CCB FINAL VALIDATION REPORT

ADPML PORTEL-PARA REDD PROJECT

REPORT NO. 2013-9206

REVISION NO. 01

CCB PROJECT VALIDATION REPORT

Date of first issue: 28 March, 2013	Project No.: PRJC-389216-2012-CCS-USA
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Client: Ecosystem Services, LLC	Client ref.: Giancarlo Raschio

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Det Norske Veritas (U.S.A.), Inc. (DNV) has performed a validation of the "ADPML Portel-Pará REDD Project" in the state of Para, Brazil on the basis of criteria defined by the Climate Community and Biodiversity Alliance (CCBA) second edition and approved Verified Carbon Standard (VCS) methodology, "Methodology for Avoided Unplanned Deforestation", version 1.1, as well as criteria for consistent project operations, monitoring and reporting. This validation report summarizes the findings of the CCBA validation.

The validation consisted of the following three phases: i) a desk review of the project design, the baseline and the monitoring plan, ii) an onsite inspection and follow-up interviews with project stakeholders and the issuance of the finding list, and iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

The project activity is to avoid unplanned deforestation through a series of activities that include monitoring, capacity building, and providing land ownership rights to local people. Through a combination of forest protection and sustainable development activities, this project is estimated to avoid the emission of approximately 22 million tonnes of CO2e (before risk buffer reduction) over 40 years, 2.2 million of which is predicted to be issued as tradable VCUs in the ten year baseline period to which this report applies. These emissions would have resulted from deforestation of approximately 20% of the project area in the baseline scenario over the next forty years.

In summary, it is DNV's opinion that the "ADPML Portel-Pará REDD Project" as described in the CCBA Project Document dated 17 January, 2013 meets all relevant CCBA criteria.

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CCB Validation Report – ADPML Portel-Pará REDD Project

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Abbreviations

AFOLU Guidelines	Agriculture, Forestry and Other Land Uses Section of Guidelines for National Greenhouse Gas Inventories 2006
CAR	Corrective Action Request
CCBA	Climate Community and Biodiversity Alliance
CDM	Clean Development Mechanism
CL	Clarification Request
CO_2	Carbon Dioxide
DNA	Designated National Authority
DNV	Det Norske Veritas (U.S.A.), Inc.
DR	Document Review
EB	Executive Board
GHG	Greenhouse Gas(es)
GPG LULUCF	Intergovernmental Panel on Climate Change's Good Practice Guidance for Land-Use Land Use Change and Forestry
GWP	Global warming potential
HCV	High Conservation Value(s)
m	Meters
MED	Methodology Element Documentation
MoV	Means of Verification
PDD	Project Design Document
REDD	Reducing Emissions from Deforestation and Degradation
SCS	Scientific Certification Systems
tCO_2e	Tonnes CO_2 equivalent
VCS	Verified Carbon Standard
VCSA	VCS Association
VCU	Verified Carbon Unit
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

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1 INTRODUCTION

ADPML and Ecosystem Services LLC have commissioned Det Norske Veritas (U.S.A.), Inc. (DNV) to validate the "ADPML Portel-Pará REDD Project" in the Brazilian state of Para. This report provides a description of the steps involved in conducting the validation and the findings of the validation based on the Climate, Community and Biodiversity Alliance (CCBA) Project Design Standards (Second Edition), as well as criteria for consistent project operations, monitoring and reporting.

The validation team consisted of the following personnel:

Role/Qualification	*Last Name*	*First Name*	*Country*
Project manager / CCBA Validator	Reed	Pablo	USA
VCS REDD AFOLU Verifier	Anderson	Ryan	USA
Technical reviewer	Aalders	Edwin	Norway

1.1 Objective

The purpose of a validation is to have an independent third party assess the project design against all criteria set out by the CCBA. Validation is a requirement for all CCBA projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended climate, community, and biodiversity benefits. The final decision on the registration of a proposed project rests with the CCBA.

1.2 Scope and Criteria

The validation scope is defined as an independent and objective review of the CCBA Project Document (CCBA PD) /1/. The CCBA PD is reviewed against the criteria stated in the CCB Project Design Standards /29/ (Second Edition – December, 2008), and the approved VCS methodology, "Methodology for Avoided Unplanned Deforestation", version 1.1/32/.

In particular, the project was assessed against the CCB Standards Second Edition to determine which of the fourteen required and three optional CCB standards criteria the project satisfies. As specified by CCBA, an 'approved' project is one that meets all 14 of the required CCB standards criteria.

The validation is not meant to provide any consulting for the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

1.3 CCB Project Description

The "ADPML Portel-Pará REDD Project" has been developed by Ecosystem Services LLC, project proponents based out of Washington DC and Lima, Peru. The project activity is to avoid

unplanned deforestation through a series of activities that include monitoring, capacity building, and providing land ownership rights to local people. Through a combination of forest protection and sustainable development activities, this project is estimated to avoid the emission of approximately 22 million tonnes of CO2e over the project lifetime, 2.2 million of which is predicted to be issued as tradable VCUs in the ten year baseline period to which this report applies. These emissions would have resulted from deforestation of approximately 20% of the project area in the baseline scenario over the next forty years.

The main project proponent has been identified as Avoided Deforestation Project (Manaus) Limited ("ADPML"). Documentation was provided that this entity has overall control and responsibility for the project as evidenced by /21/and associated title documents /25/, as well as interviews with legal counsel /59//62/. The project proponent's contact information is as follows:

ADPML
18-20 Le Pollet, St Peter Port, Guernsey, GY1 1WH

The project developer is Ecosystem Services LLC. Ecosystem Services was DNV's main point of contact throughout the project assessment. Contact information is as follows:

Ecosystem Services LLC
1250 24th Street, NW Suite 300
Washington, DC, 20037, USA

The primary project activity is management of the project area as a private conservation reserve in order to avoid unplanned deforestation. Based on evidence collected during the audit, this type of management constitutes a modification from the baseline scenario expected to result in GHG emissions reductions or removals. Evidence includes interviews with project proponents and community members; examination of data collected by remote sensing /26/, and first hand field observation.

The project sectoral scope is 14 "Agriculture Forestry and Other Land Use" and the project type is Avoided Unplanned Deforestation. Technologies and measures implemented include the protection of forest lands threatened by conversion to agriculture and cattle ranching. The project is eligible for crediting as it is an AFLOU project with a project start date after 01 January 2002 and before 08 March 2008 and has completed its required VCS validation before 8 March 2013 using an approved VCS methodology VM0015.

The project is located in the Pará state of Brazil. The geodetic coordinates provided for in the CCBA PD /1/ and the general project location has been confirmed during the site visit The project start date is 01 January 2008 as evidenced by /23/.

The project area is forested according to the definition of forest in Brazil as described by the UNFCCC (http://cdm.unfccc.int/DNA/cdf/index.html), as observed during the site visit, and confirmed by inspecting remotely-sensed imagery /26/. Other project details can be summarized as follows:

Project Proponents (Parties):	ADPML Avoided Deforestation Project (Manaus) Limited ("ADPML")
Title of project activity:	ADPML Portel-Para REDD Project
Baseline and monitoring methodology	VCS methodology VM0015 "Methodology for Avoided Unplanned Deforestation."/30/
Location of the project activity	Pará State, Brazil
Project's crediting period:	1 January, 2009 to 31 December, 2048
Project Type	Large Project
Average Annual VCUs	482,845 VCU/year over 40 years; 260,334 VCU/year over the 10 year baseline period validated in this report

Based on the definitions described in section 3.9.1 of the VCS standard version 3.3 /31/, the project is categorized as a large project, as it has an estimated average annual GHG emissions reduction of greater than 300,000 tonnes of CO2e as evidenced in spread sheets in which the methodology's quantitative elements are implemented /27/ and /28/ .

The project crediting period start date is 01 January 2009 and the end of the crediting period is 31 December 2048. The project crediting period start date corresponds to the commencement of the first monitoring period. The total estimated GHG emissions reductions or removals over the project crediting period before the VCS risk buffer is applied are estimated to be 38,717,044 tCO2e.

DNV provides reasonable assurance that the emission reduction estimations for the "ADPML Portel-Pará REDD Project" are conservative and meet the CCB criteria /29/ and the approved VCS methodology employed /32/.

To ensure complete transparency, DNV has included any clarification or corrective actions that were raised in this validation report in an appendix found at the end of this report.

2 METHODOLOGY

The validation consisted of the following three phases:

- A desk review of the project design and the baseline and monitoring methodology.
- Site visit and interviews with project stakeholders.
- The resolution of outstanding issues and the issuance of the final validation report and opinion.

The validation process included the following events and activities:

- Opening meeting, introduction and project orientation.
- Desk Review of the project document (PD) and supplemental documentation including data, models, and maps of project zone.

- Site Visit: A Site visit was conducted July 16 – July 31, 2013 with the objective of acquiring evidence to determine whether a positive validation opinion should be given. During the site visit, interviews were conducted with project stakeholders, government officials, legal counsel, and local community members to confirm statements by the project proponents and to identify potential misstatements. Carbon inventory plots were also visited and re-measured to confirm the accuracy of the project's carbon inventory. Observations of the site were made to confirm that the project boundary and leakage belt were consistent with the conditions described in the PD /1/. Observations of conditions in the area surrounding the project area and interviews with local people were used to confirm the baseline scenario and assumptions underlying the delineation of the leakage belt, as well as the perceived benefits the project will hold with regards to community and biodiversity. Additionally, the technical aspects of the project were discussed in detail with the project developer.
- Review of stakeholder comments.
- Review of collected evidence and supporting documentation.
- Issuance of findings.
- Project proponent responses to findings.
- Preparation of draft report.
- Technical review of draft report.
- Submission of final report to CCBA.

Findings established during the validation can either be seen as a non-fulfilment of validation protocol criteria or where a risk to the fulfilment of project objectives is identified. Corrective Action Requests (CARs) are issued where:

- Mistakes have been made with a direct influence on project results.
- Validation protocol requirements have not been met.
- There is a risk that the project would not be accepted as a VCS or CCBA project, or that emission reductions will not be certified.

The term Clarification (CL) may be used where additional information is needed to fully clarify an issue.

Draft report corrective action requests and requests for clarifications	***Project participants' response***	***Final conclusion***
If the conclusions from the draft Validation are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	*The responses given by the project participants during the communications with the validation team should be summarized in this section.*	*This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final Conclusion.*

Figure 1: Validation Protocol Table

2.1 Review of Documents

The project document /1/ dated 17 January, 2013 and previous versions for the "ADPML Portel-Pará REDD Project" were submitted by the project proponents along with additional background documents related to the project design and baseline, which were assessed as part of the validation. The project documentation followed the guidance set out in CCB Standard Second Edition, December, 2008 /29/.

The following table lists the documentation that was assessed during the validation:

Documents provided that relate directly to the VCS and CCBA components of the project:

/1/ Ecosystem Services LLC: CCBA PD for project activity "ADPML Portel-Pará REDD Project", Version 6 dated 17 January 2013 and earlier versions.

/2/ Ecosystem services LLC: VCS PD for ADPML Portel-Pará REDD Project. Version 5 dated 17 January 2013.

/3/ Ecosystem Services LLC: Non-Permanence Risk Assessment Version 1 dated 19 July 2012

/4/ Seta Ambiental LTDA: Carbon Stock Inventory Report Portel e Melgaço, Pará (English version of original document "Relatório do Inventário de Estoque de Carbono." Version 1 dated July 2012

/5/ Ecosystem services LLC: Annex 1 to VCS PD: Simple Cost Analysis Simple Cost analysis V3 ADPML.xlsx. version 1 dated August 2012.

/6/ Ecosystem services LLC: Annex 2 to VCS PD: RDD Validation Validacion_Detalle RRD_Av7.xlsx Version 7 dated January 2013

/7/ Ecosystem services LLC: Annex 3 to VCS PD: Classification and Modeling Explanation. Includes Sub-documents "Report_Modeling Deforestation ADPML" version 4 dated January 2013 and "ADPML Classification and Accuracy Assessment" version 1 dated September 2012.

/8/ Ecosystem services LLC: Annex 4 to VCS PD: Social Assessment Version 1 dated September 2012.

/9/ Ecosystem services LLC: Annex 5 to VCS PD: Carbon Inventory Version 1 dated September 2012.

/10/ Ecosystem services LLC: Annex 6 to VCS PD: Calculations from the carbon Inventory document. Final version dated January 2013. Previous versions reviewed in August, September, and December 2012.

/11/ Ecosystem services LLC: Annex 7 to VCS PD: Monitoring Reports 2005 to 2011 Inventory Documents collated August 2012 from original source documents dated 2005-2011.

/12/ Ecosystem Services LLC: Annex 8 to VCS PD: Adaptive Management Plan Version 1 dated November 2012.

/13/ Ecosystem Services LLC: Annex 9 to VCS PD: Wood Products version 1 dated January 2013

/14/ SETA Ambiental LTDA: Dados Carbono 18 Julho.xls Excel Spreadsheet dated July 2012.

/15/ Maps prepared by Ecosystem Services LLC(final versions dated January 2013, previous revisions reviewed in August 2012, September 2012 and December 2012):

- Sampling Plots
- Village Locations
- Project Area Coordinates
- Project Area Polygon Vertex Coordinates
- Forest/NonForest 1996
- Forest/NonForest 2008
- Forest Benchmark Maps (1996, 2004, 2008)
- Indigenous Lands
- Leakage Belt Boundaries
- Land Use (2004, 2008)
- Land Use Change 2004-2008
- Rainfall, Soils, Vegetation Type, Geology, Hydrology

Primary, Seconday, and Tertiary Roads (1996 and 2008)

/16/ Ecosystem Services LLC: Opportunity Cost ADPML V2.xlsx spreadsheet Version 2 dated August 2012.

/17/ Ecosystem Services LLC: Financial Analysis ADPML Project _2013.xlsx Spreadsheet version 2 Dated January 2013 (version 1 dated September 2012 also reviewed)

/18/ ADPML, Ltd Group: Letter confirming secured finance, accompanied by account balance statements dated December 2012.

/19/ CVs of project management team (received September 2012)::

- Pablo Omar Castro Moreno
- Giancarlo Raschio
- Gonzalo Castro de la Mata
- Peter Schlesinger
- Christian Contreras Agosto
- Leonel Mello
- Pedro Ruiz

Luis Ducassi

/20/ ADPML Ltd and Group: Statement to re-invest a minimum portion of carbon credit sales to finance local activities Dated August 2012.

/21/ [Name withheld for confidentiality]: Letter conveying legal representation of the landowner to project proponents Dated August 2012..

/22/ Ecosystem Services LLC: Governance Score.xlsx Spreadsheet dated November 2012 (earlier version dated September 2012 also reviewed)

/23/ Big Lands Brazil: Monitoring Reports dated 2005-2011

/24/ Governo Do Estado do Pará: Cadastro Ambiental Rural Nos: 67788, 68048, 67741, 67889, 67908, 67985, 67695, 67779, 67711, 67747, 67923, 67704, 68038, dated February 2012

/25/ Title Documents Nos: 228, 250, 247, 204, 207, 229, 270, 255, 252, 203, 253, 223, 219, 251, 254, 266, 224 dated November 1988

/26/ Ecosystem Services LLC: Miscellaneous Spatial Data files (kml, shapefile and geotiff files) used in project mapping, modelling, and carbon stock quantification (final versions dated January 2013, previous revisions reviewed in August 2012, September 2012 and December 2012):

/27/ Ecosystem Services LLC: Final Tables ADPML.xlsx Spreadsheet Spreadsheet dated January 2013 and previous versions dated September 2012 and November 2012

/28/ Ecosystem Services LLC: Medium lived wood products.xlsx Spreadsheet Dated January 2013.

Standards, reports, methodologies, and other guidance by the VCSA and CCBA

/29/ CCBA. 2008. Climate, Community & Biodiversity Project Design Standards Second Edition. CCBA, Arlington, VA. December, 2008. At: www.climate-standards.org.

/30/ DNV VCS Validation Report for the “ADPML Portel-Pará REDD Project”. Dated 15 February 2013.

/31/ VCSA: VCS Standard version 3.3

/32/ VCSA: Methodology “VM0015 Methodology for Avoided Unplanned Deforestation” Version 1.1.

/33/ VCSA: Agriculture Forestry and Other Land Use (AFOLU) Requirements version 3.3

/34/ VCSA: AFOLU Non-Permanence Risk Tool, version 3.2

/35/ VCSA: Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities. Version 3.

Documentation used by DNV to validate / cross-check the information provided by the project participants

/36/ Margulis, S, World Bank.: Causes of Deforestation of the Brazilian Amazon. Working Paper 22. 2004

/37/ Fearnside, P. M, World Development 29(8): 1361-1372: "Land-Tenure Issues as Factors in Environmental Destruction in Brazilian Amazonia: The Case of Southern Pará." 2001

/38/ May, P., B. Millikan, et al, CIFOR.: The Context of REDD+ in Brazil: Drivers, agents and institutions. 2011.

/39/ Araujo, T. M., N. Higuchi, et al, Forest Ecology and Management: "Comparison of formulae for biomass content determination in a tropical rain forest site in the state of ParáÂ, Brazil." 1999

/40/ Barreto, P, IMAZON: Will cattle ranching continue to drive deforestation in the Brazilian Amazon? 2011

/41/ IPCC: Good Practice Guidance for Land Use, Land-Use Change and Forestry. 2006.

/42/ Overman, J. P. M., H. J. L. Witte, et al, Journal of Tropical Ecology: "Evaluation of regression models for above-ground biomass determination in Amazon rainforest." 1994.

/43/ Pfaff, A., Barbieri, A., Ludewigs, T., Merry, F. Perz and Reis, E, Manila Typesetting Company: "Road Impacts in BrazilianAmazonia." 2009.

/44/ Kirby, K. R., W. F. Laurance, et al., Futures 38(4): 432-453: "The future of deforestation in the Brazilian Amazon." 2006

/45/ Hecht, S. Bioscience vol 43 No 10: The logic of livestock and deforestation in Amazonia. California, USA, American institute of biological sciences. 1993.

/46/ Araujo, C., C. A. Bonjean, et al. Ecological Economics 68(8-9): 2461-2468: "Property rights and deforestation in the Brazilian Amazon." 2009.

/47/ Mertens, B., R. Poccard-Chapuis, et al. Agricultural Economics 27(3): 269-294: "Crossing spatial analyses and livestock economics to understand deforestation processes in the Brazilian Amazon: the case of São Félix do Xingú in South Pará." 2002.

/48/ Asner, G. P., E. N. Broadbent, et al, Proceedings of the National Academy of Sciences 103(34): 12947-12950: "Condition and fate of logged forests in the Brazilian Amazon." 2006.

/49/ Uhl, C., P. Barreto, et al BioScience 47(3): 160-168: "Natural Resource Management in the Brazilian Amazon." 1997

/50/ Putz, F., P. Zuidema, et al Plos Biology: Improved Tropical Forest Management for Carbon Retention. 2008.

/51/ Conama, 2009: Resolução No. 411 de 06/05/2009. Available at:

http://www.mma.gov.br/port/conama/legiabre.cfm?codlegi=604 – Retrieved August 18th, 2012

/52/ Point Carbon: REDD Price Report Q4 2012.

SEMA : Zoneamento ecologico- economico da zona leste e calha norte do estado do Pará 2010. Belem, 2010

/53/ J. P. Malingreau, H. D. Eva, E. E. de Miranda, AMBIO, 41:309–314:.Brazilian Amazon: A Significant Five Year Drop in Deforestation Rates but Figures are on the Rise Again. 2012.

/54/ Brazilian Ministry of Science and Technology: http://www.obt.inpe.br/prodes/index.php, accessed September 2012.

2.2 Follow-up Interviews

As mentioned earlier, the DNV audit team conducted a site visit on July 16 – July 31, 2012 with the objective of acquiring evidence to determine whether a positive validation opinion should be given:

	Date	Name	Organization	Topic
/55/	16 to 30 July-2012	Giancarlo Raschio. Project Manager	Ecosystem Services LLC	• Project Design • Additionality • VCS/CCBA Compliance
/56/	16 to 30 July-2012	Christian Contreras. Senior Program Coordinator.	Ecosystem Services LLC	• Baseline Determination • Deforestation Modelling • Leakage Belt Design
/57/	16 to 30 July-2012	Leonel Mello. Senior Policy Advisor	Consultant for Ecosystem Services LLC	• Project Design • Environmental & Social aspects of projects • SOPs and Management
/58/	16 to 30 July-2012	Pablo Castro. Social Specialist	Ecosystem Services LLC	• FPIC • Community

				Relations • Community Benefit Monitoring.
/59/	16 to 30 July-2012	Yuri Jordy Nascimento Figueiredo	Legal Consultant	• Legal Compliance • Legal Tenure of Land
/60/	16 to 30 July-2012	Renial	SETA Ambiental	• Carbon/Forestry Inventory • Field SOPs
/61/	16 to 30 July-2012	Flavia	SETA Ambiental	• Carbon/Forestry Inventory • Field SOPs • Social Outreach
/62/	16 to 30 July-2012	Estela	Legal Consultant	• Legal Compliance of Project
/63/	16 to 30 July-2012	Derrick	SETA Ambiental	• Carbon/Forestry Inventory • Field SOPs
/64/	16 to 30 July-2012	Dra. Izildinha	University Ecology/ Forestry Professor, subcontracting for SETA	• Carbon/Forestry Inventory • Field SOPs
/65/	16 to 30 July-2012	Rosalina Coper de Preita	Local Villager/Community leader	• Community relations/concerns
/66/	16 to 30 July-2012	Nuesimar do Santos Monteiro	Local Villager/Community leader	• Community relations/concerns
/67/	16 to 30 July-2012	Benedito Gonzalez	Local Villager/Community leader	• Community relations/concerns
/68/	16 to 30 July-2012	Raymundo Flores	Local Villager/Community leader	• Community relations/concerns

Controller

2.3 Resolution of Any Material Discrepancy

To guarantee the transparency of the validation process, the concerns raised by DNV and the response provided by the project proponent and the consultant are documented in a Table of the Validation Protocol in Appendix A.

3 VALIDATION FINDINGS

3.1 G1 – Original Conditions in the Project Area

Within the CCBA PD, the project proponents have illustrated with sufficient detail and supporting evidence the original conditions of the project area. DNV was able to verify the original conditions of the project area through document review and interviews. The original conditions of the project area involved the following descriptions:

Project Area Location and Basic Physical Parameters

DNV was able to confirm the project area location and basic physical parameters presented by the project proponents in the PD through on-site inspection, as well as through review of land titling/forest concession/carbon rights documentation /24//25/. Basic descriptions of climate, soil, geographical, and geomorphological conditions present within this section were found to be appropriate for the area, as well as corroborated by peer reviewed literature and sources.

Types and Condition of Vegetation within the Project Area

As is stated in the PD, the project area comprises of 18 privately owned parcels or “Glebas” adding up to a total of 148,974.8 Ha in the Melgaçao and Portel municipalities, located in the Portel micro region. Forests in the area consist of large and productive trees connected to each other by lianas and parasites. The most important species according to size and value are: i) Hevea brasiliensis (seringueira); ii) Castilla ulei (caucho); iii) Mauritia flexuosa (Miritis); iv) Euterpe oleracea (Açaizeiros); v) Ceiba pentandra (Samaumeira); vi) Cecropia sp. (Embaubeiras) and vii) hardwoods. This information, as well the respective portions of the PD describing these types of vegetation in more detail, were verified by the DNV audit team through on-site inspection as well as through a review of the peer reviewed literature and outside sources used as evidence for the project proponents’ claims. In addition, this was also further corroborated through the remote sensing images presented in both the CCBA /1/ and VCS PD’s /2/.

Boundaries of the Project Area and the Project Zone

The project boundary (accounting area and entire project zone) was confirmed by DNV by reviewing the two documents provided by the project proponents delineating the carbon rights of the area, as well as the jurisdictional areas of the concessions in question /24//25/ as well as through on-site inspection.

Current Carbon Stocks in the Project Area

DNV can confirm that Carbon stocks have been estimated using the most recent version of the Verified Carbon Standard (VCS) methodology "Methodology for Unplanned Deforestation", version 1.1 /30/.This was verified through a review of the carbon accounting data and parameters gathered during initial inventory /27/.

Description of Communities in the Project Zone

DNV can confirm that the description of the communities living within and around the project zone is accurate. Within the description of the PD, the project proponents provide detailed information, outlining the demographic and ethnic makeup of the communities, as well as their traditional and administrative organizations, and their current socio-economic conditions. DNV can verify that all of the information within these sections is accurate, as this was what was corroborated during the on-site inspection and in interviews with community members, villages, and other local stakeholders.

Current Land Use, Property Rights, and Unresolved Conflicts

DNV can confirm that the project proponents have gone out of their way in order to present a very thorough analysis of the current land use, property rights, and unresolved conflicts present in the project area. Land tenure issues can be complicated in this area of Brazil, and therefore a careful analysis of the following topics was included and discussed at length. As mentioned earlier, DNV was able to corroborate the fact the project area is owned in its entirety by the project proponents. However, this is not to say that other people also don't inhabit the area. Considerable populations live within the project boundaries, but outside the intended project area. These communities however, lack forest licenses or authorizations granted by the Secretary of Patrimony of the Para State, the Lands Institute of Para – ITERPA, as well as other possession certificates issued and registered in INCRA. Most of the inhabitants do not have accreditation documents of the areas they manage, nor have they defined physical boundaries between properties. It is for this reason that the project proponents, rather than try and displace these communities from owned land, have ventured the formalization of these lands for community members as part of their community benefits and leakage mitigation strategies.

Current Biodiversity in the Project Zone, and Threats to It

As was presented in the PD /1/, the project zone is inserted in an area of extreme importance for biodiversity conservation, as it holds a great diversity and abundance of species, not only important for the maintenance of ecological relationships, but also of socio-economic importance, such as Brazil nut trees and other noble tree species. DNV was able to verify that the species inventoried for the area were gathered in current literature about Caxiuanã National Forest and correspond to species commonly found in the Brazilian Eastern Amazon for both fauna and flora. As was corroborated through onsite inspection and in interviews with relevant stakeholders, DNV was able to confirm that threats to biodiversity in the area were due to

- Human encroachment and unregulated, unsustainable land use.
- Commercial exploitation

- Climate Change
- Lack of information about the site's biodiversity

High Conservation Values within the Project Zone

DNV can verify that the project proponents have correctly identified areas and/or species of high conservation value within their project zone within the respective portion of the PD dealing with this topic. As mentioned earlier, this was done with the help of data obtained from literature about the Caxiuanã National Forest and through other peer-reviewed literature sources confirming the presence of these species and areas commonly found in the Brazilian Eastern Amazon for both fauna and flora.

3.2 G2 – Baseline Projections

The baseline projections of net emission reductions are based on the approved VCS methodology VM009, "VM0009 Methodology for Avoided Mosaic Deforestation of Tropical Forests Version 2.0"/32/. The project baseline is constructed according to the approved methodology.

3.2.1 Baseline Scenario

The identified baseline scenario of the project is unplanned deforestation for agriculture and cattle ranching facilitated by land speculation and increasing access to the forest resulting from illegal logging. Evidence of this baseline scenario was observed during the site visit: pioneer roads in the forest were clearly visible to the audit team, and evidence of logging (stumps, road construction, transport of logs by river) was seen firsthand. In addition, the project proponent provided scientific literature describing the process of deforestation prevalent in the region (/69/37//38//40//42//43//44//45//46//47//48//49/). Finally, spatial data including remote sensing images clearly shows the expansion of unplanned deforestation near the project area. Interviews with local community members were consistent with the baseline scenario described. The project's baseline is defined in accordance to the selected methodology, and includes a model of the projected deforestation rate and a spatial model of the expected deforestation location.

3.2.2 Additionality Assessment

The project has applied the VCS Tool VT0001 /35/ to demonstrate additionality. Section 2.5 of the VCS PD /1/ includes the details of the project proponent's application of the tool. The application included the identification of alternative scenarios, documentation of baseline determination, and comparison of the potential baseline scenarios against applicable laws, a simple cost analysis, and a common practice analysis. The additionality assessment concluded that the project is additional. Evidence reviewed in the course of the validation of this assessment included /1//2//6//18//37//40//43//44//45//47/.

In line with the methodology, the PD /1/ has identified that the most likely land use scenario is the continuation and proliferation forest encroachment by pioneer activities, eventually leading to an expansion of deforestation. In this scenario, deforestation would be initiated by increased access to the forest by expansion of unofficial roads constructed by illegal selective loggers,

followed by land clearing to support activities such as cattle ranching by agents who are facilitated by the access resulting from the loggers' actions.

In order to demonstrate additionality the project uses the VCS Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities (Version 3.0) /35/. As a first check, the audit team made sure that the project complied with the applicability conditions in order to use the aforementioned tool. These applicability conditions are as follows:

a) AFOLU activities the same or similar to the proposed project activity on the land within the proposed project boundary performed with or without being registered as the VCS AFOLU project shall not lead to violation of any applicable law even if the law is not enforced;

b) The use of this tool to determine additionality requires the baseline methodology to provide for a stepwise approach justifying the determination of the most plausible baseline scenario. Project proponent(s) proposing new baseline methodologies shall ensure consistency between the determination of a baseline scenario and the determination of additionality of a project activity.

DNV can confirm that no similar project, without being registered as a VCS AFOLU project, will lead to violation of any applicable law, even if not enforced. This was further confirmed through interviews conducted with project stakeholders and project personnel during on-site inspection, as well as through an analysis of all applicable laws similar to the one conducted in section 3.3.4 of this report. In addition, as is evidenced in sections 3.1 and 3.5 of the methodology /32/ and the sections 2.4.6 – 2.5.5 of the VCS PD /2/, a stepwise approach is used in justifying the determination of the most plausible baseline scenario. It was thus determined that the applicability conditions for the employment of the pertinent additionality tool were met.

The tool next requires the project proponents to carry out the following four steps to determine if their project is additional:

a) STEP 1. Identification of alternative land use scenarios to the AFOLU project activity;

b) STEP 2. Investment analysis to determine that the proposed project activity is not the most economically or financially attractive of the identified land use scenarios; or

c) STEP 3. Barriers analysis; and

d) STEP 4. Common practice analysis.

As part of the methodology and step 1 of the aforementioned tool, the PD has identified three alternative land use scenarios. These scenarios include forest encroachment by pioneer activities followed by deforestation to implement pastures, timber extraction by the landowner, and implementation of the project activities without registration as a REDD project. The patterns of deforestation described in the analysis were supported as common in this region of this region of Brazil by published scientific literature cited in the VCS and CCB PD's (/1//2/) and were consistent with interviews with local stakeholders described during the site visit.

As part of step 2, the project proponents were able to justify that the costs associated with the VCS AFOLU project demonstrate that the activity produces no financial benefits other than VCU related income /17//18/. According to the tool in use, these arguments thus also allowed the

project proponents to apply a simple cost analysis (Option I) and to conclude that the proposed VCS AFOLU project produces no financial benefits other than VCS related income. This information was confirmed through on-site inspection, interviews with local stakeholders, as well as review off financial documents provided for by the project proponents /6/.

Step 3, the barriers analysis, was not applicable to the project because the additionality tool /35/ allows for the application of either STEP 2 or STEP 3 and does not require that both be applied.

Lastly, as part of the common practice analysis, the project proponent provided a list of other similar projects in the state of Para. Three other projects were identified. The project proponent demonstrated that all differ significantly in scale (two are much larger than the project, the third is much smaller), funding (all are government funded, whereas the project is privately funded), legal land status (two are on government land, a third is on National Institute of Colonization and Agrarian Reform land settlement program areas), and project activities from the existing project (the projects for which information on activities were available utilize direct payment to potential deforestation agents for avoiding deforestation, a strategy that is not employed in this project). DNV concurs with the project proponent's assertion that the project is not common practice.

In conclusion, DNV can verify that the project proponents have employed the correct use of the VCS Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities /35/), that they have followed all of its respective steps correctly, and that thus the project can be considered to be additional.

3.2.3 G3 – Project Design and Goals

As is mentioned within the CCBA PD, the ADPML Portel-Pará REDD Project aims to leverage the financing from the revenues of carbon offset sales to achieve several climate, community, and biodiversity objectives in the project area. Community and biodiversity objectives, along with the corresponding project activities outlined in section G3.2, have been mainly designed to correspond to and address issues identified by project area communities themselves, which DNV has been able to verify through various interviews with community members during on-site inspection, having to do with their well-being, along with their vision and desires for their present and future conditions within their area.

Climate

- To avoid and prevent the unplanned deforestation in native forests thus avoiding the net emission of 22,273,993 tCO2e through a period of 40 years of project's crediting period.

Community

- Secure land tenure for local communities within the project boundary, and advice and support for neighboring communities.
- Enhance livelihoods and food security for communities in the project area.
- Increase local administrative and governance capacity structures.
- Enhance the sustainable use of natural resources.
- Improve community well-being.

Biodiversity

- Retain intact forests and ecosystem integrity at the landscape level.
- Retain and promote recovery of habitat as well as native flora and fauna.
- Retain rare and ecologically valuable species.
- Increase local and outside knowledge of the area's biodiversity values.

Section G3.2 in the CCBA PD describes each project activity area the project proponents are currently or hope to develop adequately. Upon the assessment of on-going and planned project activities during the site visit, it was clear to DNV that these project activities would contribute to the net positive impact of the project. The main project activity areas identified within the CCBA PD include: agricultural improvement and intensification, community capacity building, social capital development, the diversification of economic opportunities, efficient cook stove implementation, small business development, and climate and ecosystem conservation activities. During the audit, a tentative implementation schedule of the various project activities was presented to the audit team. This is a key component for future verifications to ensure that the project activities are moving ahead effectively (Please refer to FARs at the end of this report).

A list of the major risks, both natural and human-induced was identified. The risks identified include the current lack of effectiveness on the side of communities to control the conservation forest area, population growth and agricultural expansion, loss of carbon stocks due to fire, illegal logging, and land clearing. For each of these risks, for each of these risks, DNV can confirm that the project proponents have outlined effective mitigation strategies. The CCBA PD also demonstrates that the project design includes specific measures to ensure the maintenance and enhancement of high conservation values (HCVs) in the project zone. The measures include improving the proponent's ability to monitor HCV species through local employee scouts, biodiversity transects, environmental education, and through participatory conservation.

Through on-site inspection and various interviews with local stakeholders, DNV can confirm that the ADPML Portel-Pará REDD project has adopted a multiphase approach to stakeholder engagement. It has been designed to ensure that stakeholders are able to impact project design, air grievances, and give or withhold free prior and informed consent to participation in project activities. The stakeholder engagement process has been designed to continue throughout the project lifetime in order to inform all stages of project development. Communities and stakeholders will participate with and provide input to the project monitoring program their continued participation as part of an adaptive management approach to project management will be ensured as well as verified during each future verification period. This process will form the basis for ongoing adjustment and continual improvement to project activities.

3.3 G4 – Management Capacity and Best Practices

As stated in the CCBA PD, Avoided Deforestation Project (Manaus) Limited ("ADPML") is the Project Proposer and the entity that provides funding to develop, implement and run the project. On the other hand, Ecosystem Services LLC acts as the main project developer, responsible for implementing and managing the project itself. SETA Ambiental, a local organization, acts as a technical partner that has and will provide logistical field support for carrying out such activities as carbon inventories, social assessments, as well as data analysis of the carbon content of certain

species. The entire project personnel interviewed seemed well versed and trained in their respective duties. DNV also observed project management staff and their interaction with local community members and noted a high degree of effectiveness in achieving relationships and results. Their technical capabilities were also assessed by DNV through personal interviews and reviews of their resumes /19/ . It was found that the project developers, combined with the capacity of their local partners, have more than enough experience under their belt to execute a project of this magnitude.

In addition, DNV was able to prove that that project proponents have in place both a comprehensive plan to ensure that capacity building efforts will target a wide range of people in the communities (including underrepresented groups), as well as for how training will be passed on to new or seasonal workers when there is staff turnover so that local capacity will not be lost at any moment in time (please refer to CAR 5 at the end of this report). Within these standard operating procedures, which can be found directly in the PD itself, DNV made sure the project proponents stipulations also all followed the relevant workers and other relevant laws of the state of Para and Brazil /59//62/.

3.4 G5 – Legal Status and Property Ownership

Based on what was witnessed during the site visit, as well as in evidence presented and reviewed by the audit team /24//25/, DNV can confirm that the project has been developed on privately owned land and that it complies with all the relevant laws and regulations regarding forest protection on private lands. As mentioned earlier however, there is a considerable population of local communities living within the project boundary, though just outside the actual project area where forest conservation activities will take place. Rather than try and displace these communities, part of the intention of the project is precisely to improve their livelihoods and tenure over the land they occupy. Through extensive interviews with villagers, community leaders, and other stakeholder groups, DNV can confirm that the project proponents have begun to carry out a very thorough and wide encompassing process for obtaining the free prior and informed consent of the people to be directly affected by the project activities. Every person interviewed that had been reached thus far has said that they have decided to participate in the project out of their own free will; that they were allowed to arrive at that decision during their own time frame; and through their own particular means of coming to decisions in their respective communities. What's more, a surprising number of community members were not only aware of FPIC as a process, but were also well aware that it was a universal right that they were entitled to under international agreements. As part of the FPIC process, DNV also had to verify that the project proponents had put in place an appropriate grievance process in order to deal with any situation in which community members may feel uncomfortable moving forward, which they have, and is explained at length in sections 3.8 and 3.10 of the PD /1/, as well as in the audit team findings (CAR 5).

However, it is important to note here that even though the project proponents have an effective plan to implement FPIC for the project, they have not been able to reach all of the inhabitants in the project boundary as of yet, and thus are still working towards this goal of obtaining the full free prior and informed consent from all of the populations living in the area. As a result, the next

verification audit team must ensure that the project has carried out what it stipulates in G.5.3, putting a special emphasis on the participative geo-referencing of all communal lands within the project boundaries, including their respective cassava plantations and fallows, in order to obtain a full census of who exactly inhabits the areas surrounding the remaining forest, and to ensure that they are incurring on any land uninvited, irrespective of the notion that these communities may not legally own the land they occupy, in order to avoid conflict and ensure the permanency of the credits being generated (please refer to CARs 6 and 7 and FARs). From information gathered during the site visit and in interviews with these communities, some of these people have been living here for decades, and while the notion of the project helping them formalize their lands is a welcome one, the project proponents still need to reach every village in the project boundary in order to gain the consent of all of the surrounding communities in the area.

Finally, DNV was able to confirm that the project complies with all applicable laws, statues and other regulatory frameworks. Evidence to this effect includes a review of all pertinent legislation identified in the PD and of compliance with the same, then confirmed through interviews with project personnel and other relvant stakeholders and legal experts/59/. A list of the most pertinent legislature identified by the project proponents is as follows:

Relevant Law and/or Regulatory Framework	Description	Project Compliance
Law number 4771, September 15th 1965 (D.0.U of September 16th 1965)	The Brazilian forest code of 1965 – Brazilian Forest Code – provides for example: II – area of permanent preservation: protected area in the terms of article 20 and 30 of this law, covered or not by native vegetation, with the role of protecting the water resources, landscape, geological stability, biodiversity, flux of genes of plants and animals, protect de soil and secure a good environment for the human population; III – Legal Reserve Areas: Area located in the property or "*posse rural*" excluding the areas of permanent preservation, for the sustainable use of the natural resources, conservation and restoration of the ecological process, biodiversity conservation and refugee and protection of native animals and plants; Art. 150 – It is prohibited under empirical form the exploration of primitive forest of the Amazon watershed, but only can be explored in accordance of technical management plans approved by act of Public authorities, to be issued in one year term.	DNV can confirm, through its review of the legal land tenure and titles documentation /24//25/ that all of the project properties are in accordance to the environmental rural registry and the Environmental State Institute.
Normative Instruction number 003 of May 23th 2007 – Executive office of environment , science and technology - SECTAM	Regulatory of the Environmental Rural Registry -CAR in the state of Pará and providence of other requirements. Art 1 – establish criteria and procedures for implementation of the CAR – PA as an instrument for identification of the rural properties in the state of Pará that must be issued by SECTAM-PA in accordance with this Normative Instruction. Art 2 – It is necessary for all rural properties in the state of Pará to be registered in the CAR-PA, even the properties that have no production activity. Art 3 – The issuance of the CAR-PA, as toll for identification of the property will be done only once for each property. It will be a registry number with a sequential number. This number will be in all licenses, authorizations, and other documents issued for the environmental regularization of the rural property. This registry number will be linked to the land, independent if the land is sold,	DNV can confirm that the project is in compliance with this normative instruction through the review of land tenure documentation /24//25/ that confirms the development of Environmental Rural Registries for each of the properties.

	transferred or taken possession by other person. Single Parágraph – There will be no concession of any license for the land that has no registry at CAR-PA. Art 4 – In the CAR-PA it will be mentioned all the basic data of the rural property, Total area- AT, Area of permanent preservation – APP, legal reserve areas – ARL, and area of alternative use of the soil – AUAS , in addition the name and profession of the land owner, geographic coordinates and other information required by complementary laws.	
Federal Decree number 5.975/2006	Art. 10 – Forest exploration and succession formations that require shallow harvest of the forest only will be permitted under specific authorization for alternative land uses issued by SISNAMA. # 1o By alternative land use is understood any conversion of the forest to other land cover, such as settlements, agriculture, pasture, industry, energy generation, mining and transportation.	Through documentation review /24//25/, DNV can confirm that all of the properties within the project area have legal reserve areas and APPs defined.

CL1 – Net Positive Climate Impacts

DNV considered the VCS Standard, VCS AFOLU guidance, VCS approved methodology VM0015 /32/, conditions observed during site visitation, and knowledge of other ecosystems and forest projects when judging the appropriateness of the GHG emission reduction calculations of this project. DNV concludes that all significant emission sources are included in project emission calculations. DNV reviewed the calculations in detail and, with the corrections made in response to the CARs found in the DNV validation report /30/ calculations are correctly applied as specified by the methodology. Factors used in calculations are stated in the project document and are derived from local measurements, the methodology itself, or widely-referenced public sources.

Baseline and Project Emissions

Under methodology VM0015 /32/, GHG Emissions Reductions and Removals are quantified using a series of several steps: an analysis of historical land cover change, an analysis of agents, drivers and causes of deforestation and their likely future development, projection of future deforestation, calculation of baseline land cover changes, and estimation of baseline carbon stock changes. A summary of the steps involved and their validation is provided here. The project proponent has documented the steps in detail in section 2 of the VCS PD and in associated appendices. All of the data and analyses described here were reviewed in detail during the audit process.

The first step in the baseline methodology is the identification of key spatial and temporal project boundaries, which are described in a separate section of this report. The second step requires an analysis of remote sensing imagery for historical land cover change analysis. For this step, the project proponent used a combination of Landsat 5, Alos, Spot 5, and Geoeye images from the historical reference period to prepare maps and tables describing past land cover change in the reference region. The project developer details the steps of this classification in an annex 3 to the

VCS PD /7/. The audit team reviewed the methodologies applied in this analysis to confirm that they conform to methodology requirements and best practices in the field of remote sensing and are in conformance with the methodology.

The third step in the baseline methodology is the identification of agents and drivers of deforestation. To do this, the project developer used a combination of literature, interviews with local experts, and participatory rural appraisals. The analysis identified Riberinhos, Cattle Ranchers, and Illegal loggers as agents of deforestation, with a number of drivers and driver variables identified for each. Evidence used to validate these identifications included interviews in local communities, examination of remote sensing data, and review of literature, including (/35//37//38//40//42//43//44//45//46//47//48//49/). The details of this analysis are presented in section 2.4.6 of the VCS PD /2/.

The fourth step of the baseline deforestation methodology is the projection of the quantity and location of future deforestation. Methodology VM0015 allows for three approaches to predicting future deforestation. The project developers have selected option (a) as outlined in the methodology, in which the rate of baseline deforestation is estimated by using the historical average rate as calculated from imagery analysis conducted in the second step. The selection of this method was justified according the procedures of section 4.1.1 of VM0015, and is the most conservative of the modeling approaches allowed by the methodology. The audit team carefully reviewed all calculations made in the calculation of historic average rate to ensure that they were consistent with VM0015 /32/. The analysis produced a rate of deforestation of 1.77% per year across the entire reference region. The audit team concludes that this rate is consistent with the data presented and the analysis methods prescribed by the selected.

The fifth step in the application of the methodology requires a spatial model be used to predict the location of baseline deforestation. The audit team reviewed the steps performed in this analysis in order to ensure they were conducted in a way that was consistent with the methodology. These steps include the preparation of factor maps, preparation of deforestation risk maps, selection of a deforestation model, and mapping of the location of future deforestation. These steps were conducted using the “Land Change Modeler” from the Idrisi Selva software package. The audit team used interviews with project developers and review of data /1//2//9//17//28/ to determine that the modeling of the location of future deforestation had been conducted in compliance with the requirements of VM0015 /32/

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The sixth step in the application of the methodology requires the estimation of carbon stocks in each land use class. The project proponent used an on the ground inventory to estimate these stocks. The assessment team visited several plots that were part of this inventory to confirm that field methods accurately reflected conditions seen on the ground. In subjectively comparing the data, the assessment team saw no indication that there were systematic errors made during field measurement. Due to accessibility constraints, the project proponents inventoried only a subset of the project area that was most accessible as described in /11/. The audit team found this consistent with the requirements of VM0015, which includes the provision “However, remote areas and areas with poor accessibility (either because of physical or social barriers such as unsafe areas) may be excluded for the location of sampling plots, using a transparent and conservative procedure, such as creating a buffer zone along roads, paths or navigable rivers that may be used for reaching the sampling plots (pg. 135).” After all findings were closed, the audit

team concluded that the carbon stock estimates were made in a way that is free from material error and consistent with the requirements of the methodology.

In addition to field assessment of the biomass inventory, the audit team reviewed all spreadsheets, and equations used to calculate the carbon stock of each stratum and its associated uncertainty. The project used allometric equations and root to shoot ratios selected from the literature that are appropriate to the project area. The audit team also traced a subset of data sheets from their initial field recording through the full calculation process. After all findings were closed, the audit team concluded that the carbon stock estimates were made in a way that is free from material error and consistent with the requirements of the methodology.

Steps seven through nine in the application of the baseline methodology consist of manipulation of the data discussed above through a series of tables and equations to estimate the ex-ante changes in carbon stocks in the project and leakage areas as well as the ex-ante estimation of project GHG gas benefits. The audit team traced the data in the excel worksheets used by the project developer to conduct this analysis to ensure that it was conducted in accordance with the methodology and is free from material errors. DNV concludes that the project will not generate any displacement leakage (discussed further in findings CL12 and CL13 of the VCS PD /2/) and that it has quantified greenhouse gas emissions reductions and removals in a way that is consistent with the requirements of the VCS standard and selected methodology.

Boundaries on emissions sources and carbon pools are presented in the following tables. These boundaries have been validated by review of the selected methodology, by documentation supplied by the project proponent, and by physical field observations. It is DNV's opinion that the selected boundaries are consistent with the requirements of the VCS standard and selected methodology and appropriately justified.

The project's selected carbon pools are defined as follows:

Carbon Pool	Included/Excluded	Justification
Above Ground Biomass	Included	Carbon stock change in this pool is always significant
Belowground Biomass	Included	Included as recommended by the methodology
Dead Wood	Excluded	This pool is less present in the baseline scenario than in the Project scenario, thus is conservatively excluded.
Harvested Wood Products	Excluded	Determined to be insignificant. See /30/ and /15/for evidence
Litter	Included	Allowed by methodology and recommended when significant. Significance was determined by the project proponents proving that this source accounted for more than 5% of the total

		GHG emissions reductions generated, in accordance to the "Tool for testing significance of GHG emissions in A/R CDM project activities.
Soil Organic Carbon	Excluded	Not to be measure when forest is converted to pastures in the baseline scenario according to VCS VM0015 methodology /32/.

The project's selected emissions sources are defined as follows:

Sources	Gas	Included/Excluded	Justification
Biomass Burning	CO_2	Excluded	Counted as Carbon Stock Change
	CH_4	Included	Fires are the main technology used in land clearing
	N_20	Excluded	Excluded as insignificant by the methodology
Livestock Emissions	CO_2	Excluded	Excluded as insignificant by the methodology
	CH_4	Excluded	Conservatively excluded – expected to be greater under the baseline scenario as compared to the project scenario
	N_20	Excluded	Conservatively excluded – expected to be greater under the baseline scenario as compared to the project scenario

The Correctness and Transparency of Formulas and Factors Used

The approaches used to estimate emission reductions are described in further detail in the Project Document /1/ and DNV VCS report /30/. DNV can confirm that the approaches conform to the requirements in the VCS approved methodology used for this project /34/.

Estimated Cumulative Project Emission Reductions

Based on the calculations explained above and the corresponding spreadsheet /27/, DNV has been able to confirm that the calculations to determine the baseline emission and the project emissions were transparent and accurate in line with the methodology used. The overall emission reductions for the first 10 year crediting period can be found in the table below:

Years	Estimated baseline emissions or removals (tCO2e)	Avoided emissions or removals (tCO2e)	Estimated leakage emissions (tCO2e)	Estimated net GHG emission reductions or removals (tCO2e) (prior to buffer contribution)
2009	119,851	5,993	0	113,858
2010	168,764	8,438	0	160,326
2011	213,730	10,686	0	203,044
2012	248,070	12,403	0	235,667
2013	263,188	13,159	0	250,029
2014	309,663	15,483	0	294,180
2015	357,497	17,875	0	339,622
2016	356,364	17,818	0	338,546
2017	344,914	17,246	0	327,668
2018	323,116	17,285	0	340,401

Note: This table summarizes a corresponding table from the VCS PD /2/, where the baseline and project emissions here are the sum of carbon stock changes and non-CO2 GHG emissions. Only the 10 years for which the baseline validated in this report applies are reported here, though all calculations reported in the PD were checked in the validation process.

3.5 CL2 Offsite Climate Impacts "Leakage"

DNV can confirm that the project proponents have correctly followed the appropriate procedure for measuring leakage outlined within the VCS methodology. DNV can conclude that the project will not generate any displacement leakage (discussed further in findings CL12 and CL13 of the DNV validation report /30/) and that it has quantified greenhouse gas emissions reductions and removals in a way that is consistent with the requirements of the VCS standard and selected methodology.

3.6 CL3 – Climate Impact Monitoring

The monitoring plan is presented in section 4.3 of the VCS PD/2/. All of the required data and Parameters relevant to the validation as of the date of this report and verification as of 31 December 2010 are available and provided in section 4.3 of the VCS PD /2/. All of the monitoring equipment and procedures specified in the monitoring plan are applicable and eligible per VCS requirements and the requirements of the methodology.

Parameters available at the time of validation:

- Forest benchmark maps of the reference region, project area, and leakage belt and factor maps were derived from GIS files and remote sensing imagery prepared by the project developer /26/. DNV validated these maps by comparison with the imagery they were digitized from. These maps were used to derive the parameters related to the quantity of land use and Land cover change observed.
- Annual area of baseline deforestation in the reference region, project region, and leakage belt at year t; (parameters ABSLRR, ABSLPA, ABSLLK) DNV reviewed remote sensing data /26/ to confirm that classification had been carried out appropriately. Inputs to spatial models and resulting maps /15/ were reviewed to ensure that modeling was carried as described by the methodology. Land title documents /25/were reviewed to ensure that the project area was appropriately represented in GIS models. Spreadsheets implementing methodology equations /27/ were reviewed to check for computational errors.
- Carbon stocks in each forest class in the project area (Parameters $Ctot_{ic,}$ C_{pl}) and allometric equations (parameter $f_{j((}$DBH) were validated by visiting a subset of carbon inventory plots in the field to ensure that conditions in the field were consistent with data reported, reviewing spreadsheet calculations made by the project proponents in compiling the inventory /9/; and reviewing technical literature describing the allometric equations applied /39//41/
- Parameters $C_{tot,}$ CF, D_j, ER_{CH4}, GWP_{CH4} were taken from the IPCC good practice guidance. DNV cross checked this document /27/to ensure the correct values had been applied.
- The parameters F_{burnt} and P_{burnt} were derived from the forest inventory in the document/14/. DNV checked the calculations used to derive these parameters.
- The parameters DLF and EI are *ex-ante* assumptions made by the project developer. DNV cannot verify that these assumptions are correct as they relate to future conditions in the absence of the project and are thus counter factual. The parameters do not impact the validated baseline, but do impact the *ex ante* estimates of project greenhouse gas emissions. The parameters will not impact *ex post* numbers of credits to be issued that result from project monitoring. The *ex ante* estimates of project benefits will only be correct if these assumptions turn out to be accurate. DNV judged the specific values applied in these assumptions to be immaterial. See discussion in CL12 and CL 13 in the DNV validation report /30/.
- Logging intensity in the region was taken from peer reviewed literature /50/, which was reviewed by DNV to ensure it was applicable to the project area. Additionally, analysis of the carbon inventory showed that the intensity was reasonable /27//14/.
- The Coefficient of Volumetric Efficiency was taken from a government report relevant to the area, which was reviewed by DNV.

The following data and Parameters are determined ex-ante accordance with VM0015 (Version 1.1) /32/
Parameters monitored ex-post:
The following data and Parameters will be monitored ex-post in accordance with VM0015 (Version 1.1) /32/

- Future maps of forest cover in the reference region, project area, and leakage belt will be derived from analysis of remote sensing. DNV has reviewed the procedures described in the monitoring plan and can confirm that they are consistent with the requirements of the methodology and best practices in the field of remote sensing.

Areas of observed deforestation and LULC change will be derived from the maps described above. The methodology and monitoring plan provide clear steps for calculating these values. The risk factor is derived from the application of the VCS AFOLU Non permanence Risk tool /34/, which will be assessed at each verification event.

3.7 CM1 – Net Positive Community Impacts

The project proponents have outlined within the PD the net positive impacts that the project has and will continue to have on local communities. During the site visit, DNV assessed the ongoing and possible future impacts of project activities to local communities and found that the assertions made within the PD are accurate and that the project proponents will deliver significant and measureable benefits back to the community.

DNV can confirm the above statement through the verification that the project proponents are in fact consulting directly with local communities in their elaboration of desirable impacts stemming from project activities. This verification was done through on-site interviews as well as by reviewing the results of the participatory rural appraisals carried out by project personnel with local communities, whose results are directly available in the PD /1/. Also as outlined within the PD, the project proponents have identified the following positive community impacts stemming from the elaboration of their project activities. DNV found these positive impacts to be reasonable and attainable, provided project activities can continue as originally planned and envisioned:

- Secured land tenure
- Diversification of food through agroforestry practices thus an improvement in local nutrition
- More efficient technologies to produce farinha (manioc flour), therefore less time spent on this activity.
- Generation of income from monitoring activities.
- Better understanding of the importance of protecting the forest and how forest conservation will benefit their livelihoods.
- Opportunity to develop local businesses through an external fund.

As far as minimizing the risk of negative impacts, the project proponents have also laid out a series of activities to mitigate such risks and which can be found in the appropriate section of the PD. DNV found no evidence from interviews with community members or other stakeholders to conclude that any harm was or could be brought to areas that provide basic ecosystem services in critical situations, areas that are fundamental to meeting the basic needs of local communities, and or areas that are critical for the traditional cultural identity of communities. In fact, because of the conservation focus of the project, everyone interviewed believed that these high conservation valued areas would only benefit from project activities.

3.8 CM2 – Offsite Stakeholder Impacts

The project proponents have identified that there is an unlikely possibility that the project might have some potential negative offsite stakeholder impacts. These could include the change in volume of resources extracted from the project area that may result in reduced employment or access to these resources outside of the project area, and competition due to increased quality and/or quantity of agricultural products being exported from the project area. However, since the project will not impose on the local's community's ability to continue harvesting and plating their cassava, as well as extracting timber or other construction materials in considerable buffers around their community and away from the actual project area, the DNV audit team was in agreement with the project proponents in deeming that is it not likely that the project will result in any net negative impacts on the well-being of other stakeholder groups.

3.9 CM3 – Community Impact Monitoring

DNV can confirm that the project proponents have designed an initial "Social Impacts Monitoring Plan" in accordance to the results obtained during the rural participatory diagnosis developed in the project area and included in the PD /1/. As evidenced in interviews with local villagers, these initial selected indicators are a result of the products of the proposed activities that have been based on the identification of the necessities by the local populations themselves, as well as strategies foreseen to accomplish these project and broader goals. DNV has also confirmed that the project proponents have plans to ensure that project monitoring and reporting will continue in subsequent years, guided by community input from the newly formed committees and other project stakeholder groups, which will be incorporated into the monitoring plan in order to insure that project objectives, activities, and their expected impacts are being achieved and monitored appropriately. Community impact monitoring will be undertaken during each verification period, which is expected to occur annually.

DNV can also confirm that the high conservation value areas, as discussed in section 3.7, are expected to be positively impacted by the conservation of forests and their respective ecosystems in the area. From onsite inspection and evidence gathered from interviews with local stakeholders /65//66//67//68/, DNV was able to conclude that no negative impacts are anticipated as a result of the intended project activities and that by the project participants; therefore, no additional monitoring outside of this allocation will be needed. DNV has also confirmed that the project will disseminate a complete monitoring plan within 6 months of validation, which needs to be checked by the respective DOE at moment of verification (please see FAR 2 of this report).

3.10 .B1 – Net Positive Biodiversity Impacts

DNV can confirm that due to the conservation nature of this endeavor, that the project will avoid further ecosystem fragmentation of the area and loss due to deforestation. It can conservatively be inferred that vegetation cover will remain intact under the "with project" scenario, and will continue to host important species of great biodiversity and socio-economic value. DNV can also confirm that none of the Project's activities will include reforestation, thus invasive tree species will not be introduced under the forest recovery process, as this will all be natural regeneration. Another positive net impact of the project is the biodiversity monitoring itself. Currently, the monitoring of biodiversity in this part of the Brazilian Amazon is severely lacking, thus gathering more accurate information about the local biodiversity and ecological processes will be invaluable for everyone involved. DNV reviewed alongside the project proponents the full range of potential negative impacts that may arise from the project activity and found these to be credible. These possible impacts were found to be generally related to negative changes in socioeconomic conditions, for example, reduced availability of land for agricultural activities and reduced availability of timber and non-timber forest products. From onsite inspection and evidence gathered from interviews with local stakeholders /65//66//67//68/, DNV was able to conclude that no negative impacts are anticipated as a result of the intended project activities, but that nonetheless, the project proponents are committed to assessing for the occurrence of potential negative or unforeseen impacts to biodiversity, and have incorporated strategies to detect them into their initial monitoring planning explained further in section 3.12.

As mentioned earlier, the project proponents clearly state within the PD that there will not be any negative impacts on the HCVs as their mission and day-to-day activities are to conserve such areas. The audit team was able to confirm this during the on-site assessment of the project activities being implemented. In addition, the PD correctly states that because the project is essentially a conservation project, new species are not being introduced to the project area. The project proponents also clearly state that no genetically modified organisms (GMOs) are being used.

3.11 B2 – Offsite Biodiversity Impacts

The project proponent states that the activities undertaken due to the project will result in no offsite negative impact on biodiversity. Following the site visit to the project site, the audit team was able to confirm that the project will not result in any potential negative offsite biodiversity impacts. In fact, as a result of the protection of forest, it is expected that the increased connectivity of the project zone will have offsite positive biodiversity impacts due to the project activities.

3.12 B3 - Biodiversity Impact Monitoring

According to the CCBA PD /2/, biodiversity variables for monitoring will be selected based on input from communities, stakeholders, and relevant experts, such as the Scientific Station Ferreira
Penna (ECFPn) in the nearby Caxiuanã national forest, and community members will also be directly involved through participatory methods to carry out the required monitoring. While biodiversity monitoring in the area has still yet not commenced, the project proponents have committed to the development of a full monitoring plan within six months of the project

validation, which is permissible under current CCBA guidelines and procedures /29/ and all data gathered from the monitoring strategies will be part of a bigger database also available online. This will need to be verified by the next DOE responsible for carrying out the first periodic verification of the project (see FAR 3 of this report). As a preliminary list of indicators, the project proponents have ventured that the monitoring of the project zone will follow scientific inventories that monitoring species richness, presence and absence of flora and fauna, and their correspondent interactions. Their eventual plan will hope to encompass the following strategies, which the DNV audit team found to be an appropriate model that conforms to similar strategies performed around the world concerning biodiversity monitoring techniques.

- Monitor area-limited species: species that require large patches to maintain viable populations, such as large carnivores. That will indicate potential habitat losses and prey availability.
- Monitor resource-limited species: species requiring specific resources, such as frugivorous species, nectar species, snags etc. Bats can be great bio indicators as they have different feeding habits, such as insects, fruits, nectar/pollen, blood etc.
- Monitor process-limited species: species limited to spatial characteristics, such as flooding, and transport of sediments. The areas containing the flooding forests (igapós and várzeas) constitute an important site of feeding, protection and breeding of fish, amphibians, and invertebrates.
- Monitor invertebrates groups, such as ants: ants have been widely used in Brazil as a powerful tool to monitor environmental impacts, as it has widespread distribution, high abundance, and ecosystem functioning importance, ease of sampling, and well-known taxonomy and ecology.
- Monitor “special interest” species, critically endangered species, endangered species, and threatened species.
- Monitor bryophytes to assess environmental quality, such as soil, air and water quality.
- Monitor land use and changes in vegetation cover.

GL1 – Climate Change Adaptation Benefits

The CCBA PD /2/ identifies risks to the project’s climate, community and biodiversity benefits resulting from likely climate change and climate variability impacts. Risks include variability of available rainfall, unpredictable drought and flood periods through the year, more powerful wind and other natural risk events, and a need for increased area for cropland as a result of a decrease in food security through climate change effects on agricultural fields due to higher temperatures and the change in rainfall frequency. DNV found these risks to be reasonable given the likely expected climate change impacts for the area and local land-use, as well as because these findings corroborate with IPCC and other forecast reports from the Brazilian Ministry of the environment on the expected consequences of climate change for this part of the Amazon.

As the PD states and as assessed during the site visit, the project proponent demonstrates that the project activities will assist communities and biodiversity in adapting to the probable impacts of climate change. According to the project proponents, this will be achieved through an improvement in the socio-ecological resilience of the area, a reduction of the vulnerability and

the improved adaptation capacity of communities and biodiversity through a better management of the natural resources, which would include adaptive management. In specific, project activities involve plans to help communities intensify and diversify their crops with appropriate and adaptive agroforestry practices, thereby also contributing to food security concerns, and it is also expected that forest protection in the project area will provide a healthier ecosystem with a higher resistance and recovery capability to extreme meteorological phenomena and a wide range of benefits to the neighboring communities. This will also be achieved by creating alternative livelihoods to subsistence farming and the protection of local flora and fauna as well as critical watershed systems that depend upon the forest for equilibrium. A more detailed list of these mitigation measures can be found in section GL1.4 of the PD /1/.

3.13 GL2 – Exceptional Community Benefits

The project proponents have elected not to pursue these optional Gold Level criteria.

3.14 GL3 – Exceptional Biodiversity Benefits

According to the PD and referenced peer-reviewed literature, the project area lies within an ecological region that supports a number of species that are either critically endangered or endangered. A complete list of these species can be found in section 3.1 of the PD /1/ and DNV can confirm that these species are in fact shown as endangered on the IUCN Red List of Threatened Species. Whilst direct biodiversity monitoring has still not occurred directly within the project area, it is reasonable to expect that these species are present with the project area due to its remote location, characteristics, and interviews conducted with local villagers; however, this will have to be confirmed at time of verification (see FAR 3 of this report) when in fact the project proponents have commenced to implement a comprehensive biodiversity monitoring plan of the area, and where the presence of these species can thus also be finally confirmed.

5 CCB VALIDATION CONCLUSION

Det Norske Veritas (U.S.A.), Inc. (DNV) has performed a validation of the "ADPML Portel-Pará REDD Project" in Brazil on the basis of CCBA Climate, Community, and Biodiversity Project Design Standards (Second Edition), at the Gold level.

The project proponents are the ADPML Avoided Deforestation Project (Manaus) Limited ("ADPML"). The project developers were Ecosystem Services LLC. DNV has confirmed that the project proponents have the right to all and any reductions generated by the Project.

The review of the project design documentation and the subsequent follow-up interviews have provided DNV with sufficient evidence to determine the fulfilment of stated criteria.

The project correctly applies the approved VCS methodology VM0015 "Methodology for Avoided Unplanned Deforestation" Version 1.1, for the quantification of GHG emissions reductions and monitoring of leakage.

The project activity is to avoid unplanned deforestation through a series of project activities that include monitoring, capacity building, and providing land ownership rights to local people. Through a combination of forest protection and sustainable development activities, this project is estimated to avoid the emission of approximately 22 million tonnes of CO2e over the project lifetime, 2.2 million of which is predicted to be issued as tradable VCUs in the ten year baseline period to which this report applies. These emissions would have resulted from deforestation of approximately 20% of the project area in the baseline scenario over the next forty years.

Adequate training and monitoring procedures have been implemented to monitor how climate, community, and biodiversity are affected by the project activities.

In summary, it is DNV's opinion that the "ADPML Portel-Pará REDD Project" in Brazil as described in the CCBA PD of 17 January 2013, meets all relevant CCBA requirements, as well as the Climate Change Adaptation and Exceptional Biodiversity Benefits at the Gold level.

6 CCBA COMPLIANCE CHECKLIST – THE ADPML PORTEL-PARÁ REDD PROJECT

General Section			***Conformance***		
G1.	Original Conditions in the Project Area (Required)	Yes	☒	No	☐
G2.	Baseline Projects (Required)	Yes	☒	No	☐
G3.	Project Design and Goals (Required)	Yes	☒	No	☐
G4.	Management Capacity and Best Practices (Required)	Yes	☒	No	☐
G5.	Legal Status and Property Rights (Required)	Yes	☒	No	☐
Climate Section					
CL1.	Net Positive Climate Impacts (Required)	Yes	☒	No	☐
CL2.	Offsite Climate Impacts (“Leakage”) (Required)	Yes	☒	No	☐
CL3.	Climate Impact Monitoring (Required)	Yes	☒	No	☐
Community Section					
CM1.	Net Positive Community Impacts (Required)	Yes	☒	No	☐
CM2.	Offsite Community Impacts (Required)	Yes	☒	No	☐
CM3.	Community Impact Monitoring (Required)	Yes	☒	No	☐
Biodiversity Section					
B1.	Net Positive Biodiversity Impacts (Required)	Yes	☒	No	☐
B2.	Offsite Biodiversity Impacts (Required)	Yes	☒	No	☐
B3.	Biodiversity Impact Monitoring (Required)	Yes	☒	No	☐
Gold Section					
GL1.	Climate Change Adaptation Benefits (Optional)	Yes	☒	No	☐
GL2.	Exceptional Community Benefits (Optional)	Yes	☐	No	☒
CL 3.	Exceptional Biodiversity Benefits (Optional)	Yes	☒	No	☐

CCBA Validation Level Attained:

Approved (all requirements met)	☐
Gold (all requirements and also at least one optional Gold Level criterion met)	☒

APPENDIX A

CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS

Table Resolution of Corrective Action and Clarification Requests

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
CAR1	**Requirement** The project proponents must include…."An evaluation of whether the project zone includes any of the following High Conservation Values (HCVs) and a description of the qualifying attributes: 8.1. Globally, regionally or nationally significant concentrations of biodiversity values; a. protected areas13 b. threatened species14 c. endemic species15 d. areas that support significant concentrations of a species during any time in their lifecycle (e.g. migrations, feeding grounds, breeding areas). 8.2. Globally, regionally or nationally significant large landscape-level areas where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance;	In response to this observation, we have modified the following sections of the PDD accordingly: G1.8.5. Areas that are fundamental for meeting the basic needs of local communities (e.g., for essential food, fuel, fodder, medicines or building materials without readily available alternatives) G1.8.6. Areas that are critical for the traditional cultural identity of communities (e.g., areas of cultural, ecological, economic or religious significance identified in collaboration with the communities). Pages 65-68 1. The period refers to six months after the Project achieves VCS and CCB validation. (page 66 3rd paragraph) 2. Local villagers collect residual timber after applying slash and burn to capoeiras (regenerated plots formerly used for cassava crops) because such logs have a small diamete, are not very tall and are easy to transport given the lack of motorized ground vehicles in local villages.During the validation site visit it was verified in-situ that riberinhos don't have cassava plots farther than 3Km. Thus, firewood will not come from a distance greater than 3Km, which is also supported by the results of the PRA. The use of timber derived from capoeiras (small diameter trees)	Upon revision of the revised sections of the PDD in relation to this CAR, DNV can now verify that the descriptions regarding areas fundamental for meeting the basic needs of local communities and those critical for the traditional cultural identities of the same are now more in line with reality and with what was witnessed during the onsite assessment and visit. However, the following statements found within these revised sections raise further concerns: 1. "It is important to mention that the spatial identification of the High Conservancy Value Areas (HCVA) will be improved together with the population as a part of the activities to be implemented during the participatory census within the first 6 months of the project." DNV seeks further clarification as to the meaning of the "first six months of the project" (does it refer to six months

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
	8.3. Threatened or rare ecosystems;16 8.4. Areas that provide critical ecosystem services (e.g., hydrological services, erosion control, fire control); 8.5. Areas that are fundamental for meeting the basic needs of local communities (e.g., for essential food, fuel, fodder, medicines or building materials without readily available alternatives); and 8.6. Areas that are critical for the traditional cultural identity of communities (e.g., areas of cultural, ecological, economic or religious significance identified in collaboration with the communities)"……..per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failure** While the project proponent's description of the project zones' areas of High Conservation Value contain robust and complete information regarding the flora and fauna present in the region, the description within	is made evident by the pictures included in Validation Evidence> CCB Specific_Validation>Evidence for firewood gathering> pictures of firewood sources (page 68 3rd paragraph) 3. Regarding the claim that community members do not claim land or livelihood activities farther than 3Km from river boundaries: Local people harvest manioc in the LMA, which goes up to 3km from rivershores inwards mainland. As required by the VCS standard, the Project Area has been forest for at least the past 10 years and giving rotation periods for capoeiras (2-3 years) such areas are not included in the Project Area but remain as part of the LMA. As identified by our PRA and witnessed by the audit team during on-site inspections, local people would not undertake agricultural activities farther than 3Km from rivershores because it is exhausting to cover greater distances by foot on a daily basis. Also, riberinhos' economic activity - farinha sale-depends on the river (washing, peeling, and drying cassava as well as cooking and selling farinha). Farinha is sold either at the rivershores to itinerary merchants or transported by boat to Portel. Therefore, covering large distances by foot does not make sense to them. For this reason, riberinhos do not claim land-use rights or livelihood activities farther than 3Km. The	from the start of project, validation of project, etc? 2. "It is important to mention that fuel wood is not collected farther than 3 km from the shores where the population is settled". DNV seeks further clarification and objective evidence to substantiate this stated claim. 3. "The Project won't prevent local people from continuing their food-gathering activities in the Project Area, as long as such activities are carried-out to support local livelihoods but not to support commercial objectives." Through on-site inspection, the audit team witnessed local communities using their harvested manioc to produce "farhina" flour which was then sold for commercial purposes rather than for local consumption. DNV requests that the project proponents clarify what the above statement will mean for this production and what repercussions this may have for local stakeholders.

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
	this section of the PDD describing sections 8.5 and 8.6 of this requirement are weak, as they only point towards hunting with regards to meeting the basic needs of local communities, and it also makes a reference to the project zone holding no critical importance for the traditional cultural identity of local stakeholders, while in fact some locals have been on this land for more than fifty years and on-site inspection of the areas also provided evidence contrary to this statement.	only time riberinhos go beyond 3Km is when they hunt and need to go into the forest, which is part of the Project Area. (page 66 4th and 5th paragraphs) Regarding the continuity of farinha production: Local people will be able to continue hunting and gathering food in the Project Area as long as they don't do so with commercial objectives. As mentioned above, cassava growing and harvesting happens no farther than 3Km from rivershores, which is the area comprised in the LMA. For this reason, cassava growing and farinha production will not only continue to happen in the LMA but will be also improved through agroforestry practices and energy efficient cookstoves , just as detailed in the activities of the Project. (page 66 last paragraph)	Upon review of the new evidence /x/ and revised sections of the PD, DNV can now satisfactorily bring this CAR to a close. CAR 1 is closed.
CAR2	**Requirement** "Document and defend how communities and other stakeholders potentially affected by the project activities have been identified and have been involved in project design through effective consultation, particularly with a view to optimizing community and stakeholder benefits, respecting local customs and values and maintaining high conservation values. Project developers must	In response to this observation, we have modified the following sections of the PDD accordingly: G3.8. Involvement of Communities in Project Design and Provisions for Stakeholder Consultation During Project Implementation Sub-section: Participation in the Project design Pages 98-103	Upon review of the pertinent revised section of the PDD, DNV can now find specific examples of how input from local communities and stakeholders has influenced many of the established goals and objectives of the project. CAR2 is now closed.

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
	document stakeholder dialogues and indicate if and how the project proposal was revised based on such input. A plan must be developed to continue communication and consultation between project managers and all community groups about the project and its impacts to facilitate adaptive management throughout the life of the project. per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failures** While the project oproponents clearly state within their PDD that the project objectives stem directly from the input received from local communities through the use of PRA's, and despite this being corroborated through onsite inspection and interviews with the same, the PDD still lacks clear examples of how the input received from local communities directly impacted and influenced the desired objectives and activities of the REDD project.		
CAR 3	**Requirement** "Formalize a clear process for handling unresolved conflicts and grievances that arise during project	In response to this observation, we have modified the following sections of the PDD accordingly: G3.10. Process for Handling Unresolved	Upon review of the pertinent sections of the PDD revised by the project proponents, DNV can now substantiate, through the creation of

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
	planning and implementation. The project design must include a process for hearing, responding to and resolving community and other stakeholder grievances within a reasonable time period. This grievance process must be publicized to communities and other stakeholders and must be managed by a third party or mediator to prevent any conflict of interest. Project management must attempt to resolve all reasonable grievances raised, and provide a written response to grievances within 30 days. Grievances and project responses must be documented.- per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failure** While the project proponents have devised a comprehensive plan on how to handle conflicts and/or grievances with project stakeholders, they have failed to make it exactly clear in what specific instances and circumstances this process will need to involve a third party. In addition, the project proponents have yet to include provisions within this plan as to the	Conflicts G3.8. Involvement of Communities in Project Design and Provisions for Stakeholder Consultation During Project Implementation Sub-section: Stakeholders Committee Pages 106-110, 103-106 In response to the latest round of back and forth regarding this observation, we have modified the following sections of the PDD accordingly: G.3.10 Process for Handling Unresolved Conflicts "The conflict resolution approach will be sequentially adopted and will respond to the conformity or inconformity of the complainer to the proposed solution. The evaluator may also propose a specific approach for the resolution depending on the complexity of the case and the assessment of the same. The present mechanism does not exclude the right of local people to present the case to any public entities estimated to be convenient. Actually, during the census, the Project's management team will inform local people of the creation of such committee and will be informed of their right to present grievances directly to	this mentioned stakeholders committee, of exactly how a third party will become involved when dealing with a complaint, as well as what exactly the complaint/dispute resolution process will entail. However, it is the audit team's criteria that the availability of a more direct line of grievance mechanism that supersedes that of the project proponents or project personnel is also available to all project stakeholders (local authorities, judicial system). CAR 3 remains open. In addition, the creation of the aforementioned stakeholders committees is something that the next audit team will have to verify once the project is ready for its first periodic verification. This CAR thus also becomes FAR 4. Based upon the response provided for by the project proponents and the respective modifications that have been made to the PD, DNV can now bring this CAR to a close. CAR 3 is now closed.

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
	ability and knowledge of project stakeholders to send a complaint or a grievance to some authority other than that of the project proponents in case the grievance/complaint is made directly against them or would need to involve a different authority.	public entities, making a clear point that all claims and/or complaints will be addressed equally notwithstanding the line of grievance." (page 108 3rd paragraph)	
CAR 4	**Requirement** The project proponents must…. "Identify a single project proponent which is responsible for the project's design and implementation. If multiple organizations or individuals are involved in the project's development and implementation the governance structure, roles and responsibilities of each of the organizations or individuals involved must also be described.", per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failure:** While the main project proponent and their implementing partners have been identified in the PDD, it remains unclear as to what the role for Ecosystem Services and SETA Ambiental will be throughout the rest of the lifetime of the project.	In response to this observation, we have modified the following sections of the PDD accordingly: G.4.1 Identification and Roles of Project Proponents Pages 111-112 In response to the latest round of back and forth regarding this observation, we have modified the following sections of the PDD accordingly: G.4.1 Identification and Roles of Project Proponents	Upon revision of the revised sections of the PDD dealing with this issue, DNV is still not clear as to what the roles of each project proponent will be in the future of the project (i.e. will Ecosystem Services manage the project indefinitely?, Will SETA always be the entity in charge of carrying out inventory measurements for future verification periods?) Upon revision of the now re-revised section of the PD, DNV can now confirm that the respective duties and obligations of the project entities involved with the project in the future have now been defined. CAR 4 is now closed.

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
CAR 5	**Requirement** "Include a plan to provide orientation and training for the project's employees and relevant people from the communities with an objective of building locally useful skills and knowledge to increase local participation in project implementation. These capacity building efforts should target a wide range of people in the communities, including minority and underrepresented groups. Identify how training will be passed on to new workers when there is staff turnover, so that local capacity will not be lost." per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failure** Not included in the plan for this particular section of the PDD and in response to this requirement, the project proponents have failed to include the following: 1. How these capacity building efforts will target a wide range of people in the communities, including minority and	In response to this observation, we have modified the following sections of the PDD accordingly: G4.3. Plan to Provide Orientation and Training to the Project's Employees G.4.4 Equal Opportunity of Local Community Members for Employment CM4.2. Wide range of groups CM.4.3 Women Participation CM.4.4 Knowledge transfer strategy Pages 115-118, 119, 145-146	Upon review of the revised sections of the PDD, the DNV audit team can now verify that the project proponents now have both a comprehensive plan to ensure that capacity building efforts will target a wide range of people in the communities (including underrepresented groups), as well as for how training will be passed on to new or seasonal workers when there is staff turnover so that local capacity will not be lost at any moment in time. CAR 5 is now closed.

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
	underrepresented groups. 2. How training will be passed on to new workers when there is staff turnover, so that local capacity will not be lost.		
CAR 6	**Requirement** "Document that the project has approval from the appropriate authorities, including the established formal and/or traditional authorities customarily required by the communities. per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failure** Not included in this section of the respective PDD is the plan for the project proponents to attain project approval from the relevant traditional authorities of local communities.	In response to this observation, we have modified the following sections of the PDD accordingly: G.1.5 Community Information/ Specific Objective 1 G5.2. Document that the project has approval from the appropriate authorities, including the established formal and/or traditional authorities customarily required by the communities. Pages 38-39, 123-124	From the information now included, the revised sections of the PDD, DNV can now conclude that the project proponents have an effective plan to implement FPIC for the project. However, it must be noted that the project is still working towards this goal, and that FPIC at the moment has yet to be instituted. As a result, the next verification audit team must ensure that the project has carried out what it stipulates in G.5.3, with a special emphasis on the participative geo-referencing of communal lands with the borders of the project area so that there are no conflicts present with community members and leaders in this respect. This CAR is now closed, but becomes FAR 5. In this respect, the claim that community members do not claim land or livelihood activities that extends further than 3 km from river boundaries is still unsubstantiated until

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
			this can be confirmed during verification of the project activities. (see CAR 1, now closed).
CAR 7	**Requirement** "Demonstrate with documented consultations and agreements that the project will not encroach uninvited on private property, community property, or government property and has obtained the free, prior, and informed consent of those whose rights will be affected by the project per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failure** There is currently no description of how the project proponents will implement a process of free, prior, and informed consent in order to get the approval of the project from local communities, who may not have legal rights to the land they occupy, but who have traditional tenure over the land, in this pertinent section of the PDD.	In response to this observation, we have modified the following sections of the PDD accordingly: G.1.5 Community Information/Specific Objectives G.1.5 Community Information/ Specific Objective 1 G5.3. Demonstrate that the project will not encroach uninvited on private property, community property, or government property Pages 36, 39, 124-127	In response to this observation, please refer to the response of the previous CAR. The result will be the same for this instance. This CAR is closed but has also now become FAR 5.
CAR 8	**Requirement** "Identify all species to be used by the project and show that no known invasive species will be introduced	In response to this observation, we have modified the following sections of the PDD accordingly: Executive Summary-section C, 3rd and 5th	Upon review of the newly revised sections of the PDD carried out by the project proponents, DNV can now conclude that the project will not be

CAR ID	Corrective action request	Response by project proponents	DNV's assessment of response by project proponents
	into any area affected by the project and that the population of any invasive species will not increase as a result of the project. per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Evidence and Failure** There is currently no mention of whether the project will introduce or not any invasive species into the area.	paragraphs G3.2: Description of Each Project's activity Sub-section : 5. Provide capacity building in agroforestry techniques and implement agroforestry pilots (Paragraph 3) B.1.1 Biodiversity Impacts "With Project" Scenario (paragraphs 3 and 5) Pages 10, 91, 150	introducing any invasive species into the area. CAR 8 is closed.

CL ID	Clarification request	Response by project proponents	DNV's assessment of response by project proponents
CL1	**Requirement** The project proponents must include……."A description of current land use and customary and legal property rights including community property in the project zone, identifying any ongoing or unresolved conflicts or disputes and identifying and describing any disputes over land tenure that were resolved during the last ten years per Climate, Community and Biodiversity Project Design Standards (2nd Edition.)	In response to this observation, we have modified the following sections of the PDD accordingly: In response to this observation, we have modified the following sections of the PDD accordingly: Executive Summary-section C, 3rd and 5th paragraphs G3.2: Description of Each Project's activity Sub-section : 5. Provide capacity building in agroforestry techniques and implement agroforestry pilots (Paragraph 3)	Upon revision of the newly revised sections of the PDD dealing with this issue, the DNV audit team finds the project proponents response satisfactory as it now delineates specifics about potential problems the project might face as well as mitigation plans as to how to deal with them. CL1 is now closed.

CL ID	Clarification request	Response by project proponents	DNV's assessment of response by project proponents
	Clarification Within the relevant portion of the project proponent's PDD, which deals with this particular requirement, the project proponents claim the following, "On the other hand, at the level of community and resources management, the PRA has identified problems that could generate conflict. Such problems are generated by the presence of foreign extraction of resources such as timber and fish". The auditors kindly request additional information regarding the aforementioned conflicts that could generate complications for the project, as well as what mitigation plans are in place in order to minimalize such risks.	B.1.1 Biodiversity Impacts "With Project" Scenario (paragraphs 3 and 5) Pages 54-55	
CL2	**Requirement** "Describe each project activity with expected climate, community and biodiversity impacts and its relevance to achieving the project's objectives. per Climate, Community and Biodiversity Project Design Standards (2nd Edition.) **Clarification** Within section 3 of the PDD regarding this particular requirement, the project proponents state the following, "The	In response to this observation, we have modified the following sections of the PDD accordingly: For ADPML project such evidence can be found in page #3 of the PDF document " Conservation Easement, Carbon rights and Land Concession for Villagers". For ADPML project such evidence can be found in page #1 of the PDF document " Land Ownership for Villagers". In response to the latest round of back and	DNV kindly requests that the project proponents include the respective information which they have outlined here, as these documents with respect to both projects cannot be found within the response documentation submitted. Upon review of the provided evidence DNV can now bring this CL to a close. CL 2 is now closed.

CL ID	Clarification request	Response by project proponents	DNV's assessment of response by project proponents
	Project's Management Team, in cooperation with the landowner, have put forward a proposal to regularize land tenure status of those villagers living in the LMA. The landowner has signed an agreement to provide official land-use rights to villagers in the LMA with the hopes that they will own these lands in 40 years." The audit team kindly requests to see this aforementioned proposal as well as the signed agreement being referred to in this comment.	forth regarding this observation, we have provided the corresponding evidence directly to DNV's audit team.	
CL3	**Requirement** Per the Climate, Community and Biodiversity Project Design Standards (2nd Edition), the project proponents must, "Describe what specific steps have been taken, and communications methods used, to publicize the CCBA public comment period to communities and other stakeholders and to facilitate their submission of comments to CCBA. Project proponents must play an active role in distributing key project documents to affected communities and stakeholders and hold widely publicized information meetings in relevant local or regional languages.	In response to this observation, we have modified the following sections of the PDD accordingly: G.1.5 Community Information / Specific Objective 1/ 2nd paragraph G3.9. Procedure to publicize Public Comment Period Pages 38, 106	DNV deems the project proponents' response to this finding sufficient, yet these three points will now also become something that the following audit team must now verify CL3 is now closed, but becomes FAR 6.

CL ID	Clarification request	Response by project proponents	DNV's assessment of response by project proponents
	Clarification Within the section of the PDD dealing directly with this requirement, the project proponents claim the following: 1. "The PDD for CCB will be published in English on CCBA's website and a summarized version of the document (both in Spanish and Portuguese) will be posted in ESLLC webpage for the 30-day public comment period. 2. A printed version of the document will be distributed in the participating communities for free consultation. 3. In addition, ESLLC will organize a series of community sessions to present the simplified Portuguese version of the document. All comments (either in Spanish or Portuguese) will be translated to English, and then added to an annex of this PDD. The audit team kindly requests additional evidence to support that the actions stipulated in the three comments made above have in fact		

CL ID	Clarification request	Response by project proponents	DNV's assessment of response by project proponents
	taken place.		
CL 4	**Requirement** Per the Climate, Community and Biodiversity Project Design Standards (2nd Edition), the project proponents must, "Identify any illegal activities that could affect the project's climate, community or biodiversity impacts (e.g., logging) taking place in the project zone and describe how the project will help to reduce these activities so that project benefits are not derived from illegal activities." **Clarification** While this section of the PDD contains a description of how illegal activities will be mitigated against, it does not contain a comprehensive list or description of the actual activities. More information on such activities is requested by the audit team.	In response to this observation, we have modified the following sections of the PDD accordingly: G5.5. Identification and Mitigation of Illegal Activities Page 128	Upon revision of the revised portions of the PDD, DNV can now conclude that a comprehensive list and description of the actual activities in question are now present in the project documentation. CL 4 is now closed.
CL 5	**Requirement** Per the Climate, Community and Biodiversity Project Design Standards (2nd Edition), the project proponents must, "Estimate any other GHG emissions resulting from project activities. Emissions sources include, but are not limited to, emissions from biomass burning during site	In response to this observation, we have modified the following sections of the PDD accordingly: CL1.3. Other GHG Emissions from Project's activities Page 133	The DNV audit team finds the response to this finding, now also included within the revised section of the PDD, to be satisfactory enough in order to close this finding. CL 5 is now closed.

CL ID	Clarification request	Response by project proponents	DNV's assessment of response by project proponents
	preparation, emissions from fossil fuel combustion,36 direct emissions from the use of synthetic fertilizers,37 and emissions from the decomposition of N-fixing species. **Clarification** While this section of the PDD contains the following statement, "The Project activities will not generate non-CO2 emissions.", the audit team kindly requests some type of explanation or evidence used to arrive to this statement.		
CL6	**Requirement** Per the Climate, Community and Biodiversity Project Design Standards (2nd Edition), the project proponents must, "Use appropriate methodologies to estimate the impacts on communities, including all constituent socio-economic or cultural groups such as indigenous peoples (defined in **G1**), resulting from planned project activities. A credible estimate of impacts must include changes in community well-being due to project activities and an evaluation of the impacts by the affected groups. This estimate must be based on clearly defined and defendable assumptions	In response to this observation, we have modified the following sections of the PDD accordingly: G.1.5 Community Information / Specific Objective 1 and 2 CM1.1. Methodologies to Estimate Impacts on Communities CM.3.1 Selecting Community Variables to be Monitored Pages 39, 139-140, 142-144	Upon review of the new information provided for in the revised section of the PDD, DNV can now conclude that there is in fact an effective plan to develop a comprehensive methodology and monitoring plan for community impacts. CL 6 is now closed.

CL ID	Clarification request	Response by project proponents	DNV's assessment of response by project proponents
	about how project activities will alter social and economic well-being, including potential impacts of changes in natural resources and ecosystem services identified as important by the communities (including water and soil resources), over the duration of the project. The 'with project' scenario must then be compared with the 'without project' scenario of social and economic well-being in the absence of the project (completed in **G2**). The difference (i.e., the community benefit) must be positive for all community groups. **Clarification** While this section of the PDD contains the expected positive impacts for local communities affected by the project, there is no information regarding a methodology or monitoring plan to be employed by the project proponents to track progress in this respect. More information on the topic is kindly requested by the audit team.		

FAR ID	Forward action request	Response by project proponents	DNV's assessment of response by project proponents

FAR ID	Forward action request	Response by project proponents	DNV's assessment of response by project proponents
FAR1	**Requirement** **"**Comprehensively assess situations and occupations that pose a substantial risk to worker safety. A plan must be in place to inform workers of risks and to explain how to minimize such risks. Where worker safety cannot be guaranteed, project proponents must show how the risks will be minimized using best work practices. **Evidence and Action Request** At the time of the first verification, the auditing body must ensure that the plan relevant to this requirement and the referenced guidance by the project proponents in the PDD is complete, and has been distributed to relevant stakeholders		FAR1 is open.
FAR2	**Evidence and Action Request** The audit team selected for the project's first verification against the CCB standard must ensure that the following claim made by the project proponent is held true, "Ecosystem Services LLC will develop a full monitoring plan (regarding community impact monitoring) within six months of validation of the project.		FAR2 is open.
FAR3	The audit team selected for the project's first verification against the		FAR 3 is open.

FAR ID	Forward action request	Response by project proponents	DNV's assessment of response by project proponents
	CCB standard must ensure that the following claim made by the project proponent is held true, "The project is committed to develop a full monitoring plan (regarding biodiversity impact monitoring) within six months of the project start and all data gathered from the monitoring strategies will be part of a bigger database, available online."		