this module. The module is not listed in section 4.1 of the PD as being utilized.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please list the utilized module LK-ME in section 4.1 of the PD.
Round 2 Response from Project Proponent 07 August 2015	Module added to the list
ESI Findings - Round 3	Verifiers could not locate LK-ME in Section 4.1 of the PD.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please list the utilized module LK-ME in section 4.1 of the PD.
Round 3 Response from Project Proponent 29 September 2016	included
ESI Findings - Round 4	The VB noted that Section 5.6 of the PD states that market leakage is de minimis. Market effects leakage is not an optional pool and must be used. LK-ME is mandatory where the process of deforestation involves timber harvesting for commercial markets. Since the baseline scenario includes the harvest and sale of merchantable timber, LK-ME should be used to estimate market effects leakage through decreased timber harvest. The PD Section 4.5 states, "Under the baseline scenario, the owners of Yacumama will be forced, for economic reasons, to harvest the valuable the valuable hardwoods." There is no fuelwood or charcoal collection by the baseline agent so market leakage is restricted to leakage through decreased timber harvests. The VVB also noted the word "Version" was improperly included after "LK-ME VMD0011" at the bullet point in Section 4.1 of the PD.
Round 4 NCR/CL/OFI 8 November 2016	NCR: Please address the findings and apply the result of the LK-ME module to quantification of net GHG emission reductions accordingly. Please ensure the PD no longer reports market leakage as de minimis. Please identify all changes made.
Round 4 Response from Project Proponent 27 November 2016	Market leakage calculations updated to reflect change in the deforestation rate. Market leakage is included in quantification of net GHG emissions. Wording correction made.

ESI Findings - Round 5	Table 8 of the PD now reflects the results of the market leakage quantification. However, the proponent's results are slightly incorrect as the calculations were performed "long hand" in the PD and not in MS Excel. The VVB's results differ by 4 tCO ₂ e as reported in Table 8 of the PD. This is below the materiality threshold set at 5%. The item is addressed.
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Item Number	114
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	II. PROCEDURE
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Total leakage due to market effects is equal to the sum of market effects leakage through decreased timber harvest and decreased harvest for fuelwood / charcoal production. See equation 1 on page 2.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The result of this equation only accounts for LKMarketEffects,timber and no LKMarketEffects,FW/C.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Although the parameter "Leakage (market)" was listed in the parameter tables, the parameter itself (Δ CLK-ME) was not listed.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	Parameter listed in appropriate section
ESI Findings - Round 4	The parameter Δ CLK-ME is now appropriately listed in the PD. The item is addressed.

Item Number	115
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	II. PROCEDURE
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The amount of leakage is determined by where harvesting would likely be displaced to. If in the forests to which displacement would occur a lower proportion of forest biomass in commercial species is in merchantable material than in project area, then in order to extract a given volume higher emissions should be expected as more trees will need to be cut to supply the same volume. In contrast if a higher proportion of the total biomass of commercial species is merchantable in the displacement forest than in the project forests, then a smaller area would have to be harvested and lower emissions would result. Each project thus shall calculate within each stratum the proportion of total biomass in commercial species that is merchantable (PMPi). This shall then be compared to mean proportion of total biomass that is merchantable for each forest type (PMLFT). Merchantable biomass is defined as: Total gross biomass (including bark) of a tree 40 cm DBH or larger from a 30 cm stump to a minimum 10 cm top of the central stem.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Computations to determine the value for PMPi and PMLFT could not be found. The project proponent has assumed that the average merchantable biomass for the forest types (PMLFT) in the project area are nearly equal to merchantable biomass for the single stratum (PMPi) of commercial species present. Justification is needed for this assumption and transparent computations for these parameters.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please justify, per this requirement, in project documentation the assumption that there is an equal proportion of merchantable biomass of commercial species to merchantable biomass for forest types.
Round 2 Response from Project Proponent 07 August 2015	Because there is a single strata and forest type in the project area (i.e. they are exactly the same) PMPi = PMLFT .
ESI Findings - Round 3	Verifiers agree with the response that because there is a single forest type and stratum, that PMPi=PMLFT. This item has been addressed.

Item Number	116
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Data / parameter: CF Data unit: t C t d.m.-1 Used in equations: 4,7 Description: Carbon fraction of dry matter Source of data: Species specific values from the literature (e.g. IPCC 2006 INV GLs AFOLU Chapter 4 Table 4.3) or default value 0.47 t C t-1 d.m. Default shall be used if no species specific values are available Measurement procedures (if any): Any comment:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	A value of 0.47 is used for this parameter, and the default value is appropriate. However this required parameter was not included in the PD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include this required parameter set at validation in the PD.
Round 2 Response from Project Proponent 07 August 2015	Parameter inserted at the appropriate location.
ESI Findings - Round 3	The parameter CF was appropriately included in Section 8.2 of the PD. The item has been addressed.

Item Number	117
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Data Data Used Description: Mean wood density of commercially harvested species Source of data: The source of data shall be chosen with priority from higher to lower preference as follows: (a) Averaged national and commercial species-specific (e.g. from National GHG inventory); (b) Averaged commercial species-specific from neighboring countries with similar conditions. Sometimes (b) may be preferable to (a). (c) Averaged regional commercial species-specific (e.g. Table 4.13 IPCC National Guidance for Greenhouse Gas Inventories AFOLU Section). (d) Regional average (0.58 t d.m.m-3- tropical Africa; 0.60 t d.m.m-3- tropical America; 0.57 d.m.m-3- tropical Asia) from Brown, S. 1997. Estimating Biomass and Biomass Change of Tropical Forests: a Primer. For the Food and Agriculture Organization of the United Nations. Rome, 1997. FAO Forestry Paper - 134. ISBN 92-5-103955-0. Must use the same value in the CP-W module if this module is used. Measurement procedures (if any): Any comment:	/ unit: in t equations: 4,7	parameter: Dmn d.m.m-3 4,7
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5		
ESI Findings - Round 1			
Round 1 NCR/CL/OFI 14 November 2013			
Round 1 Response from Project Proponent 29 August 2014			
ESI Findings - Round 2	A value of 0.57 was computed and used for this parameter in Equation 4 and the method chosen is acceptable. The value for species <i>Caryocar macrocarpon</i> (0.57) does not appear to be correct as the average wood density from species <i>Caryocar glabrum</i> = 0.65 and <i>Caryocar villosum</i> = 0.72 in Table 4.13 of Chapter 4 of IPCC 2006 differs. The Average of 7 <i>Vochysia</i> species is also actually from 9 species. Further, the parameter was not included in the PD.		
Round 2 NCR/CL/OFI 31 October 2014	CL: Please address the findings and fix the density value for <i>Caryocar</i> sp. And the note for <i>Vochysia</i> sp. To reflect the 9 species averaged. Please also add this required parameter set at validation to the PD.		
Round 2 Response from Project Proponent 07 August 2015	Made corrections to table and equations. Added in appropriate section.		
ESI Findings - Round 3	While corrections were made pertaining to the note for <i>Vochysia</i> spp. and the density value for <i>Caryocar</i> species, and the corrected average value for Dmn was reported. However, the value applied for Dmn was not correctly included in the Dmn parameter table in section 8.2 (Data and Parameters available at Validation) in the PD.		
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include the correct Dmn value applied (0.59) in the parameter table in the PD.		
Round 3 Response from Project Proponent 29 September 2016	Included in the parameter tables		

ESI Findings - Round 4	The VB notes that this parameter is the same as Dj from module CP-W. No action is needed by the proponent due to the module overlap. The item is addressed.
Item Number	118
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Data / parameter: LDF Data unit: t C m-3 Used in equations: 4 Description: Factor for calculating the biomass of dead wood created during logging operations per cubic meter extracted Source of data: Default value for broadleaf and mixed forests of 0.53 t C m-3 from 774 logging gaps measured by Winrock International in Bolivia, Belize, the Republic of Congo, Brazil and Indonesia may be used for tropical broadleaf forests (cf. Annex 1). Default value for coniferous forests of 0.25 t C m-3 from 134 logging gaps measured by Winrock International in Mexico (cf. Annex 1). Measurement procedures (if any): Any comment:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	A value of 0.53 was used for this parameter in Equation 4. This default factor is appropriate, however it was omitted from the PD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include this required parameter set at validation in the PD.
Round 2 Response from Project Proponent 07 August 2015	Included parameter
ESI Findings - Round 3	The parameter LDF was correctly included in section 8.2 (Data and Parameters available at Validation) in the PD. This item has been addressed.

Item Number	119
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Data / parameter: LIF Data unit: t C m-3 Used in equations: 4 Description: Factor for calculating the emissions arising from the creation of logging infrastructure (roads, skid trails and decks) during logging operations per cubic meter extracted Source of data: Conservative default value of 0.29 t CO₂-e m⁻³ calculated from 1,839 hectares of logging concessions analysed by Winrock International in the Republic of Congo and Brazil, may be used for tropical broadleaf forests (cf. Annex 1). Measurement procedures (if any): Any comment:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	A value of 0.29 was used for this parameter in Equation 4. This default factor is appropriate, however it was omitted from the PD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include this required parameter set at validation in the PD.
Round 2 Response from Project Proponent 07 August 2015	(none)
ESI Findings - Round 3	The parameter was correctly included in section 8.2 (Data and Parameters available at Validation) in the PD. This item has been addressed.

Item Number	120
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Data / parameter: PMLFT unit: % Used in equations: Description: Mean merchantable biomass as a proportion of total aboveground tree biomass for each forest type Source of data: The source of data shall be chosen with priority from higher to lower preference as follows: 1. Peer-reviewed published sources (including carbon/biomass maps or growing stock volume2 maps with a scale of at least 1km) 2. Official Government data and statistics 3. Original field measurements The forest types considered shall be only those relevant for the specific market effects leakage; i.e. only forest types with active timber production. An appropriate source of data will be Government records on annual allowable cuts for the areas of commercial forests. Where volumes are used the source of data wood density is required to convert to merchantable biomass. The source of data on wood densities shall be chosen with priority from higher to lower preference as follows: 1. Knowledge on commercial species and thus an appropriately weighted wood density derived from the density of these species 2. A region-specific mean wood density as given e.g. in Brown 19973 Measurement procedures (if any): Any comment:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The PD states that PMLFT is equal ($\pm 15\%$) to PMPi but no values is given for PMLFT and the parameter (as set at validation) is not included in the PD.

Round 2 NCR/CL/OFI 31 October 2014	2	NCR: Please include this required parameter set at validation in the PD. Please also state the source of data and value used for determination of the LFME deduction factor.
Round 2 Response from Project Proponent 07 August 2015		Required parameter included and source of data identified.
ESI Findings - Round 3		The methodology behind the determination of the LFME deduction factor was included in section 5.5 of the PD. Also, the PMLFT parameter was included in section 8.2 (Data and Parameters available at Validation) in the PD. However, the value applied was not reported in the parameter table.
Round 3 NCR/CL/OFI 25 September 2015	3	CL: Please include the correct PMLFT value applied in the parameter table in the PD.
Round 3 Response from Project Proponent 29 September 2016		value included in parameter table
ESI Findings - Round 4		The value applied for PMLFT was +/-15%, therefore setting LFME equal to 0.4. This parameter was appropriately reported in the PD. The item is addressed.

Item Number	121
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Data / parameter: VBSL,EX,i,t unit: m3 Used in equations: 4 Description: Volume of timber projected to be extracted from within the project boundary during the baseline in stratum i at time t Source of data: The source of data shall be chosen with priority from higher to lower preference as follows: 1. Timber harvest records and/or 2. Estimates derived from field measurements and/or 3. Assessments with aerial photography or satellite imagery. Measurement procedures (if any): Any comment: Note that this volume does not include logging slash left onsite (tracked as part of the dead wood pool). Data compilers should also make sure that extracted volumes reported are gross volumes removed (i.e. reported volume does not already discount for estimated wood waste, as is often the practice in harvest records)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	

Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Verifiers could not locate the source of computations for determination of parameter VBSL,EX,i,t. It appears that WoPR was multiplied by a growing stock value of 3.9 m ³ per hectare (or volume of merchantable trees per hectare). This may be an estimate from field measurements but it is not explicitly stated anywhere.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please explain how the value for VBSL,EX,i,t was determined. In doing so, please identify in the PD the sources of parameters used in the computation (i.e. source of data). Please follow all guidance specified in the module. Please include this parameter set at validation in the PD.
Round 2 Response from Project Proponent 07 August 2015	Clarified in the market leakage section and added to the parameter set
ESI Findings - Round 3	The parameter was included in section 8.2 (Data and Parameters available at Validation) in the PD. However, the value applied was not reported. This finding is also pending the finding related to Pcomi in the CP-W module.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include the correct VBSL,EX,i,t value applied in the parameter table in the PD.
Round 3 Response from Project Proponent 29 September 2016	Correct value inserted in parameter table
ESI Findings - Round 4	The VVB noted that the value applied for VBSL,EX,i,t is incorrect, the volume from the harvest plan is actually 3.858m ³ and AAplanned,i,t (See BL-PL equation 3 finding) is slightly incorrect. The value reported in the parameter table for VBSL,EX,i,t is also incorrect as well as in Section 5.5 of the PD. As a result derivative values in next steps are incorrect. The intermediate parameters including VBSL,EX,i,t which compute market leakage are also time t (annual) values and should be reported on an annual basis in the PD for the 10 year baseline period. The result of LK-ME Equation 2 is applied to each year's accounting of leakage emissions for final GHG crediting as part of ex-ante estimates of the 10 year baseline period.
Round 4 NCR/CL/OFI 8 November 2016	CL: Please address the findings and fix the incorrectly computed value for parameter VBSL,EX,i,t. Please ensure all derivative values are corrected and reported appropriately.
Round 4 Response from Project Proponent 27 November 2016	updated the calculation for VBSL using updated volume and AA planned. Please Note: to stay consistent with the other values in the PD the volume was rounded to two significant digits instead of one (i.e. 3.86 vs 3.9).
ESI Findings - Round 5	Section 3.3 of the PD now reflects mostly corrected results of the VBSL parameter quantification. However, the proponent's results are slightly incorrect as the calculations were performed "long hand" in the PD and not in MS Excel. The VVB's results differ by 1.5m ³ as reported in the PD. This factors into final market leakage quantification which is below the materiality threshold set at 5%. The VVB strongly recommends the proponent perform all calculations in MS Excel to maintain decimal places etc. and best practice for GHG accounting in project development. See OFI issued in this round. The item is addressed.

Item Number	122
VCS Approved VCS Module VMD0011 Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of Emissions from Market Effects (LK-ME), Sectoral Scope 14 (Section)	IV. DATA AND PARAMETERS MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Data / parameter: PMPi Data unit: % Used in equations: Description: Merchantable biomass as a proportion of total aboveground tree biomass for stratum i within the project boundaries Source of data: Within each stratum divide the summed merchantable biomass (defined as "Total gross biomass (including bark) of a tree 30 cm DBH or larger from a 30 cm stump to a minimum 10 cm top DOB of the central stem") by the summed total aboveground tree biomass Merchantable biomass is equal to merchantable volume multiplied by wood density (Dmn) Measurement procedures (if any): Monitoring frequency: Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event QA/QC procedures: Any comment: Ex-ante a time zero measurement shall be made of this factor
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.5
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	This finding is similar in scope to PMLFT where the source or value of the parameter could not be found in the PD or MR (this is a monitored parameter).
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include this required parameter set at validation in the PD. Please also state the source of data and value used for determination of the LFME deduction factor. Please follow all guidance for both validation and monitoring per the VCS module.
Round 2 Response from Project Proponent 07 August 2015	PMPi calculation and use were explained in 5.5 and added to the appropriate parameter list

ESI Findings - Round 3	The methodology behind the determination of the LFME deduction factor was included in section 5.5 of the PD. Also, the PMPi parameter was included in section 8.2 (Data and Parameters available at Validation) in the PD. However, the value applied was not reported in the parameter table.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include the correct PMPi value applied in the parameter table in the PD.
Round 3 Response from Project Proponent 29 September 2016	Added to parameter table
ESI Findings - Round 4	The project has assumed that PMPi is equal to PMLFT, therefore PMPi does not need to be reported in the parameter table. The item is addressed.

Item Number	123
Approved VCS Module VMD0013, Version 1.0 (03 December 2010), REDD Methodological Module: Estimation of greenhouse gas emissions from biomass burning (E-BB), Sectoral Scope 14 (Section)	I. SCOPE, APPLICABILITY AND PARAMETERS
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Where used in the baseline, accounting must occur under both the baseline and with-project scenarios in both the project area and in the leakage belt.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD General
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	

Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	The VVB understands that the baseline scenario involves the burning of biomass after merchantable stems have been removed to prepare for agriculture/pasture. Table 4 of the PD states, "The standard practice in Peru for conversion of forest to agricultural lands is to remove valuable timber species and then bulldoze and burn the remaining trees." In multiple other locations of the PD it is clarified that the baseline case involved burning. The VVB also understands that burning is a tool for agriculture/pastoral activities in the region following deforestation (see Procedures section of E-BPB). Although no burning is planned as a project activity this criteria requires accounting (and associated reporting of methods) for the project case, in addition to the baseline. Section 5.3 (9) of the PD states "Emissions of CH₄ and N₂O from biomass burning were conservatively excluded." However, the E-BPB pool is mandatory following Table 3 of REDD-MF except when found to be de minimis following the T-SIG tool. The VVB notes that biomass burning is seldom found to be de minimis since it is a major source of emissions from deforestation. PD table 13 incorrectly states biomass burning as a baseline source, "No biomass burning will occur as a Project activity." This language is already stated in the project list of emission sources. This finding was issued and will be reviewed under Task 1.
Round 4 NCR/CL/OFI 8 November 2016	4 NCR: Please follow all requirements of E-BPB to account for biomass burning in the baseline scenario, providing transparent quantification of the pool in spreadsheet format and reporting all required elements in the PD. Else, please apply the T-SIG tool to render the source de minimis using the quantified biomass burning value. Please also report quantification methods (monitoring) for biomass burning in the project case, as required, despite no planned burning as a project activity.
Round 4 Response from Project Proponent 27 November 2016	Because emissions from biomass burning is always optional according to module E-BPB the project has chosen to conservatively omit these emissions.
ESI Findings - Round 5	The assertions by the proponent are correct, it is always conservative to exclude biomass burning from the baseline. No further action is needed. The item is addressed.

Item Number	124
Approved VCS Module VMD0005, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP-W), Sectoral Scope 14 (Section)	I. SCOPE, APPLICABILITY AND PARAMETERS

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	This module is applicable to all cases where wood is harvested for conversion to wood products for <i>commercial markets</i> , for all forest types and age classes.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD General
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Wood is being harvested in the baseline for sale to market.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	A reference to VMD0005 CP-W v1.1 is not included in the Title and Reference of Methodology section of the PD (Section 4.1). CP-W should be included as an utilized module, since CP-W was applied in the T-SIG module.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please include CP-W in the Title and Reference of Methodology section of the PD (Section 4.1) as an utilized module.
Round 3 Response from Project Proponent 29 September 2016	Included in section 4.1
ESI Findings - Round 4	The module CP-W is now appropriately referenced in Section 4.1 of the PD. The item is addressed.

Item Number	125
Approved VCS Module VMD0005, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP- W), Sectoral Scope 14 (Section)	Option 2: Commercial inventory estimation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 1: Calculate the biomass carbon of the commercial volume extracted prior to or in the process of deforestation using <u>equation 4 on page 4</u>

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.3
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	This equation was applied correctly.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Verifiers independently quantified Equation 3. While the equation was applied correctly, not all of the inputs were accurate. CAB_Tree,i was calculated incorrectly as per the finding in CP-AB pertaining to the calculation of total carbon stocks. This item is also pending findings below related to parameters.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	Parameter CAB_tree,i was confirmed to have been corrected in CP-AB. However, an incorrect value was applied to Equation 4 instead of CAB_tree,i as derived from the inventory. Further, the PD page 85 states, "total volume of above-ground biomass based on field measurements." This should state "Mean aboveground biomass carbon stock" following parameter CAB_tree,i in CP-W. Please see finding on the derivation of parameter Pcomi.
Round 4 NCR/CL/OFI 8 November 2016	NCR: Please address the findings and correct the quantification and reporting of Equation 4.
Round 4 Response from Project Proponent 27 November 2016	Equation corrected and wording (page 49 in new template) corrected

ESI Findings - Round 5	In order to expedite the validation audit, the VVB did an independent analysis to see whether CWP100,i can be rendered de minimis following T-SIG. The VVB used the proponent's data to independently work up stock estimates for the wood products pool and then performed an independent analysis following T-SIG. For efficiency, remaining findings for CP-W are collectively issued here, other findings in this module are closed. At this round the proponent has elected to switch to Option 1: Direct Volume Extraction Estimation. The criteria this finding is issued under is no longer relevant but reflects Equation 1 of CP-W. Parameter Ai (Total area of stratum i) is incorrect, per the parameter table the area should be the project area, and in this case the project area is one stratum. The default value for parameter WWty is incorrect, as understood by the audit team, Peru is a developing country. Since these values are computed and reported they must be corrected. Based on the independent workup of the CP-W module by the VVB and subsequent T-SIG analysis, parameter CWP100,i can be rendered de minimis. In any case, exclusion of the wood products pool is conservative accounting since at time of deforestation the project is assuming no carbon stocks entering the wood products pool.
Round 5 NCR/CL/OFI 15 December 2016	NCR: Please address the findings and fix calculation and reporting of parameter Ai and WWty for determination of CWP100,i.
Round 5 Response from Project Proponent	Value Corrected for WWty to .24 The area (Ai) used 2863 corresponds to the project area. Calculations corrected page 52 and 51 PD.
ESI Findings - Round 6	A new carbon calculation worksheet and PD were submitted in response to this finding. Derivative quantification for CWPi,100 was confirmed to have been updated correctly. Associated reporting throughout the PD as a result of the revisions were confirmed to have been updated correctly. The item is addressed.

Item Number	126
Approved VCS Module VMD0005, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP-W), Sectoral Scope 14 (Section)	Option 2: Commercial inventory estimation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 2: Identify the wood product class(es) (ty; defined here as sawnwood, wood-based panels, other industrial roundwood, paper and paper board, and other) that are the anticipated end use of the extracted carbon calculated in Step 1.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.3
ESI Findings - Round 1	

Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The PD identifies sawnwood as the only wood product class. More justification is needed for inclusion of this wood product class and the omissions of others.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please address the findings and justify the use of sawnwood as the wood product class to be accounted for.
Round 2 Response from Project Proponent 07 August 2015	Justification provided in document :The definition of sawnwood according to the UNFCCC (2003) "Sawnwood is roundwood that is sawed lengthways or by profile chipping, to produce planks, beams, joists, sleepers and lumber...." On page 30 of the Yacumama annual harvest plan under the heading: Activities: Primary Processing ... "The primary processing at the site...will be made using a portable sawmill...by which pieces of wood are obtained...." Thus the anticipated that the wood product class for the trees cut on the property would be sawnwood.
ESI Findings - Round 3	Verifiers could not locate the source of the UNFCCC (2003) definition of sawnwood. However, given that the harvest plan does call for a portable sawmill to be used on the property, verifiers can be reasonably assured that sawnwood will be the product class removed from the project area. This item is addressed.

Item Number	127
Approved VCS Module VMD0005,Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP- W), Sectoral Scope 14 (Section)	Option 2: Commercial inventory estimation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Step 4: Calculate the amount of wood products entering the pool at the time of deforestation (CWP,i, calculated in C-WP) that is expected to be emitted over a 100-year timeframe using <u>equation 6 on page 8</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.3
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	This equation was applied correctly.

Round NCR/CL/OFI 31 October 2014	2	
Round 2 Response from Project Proponent 07 August 2015		
ESI Findings - Round 3		While verifiers confirmed that Equation 6 was applied correctly (pending other findings regarding predecessors to Equation 6), verifiers were unable to locate the reference for the OFp value of 0.84.
Round NCR/CL/OFI 25 September 2015	3	CL: Please supply the reference for the OFp value of 0.84 utilized in Equation 6..
Round 3 Response from Project Proponent 29 September 2016		Winjum, J.K., Brown, S. and Schlamadinger, B. 1998. Forest harvests and wood products: sources and sinks of atmospheric carbon dioxide. Forest Science 44: 272-284.
ESI Findings - Round 4		The VVB confirms this is the correct reference and value applied for Equation 6. This quantification was performed correctly but is pending corrections to earlier steps.
Round NCR/CL/OFI 8 November 2016	4	
Round 4 Response from Project Proponent 27 November 2016		
ESI Findings - Round 5		Please see finding under Equation 4. Option 1 is now employed by the project. The item is addressed.

Item Number	128
Approved VCS Module VMD0005, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP- W), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	If using BCEFs developed outside the project country (cases (c) and (d) above under Source of data), it is necessary to validate the applicability of BCEFs used. Validation is performed by:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3, Higutchi 1998, Nogueira 2008
ESI Findings - Round 1	
Round NCR/CL/OFI 14 November 2013	1

Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The BCEF selected followed case (d) and therefore validation is necessary. No validation appears to have been performed following the requirements below. The parameter is missing from the PD and MR.
Round NCR/CL/OFI 31 October 2014	2 NCR: Since the BCEF value chosen was developed outside the country, please demonstrate the applicability of the BCEF value chosen. In doing so, please provide verifiable, transparent computations following all required elements of the "Limited Measurements" section for this parameter. Please also include this required parameter set at validation in the appropriate project documentation.
Round 2 Response from Project Proponent 07 August 2015	Parameters included. Data is not available to perform the validation. However the C pools in which the parameters were used were determined to be de-minimis using T-SIG and thereby not used in the final VCU calculations.
ESI Findings - Round 3	The verifiers understand the requirement of BCEF validation to be prescriptive. VMD0005 v1.1 states "If using BCEFs developed outside the project country (cases (c) and (d) above under Source of data), it is necessary to validate the applicability of BCEFs used. Validation is performed by: 1. Limited Measurements". The verifiers assert that the PP must demonstrate that the BCEF value from IPCC 2006 INV GLs AFOLU Chapter 4 Table 4.5 was developed in the same country in which the project is located or provide validation calculations. In order to calculate the significance of a module, correct parameters must be applied in those modules.
Round NCR/CL/OFI 25 September 2015	3 NCR: Please demonstrate that the BCEF value utilized for the project was either developed in the project country or provide the BCEF validation calculations as prescribed in VMD0005 v1.1.
Round 3 Response from Project Proponent 29 September 2016	The following description of the source of data is in the data and parameters table and in the text. There were no directly available BCEF values available for the local forest type, thus we calculated a site specific value using the following equation (IPCC 2006). The widely accepted figure for BEF in Amazonia is 1.74 (Brown and Lugo 1992). However, Nogueira et. al. (2008) calculated, from multiple sites in the central Amazon of Brazil, a BEF of 1.64. Because Nogueira et al. (2008) figure is more recent, eco-regionally relevant, and conservative, 1.64 was used to calculate BCEF. The 7 commercial tree species listed in the approved Yacumama harvest plan (Appendix B) were used to determine a "mean wood density of commercially harvested species" in the project area of 0.55 (t dry mass m ⁻³ green volume).

ESI Findings - Round 4	The alternative method used by the proponent is acceptable if no local BCEF value is available to convert merchantable volume to aboveground biomass. The factor of 0.97 applied by the proponent is incorrectly computed and reported as $1.64 \times 0.55 = 0.902$. Further, the Noguiera 2008 study found a BEF value of 1.621, 1.64 was referenced in that study from Higutchi 2008 but the VB was unable to locate the BEF value in the Portuguese paper. The BEF value chosen by the proponent, and multiplied by the wood densities of commercial species on-site require additional explanation as to their source and corrected reporting. In addition the project should further elaborate in detail within the BCEF parameter table of the PD the "Source of data" is actually, as understood by the validation team to be, "Forest type-specific or eco-region-specific from neighboring countries with similar conditions." Please note this finding was adjusted following correspondence with the proponent. The assumptions for the BCEF parameter affect the conservativeness of accounting for estimates of wood products emitted.
Round 4 NCR/CL/OFI 8 November 2016	NCR: Please address the findings and follow CP-W requirements for the derivation of parameter BCEF. Please ensure that either a value derived from the literature is appropriate or that the alternate method is applied using the project's inventory data.
Round 4 Response from Project Proponent 27 November 2016	Since the PD has been updated to use Option 1 in CP-W, BCEF is no longer required to complete the module and thus has been removed from the PD
ESI Findings - Round 5	Please see finding under Equation 4. Option 1 is now employed by the project. The item is addressed.

Item Number	129
Approved VCS Module VMD0005, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP-W), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	(a) National species-specific or group of species-specific (e.g. from National GHG inventory); (b) Species-specific or group of species-specific from neighboring countries with similar conditions. Sometimes (b) may be preferable to (a); (c) Global species-specific or group of species-specific (e.g. IPCC 2006 INV GLs AFOLU Chapter 4 Tables 4.13 and 4.14). (Basic wood density in t d.m. m ⁻³ for species j (t d.m. m ⁻³))
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.5, 8.2
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	

Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The data source for wood density is option (c). Specific findings are requested in LK-ME module for the average wood density values from IPCC 2006 Chapter 4. Per the detailed requirements below for this parameter, the wood density values need to be validated following appropriate sampling methods.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Please address all findings and provide verifiable, transparent computations following all required elements for this parameter. Please also include this required parameter set at validation in the appropriate sections of project documentation.
Round 2 Response from Project Proponent 07 August 2015	Parameters included. Data is not available to perform the validation. However the C pools in which the parameters were used were determined to be de-minimis using T-SIG and thereby not used in the final VCU calculations.
ESI Findings - Round 3	The verifiers understand the requirement of wood density validation to be prescriptive. VMD0005 v1.1 states "Where using wood densities developed outside of the project country (cases (b) and (c) above under Source of data), wood densities must be validated with either limited destructive sampling or direct measurement of wood hardness (e.g. with a Pilodyn wood tester) in the field and correlating with wood density." The verifiers assert that the PP must demonstrate that the wood density value from IPCC 2006 INV GLs AFOLU Chapter 4 Table 4.13 and 4.14 was developed in the same country in which the project is located or provide validation calculations.
Round 3 NCR/CL/OFI 25 September 2015	3 NCR: Please demonstrate that the wood density value utilized for the project was either developed in the project country or provide the wood density validation calculations as prescribed in VMD0005 v1.1.
Round 3 Response from Project Proponent 29 September 2016	The following description of the source of data is in the data and parameters table and in the text. The 7 commercial tree species listed in the approved Yacumama harvest plan (Appendix B) were used to determine the "mean wood density of commercially harvested species" in the project area (Table 16). Densities were obtained from Baker et al. (2004) appendix A. If multiple values were provided among studies in Peru, a mean value was calculated. If the species was not listed, the mean value for all species in the genus was calculated to determine the mean for that genus. In the instance of Hymenolobium sp, the genus was not listed thus we calculated the family (i.e. Fabaceae) level mean. The mean of the 7 species densities resulted in a tree density of 0.55.
ESI Findings - Round 4	The VVB notes that calculations in a spreadsheet format were not provided to support the wood density value applied of 0.55, this parameter is the same as Dmn from module LK-ME. Accordingly the VVB independently computed the value and confirmed correctness from Baker et al. 2004 values. No further action is needed by the proponent. The item is addressed.

Item Number	130
Approved VCS Module VMD0005, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP-W), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	(a) Direct forest inventory of the project area, distinguishing commercially viable stocks on the basis of species and tree size, referencing local expert knowledge or a participatory rural assessment (PRA) of harvest practices and markets; (b) Forest inventory from a proxy area in the same region, representing the same forest type and age class, distinguishing commercially viable stocks on the basis of species and tree size, referencing local expert knowledge of harvest practices and markets National and forest type-specific or eco-region-specific (e.g. from National GHG inventory). (Pcomi)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.3
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Option (a) was chosen and the PD states "Pcom,i was calculated by multiplying the volume of merchantable trees per hectare (available in the approved Yacumama deforestation plan) by the total number of hectares in the project area (3.9 m3/ha * 2879 ha = 11228.1 m3), and dividing by the total volume of above-ground biomass based on field measurements divided by the commercial tree density (Dmn) calculated in the LK-ME (75.72 tons/ha * 2879 ha / 0.57 tons/m3 = 382,452.4 m3)." This finding is also pending confirmation of the Yacumama deforestation plan and Dmn parameter.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please included this parameter set at validation in the appropriate section of project documentation.
Round 2 Response from Project Proponent 07 August 2015	Parameter included
ESI Findings - Round 3	Verifiers confirm that Pcom,i was included in the Data and Parameters Available at Validation (Section 8.2) of the PD. However, the parameter was incorrectly reported in that section as "Pcomi" instead of "Pcom,i".

Round 3 NCR/CL/OFI 25 September 2015	CL: Please correct the parameter "Pcomi" to "Pcom,i" in the Data and Parameters Available at Validation (Section 8.2) of the PD.
Round 3 Response from Project Proponent 29 September 2016	Corrected
ESI Findings - Round 4	The parameter table is still incorrectly reported in the PD as "Pcomi" instead of "Pcom,i".
Round 4 NCR/CL/OFI 8 November 2016	CL: Please correct the parameter "Pcomi" to "Pcom,i" in the Data and Parameters Available at Validation (Section 8.2) of the PD.
Round 4 Response from Project Proponent 27 November 2016	Corrected (now section 4.1 in updated format)
ESI Findings - Round 5	Please see finding under Equation 4. Option 1 is now employed by the project. The item is addressed.

Item Number	131
Approved VCS Module VMD0005, Version 1.1 (20 November 2012), REDD Methodological Module: Estimation of carbon stocks in the long-term wood products pool (CP-W), Sectoral Scope 14 (Section)	III. DATA AND PARAMETERS NOT MONITORED
VCS Standard Version 3 Requirements Document 25 March 2015, v3.5 (Description)	(a) Direct forest inventory of the project area, distinguishing commercially viable stocks on the basis of species and tree size, referencing local expert knowledge or a participatory rural assessment (PRA) of harvest practices and markets; (b) Forest inventory from a proxy area in the same region, representing the same forest type and age class, distinguishing commercially viable stocks on the basis of species and tree size, referencing local expert knowledge of harvest practices and markets National and forest type-specific or eco-region-specific (e.g. from National GHG inventory). (Pcomi)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.3
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	

ESI Findings - Round 2	Option (a) was chosen and the PD states "Pcom,i was calculated by multiplying the volume of merchantable trees per hectare (available in the approved Yacumama deforestation plan) by the total number of hectares in the project area (3.9 m ³ /ha * 2879 ha = 11228.1 m ³), and dividing by the total volume of above-ground biomass based on field measurements divided by the commercial tree density (Dmn) calculated in the LK-ME (75.72 tons/ha * 2879 ha / 0.57 tons/m ³ = 382,452.4 m ³)."
	This finding is also pending confirmation of the Yacumama deforestation plan and Dmn parameter.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Please included this parameter set at validation in the appropriate section of project documentation.
Round 2 Response from Project Proponent 07 August 2015	Parameter included
ESI Findings - Round 3	Verifiers could not locate the reference in the harvesting plan where the volume of merchantable trees per hectare (3.9m ³ /ha) was provided. It appears that "PAGE 29" of the harvesting plan is missing the annual cut volume. Therefore, the validity of Pcom,i cannot be asceratined
Round 3 NCR/CL/OFI 25 September 2015	3 CL: Please provide the reference in which the volume of merchantable trees per hectare was reported as (3.9m ³ /ha).
Round 3 Response from Project Proponent 29 September 2016	The translated plan did not include the table referenced here and in other locations. The original Spanish version has been included in the submittal packet. The table on page 29 is included.
ESI Findings - Round 4	The project has chosen to use Option 2 despite the availability of an approved timber harvest plan which specifies harvest intensity in volume extracted per ha (per year). CP-W states "If approved timber harvest plans, specifying harvest intensity per strata in terms of volume extracted per ha, are available for the project area use Option 1. If approved harvest plans are not available use Option 2." As confirmed elsewhere in this review the harvest plan was intended for one of the two project area parcels but is applied to both. As a result of applying Option 2, methods for the derivation of parameter Pcomi for Equation 4 do not follow these "Source of data" requirements per the parameter table which require use of project area inventory data or proxy area inventory data. Due to the harvest plan the VVB understands that Option 1 is more appropriate than Option 2. In either case, project documentation does not describe justification for the choice and steps for the selection must be followed properly.
Round 4 NCR/CL/OFI 8 November 2016	4 NCR: Please address all findings and use a correctly derived Pcomi value under the current chosen Option 2. Please also justify the appropriateness of Option 2 given the availability of a harvest plan. If warranted, please revise quantification and reporting to follow Option 1 of CP-W.
Round 4 Response from Project Proponent 27 November 2016	Revised and applied option 1 since a harvest plan is available
ESI Findings - Round 5	Please see finding under Equation 4. Option 1 is now employed by the project. The item is addressed.

Item Number	132
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Step 2: Assess uncertainty of emissions and removals in project area
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Uncertainty should be expressed as the 95% confidence interval as a percentage of the mean using <u>Equation 4 on Page 8</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD; Raw Data_Calculations_Yacumama PDD_Version1.1.xlsx -Uncertainty Tab
ESI Findings - Round 1	MPP: Verifier was unable to locate transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide transparent calculation of equation 4 as described in the X-Unc module. Additionally, please provide reference to this calculation in the PD.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	PDD states that the uncertainty of BSL, SS,i is zero, which is incorrect as baseline carbon stocks are not incorporated into this computation. No reference is made to equation 4 in the PDD. Additionally, the verifier was unable to find the computation and determine whether CP-W was included in the assessment.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide reference to equation 4 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Reference Provided
ESI Findings - Round 3	A reference to Equation 4 was provided in PDD section 5.3.3 transparently demonstrating the calculation of the equation. However, the PDD reports Equation 4 from X-UNC v2.0, which expired on 09 September 2015. Therefore, Equation 4 as reported in the PDD is out-of-date and must be updated to X-UNC v2.1.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please update Equation 4 in the PDD from X-UNC v2.0 to X-UNC v2.1, as required by the methodology.
Round 3 Response from Project Proponent 29 September 2016	equation updated in the PD
ESI Findings - Round 4	The PD now includes an updated Equation 4 from X-UNC. The VVB notes that although the "SS" term in the parameters of the equation itself are missing the reporting is sufficient. The item is addressed.

Item Number	133
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Step 2: Assess uncertainty of emissions and removals in project area
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Uncertainty should be expressed as the 95% confidence interval as a percentage of the mean using <u>Equation 4 on Page 8</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD; Raw Data_Calculations_Yacumama PDD_Version1.1.xlsx -Uncertainty Tab
ESI Findings - Round 1	MPP: Verifier was unable to locate transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide transparent calculation of equation 4 as described in the X-Unc module. Additionally, please provide reference to this calculation in the PD.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	PDD states that the uncertainty of BSL, SS,i is zero, which is incorrect as baseline carbon stocks are not incorporated into this computation. No reference is made to equation 4 in the PDD. Additionally, the verifier was unable to find the computation and determine whether CP-W was included in the assessment.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent calculation of equation 4. Additionally, please ensure that all carbon pools are included.
Round 2 Response from Project Proponent 07 August 2015	Calculation provided. CP-W was found to be de minimis through T-SIG analysis
ESI Findings - Round 3	While verifiers noted the updated PDD section 5.3.3 which provided the calculations of BSL,SS,i, it was noted through independent quantification that while X-UNC Equation 4 was implemented correctly, the statistics (Mean Above-ground Tree Biomass t CO ₂ eq ha ⁻¹ by pool and standard deviation by pool) that are input into Equation 4 are incorrect.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	This finding was not issued previously due to issues with parameters CAB_tree,i and CBB_tree,i. At this round Equation 4 was implemented correctly but the statistics (Mean Above-ground/belowground Tree Biomass t CO2 eq ha-1 by pool and standard deviation by pool) that are input into Equation 4 are incorrect. The confidence.t Excel function is more appropriate to use and the sample size (# plots) is incorrect. Please note this finding is derivative to multiple subsequent steps in X-UNC.
Round 4 NCR/CL/OFI 8 November 2016	NCR: Please address the findings and correct the noted quantification errors as part of Equation 4. Please ensure reporting in the PD is reflective of corrected values. Finally, please ensure derivative equation computations from X-UNC module and reporting are updated correctly.
Round 4 Response from Project Proponent 27 November 2016	Corrected uncertainty calculations using correct statistics. Confidence was calculated using "confidence.t" function in excel. All derivative uncertainty calculations were updated.
ESI Findings - Round 5	The VVB confirmed that Equation 4 is now correctly applied with the correct confidence.t and sample size. Derivative sampling error calculations have been correctly updated as well in reporting. Uncertainty is less than 15% and therefore no deduction is necessary. The values independently computed by the VVB differ slightly but as noted elsewhere the proponent has performed some of the uncertainty calcs "long hand" instead of in MS Excel. The item is addressed.

Item Number	134
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Step 3: Estimate total uncertainty in baseline scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Assess uncertainty across combined strata using <u>Equation 5 on Page 8</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD; Raw Data_Calculations_Yacumama PDD_Version1.1.xlsx -Uncertainty Tab
ESI Findings - Round 1	MPP: Verifier was unable to locate transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide transparent calculation of equation 5 as described in the X-Unc module. Additionally, please provide reference to this calculation in the PD.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.

ESI Findings - Round 2	PDD states that the uncertainty of BSL is zero which is incorrect as baseline carbon stocks are not incorporated into this computation. No reference is made to equation 5 in the PDD. Additionally, the verifier was unable to find the computation and determine whether CP-W was included in the assessment.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide reference to equation 5 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Reference Provided
ESI Findings - Round 3	A reference to X-UNC v2.0 Equation 5 was provided in PDD section 5.3.3 transparently demonstrating the calculation of the equation. This item has been addressed.

Item Number	135
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Step 3: Estimate total uncertainty in baseline scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Assess uncertainty across combined strata using <u>Equation 5 on Page 8</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD; Raw Data_Calculations_Yacumama PDD_Version1.1.xlsx -Uncertainty Tab
ESI Findings - Round 1	MPP: Verifier was unable to locate transparent calculation of the equation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide transparent calculation of equation 5 as described in the X-Unc module. Additionally, please provide reference to this calculation in the PD.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	PDD states that the uncertainty of BSL is zero which is incorrect as baseline carbon stocks are not incorporated into this computation. No reference is made to equation 5 in the PDD. Additionally, the verifier was unable to find the computation and determine whether CP-W was included in the assessment.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent calculation of equation 5. Additionally, please ensure that all carbon pools are included as the verifier was unable to find mention of CP-W.
Round 2 Response from Project Proponent 07 August 2015	Calculation provided. CP-W was found to be de minimis through T-SIG analysis

ESI Findings - Round 3	While application of Equation 5 was found to be correct, the values utilized in the calculations were incorrect. Pending Finding in Row 34.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	While application of Equation 5 was found to be correct, the values utilized in the calculations were incorrect. Pending results of Equation 4.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	Equation 4 results have been corrected. The item is addressed.

Item Number	136
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Step 3: Estimate total uncertainty in baseline scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Incorporate rate uncertainty using <u>Equation 6 on Page 9</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD; Raw Data_Calculations_Yacumama PDD_Version1.1.xlsx -Uncertainty Tab
ESI Findings - Round 1	MPP: Calculation was correctly applied, pending correction of the input calculations.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include reference to the calculation of the baseline scenario in the PD.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	The PDD contains no reference to the incorporation of uncertainty rate of the baseline as described in equation 6 of the methodology. Additionally, the verifier was unable to find the computation of this assessment.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide reference to equation 6 in the PDD, as required by the methodology.

Round 2 Response from Project Proponent 07 August 2015	Equation 6 referenced
ESI Findings - Round 3	Equation 6 is not applicable and therefore not referenced in the PD. The item is addressed.

Item Number	137
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Step 3: Estimate total uncertainty in baseline scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Incorporate rate uncertainty using <u>Equation 6 on Page 9</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD; Raw Data_Calculations_Yacumama PDD_Version1.1.xlsx -Uncertainty Tab
ESI Findings - Round 1	MPP: Calculation was correctly applied, pending correction of the input calculations.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include reference to the calculation of the baseline scenario in the PD.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	The PDD contains no reference to the incorporation of uncertainty rate of the baseline as described in equation 6 of the methodology. Additionally, the verifier was unable to find the computation of this assessment.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent calculation of equation 6.
Round 2 Response from Project Proponent 07 August 2015	Because the deforestation rate was derived directly from the Yacumama harvest plan no uncertainty exists in the baseline rate of deforestation therefore equation 6 from X-UNC was not required.
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	The assertions by the proponent are correct and the baseline rate is not applicable. No action is needed by the proponent. The item is addressed.

Item Number	138
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 2 – Uncertainty Ex-Post in the With-Project Scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Area of deforestation or degradation in the with-project scenario should be tracked directly using the same accuracy assessment criterion as used in the baseline (accuracy of 90% or more—see module BL-UP).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Ex-post monitoring was not performed.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Ex-post computations were performed in the PD and in the supporting "Yacumama_Carbon_Stock_Calculations_5_2014.xlsx" file. No ex-post measurements were taken and those values computed were derived from the baseline plot data.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include description of the area that will be evaluated in future ex-post uncertainty evaluation.
Round 2 Response from Project Proponent 07 August 2015	NCR References BL-UP. Planned deforestation (BL-PL) and therefore not applicable
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	This requirement is inherently captured as part of M-MON monitoring requirements. No action is needed by the proponent. The item is addressed.

Item Number	139
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 2 – Uncertainty Ex-Post in the With-Project Scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Uncertainty in the combined carbon stocks and greenhouse gas sources in the with-project case in stratum I is calculated using <u>Equation 7 on Page 10</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Ex-post monitoring was not performed.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Ex-post computations were performed in the PD and in the supporting "Yacumama_Carbon_Stock_Calculations_5_2014.xlsx" file. No ex-post measurements were taken and those values computed were derived from the baseline plot data. Additionally the PDD contains no reference was made to equation 7 of the methodology
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide reference to equation 7 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Reference Provided
ESI Findings - Round 3	A reference to X-UNC v2.0 Equation 7 was provided in PDD section 5.3.3 transparently demonstrating the calculation of the equation. This item has been addressed.

Item Number	140
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 2 – Uncertainty Ex-Post in the With-Project Scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Uncertainty in the combined carbon stocks and greenhouse gas sources in the with-project case in stratum I is calculated using <u>Equation 7 on Page 10</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Ex-post monitoring was not performed.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Ex-post computations were performed in the PD and in the supporting "Yacumama_Carbon_Stock_Calculations_5_2014.xlsx" file. No ex-post measurements were taken and those values computed were derived from the baseline plot data. Additionally the PDD contains no reference was made to equation 7 of the methodology
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please correct the calculation of equation 7 and provide description of how this will be assessed for future ex-post assessments of uncertainty.
Round 2 Response from Project Proponent 07 August 2015	Equation 7 corrected and language inserted.
ESI Findings - Round 3	While application of Equation 7 was found to be correct, the inputs were incorrect. Pending Finding in Row 34.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	At validation, project-case uncertainty is the same as baseline uncertainty. Application of Equation 7 was found to be correct but the inputs were incorrect.

Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	Upstream values for this calculation step were corrected. The item is addressed.

Item Number	141
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X- UNC), Sectoral Scope 14 (Section)	Part 2 – Uncertainty Ex-Post in the With-Project Scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	To assess uncertainty across combined strata use <u>Equation 8 on Page 10</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Ex-post monitoring was not performed.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Ex-post computations were performed in the PD and in the supporting "Yacumama_Carbon_Stock_Calculations_5_2014.xlsx" file. No ex-post measurements were taken and those values computed were derived from the baseline plot data. Additionally the PDD contains no reference was made to equation 8 of the methodology
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide reference to equation 8 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Equation 8 referenced
ESI Findings - Round 3	A reference to X-UNC v2.0 Equation 8 was provided in PDD section 5.3.3 explaining that the equation was not needed in this scenario, because there is only one stratum in the project. The finding has been addressed.

Item Number	142
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 2 – Uncertainty Ex-Post in the With-Project Scenario
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	To assess uncertainty across combined strata use <u>Equation 8 on Page 10</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Ex-post monitoring was not performed.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Ex-post computations were performed in the PD and in the supporting "Yacumama_Carbon_Stock_Calculations_5_2014.xlsx" file. No ex-post measurements were taken and those values computed were derived from the baseline plot data. Additionally the PDD contains no reference was made to equation 8 of the methodology
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please correct the calculation of equation 8 and provide description of how this will be assessed for future ex-post assessments of uncertainty.
Round 2 Response from Project Proponent 07 August 2015	Since there was only one stratum Equation 8 from X-UNC was not required
ESI Findings - Round 3	While Equation 8 was not needed, the result of Equation 8 in this case should be the same as the result from Equation 7. However, like Equation 7, Equation 8 is pending the finding in Row 34 and Equation 7.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	This equation is not applicable. No action is needed by the proponent. The item is addressed.
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Item Number	143
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 3 – Total Error in REDD Project Activity
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Calculation of leakage is conservative in all instances and therefore uncertainty is not considered here. Total project uncertainty is therefore equal to the combined uncertainty in baseline and with-project estimates (Calculated using <u>Equation 9 on Page 11</u>)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	No reference is made to equation 9 in the PDD. Additionally, the verifier was unable to find the computation of this assessment.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide reference to equation 9 in the PDD, as required by the methodology.
Round 2 Response from Project Proponent 07 August 2015	Refrence inserted
ESI Findings - Round 3	A reference to X-UNC v2.0 Equation 9 was provided in PDD section 5.3.3 explaining that the equation was not needed in this scenario, because there is only one stratum in the project. The finding has been addressed.

Item Number	144
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 3 – Total Error in REDD Project Activity
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Calculation of leakage is conservative in all instances and therefore uncertainty is not considered here. Total project uncertainty is therefore equal to the combined uncertainty in baseline and with-project estimates (Calculated using <u>Equation 9 on Page 11</u>)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	No reference is made to equation 9 in the PDD. Additionally, the verifier was unable to find the computation of this assessment.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent calculation of equation 9.
Round 2 Response from Project Proponent 07 August 2015	Equation 9 Provided
ESI Findings - Round 3	While application of Equation 9 was found to be correct, the inputs were incorrect. Pending Findings pertaining to Equations 6 and 8.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	While application of Equation 9 was found to be correct, the values utilized in the calculations were incorrect. Pending results of Equation 4.
Round 4 NCR/CL/OFI 8 November 2016	

Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	Upstream values for this calculation step were corrected. The item is addressed.

Item Number	145
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 3 – Total Error in REDD Project Activity
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Where no ex post (re-)measurements of carbon pools or GHG sources have been made, i.e. uncertainty from these sources is already included in UncertaintyBSL,t*, cumulative project uncertainty through time t is therefore equal to uncertainty in baseline estimates (this is represented by Equation 10 on Page 11)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Proponent states that the baseline uncertainty was applied as ex-post measurements were not taken. No reference to this calculation was found in the monitoring report.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include reference to this equation in the monitoring report.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	No reference is made to equation 10 in the PDD. Additionally, the verifier was unable to find the computation of this assessment.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include reference to equation 10.
Round 2 Response from Project Proponent 07 August 2015	Reference Provided
ESI Findings - Round 3	A reference to X-UNC v2.0 Equation 10 was provided in PDD section 5.3.3 transparently demonstrating the calculation of the equation. This item has been addressed.

Item Number	146
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	Part 3 – Total Error in REDD Project Activity
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Where no ex post (re-)measurements of carbon pools or GHG sources have been made, i.e. uncertainty from these sources is already included in $UncertaintyBSL,t^*$, cumulative project uncertainty through time t is therefore equal to uncertainty in baseline estimates (this is represented by Equation 10 on Page 11)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.3; Yacumama_Carbon_Stock_Calculations_5_2014.xlsx
ESI Findings - Round 1	MPP: Proponent states that the baseline uncertainty was applied as ex-post measurements were not taken. No reference to this calculation was found in the monitoring report.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include reference to this equation in the monitoring report.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	No reference is made to equation 10 in the PDD. Additionally, the verifier was unable to find the computation of this assessment.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide transparent calculation of equation 10.
Round 2 Response from Project Proponent 07 August 2015	No re-measurements of C pools or GHG sources have been made thus cumulative project uncertainty through time is equal to uncertainty in the baseline estimates
ESI Findings - Round 3	While application of Equation 19 was found to be correct, the inputs were incorrect. Pending Findings pertaining to Equation 6.
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	While application of Equation 10 was found to be correct, the values utilized in the calculations were incorrect. Pending results of Equation 4.

Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	Upstream values for this calculation step were corrected. The item is addressed.

Item Number	147
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X- UNC), Sectoral Scope 14 (Section)	6 PARAMETERS
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The terms denoting significant carbon stocks, GHG sources or leakage emissions from baseline modules (BL-DFW, BL-PL, BL-UP) used to calculate net emission reductions.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.2
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Data source is described however no clear source is stated pertaining to the carbon pools that will be assessed.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please include the relevant sources (carbon pools) that will be used for this parameter.
Round 2 Response from Project Proponent 07 August 2015	T-SIG calculation included that demonstrates the on significant pools are above ground tree biomass and below-ground tree biomass
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	This finding is being resolved elsewhere in the validation review. A T-SIG demo was provided. The appropriate stocks and emissions include; aboveground, belowground, and market leakage.
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Item Number	148
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	6 PARAMETERS
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Carbon stock or GHG sources (e.g. trees, down dead wood, soil organic carbon, emission from fertilizer addition, emission from biomass burning etc.) in the with-project case (EP,SS,i, Pool#)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.2
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The parameter is not included in the PD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include the parameter in EP,SS,i pool in the PD as this will be used in the computation of ex-post uncertainty.
Round 2 Response from Project Proponent 07 August 2015	Added to paramaters section
ESI Findings - Round 3	Verifiers could not locate EP,SS,i,pool# in the parameters section of the PDD.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include the parameter in EP,SS,i pool# in the PD as this will be used in the computation of ex-post uncertainty.
Round 3 Response from Project Proponent 29 September 2016	Included
ESI Findings - Round 4	Due to a version change of this module from v2.0 to v2.1 this parameter is no longer named as such. The only update to the module was to account for WRC activities (N/A to this project). Stocks and emission pools are inherently contained in the PD Data and Parameters table as major parameters within their respective modules. No action is needed. The item is addressed.

Item Number	149
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	6 PARAMETERS
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Percentage uncertainty (expressed as 95% confidence interval as a percentage of the mean where appropriate) for carbon stocks and greenhouse gas sources in the baseline case (1,2...n represent different carbon pools and/or GHG sources) (UBSL,SS,i,pool#)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.2
ESI Findings - Round 1	MPP: Parameter is not described in the PD
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include the parameter in the PD.
Round 1 Response from Project Proponent 29 August 2014	No response was provided.
ESI Findings - Round 2	No response was provided, but the parameter was included in the PD. The item has been addressed.

Item Number	150
Approved VCS Module VMD0017, Version 2.0 (31 July 2012), REDD Methodological Module: ESTIMATION OF UNCERTAINTY FOR REDD PROJECT ACTIVITIES (X-UNC), Sectoral Scope 14 (Section)	6 PARAMETERS
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Percentage uncertainty (expressed as 95% confidence interval as a percentage of the mean where appropriate) for carbon stocks and greenhouse gas sources in the with-project case (1,2...n represent different carbon pools and/or GHG sources) (UP,SS,i,pool#)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.2
ESI Findings - Round 1	

Round 1 NCR/CL/OFI 14 November 2013	1	
Round 1 Response from Project Proponent 29 August 2014		
ESI Findings - Round 2		The parameter is not included in the PD.
Round 2 NCR/CL/OFI 31 October 2014	2	NCR: Please include the parameter in UP,SS,i pool in the PD as this will be used in the computation of ex-post uncertainty.
Round 2 Response from Project Proponent 07 August 2015		Added to parameters section
ESI Findings - Round 3		Verifiers could not locate UP,SS,i pool# in the parameters section of the PDD.
Round 3 NCR/CL/OFI 25 September 2015	3	Please include the parameter in UP,SS,i pool# in the PD as this will be used in the computation of ex-post uncertainty.
Round 3 Response from Project Proponent 29 September 2016		Included
ESI Findings - Round 4		Due to a version change of this module from v2.0 to v2.1 this parameter is no longer named as such and is omitted from the new version. The only update to the module was to account for WRC activities (N/A to this project). No action is needed. The item is addressed.

Item Number	151
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5 PROCEDURES
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	For the project area the <u>net greenhouse gas emissions in the project case</u> is equal to the sum of stock changes due to deforestation and degradation plus the total greenhouse gas emissions minus any eligible forest carbon stock enhancement <u>(Calculated using Equation 1 on page 6)</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx; PD Section 5.4
ESI Findings - Round 1	Project is not enhancing carbon stocks. The final totals are calculated correctly in terms of the process used, however the project has some other factors to correct. This element will be considered closed pending the errors corrected that do not relate to this final calc.

Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	At Round 3, the proponent has not included methods to calculate net greenhouse gas emissions within the project area under the project scenario. or for ex-post in Section 6.2 of the Monitoring Report. In other words, this framework sets up accounting to monitor project emissions and is required to be reported in the PD and MR. Validation: Equation 1 from M-MON, all parameters including parameter ΔCP should be described in Section 5.4 of the PD for ex-ante estimations, despite values applied as 0 since the baseline agent is the landowner. M-MON equation 1 should be listed and parameters, their description, values applied and justification for values in the PD. Appropriate temporal period here for reporting is the 10 year baseline period. Verification: Equation 1 from M-MON is used to estimate all ex-post emissions from the project case and should be listed in the Monitoring Report as well as parameters, their description, values applied. In the event that deforestation occurs in the project case ($\Delta CP, DefPA, i, t$) for instance, this equation accounts for emissions estimates. The MR states, "The estimated project emissions or removals are 0 tCO₂e for all years of the project." Auditors presume this to be an ex-ante assumption which does not belong in the MR, otherwise this statement is incorrect for other reasons.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please address all findings and include M-MON equation 1 and parameters, their description, values applied and justification for values in the PD and Monitoring Report in the appropriate sections. Please remove the referenced text at the end of finding from the monitoring report which refers to ex-ante.
Round 3 Response from Project Proponent 29 September 2016	Included equation 1 M-mon with paremeters in section 5.4 PD. Justified a planned /predicted exante $\Delta CP = 0$.
ESI Findings - Round 4	Section 5.4 of the PD was reviewed and confirmed to now include M-MON Equation 1 and parameters, justification for setting each parameter to 0 ex-ante, and an overall statement that ex-ante project emissions are expected to be 0 for the 10 year baseline period. The validation component of this finding is addressed. At this round the proponent has elected to focus on validation and the PD, therefore the MR and results of monitoring efforts will be assessed at subsequent rounds.

Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	152
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1 STEP 1: Selection and analyses of sources of land-use and land-cover (LU/LC) change data
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Medium resolution remotely sensed spatial data shall be used ³ (30m x 30m resolution or less, such as Landsat, Resourcesat-1 or Spot sensor data).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 5.3
ESI Findings - Round 1	Monitoring Report does not seem to mention source of remotely sensed data to assess LU/LC change data
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please confirm remote sensing imagery source used to derive LU/LC change.
Round 1 Response from Project Proponent 29 August 2014	Source, processing and analysis methods inserted in appropriate sections
ESI Findings - Round 2	Source of imagery is now listed in section 1.2 of the MR as well as Appendix A. Verifiers were able to obtain the imagery from http://glovis.usgs.gov/ . Finding closed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	

ESI Findings - Round 3	Details of Landsat imagery used for LU/LC change analysis are listed in Section 1.2 of the Monitoring Report. A better location for this information is the monitoring plan or Section 9. Noting that the VCS MR template states for content in Section 1.2, "Indicate the project location and geographic boundaries." Also noting that the VCS MR template states for Section 9 to include, "May include any raw data from monitoring, additional information used in the monitoring plan, documentation of activities conducted from the monitoring plan, diagrams, etc." Also, auditors note it is confusing that the same remote sensing method descriptions are included in 2 different sections of the MR. Remote sensing methods for monitoring (including Landsat) should be included in the monitoring plan, where tabular results etc. reported at verification can be included in "Additional Information" section. Finally, years monitored for LU/LC change are noted as 2010-2013 which are subject to the revised start date finding elsewhere in this review.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include mention of Landsat and other remote sensing monitoring information in a more appropriate section of the MR following the VCS template and eliminate duplicate language as noted in the finding. Please also be sure that landsat imagery is reflective of the revised project start date.
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	No response was received at this round for this finding as the proponent has elected to focus on validation. However, monitoring efforts using Landsat are appropriately described in Section 8.1 of the PD, Monitoring Plan. The validation component of this finding is addressed. Review of the monitoring plan (approved at validation) embedded in the MR will occur when the next version is submitted as part of verification.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	153
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1 STEP 1: Selection and analyses of sources of land-use and land-cover (LU/LC) change data

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	If remotely sensed data have become available from new and higher resolution sources (e.g. from a different sensor system) during this period then it is possible to change the source of the remotely sensed data.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, MR
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	The PD could state where the Landsat dataset ceases to be available or a new and higher resolution source becomes available, ex-post deforestation will be determined by a different method, specifying the alternative.
Round 3 NCR/CL/OFI 25 September 2015	OFI: Auditors suggest mentioning in the PD that where the Landsat dataset ceases to be available or a new and higher resolution source becomes available, ex-post deforestation detection will be determined by a different method, specifying the alternative.
Round 3 Response from Project Proponent 29 September 2016	Included it in the "Monitoring of actual net carbon stock changes and greenhouse gas emissions" section in the Monitoring section of the PD
ESI Findings - Round 4	This language was confirmed to have been added to the PD Section 8.1, Monitoring Plan. Review of the monitoring plan (approved at validation) embedded in the MR will occur when the next version is submitted as part of verification. No action is needed by the proponent for this OFI. The item is addressed.

Item Number	154
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1 STEP 1: Selection and analyses of sources of land-use and land-cover (LU/LC) change data

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· The entire reference region: data shall be available for the year of baseline renewal or no further in the past than the year prior to baseline renewal.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Files from client
ESI Findings - Round 1	Data in Yacumama_GIS.gdb does not include the reference region, only polygon
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide data for RR, PA and LB
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Though no response was given here from the PP, "Project_Zone.shp" was previously supplied to verifiers and is presumed to be the reference region. The Landsat 5 image referenced in the MR is sufficient to encompass the reference region.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please confirm if "Project_Zone.shp" refers to the reference region. Verifiers suggest renaming this spatially explicit area to avoid future confusion.
Round 2 Response from Project Proponent 07 August 2015	There is no need for a reference region since the deforestation rate is based upon an approved harvest plan. The Project zone Map" was developed as part of the CCBA process to identify potential stakeholders.
ESI Findings - Round 3	The assertion by the proponent is correct, no reference region is applicable per this VCS requirement. The item is addressed.

Item Number	155
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1.1 Processing LU/LC Change Data
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The remotely sensed data collected must be prepared for analysis. Minimum pre-processing involves geometric correction and geo-referencing and cloud and shadow detection and removal.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	It is unclear if remotely sensed data required cleaning or pre-processing steps

Round 1 NCR/CL/OFI 14 November 2013	1	NCR: Please confirm if LU/LC change data underwent a pre-processing or correction process
Round 1 Response from Project Proponent 29 August 2014		Methods etc described in PD and MR
ESI Findings - Round 2		The MR in section 1.2 states "As the classification was a single-image photo-interpretive process no additional preprocessing (spatial nor spectral) was deemed necessary, outside of stacking the individual bands in ESRI's ArcGIS 10.1 (http://www.esri.com/).\" It does not appear as though geometric correction and cloud removal has occurred per this requirement. Despite Landsat data available already georeferenced, this step is required to independently confirm. Geometric correction or co-registering of images may be required for future verifications to overlay and to assess change detection. See section 5.1.2 for finding request related to cloud removal.
Round 2 NCR/CL/OFI 31 October 2014	2	NCR: Please address the findings and perform the minimum pre-processing geometric correction as specified by this requirement and using best remote sensing practice.
Round 2 Response from Project Proponent 07 August 2015		See section 1.3 PD for information
ESI Findings - Round 3		Validation: Section 1.3 of the PD describes preprocessing methods and as described are sufficient to meet this requirement. However, there is a more appropriate location in the PD for this information instead of PD Section 1.3, for instance the monitoring plan. This information is also suggested to be referenced in the context of monitoring for ex-post deforestation and natural disturbance. Verification: Section 1.2 of the monitoring report describes preprocessing methods sufficiently, but again this information is more appropriate in the monitoring plan.
Round 3 NCR/CL/OFI 25 September 2015	3	CL: As noted in the finding, please move the description of preprocessing methods to a more appropriate section in the PD and MR. Please also reference this information in terms of the purpose for monitoring ex-post, referencing the relevant parameters (ADefPA,u,i,t and ADistPA,q,i,t).
Round 3 Response from Project Proponent 29 September 2016		Moved the preprocessing description to the Monitoring section of the PD. Referenced parameters being monitored.
ESI Findings - Round 4		The description of preprocessing methods was appropriately moved to the Monitoring Plan, Section 8.1 of the PD. No further action needed. The item is addressed.

Item Number	156
Approved VCS Module VMD0015,Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1.1 Processing LU/LC Change Data

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Guidance for interpretation of remote sensing imagery is given in the GOFC-GOLD 20084 Sourcebook for REDD and shall be followed as appropriate.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	MR or PD does not seem to indicate if remotely sensed data was interpreted according to industry standards
Round 1 NCR/CL/OFI 14 November 2013	CL: Please confirm if SOPs for remote sensing were followed
Round 1 Response from Project Proponent 29 August 2014	Methods etc described in PD and MR
ESI Findings - Round 2	Remote sensing methods are mentioned in the MR section 1.2 and in Appendix A. Verifiers suggest a remote sensing Annex to guide future monitoring efforts.
Round 2 NCR/CL/OFI 31 October 2014	OFI: A remote sensing Annex would be useful to consolidate remote sensing monitoring methods.
Round 2 Response from Project Proponent 07 August 2015	We based all remote sensing on "GOFC-GOLD, 2014, A sourcebook of methods and procedures for monitoring and reporting anthropogenic greenhouse gas emissions and removals associated with deforestation, gains and losses of carbon stocks in forests remaining forests, and forestation. GOFC-GOLD Report version COP20-1, (GOFC-GOLD Land Cover Project Office, Wageningen University, The Netherlands)" thus obviating the need for a separate annex
ESI Findings - Round 3	In the Round 2 Finding, auditors should have been more specific in referring to organization of remote sensing methods for monitoring and placement in the monitoring plan. As this element has been requested elsewhere, the item is addressed.

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Approved VCS Module VMD0015,Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1.2 Post-processing and accuracy assessment
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Calculate the area of each category within the project area and, where required, the leakage belt.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	MR does not seem to note if LU/LC change occurred during monitoring period, and if so, areas of change. MR indicates value of 0 deforested during monitoring period. No leakage belt is needed on this project.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide evidence of land cover change for reference region, project area.
Round 1 Response from Project Proponent 29 August 2014	All of the points identified as forested from the 2010 map were forested during the monitoring field visit in 2013 confirming that no land cover change occurred during the monitoring period.
ESI Findings - Round 2	The original NCR should have been specific to the project area per the requirement. However, verifiable evidence was not supplied to support the assertion that no change occurred in the project area during the monitoring period and the category of change can be set to 0. This requirement pertains to detecting change in more recent imagery during the monitoring period.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Please address the findings and supply verifiable evidence to support the assertion that no map area changes occurred and the category of change can be set to 0.
Round 2 Response from Project Proponent 07 August 2015	A section was added in the monitoring report to address this NCR. Also figure 8 in the MR compares 2010 and 2013 LULC maps and demonstrates no change.
ESI Findings - Round 3	Validation: Due to the project start date revision, the 2010 imagery may also be outdated and misrepresent forest cover at that time to the reader. Verification: The response from the proponent did not indicate where this section was added to the monitoring report. Files were supplied of the Landsat imagery (dated 2010, 2013) used to determine no change for each category, they appear to not be the Landsat "Level 1" products and lack the necessary resolution to discern forest cover losses. Unclear if these data were used for the change analysis or only supplied for the audit. Auditors spot checked forest cover in the project area at the end of the reporting period using Landsat 28 August 2013 imagery and there appears to have been some disturbance in the north western part.
Round 3 NCR/CL/OFI 25 September 2015	3 CL: Please confirm that "full feature" Landsat data was used for the "wall-to-wall" change analysis. Please state whether 2010 imagery is appropriate given the start date revision, please adjust imagery acquisition dates if warranted. Please also explain the canopy disturbance observed by auditors in the 2013 imagery in the north western piece of the project area.
Round 3 Response from Project Proponent 29 September 2016	We used updated imagery from August 2011 that was within the 12 month window of the start date. Full feature level 1 was used. The different bands were stacked to make a single integrated image.
ESI Findings - Round 4	This item relates to monitoring and submission of the results of the initial monitoring period. At this round the proponent has elected to focus on validation therefore this item will be reviewed at the next round.
Round 4 NCR/CL/OFI 8 November 2016	4

Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	158
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1.2 Post-processing and accuracy assessment
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Update the Forest Cover Benchmark Maps for the project area and leakage belt.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	Benchmark monitoring map seem to have been omitted from MR
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide new monitoring map for after monitoring period or confirm if no land cover change occurred
Round 1 Response from Project Proponent 29 August 2014	All of the points identified as forested from the 2010 map were forested during the monitoring field visit in 2013 confirming that no land cover change occurred during the monitoring period.
ESI Findings - Round 2	Figure 6 in the MR is noted as the "Land Cover and benchmark monitoring map Yacumama Forest Carbon Project." However it appears to utilize 2010 imagery and is therefore not updated per this requirement.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please refer to the finding in 5.1, Step 1 and update the base imagery used to generate the Forest Cover Benchmark Map for the end of this monitoring period (differing from imagery used at validation). Please also explicitly state this figure as the "Forest Cover Benchmark Map".
Round 2 Response from Project Proponent 07 August 2015	Changes made as requested.

ESI Findings - Round 3	Verification: Figure 7 in the monitoring report appropriately shows an updated monitoring map for year 2013 and representing the end of the reporting period. Figure 6 in the monitoring report represents the benchmark map for the start of the project and does not belong since forest cover at that time is asserted in the PD. The results of the change analysis are illustrated in Figure A-3. Methods for development of the 2010 benchmark map do not belong in the monitoring report. Validation: Figure 7 in the PD, page 25, also shows a monitoring map which doesn't belong and the PD also includes discussion of derivation and analysis methods of the 2013 monitoring map which doesn't belong.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please remove the 2010 benchmark map and methods for its derivation from the monitoring report. Please remove the 2013 monitoring map and any related discussion from the PD.
Round 3 Response from Project Proponent 29 September 2016	Reference to monitoring map removed from PD. However a map based upon 2013 imagery remains in the PD. In this case the map was serving to investigate potential strata in the project area.
ESI Findings - Round 4	The monitoring map was confirmed to have been removed from the PD. The forest cover monitoring map will be reviewed as part of the verification audit. Since at this round the proponent has elected to focus on validation this item will be re-assessed at the next round.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	159
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1.2 Post-processing and accuracy assessment
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	· Update the remaining area of forest in RRL (ARRL,forest,t)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR

ESI Findings - Round 1	No mention of this data parameter in Monitoring Report. This parameter is required at the end of each monitoring period but seems to have been omitted. Calculated by taking the total area in RRL minus nonforested areas. RRL = Reference Region for Projecting Location of Deforestation
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide the calculated value for remaining area of forest in RRL
Round 1 Response from Project Proponent 29 August 2014	Because leakage monitoring is confined to the owners property not included in the project area this parameter is not monitored
ESI Findings - Round 2	The RRL parameter was appropriately omitted from the PD and MR per REDD-MF Geographical Boundary guidance. Instead a project area and proxy areas are monitored. Finding closed.

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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1.2 Post-processing and accuracy assessment
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	As described in module BL-UP (Part 2, section 2.2.3) multi-date images must be used to reduce cloud cover to no more than 10% of any image.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR, Appendix A
ESI Findings - Round 1	No findings issued under Round 1 for this item.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The MR in section 1.2 states "As the classification was a single-image photo-interpretive process no additional preprocessing (spatial nor spectral) was deemed necessary, outside of stacking the individual bands in ESRI's ArcGIS 10.1 (http://www.esri.com/).\" It does not appear as though cloud removal has occurred per this requirement. Cloud masking and removal is standard remote sensing industry practice, clouds have obscured the central part of the Oct. 7 2010 Landsat 5 imagery and at a few other sporadic locations, preventing effective classification. The clouds present in the imagery may be >10% of the image unless justification is provided otherwise.

Round 2 NCR/CL/OFI 31 October 2014	2	NCR: Please address the findings and account for cloud cover in the Landsat imagery if it exceeds 10% per this requirement and others in this section. Please provide verifiable evidence in addressing this finding request (i.e. results from cloud detection/masking analysis). Please account for cloud cover for both validation and verification temporal periods (project start and at end of the first monitoring period).
Round 2 Response from Project Proponent 07 August 2015		Clouds were accounted for based upon GOFC-GOLD protocols. Wording is in both the MR and PD.
ESI Findings - Round 3		Validation: The PD includes mention for how clouds were handled for development of the 2010 benchmark map and methods are satisfactory. This information is suggested to be referenced in the context of monitoring for ex-post deforestation and natural disturbance. Verification: Clouds are also discussed sufficiently in the monitoring report. However, this information is better presented in the monitoring plan where the discussion centers around monitoring methods ex-post, and for the relevant remote sensing monitored parameters (ADefPA,u,i,t and ADistPA,q,i,t).
Round 3 NCR/CL/OFI 25 September 2015	3	CL: Please address the findings and move the discussion of how clouds were/are handled to the monitoring plan and placed in the appropriate context.
Round 3 Response from Project Proponent 29 September 2016		Placed discussion of how clouds are to be handled in monitoring section of PD.
ESI Findings - Round 4		The discussion of cloud cover mitigation for remote sensing post-processing was moved to the Monitoring Plan, Section 8.1 of the PD. The validation component of this finding is addressed. The monitoring plan component of the MR will be compared to the PD version upon submission of the MR for verification review.
Round 4 NCR/CL/OFI 8 November 2016	4	
Round 4 Response from Project Proponent 27 November 2016		
ESI Findings - Round 5		At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	161
Approved VCS Module VMD0015,Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.1.2 Post-processing and accuracy assessment

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The overall classification accuracy of the outcome of the previous steps must be 90% or more.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	This item is pending NCR in line 44. Unable to assess if this step is necessary due to lack of pre-processing explanation.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The MR described an accuracy assessment performed using 114 ground reference points/paths for classes forest and nonforest. The ground reference points were collected using a variety of means and the number of points selected is adequate. Ground reference points collected which were inventory plots is not in good remote sensing practice due to the stratification bias. Further, sample selection for the accuracy assessment should be independent and the methods employed may not have resulted in good spatial distribution of sample points. Sample points are needed to confirm the above and it is unclear why only a subset of the sample points were used.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please provide the spatial and tabular data used to perform all elements of the accuracy assessment. Please also employ good remote sensing practice (i.e. Congalton, 1991) for the accuracy assessment by using independent samples. Please justify removal of some sample points.
Round 2 Response from Project Proponent 07 August 2015	Accuracy assessment was explicitly clarified in both the MR and PD. XL sheet of points provided. Forest plot points were removed from the analysis and only randomly allocated points used.
ESI Findings - Round 3	Validation: This requirement pertains to the results of monitoring, the 2013 monitoring map. Another finding is issued in the review under parameter "Project Forest Cover Benchmark Map." Verification: Accuracy assessment computed correctly. Although the accuracy assessment presents forest vs water, this analysis is actually about category of change (ADefPA,u,i,t and ADistPA,q,i,t), therefore, presenting forest vs. nonforest is more appropriate. Finding already issued about duplicate remote sensing analysis methods (including accuracy assessment results) in the monitoring report.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please present the results of the accuracy assessment for the 2013 monitoring map in the monitoring report in terms of forest vs. nonforest as noted in the finding.
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	No response was received for this finding as the proponent has elected to focus on validation. This criteria will be re-assessed at subsequent rounds as part of the verification review.

Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	162
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.2.1 Monitoring deforestation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The net carbon stock change as a result of deforestation is equal to the area deforested multiplied by the emission per unit area (represented by Equations 3 and 4 on page 8)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	general and section 6 of the MR
ESI Findings - Round 1	The monitoring report and calculations documents do not contain this calculation, however the project has not experienced any deforestation during the monitoring period. For clarity and completeness, this element needs to be included in the monitoring report.
Round 1 NCR/CL/OFI 14 November 2013	CL: Please include a section in the monitoring report that indicates if any deforestation occurred in the project area during the monitoring period.
Round 1 Response from Project Proponent 29 August 2014	No deforestation occurred
ESI Findings - Round 2	Although no deforestation has occurred and thus no emissions, the required parameter ($\Delta CP, Def, i, t$) must still be included in section 5.3 of the MR.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include the required parameter ($\Delta CP, Def, i, t$) in the MR.
Round 2 Response from Project Proponent 07 August 2015	Included in the appropriate section

ESI Findings - Round 3	This parameter $\Delta CP, Def, i, t$ was confirmed to have been added to the monitoring report section 5.3. However, the table format for this parameter is incorrect, also for the PD. Also, the description of this parameter $\Delta CP, Def, i, t$ should actually state "Net carbon stock change as a result of deforestation in the project area in the project case in stratum i at time t; t CO₂-e." as described in the methodology. Also, in the parameter table, this parameter is not determined from remote sensing, actually per the methodology it is to be calculated rather than measured, therefore no measurement methods are needed. Validation: The previous finding should have been more specific in noting that $\Delta CP, Def, i, t$ is an important project emissions parameter which should be described in multiple places in the PD. This parameter should be; described as part of project emissions for ex-ante despite assumption of 0, described in context of with-project case, and also described in the monitoring plan as part of monitoring the project area for stock losses. Verification: The previous finding should have been more specific in noting that $\Delta CP, Def, i, t$ is an important project emissions parameter which should be described in multiple places in the monitoring report. This parameter should be; described as part of project emissions for ex-post estimations for M-MON Equation 1, and also described in the monitoring plan as part of monitoring the project area for stock losses due to deforestation.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address all findings. Please fix the table format for this parameter to follow the VCS + CCB template in the MR and PD. Please also describe this parameter in the PD and MR as specifically noted in finding.
Round 3 Response from Project Proponent 29 September 2016	Parameter described and presented in section 5.4 and 8.1 of the PD. Updated in parameters monitored table and parameter table format updated.
ESI Findings - Round 4	At this round the parameter table format and content for $\Delta CP, Def, i, t$ is irrelevant since the project is transitioning from the VCS + CCB PD template to the VCS PD template (CCB has been dropped). The description of the parameter $\Delta CP, Def, i, t$ is now correct. As noted in another finding regarding parameter ΔCP, Section 5.4 sufficiently describes an ex-ante assumption of 0 for deforestation in the project area. This finding also defers to the VCS Standard Section 3.18.1 for conversion to the VCS PD template. This criteria will be re-assessed at subsequent rounds as part of the verification review.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.2.2 Monitoring degradation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Project proponents should use techniques that are suitable to their specific situation and that have been published in peer-reviewed papers. The key is that the monitoring method results in estimates of any emissions from degradation that may occur in the project area (Δ CP,Deg,i,t).
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring and Implementation Report
ESI Findings - Round 1	The project description and monitoring report do not mention monitoring for degradation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please indicate what was monitored to complete the requirement that degradation be monitored.
Round 1 Response from Project Proponent 29 August 2014	A formal PRA was not performed for two reasons: 1. there are no communities in or surrounding the project area (the closest community is Puerto Miguel and there is at least 40,000 acres of forest surrounding that community) and 2. the only community (lodge owner/manager) adjacent to the project area do not harvest trees illegally or for fuel wood/charcoal. Furthermore their presence is the deterrent that keeps illegal harvest from occurring and is the point of the project.
ESI Findings - Round 2	The response is sufficient to address the finding request as the current monitoring methods using the adjacent lodges deters degradation. Section 3.8 mentions protection activities administered by the lodges adjacent to the project area, suitable to prevent illegal encroachment. See PRA finding below. Finding closed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	

ESI Findings - Round 3	Auditors note that this finding was previously closed but needs to be opened again as monitoring for degradation and specific methods are a requirement of M-MON, including Equation 7. The PD sets the baseline for 10 years and in this period degradation must still be monitored through degradation PRAs every two years and reported at each monitoring period. Please note that these degradation findings below are billed to Task 1. Verification: Although the proponents did not find any potential pressure for this monitoring period from the degradation PRA, the result of Equation 7 ($\Delta CP, Deg, i, t$) is not described in the monitoring plan or included in the parameter tables of the MR. Validation: The required monitored parameter $\Delta CP, Deg, i, t$ should be described in the monitoring plan of the PD and is missing from parameter tables in Section 8.3. Parameter $\Delta CP, SelLog, i, t$ does not need to be added to the parameter tables as no commercial harvest of timber (including FSC selective logging) occurs in the baseline or with project case, but it should be mentioned as set to 0 in the PD and the reason why.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address all findings pertaining to validation and verification.
Round 3 Response from Project Proponent 29 September 2016	$\Delta CP, Deg, i, t$ Added to the parameter tables and monitoring plan in the PD. $\Delta CP, SelLog, i, t$ set to "0" under the project emissions section in the PD
ESI Findings - Round 4	At this round the project is transitioning from the VCS + CCB PD template to the VCS PD template (CCB has been dropped), and the proponent has elected to focus on validation. Parameter $\Delta CP, Deg, i, t$ is now included in Section 8.3 of the PD, however it is incorrect as "Frequency of Monitoring" in the table occurs twice. As noted in another finding regarding parameter ΔCP, Section 5.4 sufficiently describes an ex-ante assumption of 0 for degradation components (fuelwood collection, illegal timber extraction) in the project area. The validation component of this finding is addressed. This finding also defers to the VCS Standard Section 3.18.1 for conversion to the VCS PD template for the parameter table. This criteria will be re-assessed at subsequent rounds as part of the verification review. Degradation can be expected to be minimal since few communities reside near the project area.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.
Item Number	164

Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.2.2.1 Degradation through extraction of trees for illegal timber or fuelwood and charcoal
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The first step in addressing forest degradation is to complete a participatory rural appraisal (PRA) of the communities inside and surrounding the project area to determine if there is the potential for illegal extraction of trees to occur.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring and Implementation Report
ESI Findings - Round 1	The monitoring report does not mention conducting a PRA. The PD indicates that "Minor fuel wood collection for small cooking fires for fisherman was occurring prior to the project and would continue under the project scenario. However, this was determined to be de minimis." It appears that this needs to be addressed as required by M-MON.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please indicate if a PRA was conducted in order to determine if degradation through extraction of trees for illegal timber, fuelwood or charcoal is occurring. The PRA is mandatory.
Round 1 Response from Project Proponent 29 August 2014	A formal PRA was not performed for two reasons: 1. there are no communities in or surrounding the project area (the closest community is Puerto Miguel and there is at least 40,000 acres of forest surrounding that community) and 2. the only community (lodge owner/manager) adjacent to the project area do not harvest trees illegally or for fuel wood/charcoal. Furthermore their presence is the deterrent that keeps illegal harvest from occurring and is the point of the project.
ESI Findings - Round 2	A PRA is required to be completed per this requirement, to satisfy "As remote methods for monitoring degradation are not available at the time of methodology approval, the following ground-based methods must be used." Else a methodology deviation is required and detailed justification must be provided in the PD and carried into the MR following the VCS Standard, section 3.5.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please address the findings and develop a PRA following the instructions from Data and Parameters "Degradation PRA Results", else identify the methodology deviation for avoidance of the required PRA following the VCS Standard, section 3.5 in the specified sections of both the PD and MR.
Round 2 Response from Project Proponent 07 August 2015	PRA developed and inserted in the proper sections of PD and MR.

ESI Findings - Round 3	Section 2.7 of the PD describes the degradation PRA. Auditors previously incorrectly requested the degradation PRA be presented in the PD, this element is a part of monitoring in the MR and repeated every two years. Bulleted items below need to be addressed: -No time of when the PRA was held is mentioned, the methodology suggests this should have been performed at the beginning of monitoring in order to determine whether degradation monitoring is required, "The first step in addressing forest degradation is to complete a..." -Requirement states that it must be repeated every two years, this needs to be mentioned as part of the monitoring plan in PD and MR -No response list or PRA results were submitted of participants and their responses to verify if $\geq 10\%$ of interviewees believe degradation may be occurring within project boundary -Results of degradation PRA in MR do not mention depth or distance of penetration for degradation pressure from "Degradation PRA Results" parameter table in M-MON
Round 3 NCR/CL/OFI 25 September 2015	3 NCR: Please state when the PRA was performed in the MR. Please state in the MR that this degradation PRA will be repeated every two years. Please provide response list or PRA results to verify if $\geq 10\%$ of interviewees believe degradation may be occurring within project boundary. Please address the requirement which states an additional output of the degradation PRA is the depth or distance of penetration for degradation pressure (from "Degradation PRA Results" parameter table in M-MON).
Round 3 Response from Project Proponent 29 September 2016	Description of Degradation PRA removed from PD...Kept in monitoring plan
ESI Findings - Round 4	At this round the proponent has elected to focus on validation, verification elements will be reviewed at subsequent rounds. For validation, it is sufficient that the proponent include mention of the degradation PRA in the PD Section 8.3. This item will be re-assessed during verification review.

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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.2.2.1 Degradation through extraction of trees for illegal timber or fuelwood and charcoal
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	If this assessment finds no potential pressure for these activities then degradation ($\Delta CP, DegW, i, t$) can be assumed to be zero and no monitoring is needed.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Monitoring and Implementation Report
ESI Findings - Round 1	pending line 92

Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Although the proponents did not find any potential pressure for this monitoring period and ($\Delta CP, DegW, i, t$) is assumed to be zero, this should be stated explicitly in the MR (i.e. ($\Delta CP, DegW, i, t = 0$)). The required monitored parameter $\Delta CP, DegW, i, t$ is also missing from parameter tables.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address all findings.
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	At this round the proponent has elected to focus on validation, verification elements will be reviewed at subsequent rounds. Section 5.2.2.1 of M-MON includes a large number of sub-requirements for the degradation PRA. If applicable, and to simplify the audit process, they will be included here.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.2.3 Monitoring areas undergoing natural disturbance

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Where natural disturbances occur ex-post in the project area such as tectonic activity (earthquake, landslide, volcano), extreme weather (hurricane), pest, drought, or fire that result in a degradation of forest carbon stocks, the area disturbed shall be delineated and the resulting emissions estimated.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 5.4
ESI Findings - Round 1	Project area did not experience any natural disturbances. This was evaluated via remote sensing imagery as well as during the site visit and interviews with local community members and project area owners.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	The monitoring plan does not currently address monitoring for the required element natural disturbance following all components of the M-MON section "Monitoring areas undergoing natural disturbance." Ex-post natural disturbance will presumably be detected using remote sensing or ancillary sources that could result in a change in forest cover during the monitoring period. Auditors note that this item, and all other monitoring for natural disturbance was not requested at previous rounds, therefore these items are under Task 1.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include a description in the monitoring plan for ex-post monitoring of natural disturbance, following all components of the M-MON section "Monitoring areas undergoing natural disturbance" and reporting appropriate parameters as needed.
Round 3 Response from Project Proponent 29 September 2016	Upatde and Added to PD in the appropriate monitoring sections and Parameters monitored table
ESI Findings - Round 4	This requirement pertains to ex-post monitoring efforts which is within the scope of verification. The proponent has elected to focus on validation at this round. As noted in another finding regarding parameter ΔCP, Section 5.4 sufficiently describes an ex-ante assumption of 0 for disturbance components in the project area. The validation component of this finding is addressed.
Round 4 NCR/CL/OFI 8 November 2016	

Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	167
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.2.5 Monitoring project emissions
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Greenhouse gas emissions as a result of deforestation activities within the project area are calculated using <u>Equation 30 on Page 24</u> .
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.1
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	

ESI Findings - Round 3	Validation: Although greenhouse gas emissions as a result of deforestation activities within the project area (GHGP,E,i,t) are expected to be zero, these project emissions must be monitored and thus described in the project emissions section of the PD. Further, parameters for this accounting should be described briefly in the PD in the project emissions section. Again, the temporal scope for reporting this element at validation in the PD is 10 years (i.e. ex-ante). Verification: If GHGP,E,i,t project emissions are zero for the monitoring period, no reporting is required in the MR. Auditors note that this item, and all other monitoring for natural disturbance was not requested at previous rounds, therefore these items are under Task 1.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the validation findings.
Round 3 Response from Project Proponent 29 September 2016	Described in section 5.4, monitoring and parameters monitored.
ESI Findings - Round 4	The ex-ante prediction of GHG emissions from biomass burning is expected to be zero as the project-case discourages deforestation and associated burning. The parameter GHGP,E,i,t is appropriately included in the Monitoring Plan, Section 8.1 of the PD and the parameter tables section of the PD. Greenhouse gas emissions as a result of deforestation activities within the project area (GHGP,E,i,t) methods for quantification are sufficiently described in the PD as part of validation. At this round the proponent has elected to focus on validation, therefore results of monitoring for the first verification period will be re-assessed upon submission of the next MR.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	168
Approved VCS Module VMD0015,Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.3 STEP 3: Documentation

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	a. Data sources and pre-processing: Type, resolution, source and acquisition date of the remotely sensed data (and other data) used; geometric, radiometric and other corrections performed, if any; spectral bands and indexes used (such as NDVI); projection and parameters used to geo-reference the images; error estimate of the geometric correction; software and software version used to perform tasks; etc.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR, Appendix A
ESI Findings - Round 1	It is unclear the source of remotely sensed data and whether it required cleaning or pre-processing steps
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The data type, resolution, source, and acquisition date are now appropriately included in the MR, Appendix A. No other corrections were performed for pre-processing. However, information about spatial projection is lacking. Also see above finding in section 5.1.1.
Round 2 NCR/CL/OFI 31 October 2014	CL: Per this requirement, please state the spatial projection used in GIS related work in the MR. Please also state the projection to be used for future monitoring efforts within the monitoring plan section of the PD.
Round 2 Response from Project Proponent 07 August 2015	Spatial projection provided in each map figure
ESI Findings - Round 3	Map figures appropriately included spatial projection. There is no specific requirement to present spatial projection in the monitoring plan. The item is addressed.

Item Number	169
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.3 STEP 3: Documentation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	b. Data classification: Definition of the classes and categories; classification approach and classification algorithms; coordinates and description of the ground-truth data collected for training purposes; ancillary data used in the classification, if any; software and software version used to perform the classification; additional spatial data and analysis used for post-classification analysis, including class subdivisions using non-spectral criteria, if any; etc.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR

ESI Findings - Round 1	Monitoring report does not address data classification into forest/nonforest and any approaches used including ground truthing
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide more information about how remote sensing data were classified, including training data used for ground truthing
Round 1 Response from Project Proponent 29 August 2014	Included in the MR
ESI Findings - Round 2	The MR in Appendix A states "Image classification was ultimately restricted to one of two categories, Forest or Water, as no additional LULC types are distinguishable on the property." Forest and water (nonforest) classes are mentioned in the MR, but no precise definitions of the land cover classes are described. For instance there are many definitions of "forest" in land cover classification. More precise definitions of the classes are needed (i.e. CDM definition for forest, etc.). It is unclear whether ancillary data was used in this reporting period to detect deforestation/disturbance.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please include precise definitions of landcover classes per this requirement in the MR. Please confirm and describe in the MR any ancillary data which may have been used during interpretation. Please include guidance in the monitoring plan section of the PD specific to address these findings and ensure consistent monitoring over time.
Round 2 Response from Project Proponent 07 August 2015	Used and referenced GOFC-GOLD (2014) landcover classes. Very detailed descriptions of the Forest type (i.e. mixed-water flooded forest and riparian vegetation ecological system) are provided in the MR and PD.
ESI Findings - Round 3	Landcover classes are sufficiently defined in the PD and MR. In other requirements it was requested that remote sensing methods be described in the appropriate sections of project documentation. The item is addressed.

Item Number	170
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.3 STEP 3: Documentation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	c. Classification accuracy assessment: Accuracy assessment technique used; coordinates and description of the ground-truth data collected for classification accuracy assessment; and final classification accuracy assessment.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	Monitoring report does not address the accuracy of classifications made using remotely sensed imagery
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide an accuracy assessment for evaluation of imagery classifications

Round 1 Response from Project Proponent 29 August 2014	Included in the MR
ESI Findings - Round 2	No mention was made of whether the accuracy assessment was performed exclusively for this monitoring period. Likewise, image acquisition dates used for the ground reference points are not specified. The accuracy assessment should have been performed specifically for the imagery acquired for this monitoring period.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please ensure that the time period for this monitoring period accuracy assessment was performed for this monitoring period as well as the date range that the ground reference points were collected. Please include guidance in the monitoring plan section of the PD specific to address these findings and ensure consistent monitoring over time.
Round 2 Response from Project Proponent 07 August 2015	Clarified in the text in both the PD and the MR.
ESI Findings - Round 3	Accuracy assessment data acquisition date is now sufficiently described in the PD and MR. In other requirements it was requested that remote sensing methods be described in the appropriate sections of project documentation. The item is addressed.

Item Number	171
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.3 STEP 3: Documentation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	d. Changes in Data sources and pre-processing / Data classification: If in subsequent periods changes will be made to the original data or use of data:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	Unable to assess if changes to remotely sensed data occurred
Round 1 NCR/CL/OFI 14 November 2013	CL: Please clarify if any deviations from original remote sensing imagery occurred in the monitoring period, also see NCR line 33
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	No response was received by the project proponent to this finding request. Currently it seems that the same imagery for validation is being used at verification. The finding is being re-issued.

Round 2 NCR/CL/OFI 31 October 2014	CL: Please indicate whether any changes have occurred related to data acquisition and classification from validation to verification.
Round 2 Response from Project Proponent 07 August 2015	All methods used in the the creation of the LULC maps and acquisition and processing of imagery is provided in both the MR and PD
ESI Findings - Round 3	Source of data and acquisition were stated sufficiently in project documents. In other requirements it was requested that remote sensing methods be described in the appropriate sections of project documentation. The item is addressed.

Item Number	172
Approved VCS Module VMD0015,Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.3 STEP 3: Documentation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	When data from new satellites are used documentation must follow a) to c) above
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	Pending criteria (d) above.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	No finding was issued for this item in Round 1, but verifiers suggest incorporating a statement in the PD monitoring plan section that states when newer and better remote sensing data is available that it may be incorporated into future monitoring efforts.
Round 2 NCR/CL/OFI 31 October 2014	OFI: A statement in the PD could address the possibility of new and improved remote sensing data to be incorporated in future monitoring efforts.
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	No response provided to this OFI, no action needed.

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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.1 Data and Parameters Monitored for Baseline Renewal
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Remote sensing in combination with GPS data collected during ground truthing
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 1.2
ESI Findings - Round 1	PP state this will occur at baseline renewal date
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The PD illustrates "Figure 1: Yacumama Forest Carbon Project location at a continental scale." and "Figure 2: Yacumama Forest Carbon Project location at a regional scale." Figure 2 represents the regional scale but does not distinguish forest and nonforest classes per the requirement. The map also should be titled appropriately per this required parameter. This parameter is missing from section 8.2 Data and Parameters Available at Validation of the PD>
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please address all findings and illustrate in the PD a Regional Forest Cover / Non-Forest Cover Benchmark Map with forest and nonforest classes, titled appropriately and following all requirements for this parameter. Please include this required parameter in section 8.2 of the PD.
Round 2 Response from Project Proponent 07 August 2015	Not needed since the project is a planned deforestation project.
ESI Findings - Round 3	Assertion by proponent is correct, no action needed. The item is addressed.
Item Number	174

Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.1 Data and Parameters Monitored for Baseline Renewal
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The minimum map accuracy should be 90% for the classification of forest/non-forest in the remote sensing imagery. If the classification accuracy is less than 90% then the map is not acceptable for further analysis. More remote sensing data and ground truthing data will be needed to produce a product that reaches the 90% minimum mapping accuracy.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 1.2
ESI Findings - Round 1	PP state this will occur at baseline renewal date
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	No finding was issued for this item during Round 1, and will be considered as part of Round 2 but not T&M. Development of the Regional Forest Cover / Non-Forest Cover Benchmark Map should be performed according to the accuracy standards of this requirement.
Round 2 NCR/CL/OFI 31 October 2014	NCR: In development of the "Regional Forest Cover / Non-Forest Cover Benchmark Map", please ensure that the specified minimum map accuracy is followed. In doing so, please provide the tabular and spatial results of the accuracy assessment.
Round 2 Response from Project Proponent 07 August 2015	Not needed since the project is a planned deforestation project.
ESI Findings - Round 3	Assertion by proponent is correct, no action needed. The item is addressed.

Item Number	175
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.1 Data and Parameters Monitored for Baseline Renewal

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Remote sensing in combination with GPS data collected during ground truthing
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD General
ESI Findings - Round 1	PP state this will occur at baseline renewal date
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	No finding was issued for this item during Round 1, and will be considered as part of Round 2 but not T&M. Several figures in the PD illustrate the project area and forest cover but do not specify it is the "Project Forest Cover Benchmark Map". This map is supposed to illustrate the forest land within the project area at the beginning of the monitoring period (i.e. set at validation). Stratification does not seem to have been performed and therefore may not need to be displayed on this map. The parameter "Project Forest Cover Monitoring Map" is incorrectly placed where this parameter should be contained at the beginning of section 8.2 in the PD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please identify in the PD specifically the "Project Forest Cover Benchmark Map" and following all requirements for the parameter (i.e. illustrate stratification if necessary). Please remove the "Project Forest Cover Monitoring Map" from PD section 8.2 Data and Parameters Available at Validation.
Round 2 Response from Project Proponent 07 August 2015	Corrected as requested. Changed to proper wording in Section 8.2

ESI Findings - Round 3	Validation: This parameter table is appropriate in the PD and is illustrated by Figure 6 dated 2010. This benchmark map may actually need to illustrate year 2011 imagery due to the revised project start date. No accuracy assessment was provided per this requirement. The PD, page 23 states "Because there was no change detected LULC between 2010 and 2013 (see Yacumama Forest Carbon Project: Monitoring and Implementation Report) the project makes the reasonable assumption that the 2010 LULC map meets the accuracy criteria." Auditors think this assertion to be reasonable, but this is a requirement and not available for a methodology deviation per Section 3.5.1 of the VCS Standard "represent a deviation from the criteria and procedures relating to monitoring or measurement set out in the methodology." Auditors recognise any confusion surrounding the benchmark map and the monitoring map and observe that the intent of the methodology here is that the project area as set in the PD, serves as the initial "forest cover benchmark map" against which changes in forest cover will be assessed over the interval of the first monitoring period, where the entire project area is demonstrated to meet the forest definition at the beginning of the crediting period. For subsequent monitoring periods, change in forest cover will be assessed against the preceding classified forest cover map marking the beginning of the monitoring interval. Thus, the forest benchmark map is updated at each monitoring event in form of the forest cover monitoring map.
Round 3 NCR/CL/OFI 25 September 2015	3 NCR: If warranted, due to the revised project start date, please revise the Project Forest Cover Benchmark map in the PD to reflect forest cover at project start date. Please provide an accuracy assessment for this map following the requirement.
Round 3 Response from Project Proponent 29 September 2016	Map updated based upon revised start date. Forest cover map and accuracy assessment provided in the PD.
ESI Findings - Round 4	As a result of the revised start date the proponent has appropriately updated the validation benchmark map of forest cover type in the project area in the PD. This map sufficiently meets the requirement. The accuracy assessment meets best practice for remote sensing and reports a sufficient accuracy to meet the 90% requirement, the satellite classed category in addition to the reference could be labeled in the table but the illustration is sufficient. The results of this forest cover analysis to generate the benchmark map were independently confirmed. The item is addressed.

Item Number	176
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.1 Data and Parameters Monitored for Baseline Renewal
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	<u>Carbon fraction of dry matter (CF)</u>

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD General
ESI Findings - Round 1	CF of dry matter used is 0.47 t C t-1 d.m.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	This parameter is correct in the MR and PD, but the table formatting is not justified consistently for this parameter in the MR.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the finding.
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	No response was received on this item as the proponent has elected to focus on validation. Also at this round the proponent has dropped the CCB component and therefore the updated VCS MR template will be re-assessed at a subsequent round.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	The value applied for CF is constant for validation and verification. The item is addressed.

Item Number	177
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.1 Data and Parameters Monitored for Baseline Renewal

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	(b) Species-specific or group of species-specific from neighboring countries with similar conditions. Sometimes (b) may be preferable to (a);
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, Appendix A
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	This parameter does not appear to have been assessed in the first round. MR notes wood density value used is 0.55 from Reyes et al 1992. Usage of this wood density value may be subject to validation as outlined in the detailed notes below.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please address all findings and provide verifiable, transparent justification for usage of this parameter following all required elements detailed in the notes. Please also include this required parameter set at validation in the appropriate sections of project documentation.
Round 2 Response from Project Proponent 07 August 2015	The wood density parameter referred to in this NCR was used to calculate the Chave allometric equation. The Chave allometric equation was provided as an example here and in the text as one of the Allometric equation being considered for use. However for reasons provided in the text and in the Appendix it was not used in any biomass calculation.
ESI Findings - Round 3	Most trees for allometric validation used the unknown tree category set as 0.60g/cm ³ for density which is correctly obtained from Reyes et al 1992. The item is addressed.

Item Number	178
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.1 Data and Parameters Monitored for Baseline Renewal
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	(c) Averaged regional commercial species-specific (e.g. Table 4.13 IPCC National Guidance for Greenhouse Gas Inventories AFOLU Section). (Dmn)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD, section 5.3

ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	This option was chosen for parameter Dmn and a finding request has been issued in the CP-W tab of this workbook. This parameter is currently missing from the data/parameter tables set at validation.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please include this required parameter set at validation in the appropriate sections of project documentation.
Round 2 Response from Project Proponent 07 August 2015	Included in appropriate sections
ESI Findings - Round 3	The parameter table incorrectly has the section "used in equations" which should be removed and in the MR this table needs the formatting fixed as it is joined to parameter table LDF.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	Updated in the PD
ESI Findings - Round 4	The correct value for Dmn is now reported in the PD. The item is addressed.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	179
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored for Verification

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	If within the Project Area some forest land is cleared, the benchmark map must show the deforested areas at each monitoring event
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	EMJ: Monitoring map for project area forest cover seems to be omitted from Monitoring Report
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include the monitoring map for project area along with all needed parameters in the Data and Parameters Monitored section of the PD and Monitoring Report.
Round 1 Response from Project Proponent 29 August 2014	Included in the MR
ESI Findings - Round 2	The original NCR was not specific enough to address this monitoring requirement. The Project Forest Cover Monitoring Map should reflect conditions at the end of the monitoring period. Figure 3 in the MR is closest to meeting this requirement but does not note it is the monitoring map and the imagery needs to be updated. This parameter is incorrectly placed in section 5.2 Data and Parameters Available at Validation of the MR and section 8.2 of the PD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please address all findings. Please update the imagery for the end of the current monitoring period and identify the correct Project Forest Cover Monitoring Map (i.e. benchmark) with an appropriate title. Please provide the Landsat imagery employed to verifiers.
Round 2 Response from Project Proponent 07 August 2015	Made corrections to PD and MR sections. Made clear which maps were the benchmark and which were the monitoring maps in the text of the PD and MR.
ESI Findings - Round 3	Validation: N/A as the forest cover monitoring map exists for verification and the 2013 map should not be displayed in the PD, nor a description of methods for map development. Verification: This parameter table is appropriately included in the MR, though unfortunately the table format is incorrect per the VCS + CCB MR template. Accuracy assessment for this map is sufficient. Please also see finding above for "Project Forest Cover Benchmark Map" which explains the difference between this map and the initial forest cover benchmark map.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please correct the table format for this parameter to follow the VCS + CCB MR template.
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	In reviewing this parameter table within the PD the VVB also noted that reversal is termed in the "Any comment" field. The term reversal is used improperly here, please see VCS Standard finding under Section 3.18.1. The project will be updating the PD to a new VCS template without CCB and will be re-assessed at the next round.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	At this round the proponent has elected to focus on validation. Verification has been deferred. This finding remains open until the verification audit starts again.

Item Number	180
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored for Verification
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The minimum map accuracy should be 90% for the classification of forest/non-forest in the remote sensing imagery. If the classification accuracy is less than 90% then the map is not acceptable for further analysis. More remote sensing data and ground truthing data will be needed to produce a product that reaches the 90% minimum mapping accuracy.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	No finding was issued for this item during Round 1, and will be considered as part of Round 2 but not T&M. Development of an accuracy assessment for the Project Forest Cover Monitoring Map is assumed to not have occurred as the current accuracy assessment performed is for the validation benchmark map.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please develop an accuracy assessment for the updated benchmark map for the project area for this monitoring period.

Round 2 Response from Project Proponent 07 August 2015	Accuracy assessment was explicitly clarified in both the MR and PD. XL sheet of points provided. Forest plot points were removed from the analysis and only randomly allocated points used.
ESI Findings - Round 3	Accuracy assessment was supplied for this map product and all materials reviewed. Accuracy assessment follows good practice and is satisfactory. The item is addressed.

Item Number	181
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored for Verification
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Remote sensing imagery
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 5.2
ESI Findings - Round 1	Monitoring report states this data parameter, but Verifier unable to confirm if imagery was assessed
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The value for this parameter is set to 0. The data justification in the MR states "Head's up delineation using GIS and landsat imagery (or higher resolution) using multiple images to get a cloud free image." It does not appear as though multiple images were used to generate a cloud free image. This parameter is monitored and therefore applicable in the ex-post case as well as the ex-ante. Also, justification is needed for setting the value to 0 in the ex-ante case. This parameter is incorrectly placed in section 8.2 Data and Parameters Available at Validation in the PD and section 5.2 of the MR, this is a monitoring parameter.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please address all findings. Please fix the data justification for ADefPA,i,u,t to reflect the actual measurement methods employed. Please also justify (within this parameters table) why a value of 0 is appropriate in the ex-ante case.
Round 2 Response from Project Proponent 07 August 2015	Updated wording to comply with methodology and place in appropriate sections

ESI Findings - Round 3	Updated wording is sufficient. However, the parameter table for this parameter does not follow the correct format for the VCS + CCB MR and PD templates and is missing the additional content.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	The project will be updating the PD to a new VCS template without CCB and will be re-assessed at the next round.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	No action is needed, ADefPA,i,u,t is reported in the correct format in the PD Section
Round 5 NCR/CL/OFI 15 December 2016	
Round 5 Response from Project Proponent	
ESI Findings - Round 6	No further action is needed by the project proponent. The parameter was transferred over to the new PD template. The item is addressed.

Item Number	182
Approved VCS Module VMD0015,Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored for Verification
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	GIS delineation and ground truthing
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 5.2
ESI Findings - Round 1	This parameter seems to have been left out of the monitoring report
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include ADegW along with all needed parameters in the Data and Parameters Monitored section of the PD and Monitoring Report.

Round 1 Response from Project Proponent 29 August 2014	PRA not performed for the reasons given above.
ESI Findings - Round 2	Pending Section 5.2.2.1 above. This finding here is closed as parameter ADegW,I is requested elsewhere. The item is addressed.

Item Number	183
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	6.2 Data and Parameters Monitored for Verification
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	<u>Area impacted by natural disturbance in the project stratum i converted to natural disturbance stratum q at time t; ha (ADistPA,q,i,t)</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 8.3
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	This required monitored parameter is missing from the appropriate locations in the PD and MR. Please also see related findings elsewhere in this module for requests to describe monitoring for natural disturbance. Note this item is under Task 1.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include this required monitored parameter in the appropriate locations in the PD and MR.
Round 3 Response from Project Proponent 29 September 2016	Updated in the PD parameter monitored table with all content

ESI Findings - Round 4	The parameter is now appropriately included. The item is addressed.
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Item Number	184
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	5.2.1 Monitoring deforestation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The emission per unit area is equal to the difference between the stocks before and after deforestation minus any wood products created from timber extraction in the process of deforestation (represented by Equation 5 on page 9)
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 3.2
ESI Findings - Round 1	Project is not accounting for wood products in the project scenario.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	

ESI Findings - Round 5	The criteria here has merit for the validation as $\Delta C_{pools,Def,u,i,t}$ is represented by the mean carbon stock in all pools in the baseline case ($CBSL,i$) minus the carbon stock in all pools in post-deforestation land use ($CP,post,u,i$) (noting that CWP,I is not applicable). The PD needs to report the 10 year ex ante values for ΔC_{pools} , this is related to an open finding in BL-PL regarding Equation 11. All other project-case values (e.g. ΔCP - Equation 1) are zero ex ante and therefore do not need to be reported.
Round 5 NCR/CL/OFI 15 December 2016	CL: Please address the findings and report the 10 year ex ante values for ΔC_{pools} in the PD following Equation 5.
Round 5 Response from Project Proponent	Calculated and reported in Table 6 page 55 PD
ESI Findings - Round 6	This item is relevant for validation as C_{pools} represents the stock emissions per unit area for project-case deforestation. The C_{pools} values set for the 10 year baseline period are now appropriately reported in Table 6 of the PD. The item is addressed.

Item Number	185
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	This Framework <u>requires</u> the use of the latest approved versions of the following modules and tools:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD and MR
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	

ESI Findings - Round 3	Although no finding was issued here previously, auditors note that the PD and Monitoring Report make reference to REDD-MF version 1.3. The date upon which VM0007 v1.3 expired was 03 May 2013 and therefore v1.4 or v1.5 must be used. The requirement listed here for v1.4 states the framework module must be the latest and all associated modules/tools. The developer has the option to use the latest version released 07 March 2015 VM007 v3.5. Regardless of the version chosen by the developer, the latest version of associated modules and tools must be used.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please follow this requirement in utilizing a compliant later version of the VM0007 framework module REDD-MF and associated modules/tools. In responding, please refer to each module/tool which versions changed (if any).
Round 3 Response from Project Proponent 29 September 2016	Updated to Version 1.5
ESI Findings - Round 4	The VVB notes that the PD now states REDD-MF v1.5 in Section 4.1 of the PD. It also states "(more recent version than project original)." The version of the REDD-MF modular methodology is the most recent. The item is addressed. The updated MR will be checked later when it is received.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	The PD reports the latest version of modules per this requirement. Review of these modules occurs elsewhere. The MR will be reviewed for reporting and adherence to the latest versions when verification restarts again.
Round 5 NCR/CL/OFI 15 December 2016	
Round 5 Response from Project Proponent	
ESI Findings - Round 6	This open finding will be re-assessed when the verification review starts again.

Item Number	186
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	Carbon Pool Modules:

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	CP-AB "VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools"
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.1
ESI Findings - Round 1	PD states that this tool is used, however the project indicates it used v1.0. The CP-AB tool was updated on 11 October 2013 to v1.1.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please update the PD to include the use of v1.1 of CP-AB and please make any needed changes as required due to the update.
Round 1 Response from Project Proponent 29 August 2014	Update made
ESI Findings - Round 2	The PD now states that v1.1 was used. Compliance with this version will be assessed in other tabs. Item addressed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	V1.1 of CP-AB is the most up to date version and is reported in the PD.

Item Number	187
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	Leakage Modules:
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	LK-ASP "VMD0009 Estimation of emissions from activity shifting for avoided planned deforestation and planned degradation"

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.1
ESI Findings - Round 1	PD states that this tool is used.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Please note that the version of this module should be reflected as 1.2, the most up to date. Auditors note that updates to this module for v1.2 only included activities on peatlands.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Please appropriately reference the most up to date version of this module LK-ASP in project documentation.
Round 3 Response from Project Proponent 29 September 2016	Updated to Version 1.2
ESI Findings - Round 4	V1.2 of LK-ASP is the most up to date version and is reported in the PD. The item is addressed. The updated MR will be checked later when it is received.
Round 4 NCR/CL/OFI 8 November 2016	
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	Version reporting and adherence are now reviewed at the higher level finding. The item is addressed.

Item Number	188
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	Leakage Modules:

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	LK-ME "VMD0011 Estimation of emissions from market-effects"
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.2
ESI Findings - Round 1	The project description does not mention this module, however the project claims that carbon stored in long term wood products is considered de minimus. The PD explains that the project area contains highly valuable hardwood trees that would be part of the reason why an agent of deforestation would be attracted to buying the property and harvesting, selling the logs, and then burning the remainder of the project area. This seems reasonable as a baseline scenario, however the project needs to describe and provide evidence for not using this module. The VM0007 states " As referenced in the Framework (REDD-MF) the module is mandatory where: The process of deforestation involves timber harvesting for commercial markets".
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please describe in the PD why this module is not applicable and provide evidence to support the discussion.
Round 1 Response from Project Proponent 29 August 2014	Assessment addedd to the PD in the appropriate section
ESI Findings - Round 2	Section 5 describes that the module is now being used. This should be detailed in the list in Section 4.1. The validation/verification team will be separately assessing compliance with this module in a new tab, since it was previously omitted.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Please include the newly added module to the list in Section 4.1.
Round 2 Response from Project Proponent 07 August 2015	Module added to the list
ESI Findings - Round 3	The validation/verification team notes that mention of this module has been made in Section 4.1 of the PD. However, the full title reference to the module (i.e. LK-ME) was omitted from the PD to match the formatting of other listed modules. Further, mention of module LK-ME is missing from the Monitoring Report.
Round 3 NCR/CL/OFI 25 September 2015	3 NCR: Please appropriately reference module LK-ME per the findings and reference the module also in the Monitoring Report. Section 4.1 of both documents.
Round 3 Response from Project Proponent 29 September 2016	Updated to version 1.1, standardized reference
ESI Findings - Round 4	This module is now appropriately referenced in the PD. The item is addressed. The updated MR will be checked later when it is received.
Round 4 NCR/CL/OFI 8 November 2016	4

Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	Version reporting and adherence are now reviewed at the higher level finding. The item is addressed.

Item Number	189
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	Miscellaneous Modules:
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	X -STR "VMD0016 Methods for stratification of the project area"
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Sections 1.3 & 4.1; MR Section 5.2
ESI Findings - Round 1	PD states that this tool is used however it is unclear what this was used for as there is no other mention of this tool in the PD. It does not appear that the project area was stratified.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide the information related to the use of this tool. Additionally, please indicate if the project area was stratified, or indicate why it was not.
Round 1 Response from Project Proponent 29 August 2014	Updated in the monitoring report and PD
ESI Findings - Round 2	Section 1.3 of the PD mentions Module X-STR was used, but this section does not detail the steps taken to arrive at the conclusion that only 1 stratum was present post inventory. Sections 5.2 & 5.3 of the MR mention that X-STR will be used in the future if new stratification is needed. By viewing these sections, the verification team noted that Sections 5.2 & 5.3 are the same. These should be distinctive - one should be written describing data and parameters at validation, and the other should describe the results of monitoring. Also, it is unclear where the discussion/justification of post-stratification occurs in the PD or MR, as the Project Proponent's response is not detailed in Section 1.3 of the PD.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please correct Section 5.3 so that it does not mirror Section 5.2 but describes what occurred during monitoring of those data and parameters in the past tense. Please describe and support why post-stratification did not occur after inventory and detail where this is described in your response to ESI.

Round 2 Response from Project Proponent 07 August 2015	Changes made as requested to 5.2 and 5.3. The description of why no post stratification was carried out is in the comment section of the "Project Forest Cover Monitoring Map" table in section 5.3.
ESI Findings - Round 3	Section 5.2 and 5.3 of the Monitoring Report contains table formatting for some parameters that are not in line with the required table format in the VCS template "VCS+CCB+Monitoring+&+Implementation+Report+Template,+v3.0.doc." Associated parameters in the PD require similar formatting adjustments to bring in line with the VCS template. Auditors note that the VCS templates for the PD and Monitoring differ slightly in table formatting of parameters. The explanation for lack of post-stratification is sufficiently described under parameter "Project Forest Cover Monitoring Map."
Round 3 NCR/CL/OFI 25 September 2015	3 NCR: Please follow the VCS templates as noted in the finding for parameter table content in Sections 5.2 and 5.3 of the Monitoring Report and associated sections of the PD.
Round 3 Response from Project Proponent 29 September 2016	Updated to the proper templates
ESI Findings - Round 4	At this round the proponent has elected to drop the CCB component from the project. As a result the VCS template must be updated for both the Project Description and Monitoring Report. The finding here is closed to defer to the VCS Standard Section 3.18.1 requirement. The module is appropriately referenced in Section 4.1 of the PD and was assessed in detail elsewhere in this review. The item is addressed.

Item Number	190
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	Tools:
VCS Standard Version 3 Requirements Document 25 March 2015, v3.5 (Description)	T-SIG "Tool for testing significance of GHG emissions in A/R CDM project activities" – latest CDM-EB approved version
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 3.4
ESI Findings - Round 1	PD states that this tool is used, however there is no evidence provided to verifiers to show that this was used for the determination of the Harvested Wood products pool.
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please provide the information related to the determination that the wood products carbon pool was found to be de minimis.

Round 1 Response from Project Proponent 29 August 2014		Assessment addedd to the PD in the appropriate section
ESI Findings - Round 2		The Project Proponent's response in this Excel file is not detailed and does not enable the validator/verifier to efficiently navigate to wherever this assessment was added.
Round NCR/CL/OFI 31 October 2014	2	Please describe the exact section and page of the PD where this information was added, so that the v/v team may review.
Round 2 Response from Project Proponent 07 August 2015		Accounted for in Section 5.3 PD "Fate of Forest Resources Lost to Agricultural Conversion (Long-lived Wood Products)"
ESI Findings - Round 3		The section reference in the PD provided in response to this finding should actually be Section 6.4 of the PD. Here the relative contributions of pools are compared to find HWP to be de minimis. Unfortunately, T-SIG is not listed in the required section 4.1 of the PD.
Round NCR/CL/OFI 25 September 2015	3	CL: Please include the tool T-SIG in the list of modules and tools in Section 4.1 of the PD.
Round 3 Response from Project Proponent 29 September 2016		tool inlcuded in list
ESI Findings - Round 4		The tool is appropriately referenced in Section 4.1 of the PD and was assessed in detail elsewhere in this review. The item is addressed.
Round NCR/CL/OFI 8 November 2016	4	
Round 4 Response from Project Proponent 27 November 2016		
ESI Findings - Round 5		This finding is re-opened at Round 5 since the values for Market Leakage in Table 7 of the PD are reported incorrectly. The per hectare and total values do not match those computed in Section 3.3.
Round NCR/CL/OFI 15 December 2016	5	CL: Please correct the reporting of market leakage values in Table 7 of the PD.
Round 5 Response from Project Proponent		Values corrected. Project still calculates 6.11 for /ha value. Overall value was corrected. Calculations provided in XL file "Calculations tab".
ESI Findings - Round 6		Market leakage values in the PD are now reported correctly. The item is addressed.
Item Number	191	

Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	Tools:
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	T-ADD "VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities" – latest VCS approved version
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.1, MR Section 4.1
ESI Findings - Round 1	PD states that this tool is used.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Although no finding was issued here previously, a reference to the version (latest approved version is 3.0) is needed in the PD and MR.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please note the version of the T-ADD module in the PD and MR.
Round 3 Response from Project Proponent 29 September 2016	Version number added
ESI Findings - Round 4	The tool is appropriately referenced in Section 4.1 of the PD and was assessed in detail elsewhere in this review. The item is addressed.

Item Number	192
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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	Tools:
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	REDD projects under the Methodology Framework are divided between three broad activity types: unplanned deforestation, planned deforestation and forest degradation through collection of wood for fuel and production of charcoal. A single project may include one, two or all three of these activity types. In table 1 on Page 6 the modules and tools are listed and it is indicated when use of modules/tools is mandatory under each activity type. <u>The tool T-SIG should be used to justify the omission of carbon pools and emission sources.</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 2.1, MR Section 2.1
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Although no finding was issued here previously, it would be useful to the reader to include the "Planned Deforestation" activity type in Sections 2.1 of both the PD and MR. Further, it is a requirement of the VCS templates, "Indicate the sectoral scope(s) applicable to the project, the AFOLU project category and activity type (if applicable), and whether the project is a grouped project."
Round 3 NCR/CL/OFI 25 September 2015	CL: Please include reference to the project activity type in Section 2.1 of the PD and MR.
Round 3 Response from Project Proponent 29 September 2016	Noted (avoided planned deforestation)
ESI Findings - Round 4	The "Planned Deforestation" activity type is now included in Section 4.1 of the PD. The item is addressed.
Item Number	193

Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	a. All Activity Types
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Land in the project area has qualified as forest at least 10 years before the project start date.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.2
ESI Findings - Round 1	Land in the Project Area qualified as forest at least 10 years before the Project start date based on definition of forest land in FAO Forest Resource Assessment of 2000 and remote sensing analysis
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	This finding was placed in this location for audit efficiency. A parameter "Project Area" is reported in the PD and MR, this does not belong as it is not a monitored parameter, the project area is set for the project length. Also, the forest harvest plan is not a monitored parameter. These items, noted as parameters need to be removed from the parameter tables in the PD and MR. "Total area of planned deforestation" noted as a parameter should also be removed.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address the findings.
Round 3 Response from Project Proponent 29 September 2016	Parameters removed
ESI Findings - Round 4	These incorrectly included parameters were confirmed to have been excluded from the PD. The item is addressed.

Item Number	194
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	a. All Activity Types
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Project proponents must be able to show control over the project area and ownership of carbon rights for the project area at the time of verification.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.2
ESI Findings - Round 1	Project proponent did not supply documentation showing ownership of the Project site and ownership of the carbon rights for the Project Area. Ownership evidence is requested in NCR here for other items
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide documentation indicating ownership/control of project area as well as ownership of carbon rights and user rights
Round 1 Response from Project Proponent 29 August 2014	Documentation provided via mail.
ESI Findings - Round 2	The deeds state that on 17 September 2004 Roxanne Kremer transferred 1,500 ha to Lawrence Allen Bishop. A second deed states that on 14 April 1995 the property Yacurina 1 of 1,499 ha was transferred by the Regional Director of Agriculture Carlos Garcia Mere to Lawrence Allen Bishop. The second parcel was previously owned by the minister of agriculture. The maps provided with the deeds appear to cover the appropriate number of hectares as reported by the deeds (2,999 ha total). This stated there are some issues between the deeded hectares and the hectares from the GIS files provided. These will be addressed in other sections of the verification checklist. This Item can be closed when all other related NCRs are closed.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	
Round 3 NCR/CL/OFI 25 September 2015	
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	Please note this finding was issued under v1.4 of REDD-MF, since the start of the validation process the project is now under v1.5 and this requirement no longer exists.
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Item Number	195
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	a. All Activity Types
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Baselines shall be renewed every 10 years from the project start date
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.2
ESI Findings - Round 1	Baselines will be renewed every 10 years after the start of the Project except where triggers lead to a more frequent renewal.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Auditors noticed "Baseline Renewal" included as a monitored parameter in the MR. Baseline renewal or revision is more appropriate as an element in the monitoring plan where the information listed in the current parameter table is more pertinent.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please remove the parameter "Baseline Renewal" from the parameter tables as stated in the finding.
Round 3 Response from Project Proponent 29 September 2016	

ESI Findings - Round 4	No response was submitted by the PP but the VVB notes that no "Baseline Renewal" parameter exists anymore within the PD. The item is addressed. Please note this finding was issued under v1.4 of REDD-MF, since the start of the validation process the project is now under v1.5.
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Item Number	196
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	c. Planned Deforestation
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Documentation must be available to clearly demonstrate with credible evidence and documentation that indeed the land would have been converted to non-forest use if not for the REDD project.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 4.2
ESI Findings - Round 1	The project indicates that the ability to deforest is legally permitted, however no permits or other premissions were provided to verifiers for confirmation.
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please provide any evidence that supports the legal permissability to deforest the project area.
Round 1 Response from Project Proponent 29 August 2014	Peruvian government approved plan is provided in Appendix B and discussed throughout the PD
ESI Findings - Round 2	This plan is in Spanish and needs to be translated in English per the VCS rules.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please provide an English translation of the plan in the PD, as required by VCS.
Round 2 Response from Project Proponent 07 August 2015	Plan provided in English
ESI Findings - Round 3	English translation was provided and included in the PD. The item is addressed.

Item Number	197
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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	a. Geographical boundaries
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Project proponents shall clearly define the spatial boundaries of a project so as to facilitate accurate measuring, monitoring, accounting, and verifying of the project's emissions reductions and removals. The REDD project activity may contain more than one discrete area of land. When describing physical project boundaries, the following information shall be provided per discrete area:
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 1.2
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The MR states "Because digital files were unavailable for the official survey, the project area boundary used in the map figures and associated geodatabase was derived through heads up digitizing of a paper copy from the official survey performed by COFOPRI (See Appendix A). Thus the area in the map figures and geodatabase is approximate and not used in the calculation of the Project area." There are some discrepancies in areal computations of project boundaries as a result of the digitizing. This requirement states that the spatial boundaries must be clearly defined to facilitate accurate monitoring, accounting, and verification. In "Yacumama_landcover.shp" there is a field in the attribute table which notes a northern parcel is not included in the project area but appears to be included in carbon accounting. According to this file the project area should be 2,687.17ha, not 2879ha as noted in the PD and MR. Further, it is not clear whether water was completely buffered out of the project area to achieve the 2879ha.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please address the findings and fix the discrepancies in areal computations for the project area. In doing so, please follow this requirement to ensure that the spatial boundaries are clearly defined to facilitate accurate monitoring, accounting, and verification. Please explain in detail the steps followed to fix this discrepancy as a response to this finding.

Round 2 Response from Project Proponent 07 August 2015	The Project area is comprised of two parcels, Yacurana I (1499 ha) and Santuario Privado (1500 ha). The total for the two parcels is 2999 ha as identified on the official COFOPRI map document (http://www.cofopri.gob.pe/index.aspx?flag=trans). Examination of the COFOPRI map indicated some discrepancies from the original survey maps. Therefore the Project identified and updated the boundaries of the three parcels using the original survey maps produced in the early 1990's and imagery from that time period. The area of individual parcels did not precisely match the COFOPRI map document (Yacurana 1 1425 ha, Santuario Privado 1575), though the total area was consistent (see Figure 3 PD).
ESI Findings - Round 3	Methods for derivation of the project area boundaries based on the COFOPRI map are satisfactory. The areas of the individual parcels from the COFOPRI map document are reported in the PD Section 1.2 but reporting of total project area in hectares and forested area for carbon accounting is missing. The file "Yacumama_Project_Area_2015.shp" was provided to auditors as part of this round and was computed to be 2,999.68 ha. The file "Yacumama_landcover.shp" contains a forested area of 3,065.798ha. This file also showed water as 135ha, not 133ha as reported in the PD. The forested project area as computed by auditors is 2,863.9 ("Yacumama_Project_Area_2015.shp" area of both parcels minus water and settlements from "Yacumama_landcover.shp").
Round NCR/CL/OFI 25 September 2015	3 CL: Please report the total project area size and forested hectares for carbon accounting in PD Section 1.2 to be a bit more clear to the reader. Please also describe, in one location, the derivation of the project area spatial boundaries, and subsequent analysis performed to achieve the total forested area and collectively to facilitate accurate monitoring, accounting, and verification.
Round 3 Response from Project Proponent 29 September 2016	Included requested information in Section 1.2
ESI Findings - Round 4	The additional information requested regarding accounting hectares and its derivation was confirmed to have been included in Section 1.2 of the PD. It is in a centralized location to assist the reader. The item is addressed.

Item Number	198
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	a. Geographical boundaries
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	• Total land area; and
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 1.2, .gdb files supplied by client

ESI Findings - Round 1	The Yacumama property boundary encompasses 3,299 ha
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The shapefile "Project_zone" submitted to verifiers does not match (large circle with project area within) the "Project Zone" illustrated in maps within the PD and MR. This boundary is presumed to be the reference region.
Round 2 NCR/CL/OFI 31 October 2014	CL: Please supply the correct spatial file for the reference region per the finding. NOTE: As this was not issued during Round 1 this item will exist as a Round 1 request.
Round 2 Response from Project Proponent 07 August 2015	There is no need for a reference region since the deforestation rate is based upon an approved harvest plan. The Project zone Map" was developed as part of the CCBA process to identify potential stakeholders.
ESI Findings - Round 3	The assertion by developers is correct in that a reference region does not apply to planned deforestation projects. The Project Zone Map, Figure 4 of the PD, is assessed as part of the CCB review. The item is addressed.

Item Number	199
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	a. Geographical boundaries
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	• Details of forestland rights holder and user rights.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD Section 3.2
ESI Findings - Round 1	The Project proponent owns the land on which the Project is located fee simple. Yacumama follows all applicable environmental laws including the General Environmental Law (2005) which sets national environmental policy and management and ties together all previous legislation. These items are confirmed in other tabs of this workbook and through the review of other tools, modules. Evidence has been requested and the results will be handled in those other areas.
Round 1 NCR/CL/OFI 14 November 2013	

Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	The deeds state that on 17 September 2004 Roxanne Kremer transferred 1,500 ha to Lawrence Allen Bishop. A second deed states that on 14 April 1995 the property Yacurina 1 of 1,499 ha was transferred by the Regional Director of Agriculture Carlos Garcia Mere to Lawrence Allen Bishop. The second parcel was previously owned by the minister of agriculture. The maps provided with the deeds appear to cover the appropriate number of hectares as reported by the deeds (2,999 ha total). This stated there are some issues between the deeded hectares and the hectares from the GIS files provided. These will be addressed in other sections of the verification checklist. This Item can be closed when all other related NCRs are closed.
Round 2 NCR/CL/OFI 31 October 2014	2
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	This item can be closed as the GIS files form the quantitative basis for delineation of the project area boundaries and the deeds facilitate the legal identification of the project area boundaries.

Item Number	200
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	b. Temporal boundaries
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The historical reference period is the temporal domain from which information on historical deforestation is extracted, analyzed and projected into the future. A historical reference period shall be defined for all eligible REDD categories. The starting date of this period <i>shall be between 9 and 12 years in the past and the end date shall be within two years of project start.</i>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 4.5 part D
ESI Findings - Round 1	Historical reference period does not seem to be defined in MR or PD
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please define historical reference period as specified in VM0007 REDD-MF, Version 1.3
Round 1 Response from Project Proponent 29 August 2014	Deforestation rate is based upon the Approved Yacuamama Forest harvest plan in Appendix B

ESI Findings - Round 2	It appears by the response of the Project Proponent in this Excel file, specific details of the historical reference period were not actually added in the PD but are based on information in a document that needs to be translated to English.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include a section in the PD that specifically describes and defines the historical reference period and does not rely on the referenced Appendix to ferret this aspect out. This should be an extremely detailed and supported discussion.
Round 2 Response from Project Proponent 07 August 2015	Deforestation rate is based upon approved plan as required by the methodology. Discussion of historical reference period is not applicable since an approved harvest plan exists.
ESI Findings - Round 3	The assertion by the developer of the inapplicability of a historical reference period for this project is correct. The historical reference period pertains to unplanned deforestation projects. This period helps define the baseline in the absence of a plan. The item is addressed.

Item Number	201
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	b. Temporal boundaries
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The date of the next scheduled revision shall be specified in the VCS PD. The starting point for the baseline revision of the project will be forest cover projected to exist at the end of the baseline period.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 8.1
ESI Findings - Round 1	Baselines will be renewed every 10 years after the start of the Project except where triggers lead to a more frequent renewal. Year not explicitly stated in PD
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please indicate the specific year of Baseline revision in the PD.
Round 1 Response from Project Proponent 29 August 2014	Included in the PD monitoring section
ESI Findings - Round 2	Section 8.1, second paragraph of the PD explains the baseline will be re-evaluated in 2020, unless other unforeseen events trigger an earlier renewal.
Round 2 NCR/CL/OFI 31 October 2014	OFI: Please provide the exact date of baseline re-evaluation, as the requirement asks for a date, and this is something that could be flagged by VCS preference.
Round 2 Response from Project Proponent 07 August 2015	Inserted a specific date of August 1, 2020

ESI Findings - Round 3	Date of 01 August 2020 was confirmed added to Section 8.1 of the PD. However, since the project start date is changing this date may also change.
Round 3 NCR/CL/OFI 25 September 2015	OFI: Please adjust the date for baseline renewal in Section 8.1 of the PD to reflect the adjusted project start date.
Round 3 Response from Project Proponent 29 September 2016	Included date of baseline renewal
ESI Findings - Round 4	Section 8.1 of the PD now states, "Baseline will be renewed no later than January 1, 2022." The item is addressed.

Item Number	202
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	b. Temporal boundaries
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Projections for each baseline revision will be subject to independent verification.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 8.1
ESI Findings - Round 1	The geodatabase will be produced for each verification audit and the plots will be measured annually and a report of the results produced for each verification audit
Round 1 NCR/CL/OFI 14 November 2013	CL: The PD mentions an audit will occur at each baseline renewal (verification audit), but the specific term "independent" was not used to describe how the verification will take place.
Round 1 Response from Project Proponent 29 August 2014	inserted the word independent
ESI Findings - Round 2	The insertion of the word "independent sufficiently addresses this item.

Item Number	203
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	d. Sources of greenhouse gases

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Table 2 with the selection of sources and the appropriate justification shall be presented in the VCS PD.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 4.4
ESI Findings - Round 1	Sources selected and justifications provided in PD, table 12
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	Table 12 in the PD appears to be incomplete, as it does not encompass the three project source categories required to be presented in the PD, from Table 2 of the Methodology.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please include the three missing sources (from Table 2 of the Methodology) in Table 12 of the PD for the Project scenario.
Round 2 Response from Project Proponent 07 August 2015	Inserted three missing sources in the appropriate table.
ESI Findings - Round 3	Project sources biomass burning, fossil fuel combustion, and use of fertilizers are now appropriately listed in Table 13 of the PD. The item is addressed.

Item Number	204
Approved VCS Module VMD0015,Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	STEP 3. Development of monitoring plan
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	For monitoring changes in forest cover and carbon stock changes, the monitoring plan shall use the methods given in M-MON. All relevant parameters from the modules are to be included in the monitoring plan.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Section 8
ESI Findings - Round 1	Refer to M-MON checklist for more details
Round 1 NCR/CL/OFI 14 November 2013	

Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round NCR/CL/OFI 31 October 2014	2
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Auditors noticed that the monitoring plans slightly differ between the PD and MR, they should match. The PD is to report the monitoring plan which is set or fixed and then its implementation is reported in the MR. The section 4.3 in the MR reports any deviations from the monitoring plan as the project is implementing monitoring activities.
Round NCR/CL/OFI 25 September 2015	3
Round 3 Response from Project Proponent 29 September 2016	Matched dates
ESI Findings - Round 4	Though a response was received for this item and revisions to the monitoring plan in the PD were made, the verification has been deferred and no revised monitoring report was provided for comparison. This finding will remain open to be closed during verification.
Round NCR/CL/OFI 8 November 2016	4
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	No MR was provided at this round as the proponent has elected to focus on finishing validation. This item will remain open until the revised MR is received.
Round NCR/CL/OFI 15 December 2016	5
Round 5 Response from Project Proponent	
ESI Findings - Round 6	No MR was provided at this round as the proponent has elected to focus on finishing validation. This item will remain open until the revised MR is received.

Item Number	205
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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	STEP 3. Development of monitoring plan
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	• Revision of the baseline
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 5.1
ESI Findings - Round 1	Monitoring Plan contained within the MR does not contain this heading
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include this item as a heading in the Monitoring Plan, as specified in this section of the methodology.
Round 1 Response from Project Proponent 29 August 2014	Inserted
ESI Findings - Round 2	The original NCR from the v/v should have stated that the headings needed to be included not only in the MR, but also in the PD, as this is the main document containing the monitoring <i>plan</i> that ESI is validating. In addition, this heading is still missing from the MR.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please ensure the required headings are located in Section 8.1 of the PD. Please include the "Revision of the Baseline" heading in Section 5.1 of the MR. Please ensure both documents are consistent but that the MR describes what was done (in past tense) to fulfill the same section of the PD.
Round 2 Response from Project Proponent 07 August 2015	Inserted the proper heading and altered MR to reflect what was done for the purposes of monitoring.
ESI Findings - Round 3	This header was confirmed to have been appropriately included in both the PD and MR. However, since carbon stocks will be re-measured/reassessed at the point of baseline revision, the PD should summarize data under this heading to be collected at this moment in the project crediting period (see REDD-MF requirement above, "Data collection for future baseline revision shall be included in the monitoring report."). Guidance for content to include in this section are listed in parts a.-f. ("For each of these tasks, the monitoring plan shall include the following sections:"). Auditors also note the guidance text from the VCS templates may overlap content under this heading. Inclusion of a discussion of remaining forest at baseline renewal is also suggested as the entire project area will not have been deforested during the initial baseline period based on a rate of 2.12ha cleared/yr (PD pg 76). Here, it seems the baseline onward will encompass all emissions remaining resulting from deforestation not performed in the initial baseline period.

Round 3 NCR/CL/OFI 25 September 2015	3 CL: In the PD under the Monitoring Plan section, this heading, please include a short summary of data to be collected at baseline revision, addressing the criteria listed in sub-requirements a.-f. Please also include a short discussion related to baseline revision and project area remaining to be deforested per the plan as noted in the Round 3 finding. Please ensure content in the PD is reflected in the MR as noted in the Round 2 finding.
Round 3 Response from Project Proponent 29 September 2016	Included all subheadings (i.e. a-f) with additional detail related to both the overall and subheadings
ESI Findings - Round 4	As the version of the REDD-MF has changed, this requirement for a heading has now changed to "Monitoring of project implementation". However, it is inherently captured throughout the current monitoring plan. This finding is addressed.

Item Number	206
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	STEP 3. Development of monitoring plan
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	• Monitoring of actual carbon stock changes and greenhouse gas emissions
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 5.1
ESI Findings - Round 1	Monitoring Plan contained within the MR does not contain this heading
Round 1 NCR/CL/OFI 14 November 2013	1 NCR: Please include this item as a heading in the Monitoring Plan, as specified in this section of the methodology.
Round 1 Response from Project Proponent 29 August 2014	Insetted
ESI Findings - Round 2	The original NCR from the v/v should have stated that the headings needed to be included not only in the MR, but also in the PD, as this is the main document containing the monitoring <i>plan</i> that ESI is validating.
Round 2 NCR/CL/OFI 31 October 2014	2 NCR: Please ensure the required headings are located in Section 8.1 of the PD. Please ensure both documents are consistent but that the MR describes what was done (in past tense) to fulfill the same section of the PD.
Round 2 Response from Project Proponent 07 August 2015	Inserted the proper heading and altered MR to reflect what was done for the purposes of monitoring.

ESI Findings - Round 3	This header was confirmed to have been appropriately included in both the PD and MR. However, the content under the heading does not contain sufficient detail to describe all sub-requirement criteria a.-f.
Round 3 NCR/CL/OFI 25 September 2015	CL: In the PD under the Monitoring Plan section, this heading, please include additional detail as noted in the finding, addressing the criteria listed in sub-requirements a.-f. Note, relevant content to this heading which may be elsewhere in the Monitoring Plan should be moved under this heading. Please ensure content in the PD is reflected in the MR as noted in the Round 2 finding.
Round 3 Response from Project Proponent 29 September 2016	Included all subheadings (i.e. a-f) with additional detail related to both the overall and subheadings
ESI Findings - Round 4	As the version of the REDD-MF has changed, this requirement for a heading has now changed to "Monitoring of project implementation". However, it is inherently captured throughout the current monitoring plan. This finding is addressed.

Item Number	207
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	STEP 3. Development of monitoring plan
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	• Monitoring of leakage carbon stock changes and greenhouse gas emissions
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 5.1
ESI Findings - Round 1	Monitoring Plan contained within the MR does not contain this heading
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include this item as a heading in the Monitoring Plan, as specified in this section of the methodology.
Round 1 Response from Project Proponent 29 August 2014	Inserted
ESI Findings - Round 2	The original NCR from the v/v should have stated that the headings needed to be included not only in the MR, but also in the PD, as this is the main document containing the monitoring <i>plan</i> that ESI is validating.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please ensure the required headings are located in Section 8.1 of the PD. Please ensure both documents are consistent but that the MR describes what was done (in past tense) to fulfill the same section of the PD.
Round 2 Response from Project Proponent 07 August 2015	Inserted the proper heading and altered MR to reflect what was done for the purposes of monitoring.

ESI Findings - Round 3	This header was confirmed to have been appropriately included in both the PD and MR. However, the content under the heading does not contain sufficient detail to describe all sub-requirement criteria a.-f.
Round 3 NCR/CL/OFI 25 September 2015	CL: In the PD under the Monitoring Plan section, this heading, please include additional detail as noted in the finding, addressing the criteria listed in sub-requirements a.-f and describing the technical monitoring task as well as the data to be collected etc.. Please ensure content in the PD is reflected in the MR as noted in the Round 2 finding.
Round 3 Response from Project Proponent 29 September 2016	Included all subheadings (i.e. a-f) with additional detail related to both the overall and subheadings
ESI Findings - Round 4	As the version of the REDD-MF has changed, this requirement for a heading has now changed to "Monitoring of project implementation". However, it is inherently captured throughout the current monitoring plan. This finding is addressed.

Item Number	208
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	STEP 3. Development of monitoring plan
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	• Estimation of ex-post net carbon stock changes and greenhouse gas emissions.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	MR: Section 5.1
ESI Findings - Round 1	Monitoring Plan contained within the MR does not contain this heading
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include this item as a heading in the Monitoring Plan, as specified in this section of the methodology.
Round 1 Response from Project Proponent 29 August 2014	Inserted
ESI Findings - Round 2	The original NCR from the v/v should have stated that the headings needed to be included not only in the MR, but also in the PD, as this is the main document containing the monitoring <i>plan</i> that ESI is validating.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please ensure the required headings are located in Section 8.1 of the PD. Please ensure both documents are consistent but that the MR describes what was done (in past tense) to fulfill the same section of the PD.
Round 2 Response from Project Proponent 07 August 2015	Inserted the proper heading and altered MR to reflect what was done for the purposes of monitoring.

ESI Findings - Round 3	This header was confirmed to have been appropriately included in both the PD and MR. However, the content under the heading does not contain sufficient detail to describe all sub-requirement criteria a.-f.
Round 3 NCR/CL/OFI 25 September 2015	CL: In the PD under the Monitoring Plan section, this heading, please include additional detail as noted in the finding, addressing the criteria listed in sub-requirements a.-f and describing the technical monitoring task as well as the data to be collected etc.. Please ensure content in the PD is reflected in the MR as noted in the Round 2 finding.
Round 3 Response from Project Proponent 29 September 2016	Included all subheadings (i.e. a-f) with additional detail related to both the overall and subheadings
ESI Findings - Round 4	As the version of the REDD-MF has changed, this requirement for a heading has now changed to "Monitoring of project implementation". However, it is inherently captured throughout the current monitoring plan. This finding is addressed.

Item Number	209
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	STEP 5. Estimation of total net greenhouse gas emissions reductions (net of project minus baseline and leakage)
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The total net greenhouse gas emissions reductions of the REDD project activity are calculated using <u>equations 1, 2, and 3 on pages 16 to 17.</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Sections 1.7, 3.4, Yacumama_Carbon_Stock_Calculations_2015_final.xlsx
ESI Findings - Round 1	The final calculations are produced in the correct sequence according to this methodology, however several significant issues are found in the baseline calculations of VCU's. These issues are raised in BL_PL. This element will be reviewed and confirmed for correctness once the baseline calcs are corrected.
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	

Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Implementation of Equation 1 was reviewed again at this round due to previous findings. Auditors note that the project has accounted for net GHG reductions for year 2010 despite a revision to the project start date. Otherwise, Equation 1 has been applied correctly.
Round 3 NCR/CL/OFI 25 September 2015	3 NCR: Please correct Equation 1 to account for total net greenhouse gas emissions reductions beginning at the correct project start date.
Round 3 Response from Project Proponent 29 September 2016	Correct Project date applied
ESI Findings - Round 4	Table 18 in section 5.6 of the PD has been revised to correctly indicate the 2012 start date. This item is addressed.
Round 4 NCR/CL/OFI 8 November 2016	4
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	This item remains open as a placeholder in the review until the final GHG emission reduction estimates are confirmed and reported correctly in the PD.
Round 5 NCR/CL/OFI 15 December 2016	5
Round 5 Response from Project Proponent	
ESI Findings - Round 6	The ex-ante total net GHG reductions have been confirmed to be computed correctly. The proponent reports values after the buffer allocation in Table 9 of the PD. This is acceptable. The item is addressed.

Item Number	210
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	STEP 5. Estimation of total net greenhouse gas emissions reductions (net of project minus baseline and leakage)
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	Under the VCS standard project proponents shall present conservative ex-ante estimations of the total net GHG emissions reductions of the REDD project activity.

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: Sections 1.7, 3.4, Yacumama_Carbon_Stock_Calculations_2015_final.xlsx
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	This is being reviewed simultaneously in other Modules.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	An Clarification Request is issued here for the project proponent to label results of ex-ante calculations in the PD. Auditors presume Table 18 to show ex-ante calc results. Also, this table only needs to show the first 10 year baseline period as the values will be revised at baseline renewal in 10 years.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please label in the PD the Ex-Ante Estimated of Net Emission Reductions estimates. Please also shorten the table noted in the finding to show the 10 relevant years.
Round 3 Response from Project Proponent 29 September 2016	Table labeled and shortened as requested.
ESI Findings - Round 4	The VVB notes that the ex-ante estimated GHG emission reductions reported in Section 5.1 of the PD are reflective of the most recent carbon quantification worksheet and report only baseline values. However, emissions reductions for planned deforestation projects are actually a result of baseline minus project minus leakage. Although not explicit in the template, and given the increased rigor of VCS accuracy reviews, a more complete description of the net GHG emission reductions and removals is needed. The proponent should refer to Section 3.4 of the VCS PD template v3.2 - without CCB (VCS Project Description Template, v3.2-Oct 8 2013.doc). This section is also related to verification reporting.
Round 4 NCR/CL/OFI 8 November 2016	CL: Please address the findings and report additional elements for the quantification of estimated GHG emission reductions and removals. As needed, please refer to table content in the VCS PD template v3.2.
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	This item remains open as a placeholder in the review until the final ex-ante estimates are confirmed and reported correctly in the PD.
Round 5 NCR/CL/OFI 15 December 2016	
Round 5 Response from Project Proponent	

ESI Findings - Round 6	The ex-ante total net GHG reductions have been confirmed to be computed correctly. The proponent reports values after the buffer allocation in Table 9 of the PD. This is acceptable. The item is addressed.
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Item Number	211
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	a. Calculation of VCS buffer
VCS Standard Version 3 VCS Requirements Document 25 March 2015, v3.5 (Description)	<i>See Equations 4, 5 & 6 on Pages 17 & 18 of the Methodology.</i>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	
ESI Findings - Round 1	
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	There does not appear to be a location in the MR that describes how Equations 4, 5, & 6 were followed to achieve the buffer result of 25,494 units.
Round 2 NCR/CL/OFI 31 October 2014	NCR: Please detail in the PD and MR how Equations 4, 5 & 6 were utilized to achieve the buffer amount.
Round 2 Response from Project Proponent 07 August 2015	Included in the MR document
ESI Findings - Round 3	The buffer equation 4 is sufficiently illustrated in the MR and PD now. The item is addressed.
Round 3 NCR/CL/OFI 25 September 2015	OFI: The project proponent could list brief definitions of the variables for the buffer equation 4 in the MR and PD.
Round 3 Response from Project Proponent 29 September 2016	Listed definitions
ESI Findings - Round 4	In the PD the parameters section now identifies which equations were utilized. This item is addressed.

Item Number	212
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Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	c. Calculation of Verified Carbon Units
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	To estimate the number of Verified Carbon Units (VCUs) for the monitoring period $T = t_2 - t_1$, this methodology uses <u>equation 8 on Page 19</u>
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	PD: section 5.6 MR: Section 6.4
ESI Findings - Round 1	No estimate of VCUs seems to be included in PD, only project crediting period. Emissions reductions are specified. Refer to BL-PL
Round 1 NCR/CL/OFI 14 November 2013	NCR: Please include estimated VCUs for monitoring period
Round 1 Response from Project Proponent 29 August 2014	Calculation provided in the appropriate section
ESI Findings - Round 2	This estimation is now in Section 5.6 of the PD (VCU _t = 116,143) and Section 6.4 of the MR. This will need re-checked in further rounds of review.
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	The result of Equation 8 (Number of Verified Carbon Units at time $t = t_2 - t_1$; VCU) is reported in Section 6.4 of the Monitoring Report. It is appropriate here to report VCUs by year and the relevant main parameters (baseline, project, risk buffer % etc.). Auditors recognize that the VCS+CCB template is lacking a table format for this reporting and suggests the developer to refer to the regular VCS template for the Monitoring Report for useful data to be reported in this table. This data in the past has been required to be presented by Markit. Also, Table 12 of the Monitoring Report reflects ex-ante estimates of net GHG reductions and does not belong in the Monitoring Report. Correctness of this equation will be checked again at the next Round due to finding requests elsewhere in the review.
Round 3 NCR/CL/OFI 25 September 2015	CL: Per the findings, please present VCUs by year in Section 6.4 of the Monitoring Report. Auditors suggest reporting per the regular VCS (without CCB included) template VCU table format. Please remove ex-ante calcs from the Monitoring Report.

Round 3 Response from Project Proponent 29 September 2016	No response provided.
ESI Findings - Round 4	The verification has been deferred and no revised monitoring report was provided for comparison. This finding will remain open to be closed during verification.
Round 4 NCR/CL/OFI 8 November 2016	4 CL: Per the findings, please present VCUs by year in Section 6.4 of the Monitoring Report. Auditors suggest reporting per the regular VCS (without CCB included) template VCU table format. Please remove ex-ante calcs from the Monitoring Report.
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	The verification has been deferred and no revised monitoring report was provided for comparison. This finding will remain open to be closed during verification.
Round 5 NCR/CL/OFI 15 December 2016	5 CL: Per the findings, please present VCUs by year in Section 6.4 of the Monitoring Report. Auditors suggest reporting per the regular VCS (without CCB included) template VCU table format. Please remove ex-ante calcs from the Monitoring Report.
Round 5 Response from Project Proponent	
ESI Findings - Round 6	This open finding will be re-assessed when the verification review starts again.

Item Number	213
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	b. Monitoring of actual carbon stock changes and greenhouse gas emissions
VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The calculations of actual carbon stock changes and greenhouse gas emissions shall be reported using transparent procedures
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	files from client
ESI Findings - Round 1	Carbon calculations contained within Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
Round 1 NCR/CL/OFI 14 November 2013	1
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	

Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Section 6.2 of the Monitoring Report does not report carbon stock changes and GHG emissions transparently and is incomplete. Here, the result of project emissions, from M-MON, should be described and quantified, culminating with parameter ΔCP . The Monitoring Report states, "(see following parameters)" but no parameters are listed, the relevant ex-post parameters should be mentioned there with a brief description. The area of forest available for conversion and baseline carbon stocks are not relevant in this section.
Round 3 NCR/CL/OFI 25 September 2015	CL: Please address all findings and transparently report project emissions in Section 6.2 of the Monitoring Report.
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	The verification has been deferred and no revised monitoring report was provided for comparison. This finding will remain open to be closed during verification.
Round 4 NCR/CL/OFI 8 November 2016	CL: Please address all findings and transparently report project emissions in Section 6.2 of the Monitoring Report.
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	The verification has been deferred and no revised monitoring report was provided for comparison. This finding will remain open to be closed during verification.
Round 5 NCR/CL/OFI 15 December 2016	CL: Please address all findings and transparently report project emissions in Section 6.2 of the Monitoring Report.
Round 5 Response from Project Proponent	
ESI Findings - Round 6	This open finding will be re-assessed when the verification review starts again.

Item Number	214
Approved VCS Module VMD0015, Version 2.1 (20 November 2012), REDD Methodological Module: Methods for monitoring of greenhouse gas emissions and removals (M-MON), Sectoral Scope 14 (Section)	c. Monitoring of leakage

VCS Standard VCS Version 3 Requirements Document 25 March 2015, v3.5 (Description)	The calculations of leakage carbon stock changes and greenhouse gas emissions shall be reported.
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	files from client
ESI Findings - Round 1	Leakage calculations contained within Raw Data_Calculations_Yacumama PDD_version 1.1.xlsx
Round 1 NCR/CL/OFI 14 November 2013	
Round 1 Response from Project Proponent 29 August 2014	
ESI Findings - Round 2	
Round 2 NCR/CL/OFI 31 October 2014	
Round 2 Response from Project Proponent 07 August 2015	
ESI Findings - Round 3	Leakage as reported in the Monitoring Report, Section 6.3 is exactly the same as the PD in reporting validation items and is insufficient. Instead, quantified leakage emissions during the monitoring period should be reported here, culminating in the monitored leakage parameter $\Delta\text{CLK-AS}_{\text{planned}}$. This section needs to summarize activities for tracking deforestation by the baseline agent and also market leakage values. If ex-ante market leakage values are to be used at monitoring (ex-post), they should be listed here too, but only if no project harvesting of timber, fuel wood or charcoal destined for commercial markets.
Round 3 NCR/CL/OFI 25 September 2015	NCR: Per the findings, please develop the Leakage Section 6.3 to explain monitored leakage and report calculations of leakage carbon stock changes and greenhouse gas emissions.
Round 3 Response from Project Proponent 29 September 2016	
ESI Findings - Round 4	The verification has been deferred and no revised monitoring report was provided for comparison. This finding will remain open to be closed during verification.
Round 4 NCR/CL/OFI 8 November 2016	NCR: Per the findings, please develop the Leakage Section 6.3 to explain monitored leakage and report calculations of leakage carbon stock changes and greenhouse gas emissions.
Round 4 Response from Project Proponent 27 November 2016	
ESI Findings - Round 5	The verification has been deferred and no revised monitoring report was provided for comparison. This finding will remain open to be closed during verification.

Round NCR/CL/OFI 15 December 2016	5	NCR: Per the findings, please develop the Leakage Section 6.3 to explain monitored leakage and report calculations of leakage carbon stock changes and greenhouse gas emissions.
Round 5 Response from Project Proponent		
ESI Findings - Round 6		This open finding will be re-assessed when the verification review starts again.

³ Due to the overlap between validation and verification in some modules which were reviewed concurrently, ESI has included all verification findings in addition to those specific to the validation audit. Verification findings which remain open at validation will be addressed when the verification audit starts again and do not affect the results of validation.