

KUAMUT RAINFOREST CONSERVATION PROJECT – VERIFICATION REPORT



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Crediting period	11 December 2015 to 10 December 2045
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CCB Standards version	3.1
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Technical reviewer 2: Adrián Vidal

Summary:

AENOR CONFÍA S.A.U (hereafter AENOR), has carried out the verification of the Kuamut Rainforest Conservation Project (hereafter KRCP), Verra ID 2609, under the VCS and CCB Programs. The project activity is classified under sectoral scope 14, which covers Agriculture, Forestry, and Other Land Use (AFOLU), specifically within the Improved Forest Management (IFM) category, according to the latest VCS Standard (version 4.7). This large-scale initiative aims to implement enhanced forest land use management practices, contributing to the conservation of 83,381 hectares of forest in Sabah (Malaysia). The project is being carried out by Permian Malaysia Sdn. Bhd. The relevant VCS methodology, VM0010 version 1.4, has been applied to calculate the greenhouse gas reductions resulting from the project. Emissions reduction calculations have been conducted in a transparent and conservative manner and are provided in the form of spreadsheets and R files for verification purposes. The project is also developed in alignment with the Climate, Community, and Biodiversity Standards (CCB) and adheres to the Gold Level criteria for climate, community and biodiversity.

The project start date is 11 December 2015 and will be operational until 10 December 2045. The estimated net GHG emissions reductions and removals at validation for the 30-year project span were 16,291,489 tCO₂e, at an average of 543,049 tCO₂e/yr. The emissions reduction for the current monitoring period (01 January 2022 to 31 December 2023) is 1,574,813 VCUs, which is divided in 731,958 VCUs for reductions and 842,855 VCUs for removals. The risk rating is 12%, and was calculated through the NPRT within the Verra Hub. This is not a grouped project.

The purpose of the verification was to determine the conformance of the project with respect to the VCS Version 4.7 and CCB Third Edition and the validated PD, and the assessment of the ex-post monitored anthropogenic GHG emissions reductions and/or removals that have occurred as a result of the project's activities. The scope of the verification was to assess the conformance of validated project, once implemented, with the VCS and CCB requirements and requirements in the validated PD. The process was performed through a combination of desk review, interviews, and communications with relevant personnel. This is the second verification event, corresponding to the monitoring period from 1 January 2022 to 31 December 2023.

During the verification 13 CLs and 12 CARs were raised. All these issues were appropriately closed by means of corrections, more clear explanations, and other supporting documents. Two Forward Action Request (2 FAR) was also raised and described in this report.

Once all issued detected were appropriately resolved, AENOR carried out this final verification report and deems with reasonable level of assurance that the project complies with all of the verification criteria. The assessment team has no restrictions or uncertainties with respect to the compliance of the project with the verification criteria, hence, the audit team concludes that the cumulative net GHG emissions reductions or removals of 1,838,122 tCO₂e over the monitoring period has been quantified in accordance with VCS rules. A buffer discount rate of 12% was applied, resulting 1,574,813 VCUs eligible for issuance. AENOR confirms that the project has achieved the Climate Gold, Community Gold and Biodiversity Gold distinctions for the verified monitoring period in accordance with the Third Edition CCB Standards.

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1 INTRODUCTION

1.1 Objective (VCS, 4.1; CCB Program Rules, 4.2)

The objective of the verification audit was to conduct an independent assessment of the project to determine:

- The extent to which methods and procedures, including monitoring procedures, have been implemented in accordance with the validated project description, including the monitoring plan.
- The extent to which GHG emission reductions and removals reported in the monitoring report are materially accurate.
- The accuracy of the processes and activities carried out under the CCB standards which have also been implemented under the monitoring plan.

1.2 Scope and Criteria (VCS, 4.1; CCB Program Rules, 4.2)

The scope of the verification included the review of the GHG project and implementation; physical infrastructure, activities, technologies, and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods covered.

The project follows the framework an Agriculture, Forestry, and Other Land-Use (AFOLU) project. Project activities are categorized as Improved Forest Management (IFM). Under the category *Logged to protected forest*. The geographic verification scope is defined by the project boundary, the carbon reservoir types, management activities, inventory program, and contract periods.

The monitoring period for this verification is from 01 January 2022 to 31 December 2023.

The scope of this audit included a verification of the projects calculated reductions and removals with the Verified Carbon Standard requirements. In addition, the audit assessed the project with respect to the validated baseline scenarios presented in the PD and the fulfilment of the climate, community, and biodiversity criteria against the CCB Standard.

The scope was defined as follows:

- The project and its baseline scenarios;
- The physical infrastructure, activities, technologies and processes of the project;
- The GHG sources, sinks and/or reservoirs those are applicable to the project;
- The types of GHGs that are applicable to the project; and

- The project monitoring period;
- The climate, community, and biodiversity benefits, including gold distinctions

Standard criteria: Criteria from the following documents were used to assess this project:

- VCS Program Guide, v4.4
- VCS Standard, v4.7
- Program Definitions, v4.5
- AFOLU Non-Permanence Risk Tool, v4.2
- Climate, Community & Biodiversity Standards, v3.1
- CCB Program Rules, v3.1
- CCB Program definitions, v3.0

Unless otherwise indicated, the assessment was performed against the most recent version of the relevant VCS and CCB guidance documents.

According to instructions from IAF (International Accreditation Forum), and based on ISO 14065, the VVB is attaching the following accreditation information: *AENOR CONFÍA, S.A. (Unipersonal) verification/validation entity accredited by ANAB with AEN accreditation number 8993.*

1.3 Level of Assurance (VCS, 4.1; CCB Program Rules, 4.2)

The assessment was conducted to provide a reasonable level of assurance of conformance against the defined audit criteria and materiality thresholds within the audit scope. Based on the audit findings, a positive evaluation statement reasonably assures that the project GHG assertion is materially correct and is a fair representation of the GHG data and information. According to section 4.1.10 of the VCS Standard v4.7, the level of assurance for verifications shall be reasonable, with respect to material errors, omissions, and misrepresentations. Hence, in this case, for VCS and CCB the level of assurance is reasonable as indicated in the guidelines. This requirement is based and set out in ISO 14064-3.

The threshold for materiality with respect to the aggregate of errors, omissions, and misrepresentations relative to the total reported GHG emission reductions/removals was one percent (1%), as established for large projects by the VCS Standard.

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent AENOR instructions required. The technical review was

performed by a technical reviewer(s) qualified in accordance with AENOR's qualification scheme for CDM/VCS validation and verification.

1.4 Summary Description of the Project (VCS, 4.1; CCB Program Rules, 4.2)

The Kuamut Rainforest Conservation Project (KRCP) has maintained its efforts in conservation and sustainable development within the 83,381-hectare protected forest in Sabah, Malaysia. Notable activities during this monitoring period include ongoing forest patrols, biodiversity assessments, and initiatives aimed at job creation and capacity-building for local communities.

The project has incorporated various technologies and strategies to improve monitoring and conservation efforts, such as the use of camera traps, acoustic sensors, and satellite imagery to monitor biodiversity and forest health. Additionally, community development programs have been rolled out, focusing on sustainable livelihoods, job creation, and improvements to water infrastructure. There has also been continued collaboration with local stakeholders, reinforcing participatory governance and mechanisms for sharing benefits.

During this period, the project achieved 731,958 tCO₂e in total greenhouse gas emission reductions and 842,855 tCO₂e in removals (after buffer), significantly contributing to climate change mitigation. The cumulative net GHG emissions reductions or removals of 1,838,122 tCO₂e (before buffer). The protection of the forest area continues to prevent further emissions while promoting carbon sequestration through natural forest regrowth.

Some of the objectives are the following:

Climate: The project reduces emissions by halting deforestation, encouraging forest regeneration, and increasing carbon storage.

Community: The project enhances livelihoods through job creation (38 full-time jobs in 2023), training (91 participants), continued access to clean water, and capacity-building, benefiting over 843 local residents.

Biodiversity: Throughout the lifetime of the project, a significant diversity of threatened fauna has been recorded, including a total of 4 Critically Endangered (CR), 18 Endangered (EN), and 32 Vulnerable (VU) species. These include 26 mammal species, 23 bird species, and 5 reptile species. Regarding flora, the project area has documented a total of 6 Critically Endangered (CR), 5 Endangered (EN), and 23 Vulnerable (VU) plant species. These figures reflect the overall biodiversity monitored over the course of the project and underscore the area's conservation value.

By combining conservation efforts with sustainable community development, the KRCP continues to show how forest protection supports long-term climate resilience, ecological restoration, and the well-being of local communities.

2 VERIFICATION PROCESS

2.1 Audit Team Composition (VCS, 4.1; CCB Program Rules, 4.3.1)

Name	Position in the team
Javier Cócera	Lead auditor
Marcos Recio	Lead auditor
Abdul Syukur Ahmad	Auditor and local expert
Alberto Lozada	Auditor trainee
Pablo Moreno	Technical reviewer
Adrián Vidal	Technical reviewer

Javier Cócera is a forest engineer with a Master in forest management. He has developed his career focused to the forest management. Mainly he has been working through sustainability in two ways: the main one as forestry consultancy, developing forest management plans, working with GIS and LiDAR both in the field and the office and getting experience of the forest resources. The second one was developing environmental footprint projects and sustainability reports. Currently Javier is working in AENOR as auditor focused in AFOLU projects. Javier participated in courses about ISO lead auditing, Community development and also about technical skills such as remote sensing and uncertainty management. He has performed on-site audits and leaded projects in Europe, LATAM, Africa and Asia.

Marcos Recio has worked since finishing his university studies closed to the environment and climate change. The main branch of his career has been the energy efficiency and the forest management. The other path of his career has been focused to renewable energies and integrated management systems. He has worked in different countries: Spain, Senegal, Paraguay and others. In AENOR he is working with international projects, mainly in and South America, Africa, above all in Perú. Most of the projects he is working on are AFOLU and UNFCCC verifications and validations.

Abdul Syukur Ahmad is from Indonesia; he is a forestry engineer with more than 15 years of experience in forestry consultancy and auditing. He is expert in GHG carbon in forestry and forestry management systems under FSC and natural resources. Abdul has developed his career in Asian Countries working in forestry matters related to GHG projects for VCS, CCB but also in tasks related to monitoring and reporting of inventories in National Parks in his country (Indonesia) and others. Abdul has collaborated (is collaborating) with AENOR as validator/verifier in several projects in Indonesia and whole Asia, has a good understanding of

VERRA programs and has the appropriate skills to audit projects knowing how to focus on what is relevant both in the visit and in the documentary review of the PDDs and monitoring reports.

Alberto Lozada is a Forestry Engineer. He has a Master's degree in Big Data & Data Science and is currently pursuing a Master's degree in Geomatics and Remote Sensing. He is a Certified Ecological Restoration Practitioner of the Society for Ecological Restoration (SER). He is a Specialist in Natural Resources Management and has studies in sustainable management of tropical forests at the University of San Simon, Cochabamba. He is a certified drone pilot and has a university course in thermography with drones. He has 20 years of experience in the development of projects in natural and intervened areas, focused on the development of mechanisms for sustainable management of forests and their ecological and landscape recovery and restoration. He has led ecological restoration projects, studies of floristic and structural characterization of vegetation, thematic mapping processes and regional scale land cover maps using tools for analysis and visualization of geospatial data; execution and coordination of environmental studies for the development of biotic, forestry, landscape and compensation components for the hydrocarbon, mining-energy, infrastructure and humanitarian sectors in South America, Africa and Europe. Alberto has joined AENOR where he is in the process of training for the development of audits of AFOLU projects.

Adrián Vidal holds a Master's degree in Forest Engineering from the Technical University on Madrid, and a Postgraduate Diploma in Climate Change from the National University of Quilmes and the National University of Jujuy, with the support of UNEP. Adrián works at the Climate Change Unit in AENOR and has more than 5 years of professional experience in forestry and sustainability. Prior to joining AENOR, he worked at the Basque Centre for Climate Change (BC3) in carrying research in global governance, national policies, and modelling of Agriculture, Forestry and other Land Use (AFOLU) mitigation measures. He worked as an intern at the AFOLU Unit of the Transparency division of UNFCCC, providing support to the intergovernmental climate change process on issues related to land-use, land-use change and forestry (LULUCF), agriculture and REDD+. He also worked in urban forestry, landscape forest restoration and environmental consultancy, and collaborated in the Global Forest Survey project of FAO. He is fluent in Spanish, English and Portuguese.

Pablo Moreno is a Forest Engineer, and he has a Master's Degree in Forest engineering and management, both carried out in Polytechnic University of Madrid. Pablo has more than 3 years of experience in forestry and sustainability. He has worked since he stated his master's studies close to the environment in different ways. The main branch of his career has been forest management, operations management, technical analysis, working with GIS and field work as well as quality assessment and R&D development in forestry production-related topics in search of efficiency and process optimization. The other path of his career has been focused to sustainability consultancy and research and climate change. He has worked in different countries: Spain, U.S.A. and Australia. In AENOR is working with international projects, mainly in Africa and South America. He is a native Spanish speaker proficient in English and holds a basic level of French.

According to point 4.3.1 of the CCB program rules, the team carrying out the audit must have experience in the following areas:

- 1) Proficiency in a relevant local or regional language for the project location: One member of the team has Bahasa and Malayan as native language. Complementary, all members of the audit team are fluent in English, and each of them are also fluent in different languages, such as Portuguese, Spanish, Bahasa, Malayan or French. Bahasa and English were the languages used during the desk review and the onsite visit.
- 2) Relevant agriculture, forestry and/or other land use experience in the project country or region: all team members have studies related to nature and environment as described in the previous paragraphs. All team members are forestry engineers or related, with master's degrees in environmental fields as well. In addition, all team members have experience working with audit processes, especially in climate change audits under VCS and CCB in LATAM, Africa, Europe and Asia.
- 3) Relevant social and cultural expertise: all members of the audit team are fully experienced in conducting CCB audits. The members of AENOR have travelled internationally carrying out VCS and CCB audits, so they are fully aware of the socio-cultural aspects to be taken into account in each audit and in each place. Specifically, one team member is Indonesian, so has a better understand of the social and cultural conditions of the project (regional expert).
- 4) Relevant ecological and biodiversity expertise: all members of the audit team have forestry and/or environmental studies, which allows them to know and apply their knowledge in ecology and biodiversity issues to the projects they are working on. The members of the audit team have worked on a wide range of projects and are well versed in the environmental and biodiversity conditions in the project area, as well as in other parts of the world where they conduct audits. Moreover, each of the audit team members have completed valuable certifications in relevant topics, such as climate change, biodiversity, governance, sustainable finance, and others.

AENOR is accredited by ANAB and ONAC to carry out the auditing activities under different standards such as VCS or CCB.

ANAB is the ANSI National Accreditation Board (ANAB) is the largest multi-disciplinary accreditation body in the western hemisphere, with more than 2,500 organizations accredited in approximately 80 countries. ANAB is a recognized global leader in accreditation and prides itself on world-class service while maintaining the highest level of quality. ANAB accredited certificates, inspections, reports, and persons drive confidence in the marketplace. ANAB-accredited laboratories and ANAB-accredited certification bodies (personnel, management systems, validation and verification, and products, processes and services) working in the industry can be trusted when certifying, testing, and/or inspecting those working in the industry.

ONAC is the Colombia's National Accreditation Body. ONAC's main purpose is to provide accreditation services to conformity assessment bodies in order to accredit their competence, to act as the monitoring authority for good laboratory practices of the Organization for Economic Cooperation and Development (OECD), and to perform the functions of the National Accreditation Body of Colombia. The accreditation service opens opportunities for CABs and the producers they certify to demonstrate the quality of their products and services and even compete in international markets.

AENOR passes the accreditation exams and audits every year to still maintaining the required skills and assurance that its certifications are competent.

2.2 Method and Criteria (VCS, 4.1; CCB Program Rules, 4.3.1)

The verification was performed through a combination of document review and interviews with relevant personnel, as discussed in Sections 2.3 through 2.5 of this report. At all times, the project was assessed for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.6, findings were issued to ensure that the project was in full conformance to all requirements.

A project specific Verification and Sampling Plan was developed to guide the verification auditing process to ensure efficiency and effectiveness. The purpose of the Verification and Sampling Plan was to present a risk assessment for determining the nature and extent of verification procedures necessary to ensure the risk of auditing error was reduced to a reasonable level. The Verification & Sampling Plan methodology was derived from all items in our verification process stated above. Specifically, the sampling plan utilized the VCS guidance documents and ISO 14064-3. Any modifications applied to the Verification and Sampling plan were made based upon the conditions observed for monitoring in order to detect the processes with highest risk of material discrepancy.

The verification activities in which risks were assessed were the evaluations of the monitoring system (data flow, data control procedures, etc.) but mainly the quality of raw data as well as sources and the spreadsheet calculations. AENOR reproduced and verified 100% of sheets related to carbon calculations, figures and the other spreadsheets /355/ for the monitoring period 01 January 2022 – 31 December 2023 for the project area. Technical calls and review of the R scripts /321-354/ were also carried out by the audit team. The project boundary and land cover changes in the project area for the monitoring period were 100% checked using the GIS database /4-26/.

The carbon stock changes, and the land used classes in the project area were also 100% verified and crosschecked with validated values.

AENOR carried out a deep and meticulous review of the spreadsheets in order to verify the correct application of the methodology (formulae, equations.) and checked that data required for calculating the GHG removals and reductions were appropriately provided. Based on the

assessment carried out, AENOR confirms with a reasonable level of assurance that the claimed emission reductions and removals are free from material errors, omissions, or misstatements.

AENOR confirms that sufficient evidence was presented for the reported net anthropogenic GHG emission reductions and removals and that there is a clear audit trail that contains the evidence and records that validate the stated figure in this verification report since:

- Sufficient evidence available: The project participant has provided the 100% of data used in the calculations to achieve the final amount of GHG emission reductions and removals reported.
- Nature of evidence: The raw data were collected from reliable sources. They are detailed in the project documents and have been provided to the verification team and the most relevant are appropriately detailed in the Appendix 4.
- Cross-checked evidence: AENOR cross-checked the collected information through interviews with stakeholders and reproducing calculations.

Hence, AENOR confirms that the stated figures in the monitoring report are correct and confirms that is able to certify net anthropogenic GHG reductions and removals based on verifiable and reliable evidence.

Finally, regarding the validation schedule and key milestones, the following are highlighted:

- Public Comment Period: 17/09/2024 to 17/10/2024
- Kick-off Meeting (KOM) date: 02/10/2024.
- NOVS delivery: 09/01/2025.
- Final Audit Plan: 24/01/2025.
- Site visit: 03/02/2025 to 11/02/2025
- Issuance of the 1st round of findings: 20/02/2025
- Closure of findings: 05/04/2025

2.3 Document Review (VCS, 4.1, CCB Program Rules, 4.3.1)

A detailed review of all project documentation was conducted to ensure consistency with, and identify any deviation from VCS program requirements, CCB program requirements, the methodology (VM0010, v1.4), and the validated PD. Initial review focused on the Monitoring Report (MR) /1/ and included an examination of the project details, implementation status, data and parameters, and quantification of GHG emission reductions and removals. Documents reviewed included data from monitoring, economic analysis /291/, maps and

aerial images /4-26/, R Scripts /321-354/, forest specific monitoring data, deforestation images and field reports, community development activity reports, SOPs /38-49/, biomass and carbon calculation spreadsheets /355/, biodiversity monitoring data and responses to Corrective Action Requests (CARs) and Clarifications (CLs) (appendix 3).

The verification included a review of the validated PD /3/ and MR /1/, relative to the field conditions and interviews with project management staff, stakeholders and beneficiaries. Modifications to the Verification and Sampling plan were made based upon the conditions observed for monitoring in order to detect the processes with highest risk of material discrepancy.

The VCS AFOLU Non-Permanence Risk Tool was used by the Project Proponent to assess overall project risk. The VVB reviewed the Non-Permanence Risk Report and confirmed that the Project adheres to the requirements set out in the VCS AFOLU Non-Permanence Risk Tool. Each risk factor was thoroughly assessed for conformance. The final score was calculated to be 12%.

Other documents reviewed included forest inventory SOP /38-49/, financial NPV assessment /291/, NPRR evidence /289-295/, communities location, HCVs, project policies & worker rights /43-48/, grievance redress /146-147/ /102-103/, SBIA workshop documents, FPIC documentation /94-123/, stakeholder consultation /55-145/ and channels, CVs and others.

For a listing of all documents received from the client for this verification, please see Appendix 4.

2.4 Interviews (VCS, 4.1, CCB Program Rules, 4.3.1)

The AENOR's on-site verification team composed of Abdul Syukur Ahmad and Javier Cócera (two teams) conducted interviews with project developers; local stakeholders; and key personnel involved in the project activity, in order to confirm selected information and to resolve issues identified in the document review.

The field visit took place from 03/02/2025 until 11/02/2025 in which the two auditors visited the project area, interviewed key stakeholders, staff and other related experts, and also reviewed the monitoring report and supporting documents. The people interviewed were those directly affected or involved in the project activity and in some cases were just indirectly affected. Finally, some activities stated within the MR were also reviewed during the on-site visit and verified with the information provided. The physical conditions of the project were verified, as well as the conditions and benefits for community and biodiversity.

Additional to site visit, meetings via teleconferences were carried during 2024; in order to review the technical calculation and verify the processing data from satellite images and the R scripts. The scope of the verification was to assess the conformance of information in the monitoring report with the VCS and CCB requirements.

AENOR's audit team defined a preliminary questionnaire to complement and support the desk review process as a starting point to interview each one of the stakeholders on-site. This questionnaire considered Verified Carbon Standards (VCS), Climate, Community and Biodiversity (CCB) topics and Free, Prior and Informed Consent (FPIC) values based on the

information compiled by AENOR's audit team about the project before the on-site visit, during the desk-review. A sample of these questions has been included on the following page for clarification and transparency purposes. Moreover, and as stated below, AENOR's audit team used these questions for gathering purposes. Several new questions were sporadically and systematically included during on-site interviews, considering the direction in which discussions were directed and the topics that stakeholders wanted to discuss freely during the different moments of the interviews.

Some of the questions to the stakeholders, project employees and authorities were related to matters such as:

- What is your role in the project? When did it start?
- What was the project area like before the project started?
- How has the project area changed since the project start date ?
- Have there been any fires or pest outbreaks in the project area in the last years?
- Are you aware of illegal logging or any other deforestation driver in the project area?
- Have you participated in a participatory rural appraisal? If so, could you describe it?
- Is there any reluctance or concern about the project implementation?
- In your opinion, what are the main risks and benefits of the project? Have the PP informed you of risks and benefits of the project?
- Have you had any conflict, complaint or grievance related to the project? Has it been solved? How? Are you aware of any grievance, conflict, or complaint from others due to the project?
- What are your channels of communication with the project staff?
- Do you have any suggestions for the project developer on how to improve the project?
- What do you know about the verification process and the audit team visit?
- How often do project personnel meet with the communities to discuss the project?
- Have you received any benefits from the project? Have you been negatively affected by the project? Have you received any training?
- Have you noticed climate changes in the project area? Does the project support you in adapting to climate change? Have you seen any native wild animals in the project area?
- What are your responsibilities as a project employee? Have you been provided with an employment contract? Were your employee rights and benefits explained? Do you think the hiring process treated and considered all people fairly, including women?
- Have you received any training as a project employee or stakeholder?
- Do you think local communities have given equal opportunity employment to fill up the positions?

- Does the project comply with local, regional and national laws and regulations? Do you know about any disputes over the boundaries of the project lands? Do you know if local communities freely consent to participate in the project?

However, during the process, some questions were updated based on the feedback acquired from local people to obtain as much information of the highest materiality and quality as possible. Some of these new related questions were strictly connected to the conversation the audit team had with each one of the interviewees.

Some of the questions directed to the KRCP management employees were related to the following:

- FPIC in all the communities,
- Community involvement and their interconnections,
- Illegal logging activities,
- Patrolling, if necessary,
- Remote sensing activities,
- Fires, outbreaks, and forest diseases,
- Local stakeholder communication and meetings,
- Risks and benefits of the project,
- Climate benefits,
- Biodiversity benefits,
- Biodiversity monitoring
- Others.
- SOPs and policies

Name & Surname	Role/Profession/Stakeholder /Group	Date (yyyy-mm-dd)
Anne Lasimbong	CEO PACOS Trust	2025-02-03
Juan Chang	PERMIAN Global / Project Developer	2025-02-03
Christopher Philipson	PERMIAN Global / Project Developer	2025-02-03
Javier Ruiz Ramos	PERMIAN Global / Project Developer	2025-02-03
Sarah Scriven	PERMIAN Global / Project Developer	2025-02-03
Sunarto	PERMIAN Global / Project Developer	2025-02-03
Claudia Lasimbong	PACOS Trust	2025-02-03
Ivy Wong Abdullah	PERMIAN Malaysia / CEO	2025-02-03
Glen Reynolds	SEARRP	2025-02-03
Jeckos Gediman	RBJ Monitoring Inspection Coordination	2025-02-03

Philip Chin	PACOS Trust	2025-02-03
Roben Weu	PACOS Trust	2025-02-03
Melia Etin	Field staff	2025-02-04
Hendry Maiken	Field staff	2025-02-04
Viviana Nelynda Madinus	Field staff	2025-02-04
Justin Binti Tikson	Field staff	2025-02-04
Moho Syahfidin bin Sahrin	Field staff	2025-02-04
Capt. Jamang Daniel Mannan	Helicopter Pilot Sabah Air Aviation	2025-02-04
Zaidey Fulgentius	Research Assistant SEARRP	2025-02-04
Ruzniel Amroh	Research Assistant SEARRP	2025-02-04
Muhamma Eddi	Assistant Field Manager SEARRP	2025-02-04
Hendry Maiken	Field staff	2025-02-05
Viviana Nelynda Madinus	Field staff	2025-02-05
Kenedy Molujong	PACOS staf	2025-02-05
Melia Etin	Field staff	2025-02-05
Edmund Gamas	Pipe Gravity Kuala Kuamut Organizer	2025-02-05
Suhaily Atang	Local community of Tangkuyan	2025-02-05
Jericho Mark	Local community of Tangkuyan	2025-02-05
Philip Anin	PACOS	2025-02-05
Juan Chang	PERMIAN	2025-02-05
Sintik Nasir	JKKK / Village Safety and Health Commitee	2025-02-05
Onsong Julan	Head of Desa Permai village	2025-02-05
Andrew Chung	Settlement Developer	2025-02-05
Elkana Jahuri	Local community of Tangkuyan	2025-02-05
Rusinah Takas	Housewife	2025-02-05
Desy Mastor	Housewife	2025-02-05
Rohinah R Maus	Housewife	2025-02-05
Jacob O Jicob Baukom	Head of Tangkuyan village	2025-02-05
Jahuri Onggang	Local community of Tangkuyan	2025-02-05
Glorianah Jacob	School Teacher	2025-02-05
Mohd Hanafi bin Jumaidi	Assistant Medical Officer	2025-02-05
Mayaru Kalan	Farmer of Tulang Tulang	2025-02-06
Leronha Kekiyu	Farmer of Tulang Tulang	2025-02-06
Joseph Kela	Fishermen of Tulang Tulang	2025-02-06
Miat Ilot	Farmer of Tulang Tulang	2025-02-06
Peteros Jusrin	Farmer of Tulang Tulang	2025-02-06
Jurlis Joseph	Fishermen of Tulang Tulang	2025-02-06
Rizke Madisah	Farmer of Tulang Tulang	2025-02-06
Elsa Maemuddin	Farmer of Tulang Tulang	2025-02-06

Andrew Joseph	Farmer of Tulang Tulang	2025-02-06
Azrul bin Arzmi O Michael	Forest Patrol Officer of Rakyat Berjaya	2025-02-06
Conalis Jolik Majungil	Chargeman	2025-02-06
Romel Wawah	Forest Ranger	2025-02-06
Henry Papaleh	Forest Ranger	2025-02-06
Claudia Lasimbong	PACOS Community Engagement Leader	2025-02-06
Kenedy Malujung Lawrence	Project assistant	2025-02-06
Roben Weu	Project Manager	2025-02-06
Philip Chin	Technical Expert	2025-02-06
Jacklyn Jimilus	Assistant Project Coordinator	2025-02-06
Wilma Sahrin	Field Staff	2025-02-06
Rozaliah Ardi	Field Staf	2025-02-06
Welsly Juklee	Field Staf	2025-02-06
Moh Hafiz bin Jafrino	Field Staf	2025-02-06
Sodiqin bin Ahmad Syufai	Field Staf	2025-02-06
Philip Ak Ulok	Field Manager SEARRP	2025-02-06
Andy Brian Karoius	Research Assistant SEARRP	2025-02-06
Mohd. Soffie Syazmi Bin Gasmi	Research Assistant SEARRP	2025-02-06
Basri Bationg	Research Assistant SEARRP	2025-02-06
Muhammad Taufiq bin Sumin	Research Assistant SEARRP	2025-02-06
Razniel Amrah	Research Assistant SEARRP	2025-02-06
Weldiay Girang	Research Assistant SEARRP	2025-02-06
Muhammad Edri N	Biodiv Danum Valley SEARRP	2025-02-06
Zaidey Fulgentius	Research Assistant SEARRP	2025-02-06
Javier Ruiz Ramoz	Technical Operation PERMIAN	2025-02-06
Christoper Philipson	Carbon and Ecology PERMIAN	2025-02-06
Sarah Scriven	Biodiversity Tech Team PERMIAN	2025-02-06
Sunarto	Biodiversity PERMIAN	2025-02-06
Nassip bin Hj Onui	AJK of Tenaga Baru village	2025-02-07
Sahrin bin Unguyan	Head of Karamuak Dalam village	2025-02-07
Ahmad bin Majid	Head of Karamuak Luar village	2025-02-07
Mohd Hajiz B Abd Jamal	AJK KRCP of Karamuak Luar village	2025-02-07
Hajiz bin Tanalus	AJK Karamuak Dalam village	2025-02-07
Jusmi bin Jiuti	AJK Karamuak	2025-02-07
Abdul Rasik bin Kulai	AJK Kenang Kenangan village	2025-02-07
Juanin Mampang	JKK Karamuak Dalam village	2025-02-07
Geiye Sahira	AJK Karamuak Dalam village	2025-02-07
Janius	Fishermen	2025-02-07
Roslee Afan	Worker	2025-02-07

Yusni Jamin	Housewife	2025-02-07
Bichie JJauyah Abd Ghani	Housewife	2025-02-07
Sujanah Kaden	AJK KRCp Karamuak Dalam	2025-02-07
Arsad Rae Kawai	AJK Kenang Kenangan	2025-02-07
Mohd Khairul bin Mahalik	Head of AJK KRCP	2025-02-07
M Julpad b Ahmad	AJK Kenang Kenangan	2025-02-07
Ivy Wong	Permian Malaysia	2025-02-08
Juan Chang	Permian Global	2025-02-08
Junia Anilik	Head of Programme PACOS	2025-02-08
Roben Well	Data Manager PACOS	2025-02-08
Amanda Majilip	Media PACOS	2025-02-08
Philip Chin	Technical Expert	2025-02-08
Claudia Lasimbong	Community Engagement Lead	2025-02-08
Anne Lasimbong	Executive Director PACOS	2025-02-08
Juan Chang	Head of Operation PERMIAN Global	2025-02-08
Ivy Wong	CEO PERMIAN Malaysia	2025-02-08
Kenedy Malujong Lawrence	Support Staff PACOS	2025-02-08
Jacklyn Jimilus	Assisten Project Coordinator PACOS	2025-02-08

The complete list of interviewees is found in Appendix 5.

2.5 Site Visits (VCS, 4.1, CCB Program Rules, 4.3.1)

The objectives of the on-site inspections performed were mainly to cross check the description provided in the monitoring report, related to the VCS and CCB requirement implemented by the proponent, including:

- Ensure that the geographic area of the project, as reported in the CCB-VCS-PD and the accompanying KML file, is in conformance with Section 3.10.2 of the VCS Standard;
- Perform a risk-based review of the project area to ensure that the project conforms to all other requirements of the VCS rules and the methodology.
- Observe the Project Proponent's evidence and collect and record data in order to assess whether data collection techniques conform to the monitoring plan and related documentation and to evaluate data quality control systems.
- Select samples of data and information for verification in order to meet a reasonable level of assurance and to meet the materiality requirements of the project, as required by Section 4.1.8 of the VCS Standard;
- Review of biomass plots and crosschecking of the verified information with the information gathered from the onsite visit. Plot sampling demonstration was done to replicate the plots which were used in measurements of the tree biomass. Sample plots were laid down as described in the Monitoring report. The number of plants in the plot were counted, DBH were measured using the measuring tape and height (when needed) was measured using hypsometer.

- Perform a risk-based review of the project area to ensure that the project is in conformance the eligibility requirements of the VCS rules and the applicability conditions of the methodology;
- Interview local authorities to confirm that the project operates in accordance with current permits and authorizations and its relationship with local actors and communities.
- Interview the key personnel involved in the mentoring and observe monitoring practices.
- Verify activities such as planting, in the project zone.

Additional to the site inspection, meetings via teleconferences were carried with project representants and personnel in charge of carrying out the calculations, image processing, monitoring, additionality, and unique metrics report.

Based on the review of the provided documentation and considering the requirements of the standards used, the following areas were observed:

- Project proponent, developers/management team, local team onsite
- Project activities conducted during the monitoring period (reporting, results and concordance with plan as per PD, etc.)
- Monitoring procedures, monitoring team and equipment and biomass plots layout and measurements
- Full review of operations and measurement records. Controls established to detect and correct any errors or omissions in monitoring parameters
- Forest conservation and implementation
- Project activities implemented
- Stakeholders' rights
- Stakeholders' identification and consultation, trainings/benefits/satisfaction
- Project conflicts, barriers or difficulties and grievances/complaints/conflicts
- Stakeholders' consultations, meetings and documents sharing
- Project communication
- Community, implementation of CCB community monitoring plan and benefits to the community
- Areas of High Conservation Value (HCV)
- Biodiversity and current problems associated. Implementation of CCB biodiversity monitoring plan and biodiversity conservation results including conservation of trigger species

The scheduled followed by the audit team during the onsite visit was similar to the following one:

DAY	DATE (dd/mm/yyyy)	AUDIT TEAM	ACTIVITY	PLACE	COMMENTS
1	03/02/2025	1 and 2	Kick Off Meeting	SEARRP Office, Kinibalu City	The meeting was held successfully with the

DAY	DATE (dd/mm/yyyy)	AUDIT TEAM	ACTIVITY	PLACE	COMMENTS
					participation of SEARRP, Permian, PACOS, and RBJ Yayasan Sabah. The CEO of SEARRP provided an in-depth overview of the project, highlighting key objectives and upcoming milestones.
2	04/02/2025	2	Flight of the area	From KK to Project area	The flight provided a close-up inspection of the forest canopies, focusing on areas of loss. We reviewed recent deforestation events and observed variations in forest density to assess conservation impact.
2	04/02/2025	2	Chat with the PP about the project	Arrival to Danum Valley conservation area	Discussions with the PP (Project Proponent) centered around the project's location and characteristics, providing valuable insights into the logistical and environmental aspects of the area. A brief walk allowed the team to familiarize themselves with the terrain.
2	04/02/2025	1	Interview with the community organization of PACOS	House of Community member at Kg Tangkuyan	Conducted interviews with PACOS community organizers to gather insights into community engagement, FPIC (Free, Prior, and Informed Consent) processes, GRM (Grievance Redress Mechanism), and the capacity of project staff to address community concerns.
3	05/02/2025	2	Drive to Malua several hours driving	From Danum to Malua	The drive to Malua was notable for the sightings of elephants along the road, which provided an opportunity to discuss conservation efforts and animal behavior in relation to the protected forest areas.
3	05/02/2025	2	Monitoring plot Number 7	Kuamut project area	Conducted monitoring of plot number 7. We reviewed SOPs (Standard Operating Procedures), discussed methodology for data collection, and analyzed raw data gathered during fieldwork to ensure consistent monitoring practices.

DAY	DATE (dd/mm/yyyy)	AUDIT TEAM	ACTIVITY	PLACE	COMMENTS
3	05/02/2025	2	Interviews with monitoring team	Malua camp	Interviews with monitoring team members provided essential feedback on working conditions, training programs, and team experience. The discussion also covered CCB (Climate, Community, and Biodiversity Standards) requirements.
3	05/02/2025	1	Water DAM and pipe gravity inspection	Inside the Project area, approximately 1 km from village	Inspection of the water dam and gravity pipe infrastructure, which were established in 2023. This inspection was essential to verify operational effectiveness and sustainability. The PACOS and Permian teams accompanied us during the walk through the conservation forest.
3	05/02/2025	1	Interview with AJK Community Committee	Village Hall of Kg. Kuala Kuamut	The interview with the head of the AJK community committee focused on the project's relationship with the village, including community meetings, consultations, and anti-corruption measures.
3	05/02/2025	1	Interview with School Teacher and Health Staff	Kuala Kuamut Primary School and at the Health office	Conducted interviews with the school teacher and health staff to assess the support provided by the KRCP (Kuamut Rainforest Conservation Project) to local schools and health facilities, including access to education and health services.
4	06/02/2025	2	Monitoring plots review: Plots 11, 3, 9	Kuamut project area	Conducted monitoring of plots 11, 3, and 9. These field visits involved trekking to the plots to review the SOPs and assess the validity of the collected data for ongoing environmental monitoring.
4	06/02/2025	2	Night Biodiversity walk	Kuamut project area	The night biodiversity walk revealed various nocturnal species, including frogs and snakes, which highlighted the diversity of the ecosystem. This monitoring is crucial for assessing biodiversity conservation success.

DAY	DATE (dd/mm/yyyy)	AUDIT TEAM	ACTIVITY	PLACE	COMMENTS
4	06/02/2025	1	Interview with Community member of Kg. Tulang Tulang	The house of Head of Kg. Tulang Tulang, Kuamut	Interviewed community members from Kg. Tulang Tulang to gain insights into the impacts of KRCP activities, including community development plans, FPIC, and the effectiveness of the grievance mechanism in addressing concerns.
4	06/02/2025	1	Camera Trap and Bird Sound Inspection	Project Area nearby Kg, Karamuak	Conducted a camera trap and bird sound inspection. This is vital for verifying the implementation of SOPs and ensuring the correct setup of monitoring equipment for biodiversity studies.
4	06/02/2025	1	Interview with Rakyat Berjaya of Yayasan Sabah	Yayasan Sabah Community Forestry Learning Centre at Kg. Karamuak	The interview with Rakyat Berjaya focused on forest monitoring and patrol activities, as well as the collaborative efforts between the project and other stakeholders to safeguard the forest area.
4	06/02/2025	1	Interview with PACOS project staff	Yayasan Sabah Community Forestry Learning Centre at Kg. Karamuak	The interview with PACOS project staff discussed their collaboration with other stakeholders, the management capacity of the team, and the application of SOPs in fieldwork and project implementation.
5	07/02/2025	2	Monitoring plots review: Plots 6, 8	Kuamut project area	Conducted a review of monitoring plots 6 and 8. The site visits involved checking the SOPs, validating the data collection processes, and assessing the condition of the monitored forest areas for future interventions.
5	07/02/2025	2	Interviews with PP about calculations, SOPs, policies...	Malua	The interviews focused on the project's policies, SOPs, and carbon accounting methodologies. We reviewed the project's alignment with VCS standards and other relevant protocols for calculating emission reductions.
5	07/02/2025	1	Interview with AJK Community Committee	Village Hall of Kg. Karamuak	Interviewed the AJK Community Committee members from multiple villages

DAY	DATE (dd/mm/yyyy)	AUDIT TEAM	ACTIVITY	PLACE	COMMENTS
					to assess their understanding and participation in FPIC, grievance redress mechanisms, and the implementation of the community development plan.
6	08/02/2025	2	Drive to Danum valley centre	Malua to Danum	The drive from Malua to Danum Valley offered observations of orangutans along the route, contributing to ongoing biodiversity assessments in the region and emphasizing the importance of protecting these species.
6	08/02/2025	1	Interview with Permian project management	Hotel at Sandakan	A detailed interview with Permian project management staff was conducted to discuss the FARs (Forward Action request) and address any outstanding issues related to project implementation and environmental impact.
6	08/02/2025	1	Interview with Permian and PACOS	Kota Kinabalu	The meeting with PACOS and Permian in Kota Kinabalu focused on outstanding issues, including the review of FPIC processes, grievance redress mechanisms, and SOPs related to community consultations and project management.
7	09/02/2025	2	Biodiversity walk in Danum	Danum Valley	A biodiversity walk in Danum Valley provided opportunities for observing orangutans, monkeys, and microfauna. We also encountered elephant dung, underscoring the dynamic wildlife present in the region.
7	09/02/2025	2	Discussion with the PP about monitoring and BD plots for future years	Danum Valley	The discussion with the PP about future monitoring and biodiversity plots aimed to address accessibility issues in some plots. We explored potential changes for the upcoming year's monitoring strategy.
8	10/02/2025	2	Listening to gibbons.	Danum Valley	The gibbon listening session was a valuable part of the biodiversity monitoring program, allowing the team to

DAY	DATE (dd/mm/yyyy)	AUDIT TEAM	ACTIVITY	PLACE	COMMENTS
					assess the health of the forest ecosystem through sound-based monitoring.
8	10/02/2025	2	Return to KK after the flight from Lahad Datu.	Danum-Lahad Datu-KK	The return trip from Danum Valley to Kota Kinabalu marked the end of the field visit. The team completed the required activities and returned by flight to the city for the closing meeting.
8	10/02/2025	1 & 2	Closing meeting	SEARRP HQ (KK)	The closing meeting at SEARRP HQ in Kota Kinabalu focused on summarizing the findings, discussing the outcomes of the field activities, and outlining the next steps for the project moving forward.

Supporting images are provided at the end of the document, in the appendix 6, in order to demonstrate some of the activities verified by the audit team.

2.6 Public Comments (VCS, 3.18; CCB Program Rules, 4.6)

The project was open for public comment from 17/09/2024 to 17/10/2024.
<https://registry.verra.org/app/projectDetail/VCS/2609>

At the time of the verification report development, no comments were uploaded into the Verra Webpage. However, the PP indicated that some comments were received during the auditing period. AENOR reviewed such comments and confirmed that the responses are correct. AENOR during the onsite visit checked also the confirmation of the public comments reception by Verra, as well as the back and forth of communication between the PP and Verra to discuss the reception and the responses of the PC.

Both the PC and the response were reviewed and assessed by AENOR /50-51/, during the onsite visit together with the PP.

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
The comment received was summarized as follows: An expert in biometrics with over 35 years of experience has raised concerns about	The response provided by the PP was summarized as follows: The response begins by thanking the reviewer for their thorough review and emphasizing the	Comments and responses /50-51/ and the following references were reviewed and assessed by AENOR to confirm that the response to the PC is clear, accurate and reliable:

the statistical methods used in the Kuamut Rainforest Conservation Project. They argue that the project's uncertainty claims of 0.262% are unrealistically low, especially given the small sample size of 46 plots. Typically, a forest survey with 200 plots would have an uncertainty of 10-15%. The expert suggests that the appropriate statistical technique, ratio estimation, would result in an uncertainty of around 25%, not the claimed 0.262%.

They also critique the use of Monte Carlo simulation and bootstrapping in the project, stating that these methods do not significantly improve uncertainty estimates compared to conventional statistics. They believe the project's use of 10,000 artificially generated plots to estimate uncertainty is statistically invalid and misleading.

In summary, the expert asserts that the actual uncertainty is around 25% or greater, and the project is likely overclaiming emissions reductions by 25% or more.

importance of scientific rigor. It acknowledges the high uncertainty associated with projects that rely solely on field plots for carbon surveys but clarifies that the reviewer misunderstood the landscape-scale sampling approach and the statistical concepts used in the Kuamut project.

The project uses airborne LiDAR and machine learning (ML) models to estimate carbon stocks, which provides more accurate and detailed data than traditional plot-based methods. The response explains that the project's uncertainty estimates are based on a combination of LiDAR, field plot data, and other remote sensing data, resulting in a low uncertainty value of 0.262%. This value is contextualized by explaining that it represents a possible over or underestimation of around 160 hectares in a forest reserve with near blanket LiDAR coverage.

The response addresses the use of Monte Carlo simulation and bootstrapping, stating that these methods are appropriate for the project's ensemble modeling design. It explains that the project uses high-resolution biomass maps and cell-level confidence estimates to predict total stock and uncertainty. This approach is more robust than the simpler methods suggested by the reviewer, which would discard significant data and not provide the same level of detail or accuracy.

- Asner, G.P., Brodrick, P.G., Philipson, C., Vaughn, N.R., Martin, R.E., Knapp, D.E., Heckler, J., Evans, L.J., Jucker, T., Goossens, B., Stark, D.J., Reynolds, G., Ong, R., Renneboog, N., Kugan, F., Coomes, D.A., 2018. Mapped aboveground carbon stocks to advance forest conservation and recovery in Malaysian Borneo. *Biological Conservation* 217, 289–310. <https://doi.org/10.1016/j.biocon.2017.10.020>
- Hesterberg, T., 2011. Bootstrap. *WIREs Computational Statistics* 3, 497–526. <https://doi.org/10.1002/wics.182>
- Johnson, L.K., Mahoney, M.J., Desrochers, M.L., Beier, C.M., 2023. Mapping historical forest biomass for stock-change assessments at parcel to landscape scales. *Forest Ecology and Management* 546, 121348. <https://doi.org/10.1016/j.foreco.2023.121348>
- Lang, N., Jetz, W., Schindler, K., Wegner, J.D., 2023. A high-resolution canopy height model of the Earth. *Nat Ecol Evol* 7, 1778–1789. <https://doi.org/10.1038/s41559-023-02206-6>
- Permian Malaysia, 2024. Kuamut Rainforest Conservation Project Monitoring Report 2016-2021CCB_VCS_MON_REP_2609_25MAR2024.pdf <https://registry.terra.org/app/projectDetail/VCS/2609>

The response also highlights that the field plots used in the project are larger than those typically used in traditional surveys, reducing variability and improving accuracy. It explains that the combination of LiDAR and field plot data allows for a more comprehensive and accurate estimation of carbon stocks across the entire forest area.

Furthermore, the response points out that the reviewer's suggestion of using ratio estimation is an oversimplification and would not enable the prediction of changes in stocks over time as effectively as the ML approach. The response cites literature supporting the use of ML for forest biomass and structure prediction, reinforcing the validity of the project's methods.

In summary, the response argues that the project's statistical methods are valid, supported by literature, and appropriate for the data and objectives of the project. It asserts that the reviewer's claims of higher uncertainty are unsupported and that the project's estimates of carbon stocks and uncertainty are accurate and reliable.

2.7 Resolution of Findings (VCS, 4.1, CCB Program Rules, 4.3.1)

All documentation provided by the PP was assessed against the applicable version of the relevant VCS and CCB guidance document. Several clarification requests (CL) and corrective action requests (CAR) were raised and submitted to the PP, which addressed them either by providing to the audit team the requested information or by making the appropriate corrections. Updated versions of the documentation were submitted by the PP and the audit team reassessed them against the guidance documentation. This process was

repeated iteratively until all CL and CAR were fully closed. Specifically, 13 CLs and 12 CARs were raised.

All findings issued by the AENOR audit team during the verification process have been closed. In accordance with Section 4.1.13 of the VCS Standard, all findings issued during the verification process and the inputs for their closure are described in Appendix 3 of this report.

2.7.1 Forward Action Requests (VCS, 4.1; CCB Program Rules, 4.3)

Two (2) Forward Action Requests (FAR) were raised by AENOR in the 2nd verification.

1. During the onsite audit, the team responsible for the climate and biodiversity assessment conducted a thorough review of the plot monitoring procedures. Specifically, the audit team examined the Standard Operating Procedures (SOPs) for tree measurement, as well as the accuracy and consistency of the measurements taken.

AENOR observed that several members of the carbon-monitoring team were unable to identify the tree species present within each plot. While this issue did not impact the current verification process—since other team members were able to correctly identify the species, and all trees were clearly labeled with previously recorded species and genus information—it may pose a risk in the event of staff turnover or if labels become detached or lost. Additionally, this issue could become relevant should new plots be introduced for future carbon calculations.

AENOR highlighted the importance of ensuring that all members of the monitoring team are proficient in identifying the tree species within the KRCP forests, as this is crucial for maintaining the integrity of the monitoring process. Although this did not present a challenge during the current verification, the VVB (Validation and Verification Body) considers it a potential issue for future verifications and recommends that a Forward Action Request (FAR) be raised to address this concern proactively.

The Project Proponent (PP) has acknowledged this observation and fully committed to enhancing forest monitoring techniques, as well as improving Quality Assurance/Quality Control (QA/QC) processes. As a result, during the next verification, the subsequent VVB should prioritize a review of this matter to ensure the continued accuracy and reliability of the monitoring activities.

2. During the review of the Project Review Report (PRR) from Verra, in the finding #8 Verra indicated the following: “Since no baseline harvest was forecasted for the current monitoring period (2022–2023), the VVB must raise a FAR requiring that, at the subsequent verification, the VVB thoroughly assess and ensure the application of the correction and clarification to VM00010, v1.3 to the ongoing forest growth in parcels that would have been harvested after 2021”. The VVB discussed this issue with the PP at the

time of the PRR review and they do not have any objection in demonstrate the ongoing forest growth in parcels harvested after 2021. Hence the FAR will improve the readability and traceability of the data in the future years.

Please find the FAR at the end of appendix 3 of this document.

AENOR reviewed the previous Verification Report, and confirms that no FARs are pending from the previous verification. However, in the previous verification event, the PRR (Project Review Report) raised by Verra ([PRR PREVIOUS VERIFICATION VERRA REGISTRY 2609](#)), several FARs were raised for the VR of the previous VVB. These FARs can be observed in the PRR (within the Verra Registry). The PP has included into the appendix 4 of the MR the responses to the mentioned FARs.

As indicated by Verra, all FARs had to be assessed by the next VVB (in this case, the VVB for the 2nd Verification is AENOR) and hence, they were reviewed by the VVB, and the information requested in the PRR was double checked with the information provided in the appendix 4 of the MR. the onsite visit, and additional evidence were enough to confirm that the actions taken by the PP were positive and enough to close the FARs.

In summary, the FAR were:

1. Grievance Redress Mechanism: AENOR reviewed the GRM /146-147/ /102-103/ and considers that it is aligned with the VCS standard. Additionally, the people interviewed onsite were aware about the existence of such mechanism. For this MR, no grievances were reported, and none of the interviewees declared to know or have any complain. AENOR confirms that the channel of submission were reliable, and all interviewees declared to be aware of such methods. The roles of the external entities such as SHUAKAM or JOAS were explained during several meetings carried out onsite. The VVB considers these roles are aligned with the purpose of the GRM. Hence, AENOR considers that this topic is covered, and after the current MR, the GRM is correct under the VCS Standard, and therefore, the FAR 1 (from the PRR) is consider solved for the VVB.
2. Agreements with PACOS Trust and other entities: AENOR interviewed personnel from PACOS Trust and SEARRP (see attendance lists). The contracts of the agreements were reviewed onsite during the visit in February 2025. All parties described in the FAR were interviewed by AENOR onsite, and the agreements were reviewed at the same time. AENOR confirms that the roles and responsibilities of these groups are as described in the MR.
3. Community Gold Level Benefits: during the review of the monitoring report, in the following sections, this issue was clarified. In summary, The Kuamut Rainforest Conservation Project (KRCP), guided by the SEIP, has brought meaningful socio-economic and environmental benefits to local communities. It has improved livelihoods

for 167 people, including 41 women, through employment, training, and small business support, leading to greater economic stability and reduced poverty. Access to clean water and healthcare has also increased, thanks to new water systems and a medical transport service, benefiting over 400 individuals. The project promotes inclusive governance through community-led committees and the application of Free, Prior, and Informed Consent (FPIC), ensuring active participation by women and youth. Vocational training and upcoming microfinance programs enhance employment prospects and financial independence. KRCP also protects biodiversity and indigenous heritage by conserving legally protected High Conservation Value areas. Through collaboration with government agencies, it supports sustainable development and reduces reliance on deforestation. In conclusion, the KRCP demonstrates conformance with all indicators set out in Section GL2 of the CCB Standards, v3.1.

4. Biodiversity Monitoring and Gold Level Benefits: the PP has updated the monitoring plan for the BD section. As indicated in BD section of the MR, and in the appendix 4, the key BD indicators are: Vegetation quality and Presence of HCV species. This last one is divided into orangutan monitoring, camera trapping, bioacoustics monitoring and dung beetle surveys among others. All these procedures were reviewed by AENOR onsite, and additional evidence was provided and included in BD section of this verification report. The Kuamut Rainforest Conservation Project (KRCP) has attained Gold Level status under the CCB Standards by meeting the GL3 indicators, reflecting its strong conservation achievements. It has contributed to the stabilization of key wildlife populations, such as orangutans and hornbills, and has supported habitat regeneration that has led to increased biodiversity. In addition, the project has effectively addressed major threats like deforestation and hunting. Looking ahead, KRCP plans to expand its biodiversity monitoring efforts into previously unmonitored areas and to incorporate advanced technologies, including AI-based species classification through bioacoustics. These efforts will help track long-term trends in biodiversity recovery. Through this ongoing commitment, KRCP reinforces its role in protecting biodiversity, mitigating ecological threats, and strengthening the resilience of ecosystems for future generations.

Hence, based on the request of the PRR, the FARs were properly assessed, and the VVB confirms that the information provided in the appendix 4 is enough to assess the request made on the previous PRR.

2.8 Eligibility for Validation Activities (VCS, 4.1; CCB Program Rules, 4.1)

AENOR holds accreditation for validation and verification for the sectoral scope 14, Agriculture, Forestry, Land Use.

AENOR is accredited by ANAB and ONAC to carry out the auditing activities under different standards such as VCS or CCB. Please, see section 2.1 of this report.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs (VCS, 3.23, Appendix 2; CCB Program Rules, 3.1)

The verification team is not aware of project involvement in other forms of environmental credits from its activities. The project has not been registered, and is not seeking registration, under any other GHG programs. The project is already validated and verified under the VCS and CCB program. AENOR reviewed several carbon registries and did not find evidence to confirm the participation under other GHG programs.

3.2 Methodology Deviations (VCS, 3.20)

During this second verification no new methodology deviations are applied to the project. The only methodology deviation occurring in the KRCP is the one validated and verified during the previous verification event (1st monitoring period).

The methodology used for biomass estimation and emission reduction quantification remains consistent with the approach approved during the first monitoring period. According to the VM0010 methodology, field plots are assumed to be sufficient for estimating forest biomass across the project area. However, the methodology also mentions that "a multi-temporal set of remotely sensed data can be used to detect changes in the structure of the forest canopy," and suggests technologies such as SAR or LiDAR as potential tools for this approach. Following this recommendation, the current monitoring report applies a methodology that combines remote sensing data with field measurements, providing a more conservative and precise quantification.

The VM0010 methodology recommends establishing field plots at random locations within the project area to generate a representative sample of forest biomass across ecological gradients and forest strata. Biomass values from these plots are averaged across the entire area. While this plot-based approach is effective for estimating biomass changes over large areas, forests are dynamic and change heterogeneously in both space and time. Ecological and anthropogenic processes often drive diverse spatiotemporal changes in biomass and forest structure.

As outlined in the methodology, "technology is developing rapidly, including techniques such as RADAR, SAR, or LiDAR," and it suggests that "a multi-temporal set of remotely sensed data can be used to detect changes in the structure of the forest canopy." Given the complexity of forest dynamics, the methodology's recommendation to create high-resolution biomass and timber volume maps using remote sensing data has been followed. This approach, widely used in scientific research, combines field-derived biomass measurements with high-resolution satellite imagery and radar data to build continuous carbon density and timber volume maps across the project area.

The comparative analysis conducted in the monitoring report shows that the adopted methodology is more conservative and accurate than the field-plot-only approach. By integrating remote sensing data with field measurements, the methodology captures variations in forest biomass, including disturbances that may not be evident in field plots alone. The analysis compares total carbon stock, mean carbon density (ACD), and timber volume using both methods. Results indicate that all metrics generated using the combined methodology are more conservative than those derived from field plots alone. This is due to the ability of the remote sensing approach to measure a broader area, capturing patchy natural disturbances not reflected in the plot network.

The project proponent (PP) has provided a detailed analysis of the methodology deviation, demonstrating that the combination of field plots and remote sensing data results in a more conservative and accurate quantification of biomass and carbon stock. The biomass estimation approach using remote sensing has been verified as reliable and conservative. It does not affect the baseline or additionality argument for the project. The monitoring report has been updated to clarify the approach used for the calculation of carbon stocks and timber volumes, providing further substantiation of the methodology's reliability.

The methodology deviation has been reviewed and confirmed as appropriate, meeting the requirements of the VCS Standard and ensuring that the quantification of greenhouse gas emission reductions or removals remains conservative and accurate.

The results of the comparison between the usage of field plots vs field plots combined with remote-sensing are the following:

Metric	Field Plots	Plot-RS ML	% Difference
Total Carbon (Mg C)	6,609,688	6,054,169	-8.40%
Mean ACD (Mg C ha ⁻¹)	78	71	-8.30%
Total Timber Volume (m ³ ha ⁻¹)	6,870,475	6,813,318	-0.80%
Annual Growth Rate (Mg C ha ⁻¹ yr ⁻¹)	2.96	2.87	-3.00%

Additionally, during the onsite visit, the audit team confirmed that the dense tree cover, hilly terrain, muddy soil, and poor-quality roads make it challenging to monitor permanent plots. Therefore, remote sensing techniques prove to be particularly useful and valuable for these types of landscapes.

Technical calls and onsite explanations with the PP were also used to review this comparative analysis.

Therefore, this methodology deviation does not negatively impact the conservativeness of the quantification of reductions or removals in any way, on the contrary, it increases the accuracy of the quantification provided.

3.3 Minor Changes to Project Description (CCB Program Rules, 3.5.6)

In this second verification, the following minor changes to project description are identified.

Minor changes have been applied to the community and biodiversity elements of the project design. The updates in section 1.1 of the MR /1/ now reflect only the benefits not previously included in section 1.2. These include strengthened community governance and decision-making, increased women's leadership in community development, climate adaptation through hydrological resilience and soil conservation, and improved landscape connectivity for endangered species. This was modified due to one of the findings raised by AENOR, relative to the differences between Unique Project Benefits and Standardized benefits (sections 1.1 and 1.2).

Additionally, section 4.4.2 now includes both "Women and Youth in Karamuak and Kuamut Cluster" as the marginalized and/or vulnerable community group, expanding the scope to include the youth population, which was not addressed in the original project description (PD). Also, this is based because the names between PDD and MR, in the community and BD expected and achieved changes should be the same, or if modified, a minor change shall be applied.

Finally, the last small change that was incorporated within the community monitoring plan, was the inclusion of new indicators. These indicators are explained in section 4.3.1 of the MR, and summarized are the following:

- Number of training programs conducted
- Number of participants trained
- Number of local community members trained
- Number of women trained
- Number of part-time jobs
- Number of casual workers
- Number of women employed
- Incidences of hunting activities recorded (replacing changes in wildlife population)

These additions reflect an enhanced approach to measuring and reporting project outcomes that improve transparency and responsiveness to community priorities.

These changes were assessed and found to be minor, as they do not represent a deviation from the project design or alter the fundamental objectives. They were made to ensure conformance with CCB program requirements (rule 3.5.6). The changes have been

appropriately described and justified, and the project remains in full compliance with the validated project design.

Additional details can be found within the findings annex, at the end of this verification report.

3.4 Project Description Deviations (VCS, 3.21; CCB Program Rules, 3.5.7 – 3.5.10)

The following project description deviations are presented in the current verification, in spite of some of them already occurred in the previous verification event:

1. Biomass Mapping

The Kuamut Rainforest Conservation Project has made updates to its methodology based on improved data and techniques for biomass and carbon stock estimation. These changes focus on making biomass mapping and carbon stock calculations more accurate and reliable, incorporating new datasets and advanced modeling methods.

Some of the updates are:

- More accurate GPS data for the field plots.
- An updated Digital Terrain Model (DTM) using a combination of geoid-corrected LiDAR data and the Copernicus GLO-30 Digital Elevation Model.
- A new, more consistent Tree Canopy Height Model (CHM) based on a machine learning approach, which replaces the older Asner CHM model.
- Remeasurement of forest plots with new data to improve the relationship between biomass and Earth observation data, enhancing the accuracy of biomass predictions.

The monitoring of carbon stock changes in aboveground biomass within the Kuamut Rainforest Conservation Project relies on a combination of remote sensing and field plot remeasurement. Initially, the project established 46 permanent 30-meter radius field plots in the Kuamut area. These plots were remeasured starting in 2021, with final remeasurement completed by March 2022 due to movement restrictions and access difficulties. As a result, the calibration/validation dataset includes two measurements for each of the 46 plots, totaling 92 field plots.

For biomass mapping, the baseline biomass was originally estimated using LiDAR data from 2016. However, this has been updated with newer and more accurate datasets. These updated datasets have also been applied to estimate annual carbon stock changes in aboveground biomass ($\Delta CAB_{t|PRJ}$) for the project. A multi-temporal modeling approach was developed to estimate the spatial distribution and variability of aboveground biomass, considering potential emissions from small-scale deforestation or degradation. This

approach uses machine learning to integrate multiple data sources: 2016 aerial LiDAR data (for canopy height), 2016 and 2021/2022 field plot data, and satellite imagery from Landsat 8 (2015-2023) and Sentinel 1 SAR data.

The project combines these data sources to produce an updated, wall-to-wall Top of Canopy Height (TCH) map, which is then used to generate annual biomass maps. Field plot measurements support this remote sensing-based approach, ensuring accurate monitoring of forest growth without the need to measure plots every monitoring period.

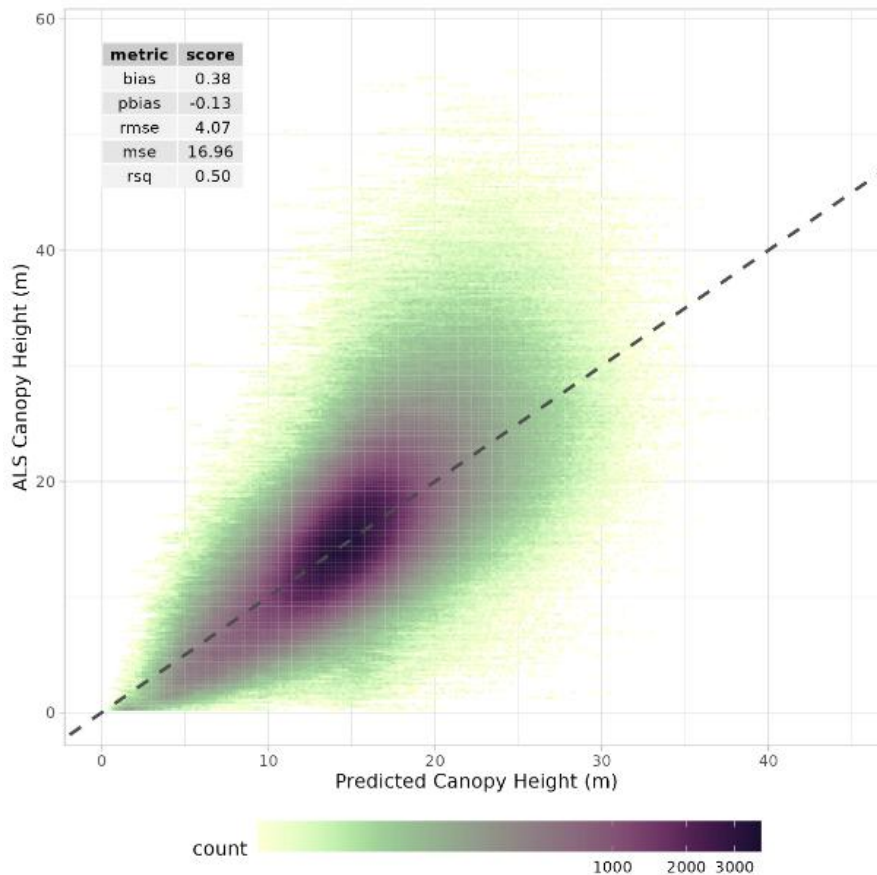
The data processing includes creating annual composite images using Landsat 8 data, with temporal smoothing applied to account for cloud cover and ensure consistent, reliable biomass predictions. For the years 2016-2022, a loess smoother was used, while for 2023, a linear reduction was applied to produce more conservative estimates for forest growth. The resulting product is a temporally consistent set of annual biomass maps. Additionally, SAR data from Sentinel 1 was pre-processed and integrated into a data cube that includes 41 bands, along with terrain data from the Copernicus GLO 30m global digital elevation model.

This modeling process, utilizing both remote sensing and field data, allows for accurate tracking of biomass and carbon stock changes across the project area.

These updated data and modeling techniques have been validated carefully, ensuring that the project's calculations for biomass and carbon stocks are both accurate and conservative. The field measurements were combined with the new data to ensure that the biomass model was precise, and the updated canopy height model was checked for consistency and accuracy.

Regarding carbon stock calculations, the project has updated its protected species lists for the Mosaic and NFM management areas, ensuring that the calculation of Above Ground Carbon for protected species is more precise. The results showed a more accurate estimate of Above Ground Carbon, with no significant impact on the project's baseline assumptions or additionality.

The audit team reviewed these updates and confirmed that they did not deviate significantly from the project's original design. The improved dataset and methodology are actually more conservative and accurate than the previous approach, and the VVB was fulfilled with the rigorous validation process that ensured consistency and reliability. Complementarily, this deviation was applied in the previous verification event, but updated to the current monitoring report.



To ensure consistency and coherence in the temporal dimension of the data temporal smoothing across each band of the data cube is validated through the R script provided /321-354/. Machine learning package mlr3 were applied to analyze the data cube and develop a Canopy Height Model that minimizes the Root Mean Square Error (RMSE) . Spatial resampling was conducted to evaluate the performance of the ensemble model and canopy height is predicted for the period from 2015 to 2023 The predictions generated by the model were carefully stored as spatial raster data contained in the folder identified by the specific folder number

In conclusion, the updated methodology is fully aligned with the project's initial objectives, and the changes enhance the accuracy and conservativeness of the carbon stock estimates. The project remains in compliance with the original design, maintaining its integrity and meeting all necessary standards.

Section 2.2.5 and 3.1.3 of the MR /1/ includes more details about these changes of the PDD in order to improve the accuracy of the project.

2. Other deviations

- Under the project scenario, ongoing forest growth is only accounted for from the date a parcel is to be harvested under the baseline scenario.
- The species conservation factors have been updated with more accurate and updated information on protected species from the Sabah Forest Department Herbarium.
- The same species conservation factors have been applied to restrict the accounting of ongoing forest growth to trees that would have been harvested under the baseline.
- Additional data and parameters for monitoring GHG emission reductions and removals were included in the previous MR that was approved by VERRA and the VVB. These were also included in the current MR in addition to those available at validation in the PD, these include:
 - Residual Stand Damage Factor,
 - Merchantable volume for tree *l* of species *j* in sample plots *p* in stratum *l*,
 - Allometric equation(s) for species *j* linking measured tree variable(s) to aboveground biomass of living trees,
 - Fraction of wood products that will be emitted to the atmosphere between 3 and 100 years after production,
 - Fraction of wood products that will be emitted to the atmosphere within 3 years of production,
 - Fraction of extracted biomass effectively emitted to the atmosphere during production,
 - Mean merchantable biomass as a proportion of total aboveground tree biomass for each forest type,
 - Forest regrowth rate post timber harvest for stratum *l*,
 - Mean volume of extracted timber per unit area for species *j* in stratum *l*,
 - Number of years since timber harvest in stratum *i* in land parcel *p*,
 - The area of stratum *i* in land parcel *p* that was harvested 1 year ago,
 - The area of stratum *i* in land parcel *p* that was harvested between 2 and 10 year ago,
 - The area of stratum *i* in land parcel *p* that was harvested between 11 and 20 years ago,
 - Cumulative area harvested until time t^* ,
 - Area of sample plots *p*,

3. Text deviations

The crediting period indicated in the PDD differed from the MR and from Verra Registry. Now, the crediting period indicated in this MR does match with the specified time in Verra Registry. See findings of this VR for additional information. This error came from the previous verification event. Complementarily, it has been updated from the PDD. These small changes do not affect the reliability or accuracy of the methodology

3.5 New Project Activity Instances in Grouped Projects (VCS, 3.6; CCB, G1.13 – G1.15)

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

3.6 Baseline Reassessment (VCS, 3.2.6, 3.2.7)

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes

☒ No

The project is not applying for a baseline reassessment during this monitoring period. AENOR reviewed the times needed for this reassessment under the VCS Standard, and confirmed that this project does not need to recalculate the baseline.

4 VERIFICATION FINDINGS

4.1 Project Details

Section 2 of the VCS-CCB MR provides information about project details. Particularly, Section 2.1.1 refers to Summary Description of the Project, 2.1.2 to Audit History, 2.1.7 Benefit Assessment and Project Crediting Period, 2.1.8 Project Location, 2.1.10 to Double Counting and Participation under Other GHG Programs, 2.1.12 Sustainable Development Contributions and other sections.

Item	Evidence gathering activities, evidence checked, and assessment conclusion:										
Audit history (VCS, 4.1)	This is the second verification of the KRCP. This information was crosschecked directly with Verra Registry for ID 2609. AENOR verified the project against VCS and CCB requirements. The verification team reviewed carefully all information included in the PD /3/ , previous MR and current version /1/. The audit process included desk review of the project design, the baseline and monitoring plan; site visit to the project area; follow-up interviews with project stakeholders and local authorities. During the verification some findings were raised, which were solved by PP before drafting the verification report. The initial verification report, monitoring report document /1/ and supporting evidence were submitted to technical review following accreditation and VCS requirements. The verification period comprises a period between 01 January 2022 until 31 December 2023, with a total of 2 years. The audit history is the following, which was confirmed through the Verra Registry: https://registry.verra.org/app/projectDetail/VCS/2609 <table><tr><th>Audit Type</th><th>Period</th><th>Program</th><th>VVB Name</th><th>Number of years</th></tr><tr><td>Validation</td><td>11 March 2023</td><td>VCS and CCB</td><td>Earthood Services Pvt. Limited</td><td>One year</td></tr></table>	Audit Type	Period	Program	VVB Name	Number of years	Validation	11 March 2023	VCS and CCB	Earthood Services Pvt. Limited	One year
Audit Type	Period	Program	VVB Name	Number of years							
Validation	11 March 2023	VCS and CCB	Earthood Services Pvt. Limited	One year							

	Verification	11 December 2015-31 December 2021	VCS and CCB	Earthood Services Pvt. Limited	Six years
	Verification	01 January 2022- 31 December 2023	VCS and CCB	AENOR Confía	Two years
Double counting and participation under other GHG programs (VCS, 3.23; CCB, G5.9)	The project is not receiving or seeking credit for reductions from a project activity under another GHG program, or any other form of community, social or biodiversity unit or credit.				
No double claiming with emissions trading programs or binding emission limits (VCS, 3.24.3-3.24.4)	The project is not registered or seeking registration under any other GHG program. No similar projects that are prone to be registered in other standards were identified by the audit team.				
No double claiming with other forms of environmental credit (VCS, 3.24.5-3.24.6)	The project has not been rejected by any other GHG program. No similar projects that are prone to be registered in other standards were identified by the audit team.				
Supply chain (scope 3) emissions double claiming (VCS, 3.24.7)	The project reduction or project activities are not included in an emissions trading program or binding emission limit. The project activity has not sought, received or is planning to receive credit from another GHG-related environmental credit system.				
Sustainable development contributions (VCS, 3.17)	During the monitoring period, the KRCP carried out activities that contributed to sustainable development by improving local livelihoods, access to basic services, and environmental conservation. These activities included job creation, providing clean water /101//105//141//, improving healthcare access, and protecting forests and biodiversity. They align with national priorities, especially poverty reduction and environmental sustainability, and directly support specific United Nations Sustainable Development Goal (SDG) targets. The report provides evidence of these contributions, ensuring				

alignment with the project's goals, SDG targets, and national priorities.

The *KRCP* contributes to 7 out of 17 Sustainable Development Goals (SDGs) achievements. Table 2.1 in section 2.1.12. Sustainable Developments Contributions of the Monitoring Report /1/ has summarized the contributions for the current monitoring, with project contributions and contributions over project lifetime.

Among the SD Contribution some of them are:

SD target 1.1. Proportion of population below the international poverty line: 244 people increased their income above the USD 2.15 daily rate. This includes 173 people from local communities earning as casual workers, 33 part-time staff and 38 full-time staff.

SD target 13. Tonnes of greenhouse gas emissions avoided or removed : The project has prevented the release of 731,958 tCO₂e and sequestered 842,855 tCO₂e during this period (after buffer).

SD Target 15.5: Red list index: 30 threatened fauna species (3 CR, 11 EN, 16 VU) detected in the Kuamut Project Area during this period.

AENOR has reviewed all the SD contributions reported in the current MP through desk review with some evidence such as the payments agreements /55/, the staff contracts /62-65//153/, the water tanks /101/, the benefits to the communities, the spreadsheets /57/ and the health of the forests, as well as the different ways to demonstrate the presence of IUCN species. Each SD indicator contributions were assessed against available evidence and also confirmed during the site visit carried out in February 2025.

4.2 Summary of Project Benefits

Section 1 of the monitoring report provides information about the project benefits. Achievements for the current monitoring period and for the project lifetime are detailed with specific data per categories in its section 1.1 states i) The Strengthened Community Governance and Decision-Making, in which 706 community members (256 women) participated in governance and decision-making workshops; ii) Increased Women's Leadership in Community Development, because 36% of total participants in project engagement activities were women. 125 women gained improved access to clean water, reducing the burden of water collection. Women actively participated in governance committees and held leadership positions; iii) Climate Adaptation through Hydrological

Resilience and Soil Conservation, by reducing soil erosion by preventing 14 to 20 Olympic pool-sized sediment discharges per year. Increased water supply through fog water interception by 620 to 1260 Olympic swimming pools annually; and iv) Improved Landscape Connectivity for Endangered Species, because the project contributed to the regeneration of mixed dipterocarp forest, enhancing habitat connectivity with the Danum Valley Conservation Area and surrounding areas of forest. Monitoring confirmed the presence of 36 RTE species, including 3 Critically Endangered (CR) and 11 Endangered (EN) species.

As specific and remarkable achievements for the current monitoring period the monitoring report in its section 1.2 states the net emission reductions of 731,858 tCO₂e and removals of 842,855 tCO₂e for the monitoring period. It has been assessed with the proper review of the calculations /355/ as final step of the desk review process. The standardized benefit metrics include: i) GHG emission reductions, ii) improved land management, iii) training of community members, iii) employment creation, iv) improvement of livelihoods, v) health services improvement, vi) improvement of access and quality of education, vii) clean water access improvement, viii) well-being improvement, and ix) biodiversity conservation.

The audit team reviewed information reported in this section against supporting evidence listed in appendix 4 and further information referenced in proper sections stated in standardized benefits; complementary, due to the onsite audit visit, the VVB was able to personally evidence and crosscheck all this information, the audit team has verified that all achievements reported are substantiated with information provided in the body of the CCB/VCS-MR. During the onsite visit, the audit team was able to confirm the benefits indicated in the MR, and there is a summary of the main aspects of the visit in section 2.5 of this report. The benefits were crosschecked with the benefits table /57/, in which the PP has records of all people working and being benefited from the project.

Data are supported with evidence and records checked during the interviews with stakeholders at the beginning of February 2025, review of activities implemented and desk review. This section has been completed appropriately with data from sources provided, such as calculations /355/, the GIS package /4-26/, stakeholder consultation /55-145/, grievances redress mechanism /146-147//102-103/, hiring and employment opportunities /38//60/, training evidence /27-34/, Biodiversity monitoring /180-244/, SOPs and policies /38-49/. All these documents are listed in Appendix 4. AENOR reviewed, opened and understood each of these documents and procedures. Direct interviews confirmed that the stakeholders were aware about the policies and registries. The comparison with the previous verification event has also been used to see if any changes occurred.

The project has created jobs for approximately 38 employees, some of them were interviewed by AENOR; during these interviews, AENOR also considered that the wellbeing of the people was improved due to project implementation, and 257 community members benefited of these improvements of whom 76 were women. Regarding the surface of forest management, the number of hectares of reduced forest loss in the project area measured

against the without-project scenario is 83,381 ha, which has been compared with the GIS and KML files /4-26/, but also with agreements /2/. The presence of endangered species were crosschecked with the IUCN red list, and their presence was directly observed during the onsite visit, but also through camera trap records.

In order to confirm the standardized benefit metrics, including: GHG emission reductions; Forest management; Improved land management; Training; Employment; Livelihoods; Health; Education; Water; Well-being and Biodiversity conservation, the audit team reviewed information reported in this section against supporting evidence mentioned above and full documentation listed in Appendix 4; also, the audit team has verified that all achievements reported are substantiated with information provided in the body of the project description and monitoring report.

In opinion of AENOR, the project benefits are credible based on the supporting documents provided by PPs and evidence received during the AENOR's stakeholders interviewed, records checked and field records. The project benefits are therefore credible based on the supporting documents provided by PP and evidence received during the AENOR's stakeholders' interviews, records checked and field observations as well.

4.3 General

4.3.1 Implementation Status (CCB, G1.9)

Assessment and conclusion	
Material misstatements	The VCS-CCB MR /1/ is adequately aligned with the VCS-CCB PD /3/. The audit team has performed the second verification; therefore, the audit team confirms that the information reflected in the PD totally aligns with different sections of the VCS-CCB MR. The audit team has compared both documents when it was necessary to see if the fixed sections at the time of validation were followed during this second verification. The audit team confirms that there are not material misstatements between PD and MR. Some findings were raised due to the incongruences between PDD and MR. When there are small discrepancies, they have been reported like: PD Deviations, Methodology deviations or Minor changes to PD.
Monitoring plan implementation status	The MR adequately details the implementation status of the project activities, and the effectiveness of the established monitoring systems was demonstrated to AENOR. Clear processes were confirmed to be in place for collecting and reporting on data to demonstrate the status of the project. The monitoring systems and procedures implemented by the PP were found to be consistent with the descriptions of the

monitoring methods given in the validated PD and related monitoring plan documents.

Section 2.1.1 of the MR provides the objective to be achieved by the project activities and the main tasks carried out for the monitoring period. The information is supported with additional documents, such as monitoring plans /176/ and agreements /2/, that give a complete information about the achievements. The onsite visit was relevant to evidence several objectives and achievements.

The implementation plan for the phased project activities has been also provided to the AENOR team along with the budget and implementation schedule. The project has achieved its objectives in Climate, Community and Biodiversity by implementing project activities in every program area as results confirm. The KRCP contributes to economic growth by providing project stakeholders with employment opportunities and a variety of livelihood enhancement activities. The project actively employs local stakeholders for forest protection and facility management and provides access to education for all project staff in addition to surrounding community members.

Section 2.2 of the MR provides the relevant milestones occurred during the last years in the project area related to the management and development of the project to understand its implementation status. These milestones are directly linked with the success to implement and achieve the goals established by the project in the community and biodiversity areas. The dates of such milestones were reviewed by AENOR with some evidence onsite, and the previous were confirmed with previous verifications. Evidence such as the consultations were used to crosscheck the dates of such activities.

The PP has divided the project milestones in three categories: Climate, Community and Biodiversity.

Climate:

1. Remeasure of all forest inventory plots, including updated botanical work of all the trees in the field plots between 2022 and 2023 → AENOR reviewed the raw data, and remeasured several plots during the onsite visit. They were useful for carbon calculations development.
2. Reporting of forest loss → the PP during their inspection and patrolling activities detected a forest loss of 2.5 hectares. It was due to the flood occurred in the wet season. AENOR reviewed the report /245-251/, remote sensing and GIS to confirm the location and surface of such loss. Additionally, the audit team confirmed it through

visual observations during the onsite visit. AENOR confirms that the estimations made by the PP are correct.

Community:

1. During the MP, 22 community engagement sessions were carried out. Those engagement included among others: workshops, meetings and training covering the topics of Free prior Inform Consent (FPIC) of local community participation, co-development of the Community Development Plan, Benefit Sharing Mechanism, Gravity Feed Water System Installation. Table 2.2 of the MR summarized all engagements carried out by the PP with the Stakeholders. AENOR reviewed all evidence which demonstrate each of these activities, to confirm the date and the attendants /55-145/. Additional interviews during the onsite visit also confirmed the fluent communication and engagement between SHs and project staff (including PACOs)

Biodiversity:

KRCP has different techniques for BD monitoring. During the current MP several milestones occurred for each activity:

1. Camera trapping → AENOR reviewed the records provided by the PP, and confirmed through date evidence, that the milestones and the pictures are correct /232-236/.
2. Bioacoustic monitoring → AENOR reviewed the Kuamut Biodiversity Data Analyses Workshop /225-231/ as well as the D021-04-01_Kuamut_bioacoustics_report /227/. Social Environment (SE) assessed the BirdNET and Perch bioacoustics models for classifying species, training the classifier with expert-validated data. They also created a standard operating procedure for equipment and data management. Bioacoustics helps analyze wildlife vocalizations without on-site presence. SE faced challenges with varying background sounds and audio durations across the 65 survey sites, which impacted classifier accuracy. They recommend using uniform audio durations and timings for improved results. AENOR gathered explanations about this procedure also during the onsite visit.
3. Dung Beetle Community monitoring → In 2022, the Kuamut Project conducted a dung beetle monitoring study in collaboration with Permian Global, SEARRP, and Nanyang Technological University Singapore. The team, including Drs. Eleanor Slade and Chiew Li Yuen, provided training on field sampling and species identification. They deployed 49 ground pitfall traps and 5 arboreal traps to survey dung beetles, with

a focus on species identification and community analysis. The study aimed to train the KRCP team, assess biodiversity, and lay the groundwork for a more systematic monitoring program in future years. Dung beetles are important for assessing forest diversity and ecosystem functioning, making them ideal for monitoring forest regeneration within the Kuamut Project. The pilot study tested the trapping methodology and logistical processes, including the use of human dung as bait. The identified beetle specimens were analyzed and cataloged by experts, with results contributing to long-term monitoring of dung beetle diversity and abundance. AENOR understood the relevance of those studies and combined the explanations gathered during the onsite visit, together with evidence review. AENOR checked the beetles report, the records and other papers associated /168-169/.

4. Forest Integrity Assessments (FIAs) → In 2022, the SEARRP team conducted Forest Integrity Assessment (FIA) surveys in the Kuamut Project area. The team, including Heon Sui Peng, Jonny Larenus, and others, was overseen by Dr. Sunarto, with Drs. Sarah Scriven and Sunarto summarizing the data. The FIA tool, developed by the High Conservation Value Network and adapted for Southeast Asian forests, is a simple and efficient method for assessing forest condition through yes/no questions while walking along forest trails. It has been proven to correlate well with measures of forest health, such as biodiversity, vegetation structure, and ecosystem functions like decomposition. The surveys were carried out at 49 biodiversity monitoring sites selected for their accessibility. These sites, used for other monitoring methods like camera trapping and bioacoustic monitoring, helped assess forest structure and quality within the Kuamut Project area. FIA surveys were only conducted in 2022, as the smartphone application was under development in 2023, with plans to resume in the next monitoring period (2024/2025). AENOR reviewed the several evidence which support these studies /242-244/.
5. Orangutan Population Monitoring → Orangutan monitoring carried out in 2023. Several studies /237-241/ demonstrate the accuracy of the Orangutan monitoring through aerial nests counting. AENOR reviewed such literature, and compared with the observations done during the onsite visit. The results of the inventory /240/ were also evaluated by AENOR.
6. Threat Monitoring → Several patrolling routes were carried out between 2022 and 2023. AENOR reviewed the summaries of

	such tracks and the records /180-224/ and the potential routes. AENOR discussed with some members of the project staff about the encounters they had during the MR. Section 2.2.1 provides a vast list of milestones occurred during this MR. The audit team considers, after the review of the PD and MR and verification that the project has been implemented as described in the PD. All milestones were checked by AENOR.
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The changes that occurred in this Monitoring Period, including methodology deviations, minor changes and project description deviations have been described above. Please see section 3.2, 3.33 and 3.4 of this report.

4.3.2 Stakeholder Identification (VCS, 3.18, 3.19; CCB, G3.6)

According to section 2.3.1 of the MR, no changes in stakeholder identification were recorded since validation. The communities participating in the current monitoring period as well as all relevant stakeholders were identified at time of validation. AENOR compared the information of the PDD /3/ with the current and previous MR. Hence, is confirmed that the communities are the same than those validated.

4.3.3 Stakeholder Consultation and Ongoing Communication (VCS, 3.18; CCB, G3.4)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Community groups and other stakeholders	According to section 2.3.1 of the MR, no changes in stakeholder identification were recorded since validation. The communities participating in the current monitoring period as well as all relevant stakeholders were identified at time of validation. AENOR compared the information of the PDD /3/ with the current and previous MR. Hence, is confirmed that the communities are the same than those validated. The project carried out workshops and consultation in the following villages: Kg. Tulang-Tulang, Kg. Desa Permai, Kg. Tamoi, Kg. Karamuak Dalam, Kg. Kuamut, and Kg. Tangkuyan. Kg. Karamuak Luar and Kg. Tenanga Baru /55-145/ Additionally, based on the community impacts located in section 4.1.1 of the MR, the communities affected by the project are: Youth from the Karamuak cluster and Kuamut cluster, Hunters from the Karamuak cluster and Kuamut cluster, Karamuak cluster and Kuamut cluster, Community groups not directly benefiting from

	project activities located further away from the 20km radius used to identify the communities participating in the project activities. Together with the PP, other entities collaborate with the project development. Those organisations are South East Asia Rainforest Research Partnership (SEARRP), and Partners of Community Organisation (PACOS) Trust. All these stakeholders were interviewed by AENOR during the onsite visit. See attendance lists.
Ongoing consultation	The project team organized several FPIC (Free, Prior, and Informed Consent) workshops in various villages, including Kg. Tulang-Tulang, Kg. Desa Permai, Kg. Tamoi, Kg. Karamuak Dalam, Kg. Kuamut, Kg. Karamuak Luar and Kg. Tenaga Baru and Kg. Tangkuyan. /55-145/ These workshops provided detailed presentations on the Kuamut Rainforest Conservation Project (KRC), obtained community consent, established Village Implementation Committees, and facilitated the signing of Memorandums of Understanding (MoUs). /66-72//112-125/ The co-development of the Community Development Plan (CDP) /126-131/ was carried out at the cluster level, specifically in the Karamuak and Kuamut clusters, with meetings and workshops in each cluster. Additionally, briefing sessions on the Benefit Sharing Mechanism (BSM) /102-103/ and priority setting were held with local communities in both clusters. AENOR's team confirmed such information with the different interviews carried out during the onsite visit, in which some of the questions were based in communication with the PP. Also, audit team reviewed relevant evidence quoted above. The evidence provided by the PP to demonstrate the engagement is very extensive. There are many records, minutes and pictures that the audit team has used to confirm such information. Regarding the minutes, the attendance lists and the summaries of such FPICs /108-123/, MoUs /66-72/ and other workshops, AENOR confirmed that the information is correct, since it was also crosschecked with onsite testimonies.
Date(s) of stakeholder consultation	The dates of the stakeholder consultation were reported in the MR section 2.3.9, and crosschecked with onsite testimonies and records and proofs of such meetings with stakeholders /139-144/. In summary, several meetings were held between 2022 and 2023. The evidence provided consists in several meetings and minutes for both cluster: Kuamut and Karamuak, for those 2 year MR. AENOR confirms that the evidence is correct and do match with the MR description.

Communication of monitored results	AENOR confirms that the results of the MR were shared with the stakeholder during regular meetings. The interviewees recognized to be aware about each milestone of the process as well as the auditing process. During the site visit, the audit teams interviewed the key individuals particularly leaders of the communities, and neighbours who received physical copies of the MR summary in different languages. In addition, the PP maintains a full, printed version of the MR and associated annexes in English for public viewing. The full MR and its executive summary are also available in English and Bahasa on the VCS project database. To disseminate information, materials were shared via village leaders, WhatsApp groups, flyers, posters, bulletin boards, and direct community gatherings. Reports, including progress updates, stakeholder engagement plans, FPIC guidelines and social/environmental assessments, were provided to community members and community leaders, and made available online at: https://permianglobal.com/projects/kuamut-rainforest-conservation-project/.
Consultation records	AENOR has reviewed the evidence to demonstrate that all consultations already happened. Minutes, workshops and attendance lists were reviewed by the audit team. The project publicized a variety of informational materials in languages using a combination of promotional materials such as letters, signs, posters, and announcements at community meetings and workshops. AENOR has reviewed these advertisements and during the onsite visit interviewed several people who confirmed the possibility to participate in such informational meetings. AENOR confirmed the results with the records provided as evidence /55-145/ and through information collected during the February 2025 site visit.
Stakeholder input	In the FPIC workshops /94-123/, villagers voiced concerns about potential land-use limitations, but were assured they would still have access to their traditional resources. The Community Development workshops /73-90/ helped to improve livelihood initiatives, with community members requesting additional training in sustainable agriculture and eco-tourism. During the Gravity Pipe System meetings /99-101/, stakeholders proposed changes to the pipeline's location, which were reflected in the revised design. Issues related to labor payments and land access were addressed through discussions with village representatives. During the onsite visit, the verification team was informed and confirmed that the project staff consulted with local communities and other stakeholders to ensure mutual understanding regarding all project activities and potential impacts. Through these consultations, the project has been able to implement programs that are based on the needs of community members and stakeholders. AENOR deems

	that the stakeholder consultation practices carried out by the PP during the monitoring period ensures the participation of all community groups and other stakeholders in the design and implementation of the project, respecting their values, customs, and institution, as well as optimizing community benefits
Influence of stakeholder input	Based on the evidence provided and the testimonies of community members and representatives directly consulted by the audit team, AENOR considers that continuous communication with stakeholders has been properly carried out throughout the monitoring period, directly with communities and other stakeholders or through their legitimate representatives, and that this communication has been effective in allowing stakeholders to influence the project implementation. AENOR observed through those meetings and consultations, that, the comments that the SHs had after the consultations, were implemented and were taken into account by the PP. It was clear for AENOR that, according to the interviews, the PP is always open to receive comments and improve the current situation of the project area and surrounding communities. AENOR interviewed people from these communities and participants to the meetings and considers that they were able to participate in the decision-making process of the project and the PP listened to their opinion and recommendation. The minutes of the meetings /145/ also showed that the different stakeholders participating in the meetings had the opportunity to provide their feedback. This was double checked with on-site testimonies.

4.3.4 Stakeholder Access to Information (VCS, 3.18; CCB, G3.1- G3.3)

The PP has provided the following information about the access of the stakeholder to the different information:

From 2022 to 2023, the KRCP project team engaged with local communities through various communication methods to ensure accessibility and transparency. This included regular workshops, community meetings, and updates on project activities. Detailed reports on progress, expenditures, and achievements were shared with stakeholders and made available online. Community committees (AJK) were formed to enhance local involvement, governance, and communication. Grievance mechanisms were set up to allow community members to raise concerns. All materials were translated into Bahasa / Malay language for accessibility, and information was distributed through village leaders, WhatsApp groups, flyers, posters, and meetings. Documentation of all meetings and decisions was maintained for transparency. AENOR has reviewed those workshops as well as the minutes of the meetings to confirm that indeed, the information provided was properly shared with the communities.

Also, the summaries were disseminated through different means. As per CCB requirements, summary documents and key project updates were translated and disseminated to

communities through local governance structures, including the Community Executive Committee and village committees. Hard copies were distributed at meetings, and digital versions were made available on the project website. AENOR reviewed the records of such dissemination and crosschecked the information with testimonies from February 2025, confirming that indeed, the summaries /158-167/ were distributed in local language too. AENOR reviewed for example the Poster , which provides clear information accessible for every type of stakeholder. This complies with the CCB requirements.

Regarding costs, risks and benefits, PACOS Trust is the body in charge to inform about these topics. The interviewees recognized that were informed about costs, risks and benefits, and also it was double checked by AENOR with the review of the FPIC and other meetings. Some of these discussions included:

The identified costs, risks, and benefits of the project include:

Costs to Communities:

- **Restricted Land Use:** Traditional activities like hunting, logging, and shifting cultivation may be impacted by conservation regulations.
- **Time Commitment:** Community involvement in meetings, training, and governance could interfere with daily routines.
- **Expectation Management:** There were concerns about how evenly conservation benefits would be shared and the timeline for these benefits to materialize.

Risks to Communities:

- **Economic Uncertainty:** Worries arose about losing income from forest-based activities and whether alternative livelihoods would be enough.
- **Conflict Over Resource Access:** The introduction of conservation measures could lead to disputes over land rights and access to natural resources among community groups.
- **Project Dependency:** There is a risk of becoming too dependent on the project, highlighting the importance of building capacity and establishing sustainable governance systems.

Benefits to Communities:

- **Improved Livelihoods:** Job opportunities in projects like water system construction, ecotourism, and sustainable agroforestry offer new income sources.
- **Better Water Security:** Community-driven initiatives, such as the gravity-fed water system, directly address essential water needs.
- **Stronger Governance:** The establishment of the KRCP Community Committee gives locals a role in decision-making and project oversight.
- **Environmental Sustainability:** Protecting the forest improves biodiversity, soil health, and water resources, benefiting local agriculture.

- **Capacity Building:** Training programs equip community leaders and members with skills for managing projects, governance, and sustainable livelihoods, ensuring long-term self-sufficiency.

AENOR considers that those costs, risks and benefits are well described. The protection of the Forests will reduce the usage that the communities could make as well as the resources they could obtain. However, they understand the benefits. Other benefits are for example the trainings /27-34/ they are constantly receiving, the employment or the wellbeing of their families. Finally, the risks, which were also mentioned and understood but all interviewees, are for example the uncertainty of a new way of receiving incomes. However, the project is a whole that they have to evaluate by putting on the table: risks, benefits and costs, without analyzing them independently. All interviewees declared to be aware and agree with those information, and in any case, if some of them had any doubt, it was solved through the different meetings they regularly had with the PP and PACOS Trust.

Regarding the verification process, all interested parties declared to be aware about the visit of the auditor (AENOR) to perform an onsite visit as part of the auditing process. They understood that this was the second verification and also the whole carbon project. AENOR reviewed the newsletter which indicated that AENOR went to visit the KRCP in February 2025. Attendance lists for such communications were also shared with AENOR.

AENOR considers that the way in which the PP has shared information with the stakeholders is correct. The information is truthful and accurate. The languages have been understood by all audiences, as other more informal means have been used to transmit the news. Additionally, the risks, costs and benefits were also shared and perfectly understood by the neighbors. Finally, it has been clear to AENOR that all the people involved know about the audit process and understand AENOR's role as auditor.

4.3.5 Grievances (VCS, 3.18.4; CCB, G3.8)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	No grievances were identified in this verification. AENOR asked in all meetings if the interviewees had any complaint, or if they heard about any complaint, but nobody indicated any grievances.
Grievance redress procedure	The Kuamut Rainforest Conservation Project (KRCP) has established a comprehensive grievance mechanism /146-147/ designed to ensure that individuals and communities impacted by the project can voice concerns and seek resolutions. With the primary goal of supporting equitable project implementation, the

grievance mechanism promotes transparency, accessibility, and respect for stakeholder rights, particularly those of local indigenous communities. This process is designed to comply with both national and international regulations, aligning with REDD+ project standards and safeguards.

The grievance mechanism is a structured system facilitating the safe, confidential, and fair submission of complaints related to KRCP activities. Key guiding principles include:

- Fairness: All grievances receive impartial handling.
- Transparency: The process is clear and open to all involved.
- Accessibility: A variety of submission channels (grievance boxes, WhatsApp line, in-person meetings) make it accessible to all stakeholders.
- Confidentiality: Sensitive information remains protected to foster honest participation without fear of reprisal.

These principles enable the grievance mechanism to act as a reliable tool for resolving conflicts and strengthening KRCP's community relationships.

The grievance panel brings together representatives from Permian, Sabah Foundation, Sabah Forestry Department, PACOS, SEARPP, RBJ and aims to include a District Officer in the future. This multi-stakeholder composition ensures a broad spectrum of expertise and perspectives, facilitating a fair and balanced resolution process. By integrating community access to external support organizations, such as SUHAKAM and JOAS, to empower individuals with multiple avenues for grievance redress, fostering greater transparency and accountability.

This approach embodies our commitment to an open, inclusive mechanism, allowing community voices to resonate within the project and, if necessary, beyond, in alignment with human rights and community development principles.

the following stages were followed, as also described in the validated PD:

- 1) Amicably resolve all grievances and provide a written response in a manner that is culturally appropriate: This is not applicable because there were no grievances raised during the monitoring period.
- 2) Any grievances that are not resolved by amicable negotiations shall be referred to mediation by a neutral third party: This is not applicable because there were no grievances raised during the monitoring period
- 3) Any grievances that are not resolved through mediation shall be referred either to a) arbitration, to the extent

allowed by the laws of the relevant jurisdiction or b) competent courts in the relevant jurisdiction, without prejudice to a party's ability to submit the grievance to a competent supranational adjudicatory body, if any. This is not applicable because there were no grievances raised during the monitoring period.

The audit team asked several interviewees during the onsite interviews about this Grievance Mechanism, and in spite of all of them recognized to be aware of such mechanism, the interviewees declared that none of them had any complaint with regard to the project. AENOR held interviews with a broad range of stakeholders during the onsite visit and confirmed that the grievance redress procedure described has been implemented and that no grievances were raised during the monitoring period (also verified by AENOR through the review of the notification that no grievance was raised in 2022/23 /102-103/). Therefore, AENOR's verification team is able to confirm the grievances procedures were applied as per validated CCB-VCS-PD and in accordance with VCS and CCB (G.3.8) requirements. The KRCP Grievance Redress Mechanism /146-147/ was reviewed by AENOR and confirms that the information is correct and accurate and hence, aligned with the VCS standard v4.7.

4.3.6 Stakeholder Participation in Decision-making and Implementation (VCS, 3.18, 3.19; CCB, G3.6)

The stakeholder involvement in project design as well as the stakeholder communication system is described in the validated PD and the MR. The audit team was able to verify the stakeholder's involvement through the different interviews and meetings conducted and through records of different meetings and workshops, and engagements. Community members demonstrated awareness and consent of the project's activities. Consultations ensure inclusive engagement with men, women, and marginalized groups, encouraging their participation in culturally appropriate ways to ensure that the project can accommodate a wide range of perspectives. AENOR has interviewed people from these communities and participants to the meetings and considers that they were able to participate in the decision-making process of the project and the PP listened their opinion and recommendation.

In the reporting period (2022-2023) a total of 22 engagement sessions were conducted including workshops, meetings and training sessions to inform the community of the project and the progress but also to collect their input and facilitate decision-making /55-145/. AENOR reviewed such engagement processes to crosscheck the correct date, the proper participation and the inputs provided by the attendants and accepted by the PP. In total 706 community members (450 male, 256 female) participated in these sessions.

The PP has specific mechanisms to ensure women participation. 36% of the attendants were women. Also, AENOR interviewed several women and confirm they had real opportunities to join the conversation as well as providing feedback. None of the women interviewees by AENOR recognized any type of discrimination.

AENOR made interviews in all communities cluster, and even crosschecked the attendant list of the engagement records /55-145/, with the onsite visit attendant list. For the meetings with local stakeholders, interviewees were asked about her role and the relationship with women and children, stating to everyone the importance of their presence and work in engaging with communities.

Thus, it is the opinion of AENOR that the communication and consultation plan as described along the PD is being implemented and that it enables effective participation in a culturally appropriate and gender-sensitive manner with all communities.

4.3.7 Risks from the Project and No Net Harm (VCS, 3.18, 3.19)

The information about this section is provided in [appendix 2](#) of this report.

4.3.8 Community and Biodiversity Benefit Permanence (CCB, G1.11)

Describe the steps taken to verify the actions needed or implemented to maintain and enhance the climate, community, and biodiversity benefits beyond the project lifetime, as identified by the project proponent. Provide and justify a conclusion as to whether reasonable measures have been taken to enhance project benefits beyond the project lifetime in accordance with the validated project description document.

The PP fosters the permanence of the project by three components:

Climate:

The protection of the project area, classified as Class I, is permanent. AENOR reviewed the Land Agreements /2/ and considers that this topic is covered.

The continued monitoring and patrolling avoid possible adverse effects such as fires. Hence, the combined protected by Law, together with the effective measures, are promoting the permanence of the project along time, as well as their climate benefits.

Community:

The project has enhanced the well-being of the stakeholders as it was indicated in sections above and also in the MR. The generous gains of the project are beneficial for all communities. The participation in the different workshops allow the communities to provide their feedback which is very appreciated. About the jobs, several positions were covered during this MR, which are also a basis of inputs and economy support. The jobs are covered

by men and women, so several families can be part of the project. Additionally, the benefit sharing mechanism is another income for those families.

AENOR reviewed the jobs and the covered positions, the trainings /27-34/, the benefit agreement /134//55/ and also the well-being improvement in the communities. Several interviews were used to confirm the happiness of the communities with regards to the project, and hence, their permanence along time.

Biodiversity:

The permanent conservation agreement, being as Class I forest, is the key to maintaining the preservation and enhancement of the ecosystems. The project has significantly improved the management of 83,381 hectares for biodiversity conservation. During this monitoring period, it has benefited 3 Critically Endangered (CR), 11 Endangered (EN), and 16 Vulnerable (VU) fauna species. Over the lifetime of the project, the impact has extended to 4 CR, 18 EN, and 32 VU fauna species (including 26 mammals, 23 birds, and 5 reptiles), as well as 6 CR, 5 EN and 23 VU flora species. AENOR reviewed the conservation plans /170-171/, the agreements /2/, as well as confirmed the presence of those species by direct observation during the onsite visit, but also with records from camera traps or other methods.

By implementing these measures, the KRCP not only addresses immediate conservation, and community needs but also sets a foundation for sustained environmental and social benefits that can last well beyond the project's official duration.

AENOR has verified those activities through the desk review and during the on-site visit, by checking different future plans and also during the on-site assessment different people were interviewed and asked about the benefits of the project among other topics. Specifically, the audit team interviewed dozens of relevant stakeholders and local community representatives (Head of village, Elders, Women, youth, different roles). When asked about the benefits of the project and whether they thought it was good in the long term, all of them answered in the affirmative as it reinforced all the aspects mentioned above by improving their organization, strategies, governance and other aspects beyond the project lifetime. AENOR considers the activities correct to enhance project benefits beyond the project lifetime.

4.3.9 Risks to the Project (CCB, G1.10)

As summarized in section 2.2.7 of the monitoring report, the PP has indicated the risks happening during this verification period. The PP has provided mitigation activities through active patrolling, continuous engagement with stakeholders, wildlife encounters trainings and real time fire monitoring.

AENOR deems that the Project Proponent correctly identified the risks to the project benefits but the most important is that created, and it is implementing actions to reduce or diminish

the negative impacts of these risks in the benefits on the Climate, community and biodiversity.

The audit team reviewed the trainings /27-34/ used as mitigation measure, and double checked the information with onsite testimonies. Fire monitoring was explained by the PP to AENOR during onsite visits.

In addition to these risks, the PP has developed a Non-Permanence Risk Report to estimate the risks on climate benefits in accordance with the VCS AFOLU Non-Permanence Risk Tool v.4.2. This way, internal, external and natural risks are considered, not just to issue conservatively future carbon credits in the future but also to analyse and consider possible risks that might affect the project's viability and to mitigate them to ensure its success of it.

4.3.10 Anti-discrimination (VCS, 3.19; CCB, G3.7)

The project is committed to holds every individual involved in project design and implementation to a high standard of integrity which ensures no one is involved, or complicit in, any form of discrimination or sexual harassment with respect to the project and its communities. This includes discrimination based on gender, race, religion, ethnicity, social class, or other aspects of human individuality.

The PP has developed several forms and policies to avoid potential discrimination behaviors. Some of them are the sexual harassment policy /43/, which forms an essential component of our safeguarding framework, which includes a Whistle-blower Policy, Employee Code of Conduct, Cultural Guidance for visiting scientists and students and Complaints and Investigations Procedures. The whistleblowing policy and SOP /44-49/ is another policy for avoiding inappropriate conduct in the workplace includes discrimination, sexual and any other form of harassment, bullying or intimidation, verbal or physical assault, abuse of power, theft, fraud, corruption or bribery, breach of personal data privacy and confidentiality, or other breaches of SEARRP policy or code-of conduct which may create legal, financial or reputational risks to the organization, including negligence or lack of action by management which could ultimately encourage such conduct. The whistleblowing channel enables individuals who submit reports of misconduct to remain anonymous, especially if the complainant is of the view that a complaint may not be handled correctly (e.g. if it involves someone very senior in the organization) or if they are concerned at facing harassment, intimidation, discrimination or retaliation for making a report in good faith.

Additionally, AENOR has reviewed the GRM protocol /146-147/ and cross-checked the absence of negative comments within the mechanism, alongside onsite interviews. The abundance of policies and preventive measures demonstrate the KRCP's compliance with anti-discrimination policies and other forms of harassment. As a result, the project shows no signs of complains.

During the process of the verification, the audit team did not find any evidence that the project is engaging in any form of discrimination. AENOR checked and confirms that the PP has developed specific measures to prevent discrimination and to guarantee equal opportunities for community members, including women and vulnerable and/or marginalized people. Complementary, through the onsite visit carried out by the verification team, AENOR had the opportunity to ask to the stakeholders and beneficiaries if they had knowledge of any sign of discrimination. None of the interviewees declared to know proofs of discrimination. Furthermore, among the interviewees, there were women (listed in Appendix 5) who declared to be part of the project without being discriminated

4.3.11 Worker Relations (CCB, G3.9 – G3.12)

Regarding trainings, in total, 6 trainings were carried out. More than one hundred people participated in those trainings, including: training about 1st aid /33-34/, about BD analysis /174/ and socio-economic data, among others. AENOR reviewed the evidence for those trainings, which include: attendance lists, proposal of the courses, and confirmation of the attendance during the onsite visit, when the interviewees declared to be advised and to be part of different trainings programs.

For maintenance of local capacity, engaging local community members in data collection and project activities ensures that the knowledge and skills developed during the project remain within the community. Regular training sessions /27-34/ and updates help keep both staff and community members informed, allowing them to maintain and build upon their acquired skills. Defining clear roles and responsibilities for everyone involved ensures effective contribution and accountability throughout the project. During the interviews, all staff members had very clear their roles in the KRCP. Additionally, thorough documentation and regular reporting create a valuable knowledge repository that can be referred to for future initiatives. Involving the community in decision-making processes fosters a sense of ownership, ensuring continued support and the sustainability of the project even after its initial implementation phase. These practices collectively contribute to building and maintaining long-term local capacity for the community.

About the employment opportunities, the KRCP is always following their HR policy /47/, which states that all candidates are considered based on their qualifications without discrimination. AENOR reviewed the policy and crosschecked the information with onsite testimonies. Complementary, no grievances were raised about this topic. The PP ensures that regular payments reviews are done, in order to guarantee equal conditions. The interviewees recognized to be very happy for their positions and the conditions they had working for the KRCP. Regarding figures, In this reporting period of 2022, the Kuamut Project hired a total of 32 individuals on a full-time basis and the number increased to 38 individuals at the end of 2023. This includes 6 persons from Karamuak and Kuamut villages on full time

basis. AENOR has reviewed the staff of the project, and crosschecked the names with onsite testimonies during February 2025.

Additionally, the project tries to avoid and mitigate potential risks to the workers. The KRCP has prioritized worker safety but has identified several inherent risks associated with its implementation. These include exposure to wildlife and insects, navigation and communication challenges in dense forests, physical injuries from activities like fire suppression and field surveys, environmental hazards such as harsh weather and flooding, and logistical shortfalls that may leave workers vulnerable in emergencies. To address these risks, the project has implemented safety measures including the provision of first aid kits with anti-venom cream and insect repellent (reviewed by AENOR during the onsite visit), navigation and communication equipment like GPS devices and transceivers (reviewed by AENOR during the onsite visit), and a buddy system for mutual assistance. Workers are also supplied with essential safety gear such as gloves, boots, and survival kits, and logistical support ensures that extra supplies like fuel, food, and water are available in case of delays (reviewed by AENOR during the onsite visit). Additionally, comprehensive safety training is provided to all workers before starting any activities, covering topics like emergency procedures, equipment use, and shelter building. These measures help minimize risks by ensuring that workers are equipped to handle health issues, navigate safely, receive quick assistance in emergencies, and be protected from physical injuries and environmental hazards.

Hence, AENOR considers that the PP is complying with the worker relations about risks, trainings and well-being of the staff. So, the project is complying also with the CCB requirements and national Legislation.

4.3.12 Management Capacity (VCS, 3.19; CCB, G4.2 – G4.3)

The PP is committed with the skills-improvement of the staff. As demonstrated before, several trainings were carried out during this MP.

Furthermore, the management team at Permian Global, with decades of combined experience in land management, carbon projects, climate change, and forest management, is well-equipped to implement the Kuamut Rainforest Conservation Project (KRCP). Their specialized skills in carbon stock monitoring, biodiversity evaluation, and community engagement ensure effective project execution. The team's vast experience includes contributions to climate policy, carbon dynamics research, and successful community collaboration. They are committed to delivering comprehensive, sustainable outcomes through their expertise in tropical forest ecosystems and carbon estimation. AENOR reviewed the CVs of several people of the team. Technical meetings demonstrated the different qualities of the staff. During the onsite visit, AENOR was able to observe that the PP has different teams: Remote sensing, Biodiversity, Monitoring, Communities engagements. All staff is highly qualified.

The KRCP works with a wide variety of institutions, both locally and internationally, such as scientific experts, universities, NGOs, and development organizations. These partnerships offer essential technical guidance on climate science, community development, site management, and biodiversity conservation, contributing to the project's success. Collaborations with institutions like the Meteorological Department and climate-focused universities provide valuable climate-related data, while local NGOs and development groups help ensure effective, culturally-sensitive community engagement. These collaborations enhance the project's impact, expand its reach to new partners, and ensure continuous capacity-building. The project management team actively addresses any capacity gaps through targeted recruitment or additional partnerships, ensuring the project's long-term sustainability.

Regarding the financial health of the project, Permian Malaysia and KRCP are financially backed by Permian Global, which has more than 17 years successfully operating in the carbon markets. Also, carbon credits from the previous verification were already purchased. AENOR reviewed the financial analysis /291/ and deems it correct and reliable.

No evidence of any form of corruption or illegality was found during the review of the provided evidence and the interviews by the audit team. Through the onsite visit, the verification team did not obtain any proof of corruption signs, and none of the interviewees recognized to have the knowledge of corruption signs. Complementary, AENOR has reviewed the corruption policy /43-44/ and deems that the information provided does match with the development of the project. Hence, AENOR confirms that the project is in accordance with the VCS and CCB requirements.

4.3.13 Commercially Sensitive Information (VCS, 3.5.2 – 3.5.4; CCB Program Rules, 3.5.13 – 3.5.14)

This section is reported within the [appendix 1](#) of the verification report.

4.3.14 Legal Status and Property Rights

4.3.14.1 National and Local Laws (VCS 3.1, 3.6-7, 3.14, 3.18-19; CCB, G5.6)

The Kuamut Rainforest Conservation Project (KRCP) is fully compliant with Sabah's and Malaysia's legal framework. The Northern Kuamut Forest Reserve was established under the Forests (Constitution of Forest Reserves and Amendment) Enactment 1984 (No. 4 of 1984) and further regulated by the Forest (Northern Kuamut Conservation Area) Rules 2016, which outline the management of the reserve for biodiversity protection, research, and sustainable ecotourism. These Codes were reviewed by AENOR and understood through technical meetings with the PP.

Key legal provisions ensure that conservation efforts, such as research on ecosystem function, educational initiatives, and responsible tourism, are aligned with long-term sustainability. The management committee meets regularly to oversee these activities and ensure alignment with the forest reserve's goals.

In addition to this, Sabah has incorporated climate change and sustainability efforts into its Sabah Maju Jaya (SMJ) Development Plan (2021-2025), with the establishment of the Sabah Climate Action Council (SCAC) in March 2022, which coordinates state-level climate initiatives.

Hence:

- The legal framework emphasizes sustainable forest management, integrating conservation, research, and tourism.
- The project adheres to regional and national policies on biodiversity and climate action, ensuring it is aligned with Sabah's long-term development and sustainability goals.
- The Sabah Climate Action Council and the GHG inventory study are important initiatives that further solidify the state's commitment to addressing climate change, offering a supportive environment for the KRCP's activities.
- The project has remained compliant with all relevant legal frameworks, ensuring continued protection and promotion of sustainable development in the region.

AENOR, as the VVB, confirms that these regulations support the KRCP's goals and compliance. Additionally, AENOR's audit team did not detect during verification process any incompliance related to laws and regulations for the monitoring period.

4.3.14.2 Relevant Laws and Regulations Related to Worker's Rights (VCS, 3.18.2; CCB, G3.11)

Section 2.5.2 of the MR /1/ details the whole list of Laws and Legislation which cover the employment terms and conditions. Among others, the PP has indicated that the KRCP complies with:

- Employment Act 1955, amended 2022
- National Wages Consultative Council Act 2011
- Employment Insurance System Act 2017
- Occupational Safety and Health Act 1994
- [...]

Additionally to these rules, the PP has implemented several SOPs /38-49/ and Policies from which the Employee Handbook /38/ represents a good example of the commitment among all employees and the Project. This Code has several chapters, and some statements are referred to safety and health, stating that major misconducts are for example driving under the influence of drugs or alcohol. About working hours, some minor misconducts are repeated failure to meet the established standard of work, Refusal to carry out the day-to-day duties or tasks that have been assigned within the lawful and reasonable remit of the individual's job description or habitually ceasing work before the stipulated closing hour without permission, reason or cause.

The rest of clauses are reviewed by AENOR and considered consistent with the rest of National Legislation.

Hence, during the onsite interviews, AENOR asked to the staff interviewed whether they knew the legislation which cover their rights, and also, if they knew the existence of the Employee Code of Conduct /38/. All interviewees recognized to be aware of such Legislation and also the internal procedures.

4.3.14.3 Human Rights (VCS, 3.19)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	The project aligns with international human rights law, including the United Nations Declaration on the Rights of Indigenous Peoples and ILO Convention 169 on Indigenous and Tribal Peoples, through various measures: • Free, Prior, and Informed Consent (FPIC): The project engaged the local communities through extensive FPIC workshops conducted by PACOS Trust, a Sabah-based indigenous peoples NGO. AENOR reviewed the FPICs /94-123/ and confirmed that all communities are involved in such engagements, and also, several topics were covered. Including the possibility to provide inputs and comments. • Community Participation and Benefit Sharing: The project involves communities in designing and implementing social development programs. The communities involved in the project are gathering several benefits: Money, improvement of wellbeing, trainings, employment, etc. AENOR reviewed the BFS agreement /55/, and rest of benefits, such as Trainings /37-34/, Staff /62-65/, and wellbeing improvement activities. During the onsite visit, all these topics were double checked and asked during the interviews.

- **Legal and Policy Frameworks:** The project complies with the Verra Climate, Community, and Biodiversity (CCB) standards and the Verra Verified Carbon Standard (VCS). This is the second verification. AENOR reviewed the MR /1/ together with the VCS standard 4.7 and the CCB Rules and CCB standard 3.1
- **Monitoring and Reporting:** Regular monitoring and reporting mechanisms are in place to ensure transparency and accountability. AENOR confirms that all documents are transparently shared, in order to allow everybody to understand what is happening in the project, under Climate, Community and Biodiversity aspects.
- **Protection and Restoration of Customary Lands:** The project protects and restores significant areas of tropical rainforest, which are crucial for the cultural and subsistence needs of the local communities. AENOR understands that the PP manages the land of the Project. However, these forests belong to the Government and the agreements are clear for everybody.

The project continues to recognize, respect, and promote the rights of local communities (LCs) and customary rights holders in line with international human rights laws through policy development and implementation as well as methods to ensure inclusive participation.

During the February 2025 visit, several questions were asked to the persons of the communities and stakeholders to corroborate that no rights were violated. In addition, documentation from human resources department was reviewed.

Thus, AENOR did not detect incompliances checking the documents provided and interviewing the workers. Then, the audit team deems that the project fulfils with CCB requirements related to human rights.

4.3.14.4 Indigenous Peoples and Cultural Heritage (VCS, 3.18, 3.19)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection of cultural heritage	The Kuamut project is committed to the preservation of cultural heritage. KRCP has demonstrated a total commitment to the communities, involving them fully in its engagements, involving them in FPIC, consultations and trainings. This allows the PP to understand which areas deserve better conservation, or deserve a conservative cultural approach. AENOR understands that the PP accepts the suggestions of the communities and therefore they are united and involved in the preservation of this cultural heritage.

The project preserves vital areas of tropical rainforest that are crucial to the cultural heritage of local communities. By halting commercial logging and other detrimental activities, it protects land that holds cultural, spiritual, and livelihood significance for Indigenous Peoples and local populations.

During the visit, several questions were asked to the communities of Kuamut and Karamuak Clusters. Everyone interviewed agreed that the project was good for the preservation of their culture, every year the project supporting several events in the communities. In addition, the women interviewed also said that the project was not only good to preserve their culture but also improve their livelihoods particularly water system installment for community household implemented in the project.

Thus, AENOR's audit team did not detect incompliances by checking the documents provided and interviewing the workers. Then, the audit team deems that the project fulfils CCB requirements related to human rights.

4.3.14.5 Recognition of Property Rights (VCS, 3.19, CCB, G5.1)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	N/A, because the project area is a Class I forest reserve designated by the state government, and as such no local population lives inside. Class I refers to as Forest that are conserved for the protection of forests, watershed areas, soil & other essential climatic and environmental factors. Timber harvesting is not permitted in this forest reserve. AENOR checked the agreement and reviewed several articles and information about the different categorizations of forest protection within Sabah.
Respect for property rights	In Sabah, efforts are underway to protect the rights of Indigenous Peoples (IPs), local communities (LCs), and customary rights holders through legal, social, and administrative measures. These include formal recognition of land rights, laws to prevent illegal land grabs, and alignment with international standards like UNDRIP. (see sections above about Laws) Communities are engaged through Free, Prior, and Informed Consent (FPIC) /94-123/ and regular consultations. Conflict resolution mechanisms are established to address disputes /146-147/. Environmental

	and social safeguards are in place to protect livelihoods and cultural practices, and awareness campaigns inform communities about their rights and protection mechanisms. AENOR reviewed the different records of the stakeholder consultation as well as FPIC, GRM /146-147/, Community meetings or others. AENOR considers that all people involved in the project was considered, and therefore they had the opportunity to discuss whatever is needed. The GRM is also open to submit any comment. In this MR, no comments were submitted. Therefore, AENOR verifies that with the evidence observed during the visit and the documents provided by the PP are in compliance with the VCS and CCB rules. It is clear that the PP recognised, respected and supported Indigenous Peoples customary rights holders' property rights during the monitoring period.
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4.3.15 Free, Prior, and Informed Consent (VCS, 3.18, 3.19; CCB, G5.2)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	The FPIC process for the KRCP ensures the active participation and consent of Indigenous Peoples and local communities. In 2022, the process focused on 8 villages within a 20km radius. A Memorandum of Agreement was signed with 7 villages, excluding Kg Tenaga Baru, whose community chose not to participate. The process adhered to FPIC principles, ensuring informed consent before any project activities. The KRCP Community Committee was established with local representatives from different groups to ensure ongoing community involvement. The project facilitated a series of Free, Prior, and Informed Consent (FPIC) workshops across local communities to introduce the project and obtain consent for participation. These workshops culminated in the signing of MOUs with 7 out of 8 villages, while Kg Tenaga Baru opted out but continued to receive project updates through its village headman. The PP carried out several engagements with communities, as indicated in sections above. however, referring to FPIC Workshops, meetings were held on 28 September, 29 September, 11 October, and 13 October 2022.

	AENOR has reviewed the seven (7) Memorandum of Understanding (MOU) /66-72/ for the 7 communities involved in the current MR /1/. These agreements were signed in different dates between 28th September and 13th October. The agreements are supported by PACOS Trust. During the onsite visit, AENOR asked to the different communities about these agreements, the satisfaction with the contracts and if they had any complaint about the process. The communities indicated that the process is always smooth, and they are happy to be part of the consultations and the process. Additionality to the agreements /66-72/, the PP has also provided the rest of materials for each session. They consist of the summary of the workshop for each community /95-125/ including the main ideas, the minutes and what was covered before of signing the agreement. Also, the attendance lists for such meetings (workshops) were provided and reviewed by AENOR /109-133/. During the onsite visit, AENOR interviewed several of those participants and confirms that the information indicated in the MR is correct and reliable. AENOR also confirms that the people indicated in the MR within the FPIC table do match with the attendants of the seminars.
Outcome of FPIC discussion	The main outcomes of the FPIC process are as follows: • Community Consent: Ensured informed decision-making and community approval of the KRCP. • Formation of KRCP Community Committees: Established committees in each participating village to coordinate activities, organize workshops, and facilitate communication between the community and external organizations. • Signing of MoUs: MoUs were signed between PACOS and the community, outlining mutual responsibilities and commitments. • Addressing Basic Needs and Socio-Economic Development: Identified and planned for community needs such as clean water, energy, and medical facilities. • Documentation and Mapping: Emphasized the importance of documenting and mapping community resources and customary land to secure land rights and ensure sustainable resource management. AENOR has reviewed several evidence to confirm the outcomes above. Among the evidence the VVB highlights: the MOUs /112-125/, the FPIC Workshops /94-123/, the attendance lists and the community development plans (CDP) /73-90/ among other evidence. The CDP are designed for each cluster: Kuamut and Karamuak. The objectives for each CDP are: 1) Explaining to the community what the Community Development Plan wants to achieve and how community involvement is very important in making this project a success; and 2) Forming a community development plan and its implementation according to priority through discussion with the community.

These CDP also explain the objectives of the KRCP and the purpose of the CDP itself, which is increasing the development and improve the lives of the communities involved in this KRC project. “They explained they already had everything they wanted, no need for big buildings or facilities like those in the city. What is important is enough if there are good roads, electricity supply, and internet lines so that it is easy to produce socio-economic results. In addition, they can attract foreign tourists to come to their area and with a good internet network, they can promote their tourist area to outsiders”.

AENOR reviewed all these evidence and crosschecked the outcomes for each session with onsite testimonies and interviews. All interviewees recognized to understand the FPIC, the workshops and the purposes of the project. As well they were happy for the way in which these consultations were taken.

Hence, AENOR considers that the FPIC covers all topics, and the way in which it was carried out, fulfils the VCS and CCB requirements.

4.3.16 Property Rights Protection (VCS, 3.19; CCB G5.1-G5.5)

Based on section 2.5.8 of the MR, the KRCP guarantees no involuntary relocations. The project area contains no permanent human settlements, ensuring that no property rights holders have been removed or relocated against their will. Permian Malaysia Sdn. Bhd., as the sole license holder of the Project Area, holds comprehensive rights and responsibilities, including generating and selling carbon offset credits and preventing other organizations from applying for concessions within the project area. This has been agreed to between the three partners of the project i.e. Sabah Forestry Department, RBJ Sdn Bhd and Permian Malaysia, as captured in the signed Management Agreement for the KRCP project.

In Sabah, Borneo, forest areas are divided into Class I and Class II:

1. Class I: These are protected areas for strict conservation where activities like logging and commercial use are not permitted. The primary objective is the preservation of biodiversity and natural ecosystems.
2. Class II: These are managed areas for sustainable resource production Logging and other economic activities are allowed, but they must follow sustainable management practices to ensure forest regeneration.

The VVB has checked and assessed land and partnership records /2/. It is concluded that all property rights and recognized, respected and supported. All properties involved in the project either have property titles or equivalent documents to certify and assure rights over the land. Within the project area, there are no local communities or indigenous heritage with collective property titles.

Additional literature was reviewed by AENOR, such as the paper “*Changes in forest land use and management in Sabah, Malaysian Borneo, 1990-2010, with a focus on the Danum Valley Region*”, by Glen Reynolds et al.

The provided evidence was evaluated as follows:

- **Documentation of Legal and Regulatory Framework:** This includes references to the Sustainable Forest Management License Agreement (1997) and the Forest Enactment (1968), which establish the legal foundation for the project’s activities and the re-designation of the forest reserve. This was further validated by reviewing the official Sabah Forestry Department website.
- **Affirmation Statement by the General Manager of Rakyat Berjaya Sdn Bhd:** This statement confirms the original classification of the project area as Class II Forest Reserve, in line with the Sustainable Forest Management License Agreement of 1997 and the Forest Enactment of 1968. It assures that the legal and regulatory framework for the project is robust and predates the project, which is key to verifying its environmental and legal compliance. The statement also clarifies that no new Community Forestry Areas were established within the Kuamut Forest Reserve, addressing potential concerns about land use or rights changes that could affect local communities, thus assuring Verra that the project has not imposed new restrictions that might harm the communities.
- **Records of Stakeholder Engagement and Consent:** Detailed documentation of consultations with local communities and stakeholders, including the process of obtaining Free, Prior, and Informed Consent (FPIC), provides evidence of the project’s commitment to engaging with and respecting the rights of local communities. This is essential for meeting Verra’s standards on stakeholder engagement and consent.

Considering the information provided in the monitoring report and gathered from different interviews and the PP as well, AENOR can confirm that the project does not lead to the involuntary removal or relocation or property rights holders from their lands or territories and that the project protects the rights of indigenous peoples, communities and other stakeholders in accordance with the Climate, Community & Biodiversity Standards and the validated project design.

4.3.17 Benefit Sharing Mechanisms (VCS, 3.18, 3.19)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Process used to design the benefit sharing plan	The project introduced various benefits and has updated the framework from 2023 onwards based on the community development plan. The CDP carried out in January 25, 2023 /73-90/ (one for each community cluster) was one of the methods used for the PP to explain different topics of the project, among which, the benefit sharing plan was discussed. The CDP

	was developed in this monitoring report period of 2022-2023. The agreed CDP was presented and agreed by the community in the meeting dated 25 January 2023. This was reviewed by AENOR /134/. In summary, the community wanted a focus on agriculture activities including cocoa farming, fishing, tree nursery and backyard garden establishment for food security i.e. rice cultivation as part of their community development plan. But priority setting by the community during the subsequent benefit sharing mechanism workshop, dictates that access to basic infrastructure like water supply be prioritized. During onsite interviews, AENOR confirmed that all communities participated in the design of the benefit sharing plan, and hence, the current benefits were approved for all parties in advance.
Summary of the benefit sharing plan	Post the sale of carbon credits, proceeds will finance further benefits such as a microfinance program to support local enterprises and eco-tourism, agricultural advancements through garden and nursery projects, and food security initiatives via regenerative and agro-ecological practices. These programs are selected in conjunction with community input to ensure they align with both the project's objectives and SDGs. The Village Development Fund, Social Support Program of RM100 cash contribution and Microfinance program will be carried out in phases or staggered with full understanding and participation of the local communities. As part of the project's Benefit Sharing Mechanism, a monthly cash payment of RM100 was discussed. However, it was communicated that this payment would only commence after the sale of carbon credits. AENOR reviewed examples about the payment agreements /55/ and confirmed such statements with onsite testimonies with communities. The rest of the benefits (non-monetary benefits), were double checked with the CDP and also testimonies from stakeholders. Some of these components, also implemented are: medical transportation boat, construction of water gravity systems, and other activities. AENOR visited and reviewed all these benefits onsite, and the information from the communities was also crosschecked. Based on conversations with the PP, AENOR understood that the first bunch of credits sold happened in March 2024. This is out of the monitoring period covered by this report.
Approval and dissemination of benefit sharing plan	AENOR reviewed the Benefit sharing plan (BSP), the information on the MR /1/ was double checked with the different evidence which support the design. The CDP /73-90/ was reviewed and crosschecked with onsite interviews. The dissemination was also observed through different engagements such as Workshops or FPICs /94-123/.

AENOR considers the dissemination has been properly carried out. All communities demonstrated to be aware about the benefits, and furthermore, the benefits were discussed previously to the confirmation.

Hence, AENOR considers that both, the approval and the dissemination were carried out according to the VCS and CCB requirements, and all interested parties were aware and understood the costs, risks and benefits of the project implementation.

4.3.18 Identification of Illegal Activities (VCS, 3.19; CCB G5.4)

Regarding the PP, illegal activities are those included into the illegality of logging and hunting of animals, as well as harvesting plants.

The PP indicated that during this MR, no illegal activities were identified.

Indeed, the patrolling activities serve as monitoring action and enforcement by trained forest rangers from RBJ Sdn Bhd. The Project also utilizes technologies including satellite imagery and deploying drone to beef up efforts to detect illegal activities on the ground. These techniques were explained during the onsite visit.

AENOR interviewed staff from patrolling team and did not receive news about illegal activities. Additionally, during the wee onsite, AENOR did not find any sign of illegal logging or illegal hunting. The well preservation of the forests was well noted. Finally, AENOR highlights the efforts of the PP by monitoring the project area through remote sensing.

First, the PP identified the “loss event” through remote sensing. Finally, it was confirmed that the size of these negative event is not considered as proper loss event.

Secondly, during the aerial inspection, the PP indicated that had found several potential deforestation activities in one area of the project. AENOR and the PP flew the area in helicopter and it was discovered that those potential deforestation events were landslides, and happened naturally. Most of the landslides were located out of the project boundaries, but also there was some small affectation in the project area. These landslides will affect to the next verification event, since the PP explained through satellite imagery comparison when they occurred and it was clear that the occurrence was out of this MR (2022-2023).

Hence, AENOR confirms that the PP performs continued monitoring and the biomass maps also demonstrates the absence of illegal logging activities.

During the site visit performed in February 2025. AENOR include this as a relevant question to main stakeholders, to provide assurance of compliance with G5.4 of the CCB Standards. Thus, AENOR’s opinion based on the desk-review process and information found out during the site visit is that the project has demonstrated that is not using or will use victims of human trafficking, forced labor, child labor or other illegal activities.

4.4 Climate

4.4.1 Accuracy of Reduction and Removal Calculations (VCS, 2.5, 3.2, 3.6, 3.15, 4.1, 4.3)

The Kuamut Rainforest Conservation Project (*Kuamut Project* or *KRCP*) aims to protect and restore 83,381 ha of tropical forest in Sabah, Malaysia. The project is located in the Tongod and Kinabatangan districts of Sabah. The second monitoring period spans from 2022 to 2023 (MR2). The validation, verification and issuance of carbon credits for MR1 was completed in 2024. Hence, the verification process for MR2 is ongoing.

The methods are in accordance with the Verra VM0010 VCS Methodology (as described in the title and methodology section) and outline the precise data processing steps carried out during the analysis. The analysis was carried out using the R programming language /321-354/ (R Core Team 2023). Additional external analyses were carried out as part of this pipeline including a deforestation classification analysis, conducted in Google Earth Engine (Gorelick et al. 2017) and described in 15 Deforestation Emissions; and a Machine Learning pipeline for the generation of time series Biomass and Merchantable Volume maps.

Reference areas, representative of local common practice for timber harvest, were defined in order to generate the baseline. The most likely land-use scenario, in the absence of the project, would have been a combination of two different forest management practices; parts of the concession would have been subject to continued selective logging, referred to as Natural Forest Management (NFM), and the remaining area would have been managed using a practice known locally as Mosaic Plantings. The reference areas therefore comprise multiple concessions that are representative of these two different management practices.

For the Mosaic Plantings approach, three areas were selected within the greater Yayasan Sabah Forest Management Area; each of which with their own management plan. These include:

- A 21,400 ha concession within the SG Pinangah Forest Reserve
- An additional area of 5,600 ha within the SG Pinangah Forest Reserve (with a separate management plan)
- An area of 27,600 ha in the Gunung Rara forest reserve.

AENOR has reviewed the different plans included in the above mentioned forest management types. The VVB reviewed the SG Pinangah Forest Reserve (5600 ha), SG Pinangah Forest Reserve (21,400 ha) and part of the Ulu Segama Forest Reserve. The Sabah Forestry Department annual reports have also been reviewed by the VVB.

Regarding the usage of field plots, which is explained below, the project has 46 inventory plots, which were remeasured during the current MR and some of them were also remeasured by the audit team during the onsite visit. The results do match with the raw data. Additionally, AENOR reviewed the R script (R/Kuamut_TreeAllometrics.R) /337/ together with the PP to

understand the way in which the raw data from the 46 plots was used. The Digital Elevation Model was used to understand the elevation of the terrain and then, using the LiDAR, the PP could obtain accurate data about the tree biomass.

The initial step involved adjusting the elevation values in the digital terrain model (DTM) obtained from the LiDAR survey. Since the elevations provided by the survey were referenced to the ellipsoid, they were converted to orthometric heights using the Earth Gravitational Model 2008 (EGM2008) geoid. This correction was necessary because the LiDAR-derived DTM did not offer full spatial coverage of the study area, making it essential to integrate it with global DTM datasets, which report elevations relative to the geoid.

To create a seamless elevation surface, three different digital elevation model (DEM) sources were utilized. LiDAR data was given highest priority, followed by the Copernicus GLO30 dataset, and NASADEM was used in areas where neither of the first two sources provided data. The datasets were merged using gdalwarp through the {ezwarp} R package (Graham, 2024), applying bilinear resampling at a spatial resolution of 30 meters.

A 30 m radius was measured along the topographic surface when defining the outline of the plot on the ground, i.e the circular plot conformed to the land surface, not a planar surface. Given the availability of high-resolution LiDAR across all plot locations, the mean slope was extracted for plot locations which was used to convert the plot area to planimetric area,

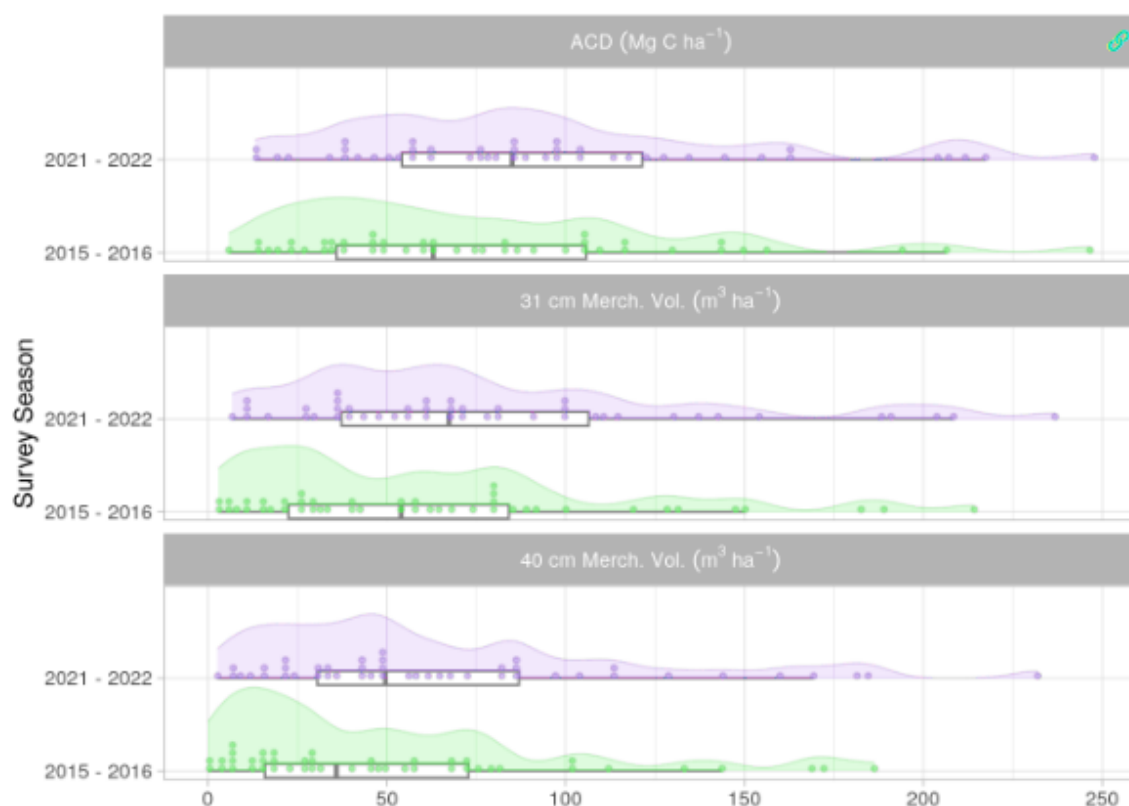
$$A_{ha} = \frac{A_p \times \cos(S)}{1e^4}$$

according to

The R script, complementary to each process has been reviewed together with the PP during the technical calls and the onsite visit /321-354/.

Once the terrain is corrected, the next step is to calculate the individual tree-level data to each plot. Here, the PP has divided tree volumes in >10 cm; > 31 cm; and > 40cm.

The comparison is showed in the image below:



The aim of this objective is to examine the growth observed in forest plots between the field surveys conducted in 2016 and 2022. While these measured growth rates are not directly applied in the carbon emissions calculations, they serve as a reference to assess the accuracy of the modelled growth rates that were ultimately used in the final estimations.

AENOR also reviewed the following R scripts: R/forest_plot_growth_rate.R; R/ggplot_targets.R; and R/KuamutTree2Plot.R; in addition to the raw data and explanations gathered from the PP.

In order to quantify the biomass growth rates and the total emissions lost due to degradation, the PP has developed a multi-temporal modelling approach to estimate the spatial variability and distribution of aboveground biomass. To achieve this the PP has adopted a machine learning workflow that uses the following data sources: aerial LiDAR scan (ALS) data from 2016 describing canopy height, USGS Landsat 8 Level 2, Collection 2, Tier 1, Sentinel-1 SAR GRD: C-band Synthetic Aperture Radar Ground Range Detected, log scaling, and forest plot data from the Kuamut Project area.

For this monitoring period, a full year of imagery was not yet available. Therefore, in order to mitigate the risk of over-fitting during the temporal smoothing process, the PP opted to use a linear interpolation method to smooth the data cube. The linear fit was applied for all years from 2015-2023 but only the year 2023 was carried forward for further analysis. For the MR1

period the PP had limited concern of over-fitting because forest plot data were collected in 2022, ensuring the constraint of predicted values for 2022. Adopting linear smoothing for 2023 conservatively allows for extrapolation in the absence of additional field data.

Canopy height predictions were added as a new band to each year's data cube to support biomass modelling. Forest plots from 2016 and 2020 in the Kuamut area were used to extract environmental variables from the corresponding data cubes using weighted extraction for improved accuracy. Aboveground Carbon (AGC) was converted to density (ACD) for model training.

According to the PP, key predictors for ACD included modelled canopy height (CHM), Landsat bands B1 and B7, several spectral indices (AVI, CVI, EVIGEMI, MNLI), Sentinel-1 VV and VH, and topographic mean curvature. The best model was selected by testing variable combinations using the {MuMin} package, with CHM and mean curvature required due to their ecological relevance.

An ensemble model was built combining XGBoost, SVM, and GLM, with predictions merged via a super learner (linear regression) following Polley & Van der Laan (2010), using {mlr3pipelines} for unified tuning. Spatial resampling validated performance.

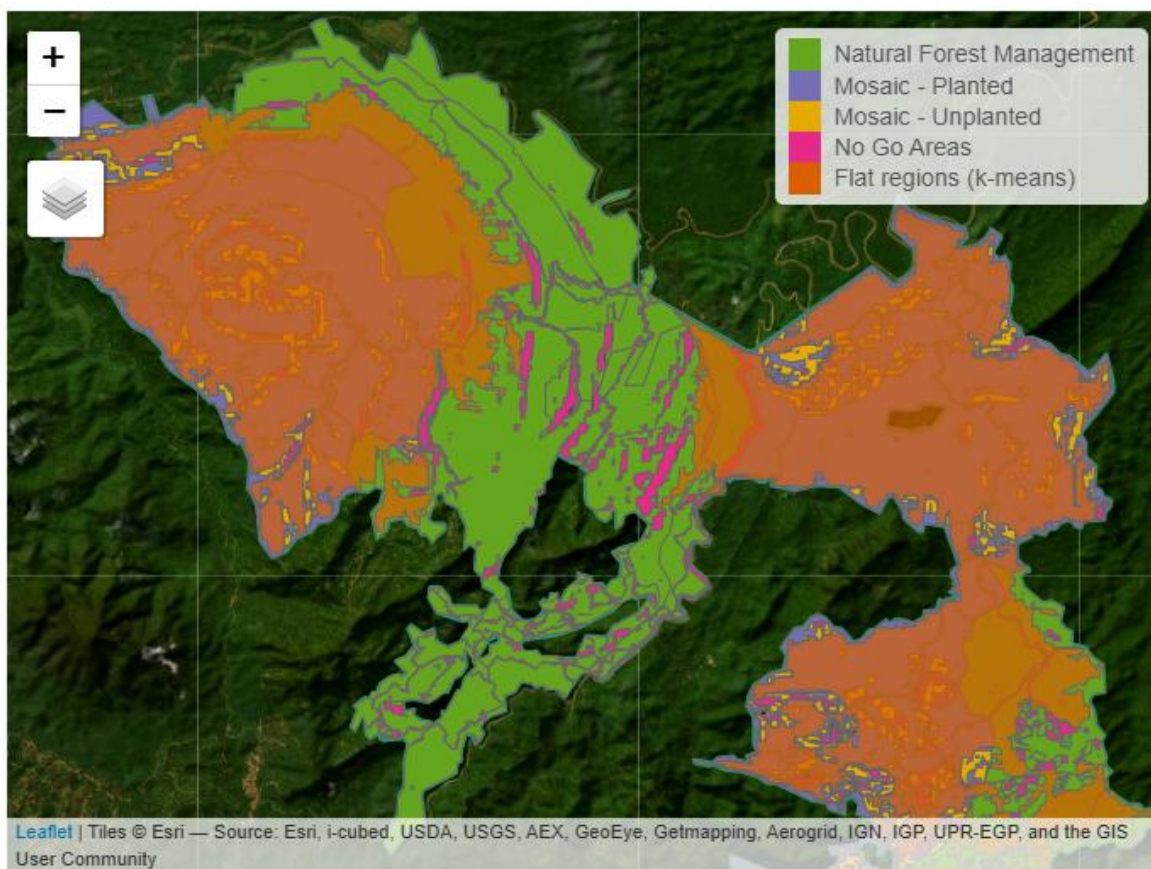
The final model was trained on all plots and applied to the entire area. Predictions were cleaned by capping negative values at zero and removing values above 300. The full process was repeated to model Merchantable Volume with cutting thresholds of 10 cm, 31 cm, and 40 cm. Strata were assigned to logging coupes within the project area based on terrain slope and proximity to key features. Coupes overlapping predominantly flat areas were classified as Mosaic. Within this stratum:

- Slopes <15° were labeled mosaic-planted
- Slopes between 15°–25° were labeled mosaic-unplanted
- Slopes >25° were designated as no-go and excluded

Additional no-go zones included areas within:

- 100 m of main rivers
- 30 m of small rivers
- 10 m of roads (excluding tracks)
- 50 m of protected areas

All remaining coupes not falling under these exclusions were categorized as Natural Forest Management (NFM).



AENOR confirms that based on the explanations of the PP, the design of the stratification is updated and correct. Furthermore, during the aerial inspection during the onsite visit, AENOR was able to crosscheck through satellite imagery, the difference between strata and also confirmed with checkpoints from the ground as well as aerial inspection that the strata were correctly classified.

Baseline emissions

In section 2.2.4 and appendix 1, both from the MR /1/, the PP has indicated that the approach for biomass mapping has been updated with new more accurate and up-to-date datasets. These more accurate maps have been used to update the 2016 timber volume maps. As these volume maps are used to produce the timber harvest plan and estimate the Mean volume of extracted timber under the baseline (VEX,j,i|BSL), this value and all subsequent calculations have changed slightly.

The first step has been to adjust the shapefiles of the project area, in order to improve the accuracy of the hectares. Now it is 83,381 ha, and also, the different stratum have been reshaped. AENOR has reviewed the shapefiles /4-26/ and confirm that the whole project area and also, the stratum do match with the MR information.

Combining remote sensing, together with field measurements are the key points to determine the biomass per hectare, potentially available for harvesting.

The field inventory consists of 46 circular plots of 30m radius. In each of these sample plots, the tree height and DBH of all trees above 10 cm DBH were measured. AENOR during the onsite visit was able to re-measure several field plots (plots number 7, 11, 3, 9, 6 and 8), and confirmed that the information used in the raw data for this calculation do match. If some discrepancies were found, they were due to the tree growth, and hence, the measurements were in some cases, higher during the onsite visit remeasurements.

Biomass was calculated according to equation 4 from Chave et al. (2014) utilizing the measured diameter and heights, and the estimated wood density. This means that the taxonomic information is incorporated via the wood density, so while one equation is used the estimated biomass will be quite different for different species of the same dimensions. The plot level timber volume was derived by summing the timber volume of all trees above the defined cutting limit (40 cm DBH for the NFM areas, and 31 cm DBH for the Mosaic Planting Approach areas). AENOR attended several technical meetings to understand and verify the calculations made by the PP, as well as the R scripts and the machine learning procedures.

The Kuamut Project's baseline scenario includes two main forest management approaches: Natural Forest Management (NFM) and Mosaic Plantings (MP). Each applies a minimum logging diameter of 40 cm DBH for NFM and 31 cm DBH for M, and both are subject to legal restrictions on which tree species can be harvested. Based on guidance from Sabah Forestry and the Wildlife Conservation Enactment 1997, two species protection lists were established: MP, being more intensive, has a shorter list with 18 protected species and 17 genera, while NFM includes 258 protected species and 42 genera.

The following maps depict the spatial sequencing of the baseline timber harvest plan for the planted and unplanted mosaic strata.

Unplanted Mosaic Timber Harvest Plan

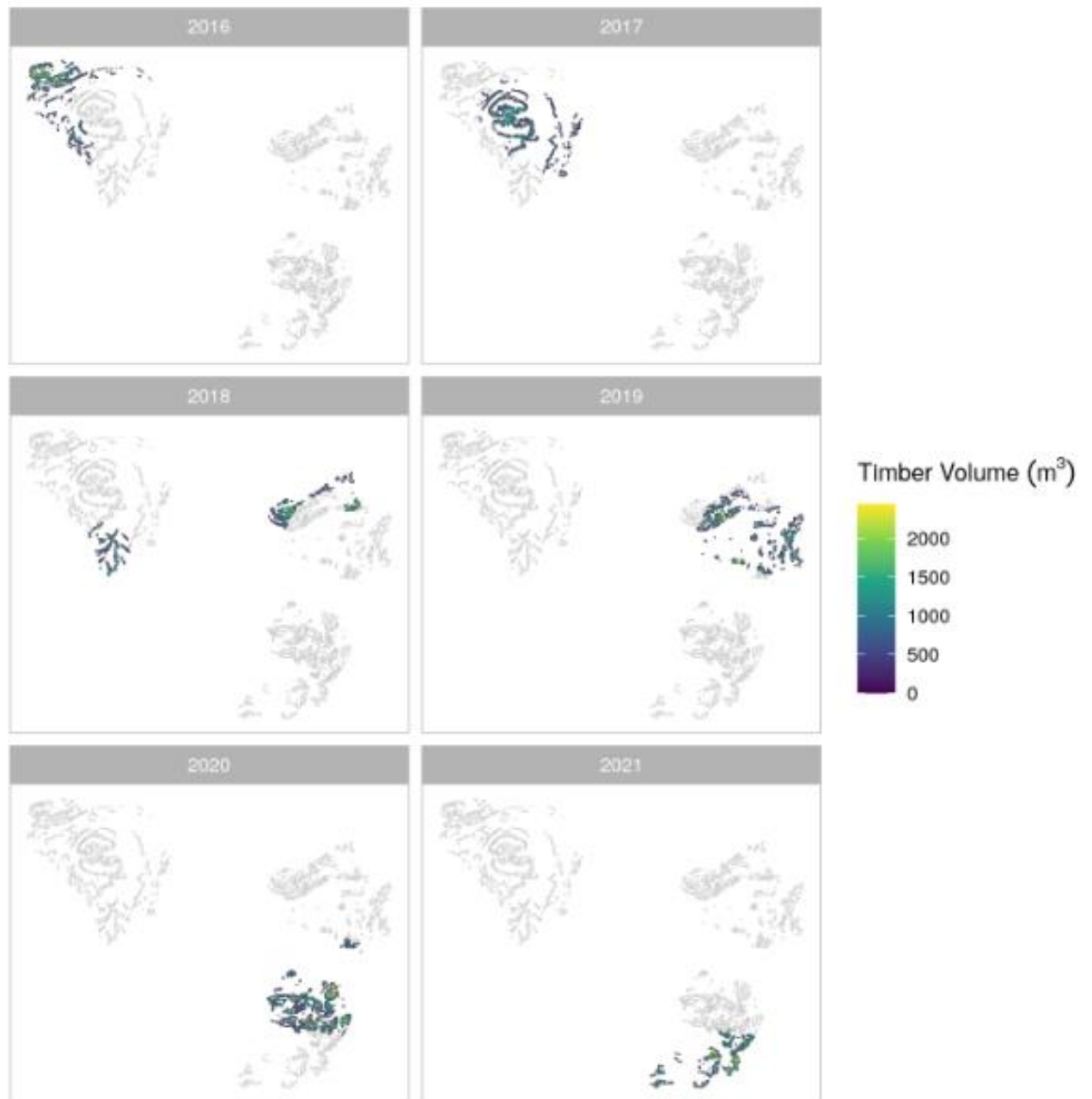


Figure 11.2: Unlanted mosaic timber harvest plan and corresponding timber volumes

Planted Mosaic Timber Harvest Plan

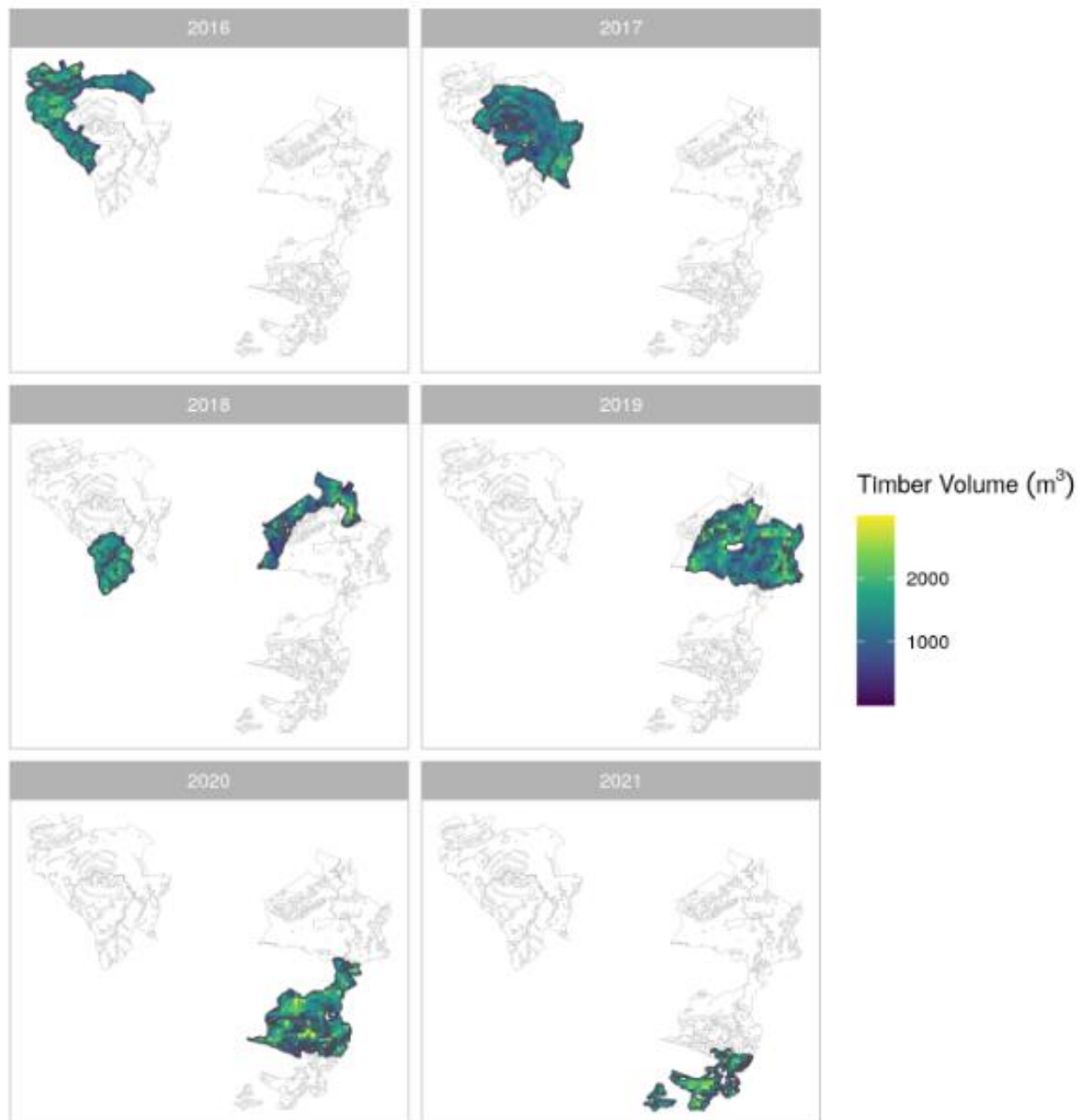
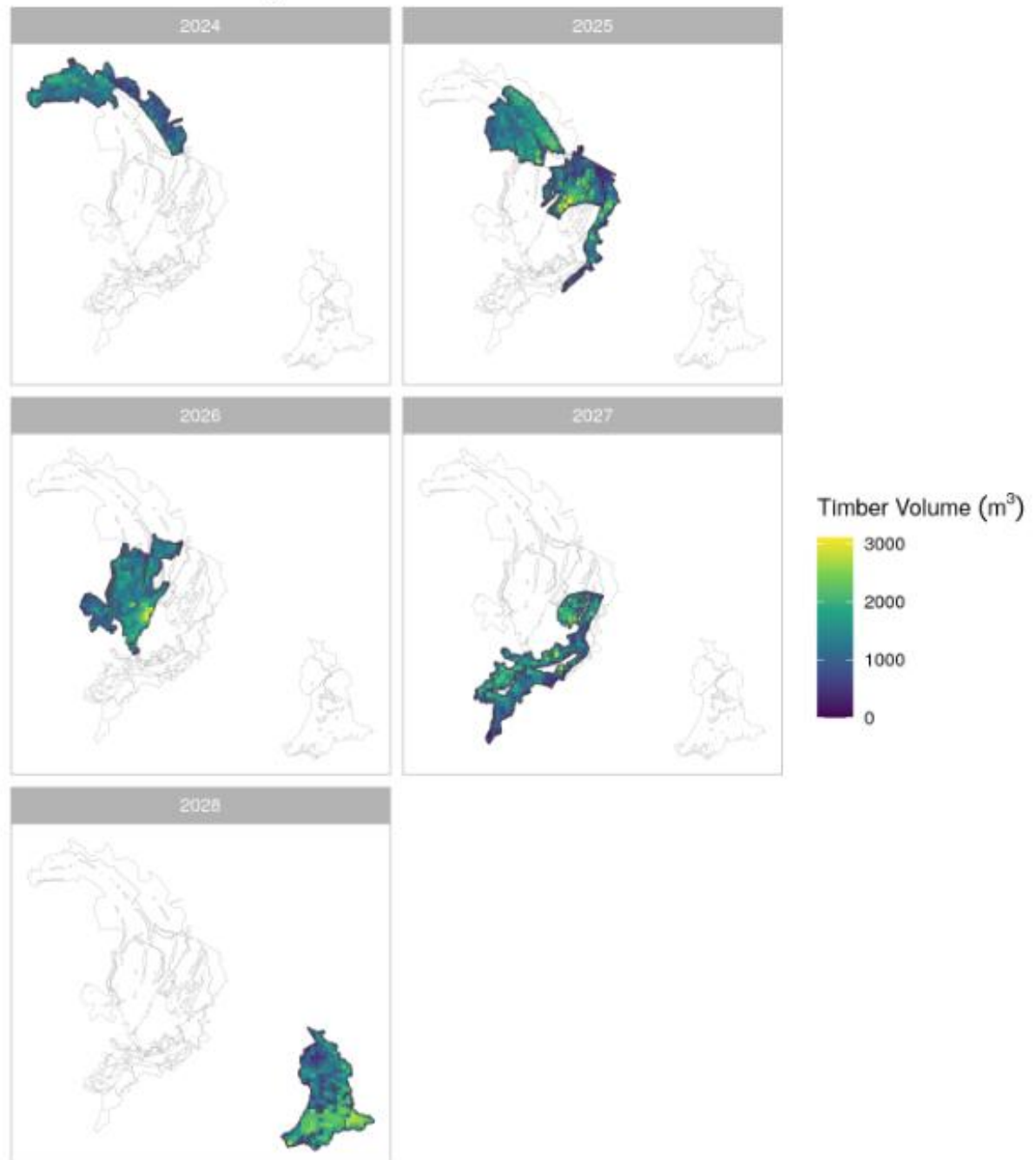


Figure 11.1: Planted mosaic timber harvest plan and corresponding timber volumes

The following map depicts the spatial sequencing of the baseline timber harvest plan for the NFM strata. Note that the baseline for NFM strata begins in 2024.

Natural Forest Management Timber Harvest Plan



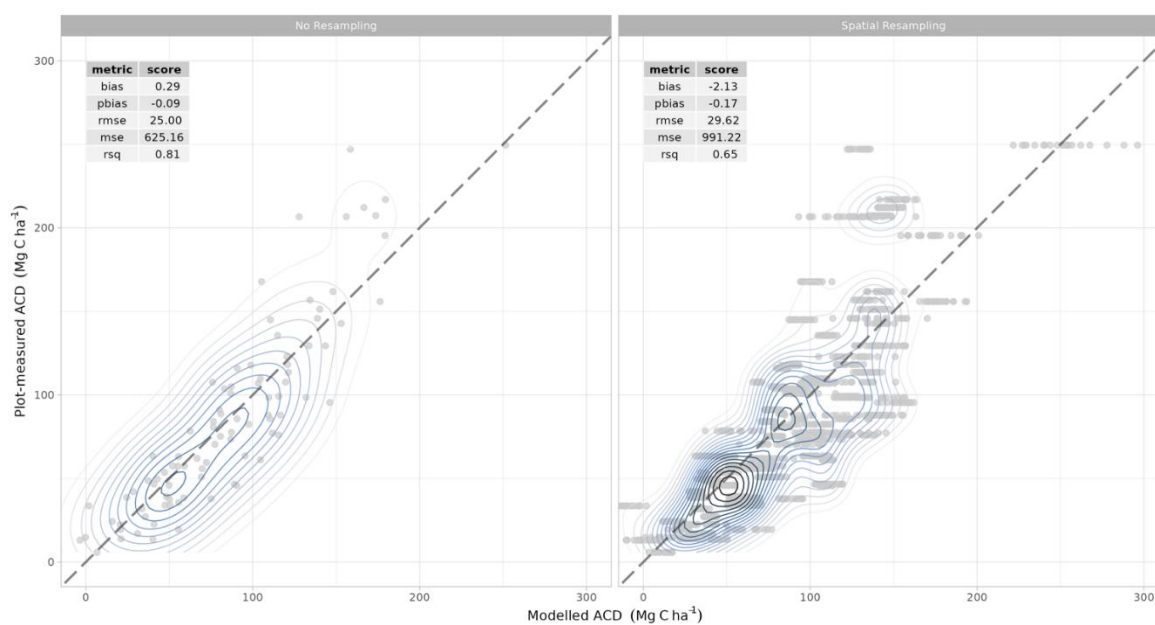
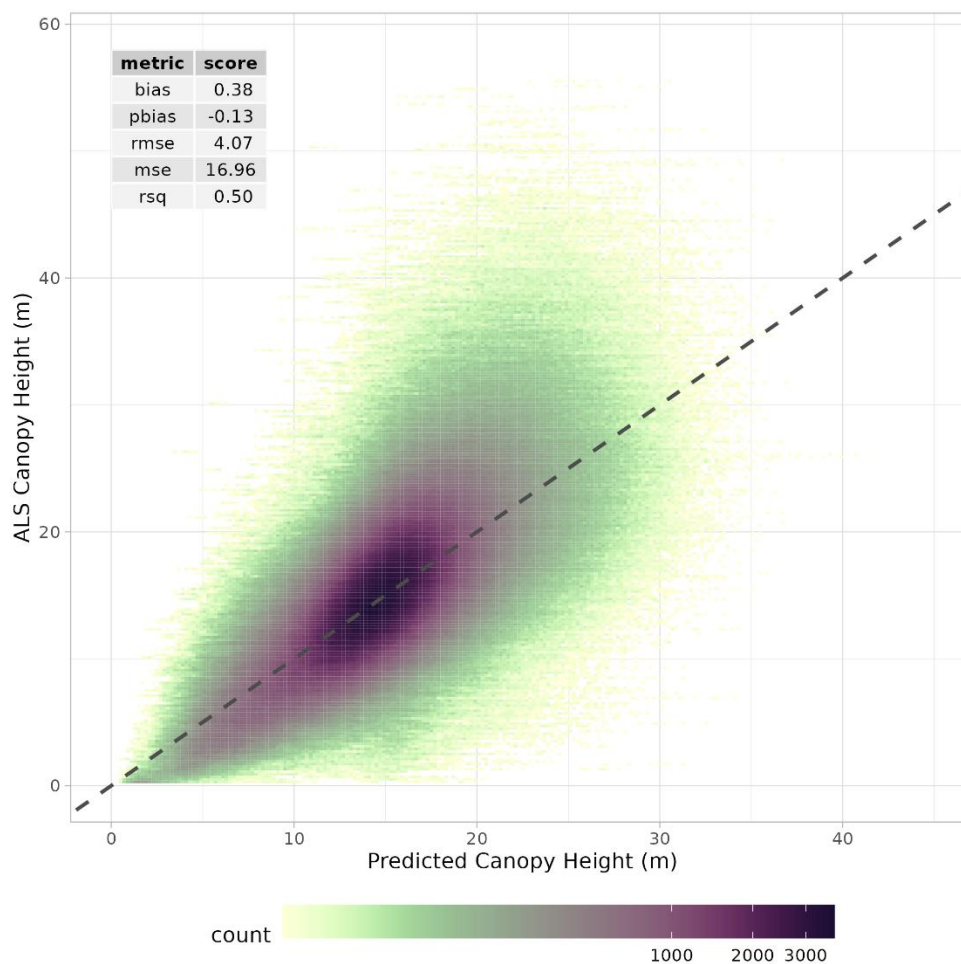
Natural Forest Management timber harvest plan and corresponding timber volumes

For the KRCP assessment, annual composites of Landsat 8 (L8) imagery were generated for the project area using Google Earth Engine. For SAR data, Sentinel-1 (S1) imagery was used, collecting all scenes within each year that intersected the area of interest. Each S1 image was preprocessed following the approach described in Mullissa et al. (2021), and the entire preprocessing pipeline was implemented within Earth Engine using the R package.

Terrain variables were derived from the Copernicus GLO 30 m DEM, including slope, aspect, minimal curvature, and mean curvature. All of these, optical, SAR, and terrain data, were then combined into a data cube consisting of 41 bands.

To ensure consistency across years, temporal smoothing was applied to each band in the data cube for the period from 2015 to 2022. The data cube was aligned with the Canopy Height Model (CHM) shown in Figure 13 of the MR /1/. The CHM was generated using airborne LiDAR data, but its coverage was incomplete due to cloud cover or areas that were not flown. Only the regions where the CHM overlapped with the data cube were used to create the modeling dataset. This dataset included the canopy height values from the CHM along with all the environmental and Earth observation variables from the data cube.

Machine learning models were then applied to predict canopy height, using the combination of variables that resulted in the lowest RMSE. Spatial resampling was used to evaluate model performance, as illustrated in Figure 14 of the MR /1/. The final ensemble model was used to generate canopy height predictions across the full study area, and the results were stored as spatial raster datasets.



Regarding the growth rates, they were estimated for the Kuamut project area using ACD predictions from 2016 to 2021. A linear mixed effects model, with strata as a fixed effect, was used to calculate growth rates for each stratum. Data from 2022 was excluded due to the need for an additional year to confirm time series stability.

The carbon stock of timber harvested per hectare was then calculated as:

$$C_{HB,j,i|BSL} = (V_{EX,j,i|BSL} + V_{EX,INF,j,i|BSL}) * BCEF_R * CF_j \quad \text{(equation 3 from VM0010)}$$

Where:

$C_{HB,j,i BSL}$	Mean carbon stock of harvested biomass per unit area for species j in stratum i , $tC \cdot ha^{-1}$
$V_{EX,j,i BSL}$	Mean volume of extracted timber per unit area for species j in stratum i , $m^3 \cdot ha^{-1}$
$V_{EX,INF,j,i BSL}$	Mean volume of extracted timber for forestry infrastructure per unit area for species j in stratum i , $m^3 \cdot ha^{-1}$;
$BCEF_R$	Biomass conversion and expansion factor applicable to wood removals in the project area, $t.d.m \ m^{-3}$
CF_j	Carbon fraction of biomass for species j , $tC \ t \ d.m^{-1}$
i	1,2,3 ... M strata
j	1,2,3 ... J tree species.

For D_j the value of 0.51 was used which is the average value of the species found in the field plots. For the carbon fraction, the value of $0.47 \ tC \cdot t.d.m^{-1}$ was used. AENOR reviewed the source of these parameters as indicated in the list of parameters below. The resulting values for the mean carbon stock of extracted timber per hectare is provided below:

Year that logging would occur according to the timber harvesting plan	Mean carbon stock of harvested biomass in stratum i ($tC \ ha^{-1}$)		
	Stratum 2 (Natural Forest Management)	Stratum 3 (selective logging within Mosaic Planting)	Stratum 4 (planting areas within Mosaic Planting)
2016		17.71	13.23
2017		14.78	10.75
2018		15.68	12.11
2019		17.71	12.77
2020		19.04	14.78
2021		19.26	18.14
2022			
2023			

2024	7.96		
2025	9.6		
2026	9.25		
2027	9.96		
2028	10.68		
2029			
2030			
2031			
2032			21.28
2033			21.28
2034			21.28
2035			21.28
2036			21.28
2037			21.28
2038			21.28
2039	7.96		21.28
2040	9.6		21.28
2041	9.25		21.28
2042	9.96		21.28
2043	10.68		21.28
2044			21.28
2045			21.28

The change in carbon stock in the dead wood pool in stratum i has been calculated as the difference between the total carbon stock of the harvested biomass and the carbon stock of the extracted timber, plus the residual stand damage and biomass of trees left to decay as a result forestry infrastructure establishment with the following equations:

$$\Delta C_{DWSLASH,i,p|BSL} = \left[\sum_{j=1}^J [(C_{HB,j,i|BSL} - C_{EX,j,i|BSL}) + C_{RSD,j,i|BSL} + C_{notHB,inf,j,i|BSL}] \right]$$

(equation 5 from VM0010)

Where:

$\Delta C_{DWSLASH,i,p|BSL}$

Change in carbon stock of dead wood as logging slash resulting from timber harvest per unit area in stratum i in land parcel p , in $tC \cdot ha^{-1}$

$C_{HB,j,i|BSL}$

Mean carbon stock of harvested biomass per unit area for species j in stratum i , $tC \cdot ha^{-1}$

$C_{EX,j,i BSL}$	Mean carbon stock of extracted timber per unit area for species j in stratum i , $tC \cdot ha^{-1}$;
$C_{RSD,j,i BSL}$	Mean carbon stock in timber from residual stand damage per unit area for species j in stratum i , $tC \cdot ha^{-1}$
$C_{notHB,inf,lj,i BSL}$	Mean carbon stock of biomass that is not harvested during the establishment of forestry infrastructure per unit area for species j in stratum i , $tC \cdot ha^{-1}$
i	1,2,3 ... M strata
j	1,2,3 ... J tree species.
P	1, 2, 3 ... P land parcels

The mean carbon stock in timber from residual stand damage was calculated as follows:

$$C_{RSD,j,i|BSL} = C_{EX,j,i|BSL} * F_{RSD|BSL} \quad (\text{equation 6 from VM0010})$$

Where:

$C_{RSD,j,i BSL}$	Mean carbon stock in timber from residual stand damage per unit area for species j in stratum i , $tC \cdot ha^{-1}$
$C_{EX,j,i BSL}$	Mean carbon stock of extracted timber per unit area for species j in stratum i , $tC \cdot ha^{-1}$
$F_{RSD BSL}$	Factor for residual stand damage, dimensionless
i	1,2,3 ... M strata
j	1,2,3 ... J tree species.

The final values are reported in table 18 and 19 of the appendix 1 of the MR /1/.

Calculation of baseline carbon sequestered in wood products (section 8.1.3 of the methodology)

Under the baseline, the harvested wood would have been harvested for conversion to wood products. Therefore, the carbon stock in the wood products pool have been included in the baseline

The carbon stock of extracted timber that is immediately emitted to the atmosphere at the time of harvest is calculated as

$$C_{WP0,i|BSL} = \sum_k C_{EX,i,k|BSL} * (WW_k + SLF_k) \quad (\text{equation 9 from VM0010})$$

Where:

$C_{WP0,i BSL}$	Carbon stock of extracted timber from stratum i that is assumed to be emitted immediately at the time of harvest, in $tC \cdot ha^{-1}$
$C_{EX,i,k BSL}$	Mean carbon stock of extracted timber per unit area in stratum i , for wood product type k , $tC \cdot ha^{-1}$
WW_k	Fraction of biomass carbon from wood waste that is assumed to be emitted to the atmosphere immediately at the time of harvest for wood product k , dimensionless;

SLF_k	Fraction of biomass carbon from the shortlived wood product pool that is assumed to be emitted to the atmosphere immediately at the time of harvest for wood product k, dimensionless
i	1,2,3 ...M strata
k	Wood products

Change in carbon stocks due to forest regrowth after harvest (section 8.1.4 of the methodology)

In accordance with the methodology, the carbon sequestration in the baseline scenario resulting from forest regrowth after timber harvest up to year t is considered equal to the estimated baseline forest regrowth rate of each stratum.

Therefore, carbon sequestration resulting from forest regrowth after timber harvest is calculated as:

$$C_{RG,i,p|BSL} = \sum_i RGR_i \quad (\text{equation 12 from VM0010})$$

Where:

$C_{RG,i,p BSL}$	Carbon sequestration resulting from forest regrowth after timber harvest and establishment of forestry infrastructure in stratum i in land parcel p , t C ha ⁻¹ yr ⁻¹
RGR_i	Regrowth rate of forest post timber harvest post forestry infrastructure establishment for stratum i , t C ha ⁻¹ yr ⁻¹ ;
i	1,2,3 ...M strata

Calculation of baseline emissions from the combustion of fossil fuels in forestry and wood processing machinery (section 8.1.5 of the methodology)

The implementation of the baseline activity (selective logging and/or clearcutting) entails the use of forestry and wood processing machinery, which leads to GHG emissions from fossil fuel combustion. In accordance with the methodology, the omission of any or all of the associated GHG emission sources is considered conservative. These emissions have therefore been excluded from the calculations and CFuel is considered zero in the baseline.

Calculation of baseline scenario greenhouse gas emissions from change in carbon stocks (section 8.1.6 of the methodology)

The net greenhouse gas emissions in the baseline scenario are estimated from the carbon stock change as a result of timber harvest plus the carbon stock change resulting from conversion and retirement of wood products minus carbon sequestration from forest regrowth after harvest.

In accordance with the methodology, annualized calculations have been performed that vary between years 1, 2-10; 11-20 using the following equations:

$$\Delta C_{NET|BSL1} = \sum_{i,p} A_{1,i,p} * \sum_{i=1}^M (C_{DWslash,i,p|BSL} / 10) + C_{WP0,i,p|BSL} + (C_{WP100,i,p|BSL} / 20) \quad (\text{equation 23 from VM0010})$$

$$\Delta C_{NET|BSL(2-10)} = \sum_{i,p} A_{2-10,i,p} * \sum_{i=1}^M ((\Delta C_{DWslash,i,p|BSL}/10) + (\Delta C_{WP100,i,p|BSL}/20))$$

(equation 24 from VM0010)

$$\Delta C_{NET|BSL(11-20)} = \sum_{i,p} A_{11-20,i,p} * \sum_{i=1}^M (C_{WP100,i,p|BSL}/20) \quad (\text{equation 25 from VM0010})$$

Where:

$\Delta C_{NET BSL(1)}$	Net change in carbon stock across all parcels in the baseline scenario in the first year since harvest in the baseline scenario, in t C
$\Delta C_{NET BSL(2-10)}$	Net change in carbon stock across all parcels in the baseline scenario in years 2 - 10 since harvest in the baseline scenario, in t C
$\Delta C_{NET BSL(11-20)}$	Net change in carbon stock across all parcels in the baseline scenario in years 11 - 20 since the start of the project activity, in t C;
$\Delta C_{Slash,i,p BSL}$	Change in carbon stock of dead wood as logging slash resulting from timber harvest per unit area in stratum i in land parcel p , in t C ha ⁻¹
$\Delta C_{WP0,i,p BSL}$	Change in carbon stock resulting from wood product conversion and retirement from stratum i in land parcel p , that is assumed to be emitted in the first year of harvest in the baseline t C ha ⁻¹
$\Delta C_{WP100,i,p BSL}$	Carbon stored in wood products that is assumed to be retired between 3 - 100 years after harvest from stratum i in land parcel p , t C ha ⁻¹ ;
$A_{1,i,p BSL}$	Area of stratum i in land parcel p that was harvested 1 year ago, ha
$A_{2-10,i,p BSL}$	Area of stratum i in land parcel p that was harvested between 2 and 10 year ago, ha
$A_{11-20,i,p BSL}$	Area of stratum i in land parcel p that was harvested between 11 and 20 year ago, ha
i	1,2,3 ... M strata
p	1, 2, 3 ... P land parcels harvested within the project crediting period

The net change (sequestration) in carbon stock due to forest regrowth across all parcels in all years since harvest in the baseline scenario are calculated as follows:

$$\Delta C_{NET|BSL(1+)} = \sum_{i,p} A_{t^*} * \sum_{i=1}^M (-\Delta C_{RG,i,p|BSL}) \quad (\text{equation 26 from VM0010})$$

Where:

$\Delta C_{NET BSL(1+)}$	Net change in carbon stock due to forest regrowth in all parcels that have been harvested in the baseline scenario, in t C;
$\Delta C_{RG,i,p BSL}$	Carbon sequestration resulting from forest regrowth after timber harvest in stratum i in land parcel p , t C ha ⁻¹
A_{t^*}	Cumulative area harvested until time t^* , ha;
t^*	1, 2,...10, time elapsed since the start of the project, in years
i	1,2,3 ... M strata
p	1, 2, 3 ... P land parcels harvested within the project crediting period

Since the baseline emissions from the combustion of fossil fuels have been conservatively omitted, the net change in carbon stock over each year of the project crediting period in the baseline scenario since the start of the project activity is calculated as:

$$\Delta C_{NET|BSL,t^*} = \sum_{p=1}^P [\Delta C_{Net,p|BSL(1)} + \Delta C_{Net,p|BSL(2-10)} + \Delta C_{Net,p|BSL(11-20)} + \Delta C_{Net,p|BSL(1+)}] \quad (\text{equation 27 from VM0010})$$

Where:

$\Delta C_{NET BSL,t}$	Net change in carbon stock across all parcels in the baseline scenario in the year t^* since the start of the project activity, in tC;
$\Delta C_{NET BSL(1)}$	Net change in carbon stock in the baseline scenario for all parcels p that are within 1 year of harvest in the baseline scenario, in tC;
$\Delta C_{NET BSL(2-10)}$	Net change in carbon stock in the baseline scenario for all parcels p , that were harvested between 2 – 10 years ago in the baseline scenario, in tC;
$\Delta C_{NET BSL(11-20)}$	Net change in carbon stock in the baseline scenario for all parcels p , that were harvested between 11 – 20 years ago in the baseline scenario, in tC
$\Delta C_{NET BSL(1+)}$	Net change in carbon stock due to forest regrowth in all parcels that have been harvested in the baseline scenario, in t C;
t^*	1, 2,...10, time elapsed since the start of the project, in years
p	1, 2, 3 ... P land parcels harvested within the project crediting period

Project emissions

The growth rate was calculated across multiple years for the entire Kuamut project area using the Aboveground Carbon Density (ACD) maps for the years 2016-2023 /21-23. As explained in that same section, these maps are developed using a multi-temporal modelling approach to estimate the spatial variability and distribution of aboveground biomass. The modelling approach adopted a machine learning workflow that uses the following data sources: aerial LiDAR scanning (ALS) data from 2016 describing canopy height, optical (Landsat 8) and Synthetic Aperture Radar (SAR) satellite imagery and forest plot data.

For this MR the PP has adopted the equation form as presented in the corrections and clarifications document (v1.3 10-06-2024). Here, the formula stipulates that ongoing forest growth may only be accounted for in the cumulative area, harvested in the baseline, at time t . During the years 2022 and 2023, no baseline harvest was forecasted and therefore ongoing forest growth is only considered for the baseline harvest area for years 2016-2021.

Using the growth rates derived from the annual biomass maps, the annual carbon stock change in aboveground biomass of trees has therefore been calculated as:

$$\Delta C_{AB,t|PRJ} = \left(\sum_{i,p}^{M,P} \left(A_{t^*,i,p} \times \frac{C_{AB,i,t2|PRJ} - C_{AB,i,t1|PRJ}}{T} \right) \right) \times \frac{44}{12}$$

Where:

$\Delta C_{AB,t PRJ}$	Annual carbon stock change in aboveground biomass of trees in year t (t CO ₂ e/yr)
$C_{AB,i,t PRJ}$	Mean aboveground biomass carbon stock of trees in stratum i at time t (t C/ha)
$A_{t^*,i,p}$	Cumulative area harvested of parcel p in stratum i at time t^* (ha)

sp	1, 2, 3, ..., SP sample plots
T	Number of years between monitoring time $t1$ and $t2$ ($T = t2 - t1$) (years)
$t1$	Beginning of the monitoring period or time of harvest event, whichever is later
i	1, 2, 3, ..., M strata
t	1, 2, 3, ... t^* years elapsed since the start of the project activity
p	1, 2, 3, ..., P land parcels harvested within the project crediting period
44/12	Ratio of molecular weights of carbon dioxide and carbon ($t\text{ CO}_2\text{e}/t\text{ C}$)

The growth rates, used for each stratum in the project area as described above in the growth modelling section, and after deducting for protected species using the species conservation factor were $2.98\text{ t C ha}^{-1}\text{ yr}^{-1}$ for mosaic-planted, $2.92\text{ t C ha}^{-1}\text{ yr}^{-1}$ for mosaic-unplanted and $2.03\text{ t C ha}^{-1}\text{ yr}^{-1}$ for NFM.

Applying these resulting “adjusted” growth rates to the parcels that would have been harvested, under the baseline within this monitoring period, gives the results provided in the table below.

Annual carbon stock change in aboveground biomass of trees in the project area.

Year	Annual carbon stock change in aboveground biomass of trees in year t , $t\text{CO}_2\text{e}$
2022	479,872.6
2023	479,872.6

Forest disturbances in the project scenario result from fire and non-fire forest disturbances, plus any carbon stock changes that occur as a result of illegal logging or natural disturbances.

Natural Disturbance - Fire

The net greenhouse gas emissions resulting from fire disturbance are calculated as

$$\Delta C_{DIST-FR,t|PRJ} = \sum_{i=1}^M A_{Burn,i,t} * B_{i,t|PRJ} * COMF_i * G_{g,i} \cdot 10^{-3} * GWP_{CH_4} \quad \text{Equation 1}$$

Where:

$\Delta C_{DIST-FR,t PRJ}$	Net greenhouse gas emissions resulting from fire disturbance in year t , $t\text{CO}_2\text{e}$
$A_{burn,i,t}$	Area burnt for stratum i at time t , ha

$B_{i,t PRJ}$	Average aboveground biomass stock present in the project scenario but absent in the baseline scenario before burning stratum i , time t ; t d. m. ha ⁻¹
$COMF_i$	Combustion factor for stratum i , dimensionless
$G_{g,i}$	Emission factor for stratum i for methane, g kg ⁻¹ dry matter burnt
GWP_{CH_4}	Global warming potential for CH ₄ (IPCC default: 21), tCO ₂ e tCH ₄ ⁻¹ ;
i	1,2,3 ... M strata
t	1,2,3 ... t^* years elapsed since the start of the project activity.

If any area is subject to a fire disturbance, the aboveground biomass stock present in the project scenario but absent in the baseline scenario before burning will be derived from the ACD maps (see Figure 3.13) by applying the following equation:

$$B_{i,t|PRJ} = \sum_{j=1}^J \{V_{EX,i,j|BSL} * BCEF_R\} \quad \text{Equation 2}$$

Where:

$B_{i,t PRJ}$	Average aboveground biomass stock present in the project scenario but absent in the baseline before burning for stratum i , time t , t d. m. ha ⁻¹ ;
$V_{EX,j,i BSL}$	Mean volume of extracted timber per unit area for species j in stratum i , m ³ ·ha ⁻¹
$BCEF_R$	Biomass conversion and expansion factor applicable to wood removals in the project area, t.d.m m ⁻³ ;
i	1,2,3 ... M strata
j	1, 2, 3 ... J tree species
t	1,2,3 ... t^* years elapsed since the start of the project activity.

Disturbance - Non-Fire natural disturbance and illegal logging

For non-fire natural disturbance (e.g. windthrow event, hurricane, landslide), it is assumed that a disturbance event in the project scenario would also have occurred in the baseline scenario. Project emissions are therefore equal to the non-fire natural disturbance to biomass absent in the baseline scenario (harvested and removed) but present in the project scenario. The resulting greenhouse gas emissions were calculated as:

$$\Delta C_{DIST,t|PRJ} = \sum_{i=1}^M (A_{dist,i,t} * \sum_{j=1}^J \{C_{AB,j,i|BSL}\}) * \frac{44}{12} \quad \text{Equation 3}$$

Where:

$\Delta C_{DIST,t PRJ}$	Net greenhouse gas emissions resulting from non-fire natural disturbance in year t , tCO ₂ e
$A_{dist,i,t}$	Area disturbed for stratum i at time t , ha
$C_{AB,i BSL}$	Carbon stock in aboveground biomass per unit area in stratum i , tCha ⁻¹
44/12	Ratio of molecular weights of carbon dioxide and carbon, tCO ₂ e tC ⁻¹
i	1,2,3 ... M strata
j	1, 2, 3 ... J tree species; and
t	1,2,3 ... t^* years elapsed since the start of the project activity.

Annual deforestation figures resulting from natural disturbances or illegal logging activities within the Kuamut project area.

Period	Area deforested (ha)	Project area deforested %
2021 - 2022	0.00	0.000
2022 - 2023	3.42	0.004
Total	3.42	0.004

Net greenhouse gas emissions resulting from non-fire disturbance in year t

Year	Area disturbed at time t (ha)	Net greenhouse gas emissions resulting from non-fire natural disturbance in year t (tCO ₂ e)
2022	0.0	0.0
2023	3.4	1,952.8

In 2023, the random forest land cover classification (LCC) failed to detect a known deforestation event caused by flood inundation. This was likely due to the unusual spectral characteristics of stagnant floodwaters not being represented in the training data. The deforestation was later identified through routine monitoring of high-resolution Planet Labs imagery and confirmed via field inspection. It was manually digitised and incorporated into the LCC-derived deforestation dataset. AENOR reviewed the flooding report /245/, but also, the calculations regarding these emissions, and additionally, the surface of the event, was crosschecked with onsite inspections of the disturbance.

Net greenhouse gas emissions in the project scenario (section 8.2.3 of the methodology)

The net greenhouse gas emissions in the project scenario in year t are then calculated as:

$$\Delta C_{NET,t|PRJ} = (\Delta C_{DIST-FR,t|PRJ} + \Delta C_{DIST,t,PRJ} + \Delta C_{DIST-IL,t|PRJ}) - \Delta C_{AB,t|PRJ}$$

Equation 4

and

$$GHG_{Net|PRJ} = \sum_{t=1}^{t^*} \Delta C_{Net,t|PRJ}$$

Equation 5

Where:

$GHG_{NET PRJ}$	Net greenhouse gas emissions in the project scenario since the start of the project activity, tCO ₂ e
$\Delta C_{NET,t PRJ}$	Net greenhouse gas emissions in the project scenario in year <i>t</i> , <i>not including areas that would not yet have been harvested under the baseline for this monitoring period</i> , tCO ₂ e;
$\Delta C_{DIST-FR,t PRJ}$	Net greenhouse gas emissions resulting from fire disturbance, assessed over the entire project area, in year <i>t</i> , tCO ₂ e
$\Delta C_{DIST,t PRJ}$	Net greenhouse gas emissions resulting from non-fire natural disturbance, included in growth, and therefore <i>not including areas that would not yet have been harvested under the baseline for this monitoring period</i> , in year <i>t</i> , tCO ₂ e
$\Delta C_{DIST-IL,t PRJ}$	Net carbon stock changes as a result of illegal logging, assessed over the entire project area, at time <i>t</i> , tCO ₂ e
$\Delta C_{AB,t PRJ}$	Annual carbon stock change in aboveground biomass of trees in year <i>t</i> , <i>not including areas that would not yet have been harvested under the baseline for this monitoring period</i> , tCO ₂ e yr ⁻¹
<i>t</i>	1,2,3 ... <i>t</i> * years elapsed since the start of the project activity.

The area used to delineate disturbance due to fire and or illegal logging includes the entire area contained within the project perimeter. Conversely, the area used to account for on-going forest growth (with natural disturbance combined) corresponds to the cumulative area that would have been harvested at time *t* in the baseline scenario. The net carbon stock change has been converted to net greenhouse gas emissions resulting in Table below:

Actual greenhouse gas emissions in the project

Year	Net greenhouse gas emissions resulting from fire disturbance in year <i>t</i> (tCO ₂ e)	Net greenhouse gas emissions resulting from non-fire disturbance and illegal logging (tCO ₂ e)	Annual carbon stock change in aboveground biomass of trees in year <i>t</i> (tCO ₂ e)	Net greenhouse gas emissions in the project scenario in year <i>t</i> *(tCO ₂ e)
2022	0	0.0	-479,872.6	-479,872.6
2023	0	1,952.8	-479,872.6	-477,919.8

Net greenhouse gas emissions from deforestation within the project area were calculated following the approach outlined in Equation 35 of the VM0010 methodology, as adapted in Equation 15.1.

In this calculation:

- Emissions account for disturbances such as illegal logging, fire, and natural events.
- Aboveground carbon stock in the affected area is used for each deforestation event and year.
- The result is converted to CO₂-equivalent using the molecular weight ratio of carbon dioxide to carbon.

Unlike the original VM0010 equation, no stratification was required since biomass estimates were taken directly from spatial biomass maps. Emissions were calculated based on carbon stocks at the time of deforestation, not the baseline year, thus capturing both baseline and post-baseline forest growth.

Annual net emissions results are summarized in the table below.

Period	Deforest Area	Total C lost	C_DIST_IL_i_t_PRJ
2016	97.7	5,486.1	20,115.6
2017	309.7	21,596.3	79,186.3
2018	10.1	128	469.3
2019	11.5	645.9	2,368.5
2020	34.3	2,203.8	8,080.7
2021	0.0	0.0	0.0
2022	0.0	0.0	0.0
2023	3.4	532.6	1,952.8

The deforested area extraction Code and the deforestation emissions calculations code were also reviewed with the PP, together with the main calculation spreadsheet /355/.

Leakage emissions

Leakage from activity shifting and market leakage are considered, and properly described in the MR /1/.

The management plans for Yayasan Sabah and Rakyat Berjaya Sdn. Bhd. have not materially changed as a result of the project and neither have the permits issued by the Sabah Forestry Department materially changed. To show this, historical records of harvest volumes were

obtained for the project time period. For the PD, historical timber harvest data was collated from the Sabah Forestry Department for each year from 2010 until 2019, for each active concession in Sabah during this time period.

The audit team has checked the Sabah Timber Production records /350-351/. The data provided include data on the volume extracted, the area that was harvested, and the logging type (NFM or Salvage logging). Multiple records for each forest reserve were taken. The data analysis shows that there is no material difference between the Timber Volume extracted from the other forest reserves before and after the start of the project activity, therefore there is no evidence of any activity shifting leakage.

According to the methodology, market leakage will be estimated as:

$$GHG_{LK|LtPF,t*} = LF_{ME} * GHG_{NET|BSL,t*} \quad \text{Equation 6}$$

Where:

$GHG_{LK LtPF,t*}$	Total market leakage as a result of IFM LtPF activities, in the year t^* since the start of the project activity, tCO ₂ e
LF_{ME}	Leakage factor for market-effects calculations; dimensionless
$GHG_{NET BSL,t*L}$	Net greenhouse gas emissions in the baseline scenario in the year t^* since the start of the project activity, tCO ₂ e

The leakage factor that is applied to the baseline emissions is determined by comparing the ratio of merchantable biomass to total biomass in the project area and the forests to which timber harvesting would have been displaced. In the PD, the factor was calculated as shown in Table below:

Calculated deduction factors (LF_{ME}).

Stratum in the project area	Corresponding forest type in the analysed forest estate	% difference between PMP _i and PML _{FT}	LF_{ME}
Stratum 2	Natural Forest Management	-10.3%	0.4
Stratum 3 and Stratum 4	Salvage logging	35.5%	0.2

Market leakage concerns the timber that would have been harvested under the baseline scenario based on the merchantable biomass and total biomass present in the project area under that baseline scenario. Applying the estimated value of 0.288 to equation 7 and using activity leakage of zero, this leads to the following results for the leakage calculation as shown in Table below.

The PP calculated the market leakage factor following the methodology outlined in Box 2 of the Verra guidelines. This factor is based on comparing the ratio of merchantable to total biomass in the project area (for each forest management type) with the same ratio in Sabah's forest reserves, where logging activities might shift.

To do this, they used biomass data from a statewide map developed by Asner et al. (2018). Harvest data from 2016 to 2019 was used to estimate the volume of harvestable biomass in forest reserves, based on logged timber volumes and reserve areas. Because harvestable biomass varies significantly across Sabah's reserves, the leakage factor was calculated as an area-weighted average for the two main management types: NFM and Mosaic. This weighted factor was included in the project's code documentation, and was reviewed by the VVB during the technical calls, additional explanations and technical sessions during the onsite visit. Market Leakage is calculated by applying equation above of the methodology. The leakage factor was determined by considering where logging will be increased because of the decreased supply of the timber caused by the project. To estimate the leakage factor, the ratio of merchantable biomass to total biomass was estimated for the NFM stratum (stratum 2) and the combined Mosaic strata (stratum 3 and 4) in the project area (PMPi). PML is calculated individually for each Forest Reserve Logging Type combination. The weighted leakage for the entire project estimated is 0.288. This value is the same as the previous verification and validation.

Estimated emission as a result of conservatively accounting for leakage.

Year that logging would occur according to the timber harvesting plan	Leakage due to activity shifting (tCO ₂ e)	Market leakage as a result of IFM LtPF activities in year t* (tCO ₂ e)	Total cumulative leakage in year t* since the start of the project activity
2022	0	178,044.6	1,015,641.4
2023	0	178,044.6	1,193,686.0

Uncertainty

Three key sources of uncertainty in the prediction of baseline and project-based emissions are the total merchantable volume (TMV) stock with a DBH > 31 cm and 40, observed growth rate, and post-processing of deforestation masks. To address TMV uncertainty, a simulation approach was used, drawing 100 random samples from a normal distribution constrained by the upper and lower 95% prediction interval values. The resulting simulated total provided uncertainty limits. The project growth rate uncertainty was derived from the fixed effects slopes of the linear mixed-effects (LME) model, calculating the 0.025th and 0.975th percentiles as uncertainty limits. To improve detection accuracy and reduce false positives, a post- processing analysis included a morphological neighborhood filter and a redundancy investigation. The filter removed small polygons and merged them with larger neighbors, while a redundancy analysis eliminated areas previously identified as deforested in annual calculations. These measures increased confidence in deforestation detection and reduced

errors in carbon stock calculations. The approach aligns with general practice followed for uncertainty analysis in this matter /352/.

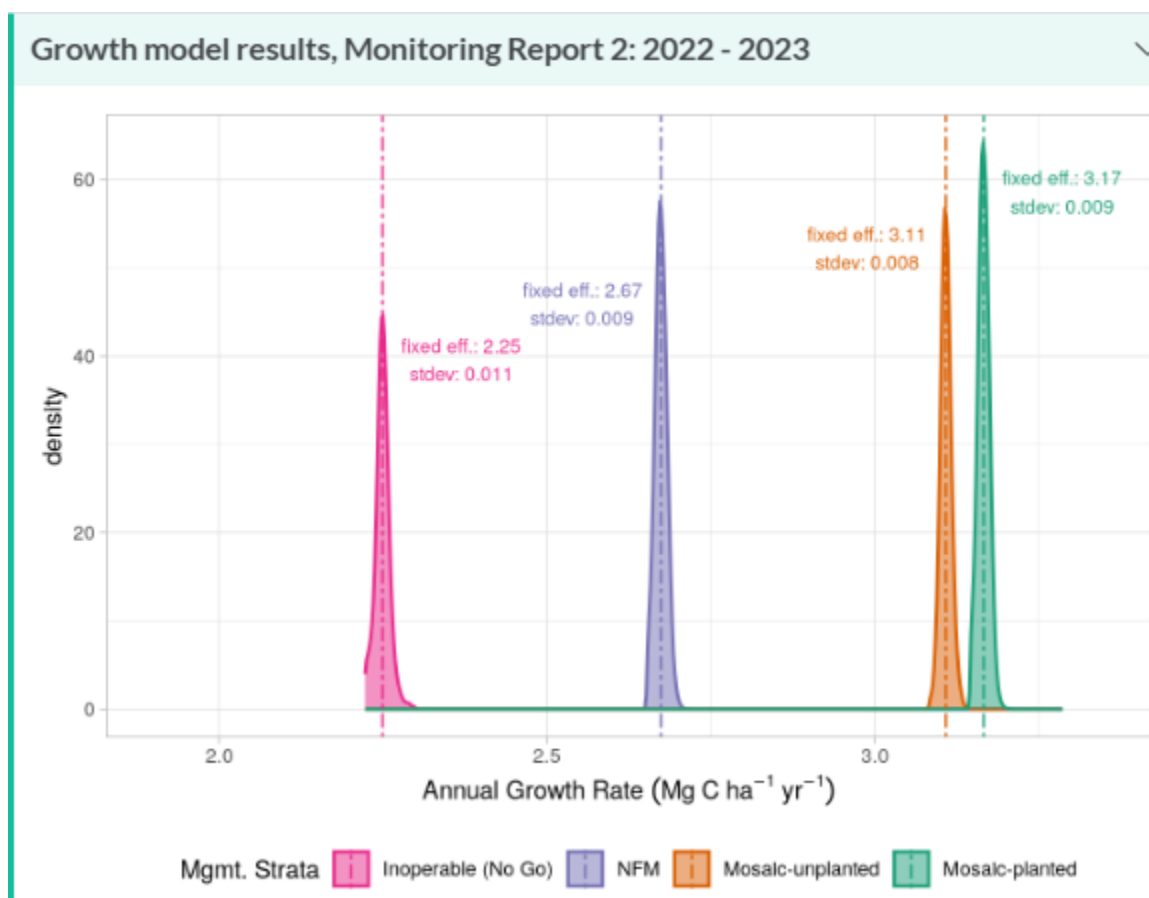
Net GHG Emission Reductions And Removals

The net GHG emission reductions and removals has been estimated using equation 41 of the applied methodology.

The project's overall forest growth rate was estimated using annual maps of predicted Aboveground Carbon Density (ACD) for the years 2016 to 2022. This method, based on modelled ACD rather than field plots, helps avoid bias from uneven plot distribution and enables growth estimation across all management zones, including areas not accessible for field measurements.

Before analysis, areas affected by deforestation or located outside the project boundary were excluded from the ACD maps. Management strata were included in the modelling process, as they may reflect past land-use practices that influence growth rates. While areas designated as "No-Go" (ineligible for harvesting) were not excluded, they were incorporated into the model as a fixed effect to allow for proper adjustment during analysis.

Six models were tested to determine the best approach for estimating growth. These included both linear and linear mixed-effects models. Some models included year and management strata as predictors, while others also incorporated spatial cell ID as a random effect to account for local variability and spatial autocorrelation.



Management Strata	Modelled Growth Rate (Mg C/ha)	Species Conservation Factor	Adjusted Growth Rate (Mg C/ha)
Inoperable (No Go)	2.25		
NFM	2.67	0.76	2.03
Mosaic-planted	3.17	0.94	2.98
Mosaic-unplanted	3.11	0.94	2.92

The code R/proj-growth-rate-multi.R /343/ was also reviewed by the VVB. AENOR double checked the correctness of the assumptions with the spreadsheet, the MR and internal review of the different codes.

For the current monitoring period from 01 January 2022 – 31 December 2023, the implementation of the project activities has resulted in emission removals of 842,855 tCO₂e. and 731,958 tCO₂e for Emissions reductions. Buffer credits allocation is 12% . the total amount of VCUs to be issued after the NPRT discount are 1,574,813 VCUs

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Buffer pool allocation (tCO ₂ e)	Reductions VCU (tCO ₂ e)	Removals VCU (tCO ₂ e)	Total VCU Issuance
01-Jan-2022 to 31-Dec-2022	618,210.3	-479,872.6	178,044.6	131,771	365,979	422,287	788,266
01-Jan-2023 to 31-Dec-2023	618,210.3	-477,919.8	178,044.6	131,537	365,979	420,568	786,547
Total	123,6420.6	-957,792.4	356,089.1	263,308	731,958	842,855	1,574,813

With regards to the comprehension of the R Scripts and the external work carried out by the PP to develop the calculations and figures explained above, but also in the MR /1/, AENOR had different technical calls with the PP in order to understand the Kuamut Pipeline Book, as well as clarify several doubts obtained from the R scripts and statistical assumptions. The different calls can be summarized as follows:

1. Call 1 (31/10/2024): Overview of the Kuamut Project

The call began with a general presentation of the Kuamut project data book in Sabah, Malaysian Borneo. The data book is divided into chapters covering reference areas, plot locations, tree data, digital elevation models, biomass maps, slope analysis, and more. It was mentioned that the book contains a vast amount of information, and multiple meetings will be required to review everything in detail. The discussion included reference areas and plot locations, providing information on individual trees and carbon-related calculations. Digital elevation models and how data is integrated for carbon analysis were also covered. The process of aggregating tree-level data into plot-level data for carbon analysis was explained. A significant section of the book is dedicated to biomass mapping, where high-resolution biomass maps for the entire site have been created. These maps will be discussed in-depth in future meetings.

A key aspect of the project's baseline is slope analysis. The area's topography is highly variable, so slope analysis is crucial in defining the counterfactual, or what would have happened without the project. This feeds into the definition of management strata, which are based more on management practices than forest types. The project area is primarily lowland dipterocarp forest, which is variable but largely of one type.

Information on harvest plans for different management strata, including mosaic and natural forest management strata, was discussed. Due to the use of high-resolution biomass maps, there is sometimes confusion about how much is accounted for in terms of avoided emissions compared to the biomass map. The baseline growth rate for the mosaic area, deforestation analysis, and related emissions were discussed. The project's growth rate, integrating remote sensing data and field data to estimate forest growth and compare it with field plots, was also covered. One of the methodology requirements is the estimation of uncertainty, which is mathematically dense but important. Finally, leakage analysis and its correspondence to the VM0010 methodology were discussed.

2. Call 2 (5/12/2024): Deforestation Analysis and Biomass Mapping

The importance of starting with deforestation analysis before moving on to biomass mapping was discussed. The PP explained the approach and methodology used for land cover classification and deforestation identification. Here, the PP explained that Harmonized Sentinel and Landsat datasets were used to improve image quality due to frequent cloud cover in the region. This new dataset provides double the opportunities for cloud-free images. Annual composites were created, and forest classification was performed using the Random Forest algorithm. Deforestation areas were identified, and false alarms were removed using seed filters and 2.5-hectare thresholds.

Biomass mapping was conducted using LiDAR data, canopy height models, and field plot data to train the biomass model. Annual biomass maps were generated, and growth rates were estimated. Cross-validation and uncertainty analysis were performed to ensure model accuracy. Hugh explained that multiple remote sensing data sources were combined into a data cube to train the canopy height model. A secondary regression using machine learning algorithms was then performed to predict annual biomass.

3. Call 3 (21/11/2024): Harvest Plans and Management Strategies

There is a differentiation between planted and unplanted mosaic areas, and existing concession boundaries are used to define strata. Harvest plans were created for natural forest management and mosaic areas. Historical data and common practices were used to estimate timber volumes and logging areas. Differentiation between planted and unplanted areas in mosaic concessions was made. Parcel calculations estimate emissions and decomposition factors at the parcel level. Timber volume and area data were used to calculate annual emissions. Species conservation factors were applied to adjust timber volume estimates.

The project's growth rate was estimated using plot data and canopy height models. Conservative growth rates based on reference data and published studies were applied. The growth rate for planted mosaic areas is approximately 3 tons of carbon per hectare per year, while the IPCC secondary forest growth rate of 1.6 tons of carbon per hectare per year is used for unplanted areas.

4. Call 4 (09/12/2024): Parcel and Annualized Calculations

The methodology also accounts for the slash created during logging, which includes branches and residual stand damage. The residual stand damage parameter is based on a conservative estimate from a relevant study. The calculations continue with the estimation of emissions from different wood products (sawn wood, wood-based panels, etc.) and the immediate and long-term emissions. Annualized calculations involve modelling the emissions over the next 20-30 years for each parcel. This includes the regrowth in the baseline scenario and the net emissions in the project scenario. The methodology changes in version 1.4 were discussed, including the new approach to accounting for ongoing forest growth and the labelling of credits as emissions reductions or removals.

The final steps involve calculating the net change in carbon stocks between the baseline and project scenarios, applying the leakage factor, and determining the buffer pool allocation. The buffer allocation is now based on the difference in carbon stocks rather than the net credits generated. The final summary table includes the allocation of credits as either emissions reductions or removals.

AENOR reproduced the calculations spreadsheets /355/ to achieve the same results and deems they are depicted clearly and correctly in the provided sheets. The AENOR verification team was able to trace them directly from the data sources, for example the R scripts /321-354/ and it was supported with the technical calls between AENOR and Permian. Formulae used are in compliance with monitoring plan, PD, and methodology, as well as the default values used to determine the parameters. Thus, the net amount of VCUs to be issued is accurate and realistic. Assumptions used by PP at verification were appropriately cross-checked and assessed with requested evidence.

In order to calculate the above terms, the monitoring report details the data and parameters used during the verification process. For each of them, AENOR checked its accuracy, consistency and reliability by reproducing the spreadsheets calculations /355/, verifying the correctness of formulae and methods used and crosschecking the data values with sources.

AENOR carried out a deep review of the technical annex and the calculations and others provided by the PP that feed data values shown in the carbon-calculations-summary-kuamut-mr-2-Net_VCUs_2022_2023 /355/.

AENOR verified the consistency and accuracy of each parameter detailed in sections 3.1.1 and 3.1.2 of the MR by crosschecking the information with the information in section 3.3 of the PD as well as checking values and reproducing the calculations in the spreadsheets /355/ and GIS package /4-26/ and did not find inconsistencies between them after the closing of CARs and CLs requested. Therefore, AENOR deems that values reported for the parameters are accurate and consistent. Information was deemed accurate and consistent taking into account sources used. Other default values used are from sources well accredited and validated at validation stage.

AENOR verified the list of parameters available at validation reported in the monitoring report and values applied (if applicable) or the references to the documents. The list is complete and in compliance with the methodology and the PD.

AENOR compared the traceability and the calculations between the current and the previous monitoring reports and verification reports.

The data and parameters monitored and used to determine the emission reductions of the project are also detailed in section 3.1.2 of the MR. AENOR verified that list is complete and in compliance with the applicable methodology and the PD. For each parameter, the references to the tables where they are used are provided.

The values and estimates presented in the VCS-CCB MR /1/ are considered reasonable based on the documentation reviewed, further references and the result of the interviews during the on-site visit.

Based on the information reviewed, it can also be confirmed that the sources used are correctly quoted and interpreted in the VCS-CCB MR /1/ and supporting documents. All assumptions and data indicated in the VCS-CCB MR /1/ and all relevant sources were checked and confirmed and are listed in the VCS-CCB MR /1/ including their references and sources. In essence, the methodology was correctly applied following the requirements. All values in the VCS-CCB MR /1/ are considered accurate and verifiable in the context of the proposed VCS project activity. Data sources are quoted correctly. Hence, the calculation of baseline emissions, project emissions, leakage emissions and the verified net GHG emission reductions are considered correct.

The list of parameters available at validation and the values used were also checked by AENOR and it is deemed complete and consistent with calculations and assumptions considered. The following table summarizes the data/parameters available at validation:

Data/Parameter available at validation	Value	Assessment procedure and result
CF _j Carbon fraction of dry matter for species j	0.47	Reviewed with the validated PDD and the IPCC default for aboveground tree biomass (table 4.3 in volume 4 of the 2006 IPCC guidelines)
D _j Basic wood density of species j	Different values according to each specie	Reviewed with the validated PDD and the densities within global wood density database

Data/Parameter available at validation	Value	Assessment procedure and result
Relationship between Aboveground Carbon Density and LiDAR based Top of Canopy Height	N/A	N/A
BCEF _R Biomass conversion and expansion factor applicable to wood removals in the project area	1.89	Reviewed with the validated PDD and the IPCC default for aboveground tree biomass (table 4.3 in volume 4 of the 2006 IPCC guidelines)
F _{RSDBSL} Residual Stand Damage Factor	1.8	Reviewed with the validated PDD and the evidence provided (Pinard, M., & Putz, F. (1996). Retaining Forest Biomass by Reducing Logging Damage. Biotropica, 28(3), 278-295. doi:10.2307/2389193)
V _{l,j,i,sp} Merchantable volume for tree l of species j in sample plots p in stratum i	Different values according to each specie	Reviewed in the validated PDD
f _j (X,Y...) Allometric equation(s) for species j linking measured tree variable(s) to aboveground biomass of living trees	AGB _{est} = 0.0673 x (ρD ² H) ^{0.976}	Reviewed through the Chave equation
OF	OF	The values for this parameter is sourced

Data/Parameter available at validation	Value				Assessment procedure and result
Fraction of wood products that will be emitted to the atmosphere between 3 and 100years after production;	Wood Product Class	Boreal	Temperate	Tropical	from default values for the tropical forest region provided in the methodology
	Sawnwood	0.39	0.62	0.86	
	Woodbase panels	0.62	0.86	0.98	
	Other industrial roundwood	0.86	0.98	0.99	
	Paper and paperboard	0.39	0.62	0.99	
SLF Fraction of wood products that will be emitted to the atmosphere within 3 years of production	Sawn wood: 0.12 Woodbase panels: 0.06 Other industrial roundwood: 0.18 paper and paperboard: 0				The value for this parameter is sourced from default values given in the methodology were used which in turn are taken from Winjum et al (1998).
WW Fraction of extracted biomass effectively emitted to the atmosphere during production	24%				The value for this parameter is sourced from default values given in the methodology were used which in turn are taken from Winjum et al (1998).
PML _{FT} Mean merchantable biomass as a proportion of total aboveground tree biomass for each forest type	Logging Type		PML _{FT}		The value for this parameter is sourced from merchantable volume data for all active logging concessions within the State of Sabah
	Salvage Logging		0.96		
	NFM		0.4		
RGR _i Forest regrowth rate post timber harvest for stratum i	1.6 t C ha ⁻¹ yr ⁻¹ for stratum 2 and 3 3.0 t C ha ⁻¹ yr ⁻¹ for stratum 4 0 t C ha ⁻¹ yr ⁻¹ for stratum 1 as a no-go area				The value was reviewed with the validated PDD and other papers provided in the MR (already validated)
V _{EX,j,i BSL}	Different values				Reviewed in the validated PDD

Data/Parameter available at validation	Value		Assessment procedure and result
Mean volume of extracted timber per unit area for species j in stratum i			
TH _{i,p} Number of years since timber harvest in stratum i in land parcel p	Different values		Reviewed in the validated PDD
A _{i,p} The area of stratum i in land parcel p that was harvested 1 year ago	Year of Logging	Area (ha)	Reviewed in the validated PDD
	2016	6177.69	
	2017	7902.44	
	2018	5587.26	
	2019	9036.81	
	2020	5915.17	
	2021	2213.69	
	2022	0	
	2023	0	
A _{1,i,p} The area of stratum i in land parcel p that was harvested between 2 and 10 year ago	Different values		The value for this parameter is sourced from model analysis and calculations.
A _{2-10,i,p} The area of stratum i in land parcel p that was harvested between 11 and 20 years ago	Different values		Reviewed in the validated PDD
A _{11-20,i,p} Cumulative area harvested until time t*	Different values		Reviewed in the validated PDD
A _{t+} Cumulative area harvested until time t*	Different values		Reviewed in the validated PDD
A _{sp} Area of sample plots p	0.28		Reviewed in the validated PDD

The parameters monitored are the following:

Data/Parameter monitored	Value	Assessment procedure and result
$A_{burn,i,t}$ Area burnt in (stratum i) at time t	0 ha	AENOR has carried out technical calls with the PP and also has reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter
$A_{dist,i,t}$ Area disturbed in stratum i at time t (natural disturbance)	3.42 ha	AENOR has carried out technical calls with the PP and also has reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter
$A_{DIST_IL,i}$ Area impacted by illegal logging (in stratum i)	0 ha	AENOR has carried out technical calls with the PP and also has reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter
$\Delta C_{AB,t PRJ}$ Annual carbon stock change in aboveground biomass of trees, in each stratum, in the project scenario	2.98 for mosaic-planted, 2.92 for mosaic-unplanted and 2.03 for NFM	AENOR has carried out technical calls with the PP and also has reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter
$B_{i,t PRJ}$ Aboveground biomass stock present in the project scenario (but absent in the baseline scenario) before burning	0	AENOR reviewed the spreadsheets and compared data with literature and files about fire monitoring
$C_{AB,i BSL}$	1,952.8 tC/ha	AENOR has carried out technical calls with the PP and also has

Data/Parameter monitored	Value	Assessment procedure and result						
Carbon stock in aboveground biomass in areas disturbed		reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter						
$C_{DIST_IL,i,t PRJ}$ Biomass carbon of trees cut and removed through illegal logging	Different values	AENOR has carried out technical calls with the PP and also has reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter						
PMPi Merchantable biomass as a proportion of total aboveground tree biomass for stratum i within the project boundaries	<table><tr><td>Stratum</td><td>PMP_I</td></tr><tr><td>Mosaic</td><td>0.71</td></tr><tr><td>NFM</td><td>0.45</td></tr></table>	Stratum	PMP_I	Mosaic	0.71	NFM	0.45	AENOR has carried out technical calls with the PP and also has reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter
Stratum	PMP_I							
Mosaic	0.71							
NFM	0.45							
LF_{ME} Leakage factor for market-effects calculations. Derived as from variables PMPi and PMPFT as described in the Leakage Factor calculation box on page 48 of the methodology.	<table><tr><td>Stratum</td><td>LF_{ME}</td></tr><tr><td>Mosaic</td><td>0.2</td></tr><tr><td>NFM</td><td>0.4</td></tr></table>	Stratum	LF_{ME}	Mosaic	0.2	NFM	0.4	AENOR has carried out technical calls with the PP and also has reviewed the different remote-sensing files /4-26/. The spreadsheets /355/ also demonstrated the accuracy of this parameter
Stratum	LF_{ME}							
Mosaic	0.2							
NFM	0.4							

In order to verify the accuracy and consistency of parameters monitored and used to calculate the ERs for the monitoring period, the AENOR verification team reproduced table by table and script by script using the sequence established in the methodology, checking the correctness of the formulae applied and assumptions used, when applicable and that values used matched with data sources. At the same time, the verification team had to check the set of other spreadsheets that feed the MR_Tables_calculation spreadsheet /355/ and show data inputs for calculating the terms listed above. In addition, the whole set of spreadsheets are fed from other sources, like the GIS package and other sources/reports.

AENOR not only verified the spreadsheet calculation, data, and parameters but also, the AENOR team could verify that the Project Proponent conducted a rigorous QC/QA procedure of its field measurements and an assessment of uncertainty. Thus, AENOR deems the Project Proponent performed good practices in this assessment and concludes that GHG removals were quantified correctly in accordance with the project description and applied methodology.

After a deep and thorough review and reproduction of calculations of tables from VM0010 as well as the mandatory modules and samples to the tracks to the other spreadsheets, AENOR deems the parameters monitored and available at validation are correct, reliable, and consistent. Information in the monitoring report is in compliance with the PD, the calculations provided and the applicable methodology. Then, the results showed in the MR are reliable, consistent, and accurate. Additionally, the VVB had technical calls with the PP in order to clarify doubts about the R Scripts and carbon modelling or LiDAR analysis. These technical calls 'summaries were described above.

Interviews with project proponents and inspection of data and results demonstrated that the project proponents possess all of the competencies required for reporting of GHG emissions reductions in an accurate way.

Data presented to the audit team was clear and coherent and processing steps could be traced to the corresponding sections of the methodology and monitoring plan with transparency.

The monitoring plan provides means for internal data review and quality control, and the data presented by the project proponent included the results of these internal assessments. AENOR considers that information provided is sufficient and the quality of that information is appropriate to determine the GHG emission reductions.

AENOR deems the information and the sources are reliable and appropriate. AENOR deems that evidence provided is sufficient to reproduce calculations in quantity and quality.

4.4.2 Quality of Evidence to Determine GHG Emission Reductions and Removals (VCS, 2.5, 3.2, 3.6, 3.15, 4.1, 4.3)

The data and parameters used to determine GHG emission reductions and removals are listed in section 3.1 of the MR.

The PP has standardized data collection and processing through SOPs /38-49/ and perform multiple quality assurance and quality control (QA/QC) assessments. All data collected, recorded, stored, and reported are subject to review and approval by data analysts, data managers, the technical project lead, and the project team leader with reference to each level of data management. In order to ensure the security and traceability of data entry and

QA/QC, all data in raw, intermediate, and final stages have access levels pre-defined for different types of users, as defined in the monitoring plan.

The PP uses a remote sensing for land cover changes and fire detection in the project area, in combination with onsite real data. The monitoring report describes the steps followed to analyze the information. Also, AENOR has carried out technical meetings with the PP and the responsible of remote sensing to review the process of data analysis and aerial images and processing. The R Scripts /321-354/ were also mutually reviewed and explained. The project originally used LiDAR-based canopy height data from 2016 to estimate baseline biomass, but this has since been updated using more accurate and recent data. For ongoing forest monitoring, a multi-temporal machine learning model was developed using LiDAR, satellite imagery (Landsat 8 and Sentinel-1), and forest plot data (from 2016 and 2021/2022). This approach enables annual biomass estimation without needing yearly field measurements. Remote sensing data were processed with temporal smoothing to create consistent imagery, supporting more conservative and accurate estimates of aboveground biomass growth over time.

AENOR has verified that the monitoring plan is being implemented as the described in the project description. AENOR checked that key workers are fully involved in monitoring events (training, measuring, archiving, reporting, quality control, etc.) by interviews during the onsite visit as well as with the review of the trainings and SOPs /38-49/. QA/QC procedures are considered strict at identifying, reviewing, and handling inconsistencies found to improve the management of the project.

Roles and responsibilities along with data management and archival system are also detailed in the monitoring report and other supported documents. The Kuamut Rainforest Conservation Project (KRCP) operates under a structured governance model to ensure effective monitoring and conservation efforts.

Data presented to the audit team were clear and coherent and processing steps could be traced to the corresponding sections of the methodology and monitoring plan with transparency. The PP has provided several spreadsheets and R Scripts, together with remote sensing maps, with different levels of complexity to allow the understanding of all the people who want to comprehension of the calculation.

The monitoring plan provides means for internal data review and quality control, and the data presented by the PP included the results of these internal assessments. AENOR considers that information provided is sufficiency and the quality of that information is appropriate to determine the GHG removals.

4.4.3 Non-Permanence Risk Analysis (VCS 2.4, 3.2, 3.5, 3.6, 3.15, 3.23, 4.1)

The project utilized the non-permanence risk analysis tool, AFOLU Non-Permanence Risk Tool 4.2, to assess risk according to internal risk, external risk, natural risk, and mitigation

measures for minimizing them. The audit team reviewed the Non-Permanence Risk Report submitted through Verra Project Hub and additional documentation /289-295/, following VCS Standard v4.7 Section 3.2.10 and confirmed that the project adheres to the requirements set out in the VCS AFOLU Non-Permanence Risk Tool.

At all levels, the audit team evaluated the rationale, appropriateness, and justifications of risk ratings chosen by the PP. Each risk factor was thoroughly assessed for conformance.

It is important to note that AENOR's audit team requested the PP that for all NPR risk factors, to make sure the report provides explanations, justifications and/or documental evidence in accordance with Project Hub instructions. Instructions will be included in table below for each type of sub-group risk.

AENOR has checked that information provided in the NPRR is consistent with supporting documents provided. The assumptions and justifications provided to determine the risk rating of each risk factor are elaborated and they are based on provided documents using conservative assessments. AENOR deems that information provided is reliable and appropriate from reliable sources. Thus, the overall risk rating of 12 % is credible and realistic. A brief review of each factor is shown in the table below.

Internal Risks:

Project Management			
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating	VVB Assessment
Q1)	The project has an adaptive management plan in place that includes a monitoring plan.	0	The VVB verified this information through the assessment of the Kuamut Adaptive Management plan /295/. Adaptive management is a structured, iterative process that enables better decision-making by addressing uncertainties and integrating lessons from project outcomes. The process ensures flexibility and continuous improvement by refining management actions based on systematic monitoring and evaluation. The adaptive management cycle consists of six stages: 1. Problem Definition: Identifying key uncertainties and challenges. 2. Planning: Designing strategies, experiments, and monitoring systems to address uncertainties.

			3. Implementation: Executing planned activities while monitoring key metrics. 4. Monitoring: Collecting data on environmental, social, and economic indicators. 5. Evaluation: Assessing results to determine what is working and what needs improvement. 6. Adaptation: Modifying strategies and actions based on insights to improve outcomes. This iterative approach enables the Kuamut Project to adapt to changing conditions and unforeseen challenges while maintaining progress toward its goals. AENOR considers that the plan is aligned with the VCS and NPRT requirements and therefore, the score is properly assessed. The review of the plan /295/ together with onsite testimonies is enough to satisfy this score.
Q2.a)	The project is an IFM project	0	The Kuamut Rainforest Conservation Project does not focus on planting trees but rather on protecting and regenerating existing native forests. The project prevents logging and promotes natural forest recovery Risk rating=0 is justified. AENOR confirms the project is not planting trees but protecting them (IFM)
Q2.b)	The Kuamut Rainforest Conservation Project has strong enforcement measures in place. Monthly patrols by RBJ cover all key access points using vehicles, boats, helicopters, and satellite monitoring. No major illegal activities were detected inside the Project Area in 2022-2023, and a small encroachment outside the area (80x80m) was immediately reported and addressed. Security gates at Km 11, Jalan Danum, and	0	The VVB corroborated this information through the on-site visit, stakeholder interviews and the land property documents reviewed onsite and through previous verifications. Risk rating=0 is justified.

	Haranky control vehicular movement, while satellite imagery and camera traps provide real-time tracking. The reclassification of Kuamut Forest Reserve to Class I Protection status eliminated logging risks, reducing the likelihood of large-scale encroachment. The project also engages local communities to prevent illegal activity. Given these measures, the claim that more than 50% of stocks require enforcement does not apply.		
Q2.c)	The local management team includes individuals with significant experience in all skills necessary to successfully undertake the project activities.	0	The project is managed by experienced teams from Permian Malaysia Sdn. Bhd., Yayasan Sabah, Rakyat Berjaya Sdn. Bhd., and the Sabah Forestry Department, all of which have extensive expertise in forestry, biodiversity conservation, carbon crediting, and community engagement. Additionally, the project collaborates with SEARRP and PACOS Trust, further strengthening its capacity in scientific monitoring and community outreach. The leadership team includes individuals with over 20 years of experience in their respective fields. The VVB corroborated this information through the interviews with the staff and an assessment of the evidence provided and checked onsite. Risk rating=0 is justified.
Q2.d)	The management team is based in Malaysia and maintains a local presence. Permian Malaysia Sdn. Bhd. is headquartered in Kuala Lumpur, while the Sabah Forestry Department, Yayasan Sabah, and Rakyat Berjaya Sdn. Bhd. operate in Kota Kinabalu, Sabah, ensuring proximity to the project site.	0	The information was corroborated on site by the VVB. Risk rating=0 is justified.

Q2.e)	The project actively monitors and reports disturbances. A single non-fire natural disturbance (flooding) was identified in 2023 and was promptly investigated, documented, and accounted for in carbon calculations. This flood was not significant to be considered a loss event as per VCS guidance.		The VVB corroborated this information through the interviews with the staff during the audit visit. Observations of the satellite imagery, comparing historical images also confirmed such statement. The event does not qualify as a loss event, as the cumulative loss is less than 5%. AENOR considers that the PP works efficiently to detect possible reversals, illegal activities or loss events. Risk rating=0 is justified.
Q2.f)	KRCP is not an ALM project	0	N/A
Q2.g)	KRCP is not an ALM project	0	N/A
Q3.h)	Mitigation: the management team includes individuals with more than 20 years of experience in AFOLU projects worldwide.	-2	The VVB corroborated this information through the interviews with the staff and an assessment of the evidence provided in the onsite visit and the Company webpage. Technical meetings also corroborated this information.
Q3.i)	KRCP is not an ALM project	0	N/A
Total Project Management (PM) [as applicable, (a + b + c + d + e + f + g + h + i)] Total shall not be less than 0.		0	This score was reviewed by AENOR by assessing each of the individual ratings on the Verra Hub and confirms that is correct and aligned with the NPRTool.

Financial Viability			
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating	VVB Assessment
Q1. a-e)	The payback period is four years or less from the current risk assessment.	0	This is the second monitoring period of the project. The payback period was achieved during the first monitoring period. The VVB reviewed the KRCP financial analysis /291/ and also discussed and reviewed the financial analysis onsite.

Q2.f-i)	Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven	0	This information was corroborated through the financial documents /291/. Explanations during the onsite visit also demonstrated that the project reached breakeven after the sale of VCU's issued on 2024
Q3.j)	Mitigation: N/A	0	N/A
Total Financial Viability (FV) [as applicable, ((a, b, c, d or e) + (f, g, h or i) + j)] Total shall not be less than zero and the sub-total for question two with the mitigation j shall not be less than 0 (note: the mitigation only applies to Q2)		0	This score was reviewed by AENOR by assessing each of the individual ratings on the Verra Hub and confirms that is correct and aligned with the NPRTTool.

Opportunity Cost				
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating	VVB Assessment	
Q1)	Are the baseline activities subsistence-driven? NO.	0	The VVB corroborated this information through the on-site visit, and the stakeholder interviews. The baseline is not subsistence driven- The Project Area was reclassified from Class II (Production) Forest Reserve to a Class I (Protection) Forest Reserve in 2015/2016, which meant that all logging operations were halted and conversion to mosaic plantings was avoided. Unsustainable logging practices are thought to have a negative impact on orangutan populations, which have higher abundance in less disturbed, better-quality forests. Mosaic planting is likely to have severe negative impacts on biodiversity, including the orangutan population, since the actively planted portion of the mosaic requires the near-complete removal of natural vegetation and thus of natural habitats for these forest dependent species. Thus the	

			answer to Q1 is "No". AENOR confirmed this information with the assessment of the baseline and onsite testimonies.
Q2.a-f)	NPV of the most profitable alternative land use activity is expected to be 20 percent or less than that of project activities.	0	The NPV of timber extraction was calculated at 17m USD over 20 years of operation, while the NPV of projected revenues from the sale of VCUs resulting from project activities is 54m USD. AENOR reviewed the financial analysis /291/ and crosschecked the information with testimonies gathered onsite and technical meetings.
Q3.g-h)	Does the project have net positive community impacts? N/A since this score is only needed when Q1 is answered yes	0	N/A since this score is only needed when Q1 is answered yes
Q4.i)	Mitigation: Project is protected by legally binding agreement to continue management practices that protect the credited carbon stocks over the duration of the project crediting period	0	N/A
Q4.j)	Mitigation: Project is protected by legally binding agreement (See Section 2.2.4) to continue management practices that protect the credited carbon stocks for at least 100 years.	0	The project was converted to Class I forest from previously Class II, which gives the status of permanent protection to the project area. AENOR reviewed the land agreements and National Legislation which covers the protection of the land.
Q4.k)	Mitigation: Where there is a potential for revenue loss compared to the most profitable alternative land use activity, project is a non-profit or has additional financial support (e.g., via grants, government funding, ecosystem services payments or SD VSta assets) to overcome expected revenue loss.	0	The project is developed by Permian Malaysia under the umbrella of Permian Global, which provides financial and technical support to the project. Permian Global has around 20 years of solid financial solvency in forest carbon projects. AENOR ensured the organization of the project is as indicated in the MR and the PDD

Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e, f, g or h) + (i + j) + k] Total shall not be less than 0.	0	This score was reviewed by AENOR by assessing each of the individual ratings on the Verra Hub and confirms that is correct and aligned with the NPRTool.
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Project Longevity		VVB Assessment
Q1)	The project requests registration after January 2024	NO The VVB corroborated this information through the Verra registry.
Q2)	Project has a legally binding agreement covering at least a 100-year period from the project start date. (If Yes, the project is given a zero score for this risk category.)	YES The classification as a protected area (which originated due to the project), is permanent. In addition to the protected area status, there is a cabinet decision to keep 30% protected forests and 50% of Sabah under forest cover (documents and evidence in the public domain). AENOR reviewed the land agreements /2/ as well as the National Legislation to ensure that the project is permanently covered by those Rules.
Q3)	What is the project longevity in years? If you answered Yes to Q1 and the project longevity is less than 40 years, the project fails the risk assessment. If you answered No to Q1 and the project longevity is less than 30 years, the project fails the risk assessment. Please note that projects with project longevity of less than 40 years will be ineligible for the Core Carbon Principles label.	N/A The score is 0 for the project longevity risk. See Q2.
Q4)	Does the project have a management, financial and monitoring plan for the entire project longevity? If No, the project fails the risk assessment. If Yes, proceed to Q5.	N/A The score is 0 for the project longevity risk. See Q2.
Q5)	Is the project an ARR or IFM project with harvesting? If No, proceed to Q7. If Yes, proceed to Q6.	N/A The score is 0 for the project longevity risk. See Q2.

Q6)	Can the project demonstrate a commitment to continue the management practice, replant or allow re-growth? If No, the project fails the risk assessment. If Yes, proceed to Q7.	N/A	The score is 0 for the project longevity risk. See Q2.
Q7. a- b)	Does the project have a legal Agreement or requirement to continue the management practice(s)? If No, proceed to a. If Yes, proceed to b.	N/A	The score is 0 for the project longevity risk. See Q2.
Q8)	Is the project a grouped project where contract durations with individual project activity instances are less than the project longevity?	N/A	The score is 0 for the project longevity risk. See Q2.
Total Project Longevity (PL) [as applicable, (a or b)] Total shall not be less than 0.		0	This score was reviewed by AENOR by assessing each of the individual ratings on the Verra Hub and confirms that is correct and aligned with the NPRTTool.

According to the results, the Internal Risk obtained the following risk rating:

Internal Risk	
Total Internal Risk (PM + FV + OC + PL) Total may not be less than zero.	0

External Risk:

Land Tenure and Resource Access/Impacts			
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating	VVB Assessment
Q1	Has due process been undertaken to discover any disputes over ownership and land, resource access, or use rights? If No, the project fails the risk assessment. If Yes, proceed to Q2.	YES	The VVB verified this information with the assessment of consultations & FPIC process /94-123/. Onsite testimonies also clarified this information. A detailed FPIC process was conducted at the start of the project to discover any disputes with nearby communities. The project area is public land owned by the State of

			Sabah. AENOR also reviewed the land agreements and national Laws
Q2	Has the project executed a binding legal agreement(s) (such as a contract) securing the legal right to control and operate project activities over the entire project area with all entities that have verified ownership claims or verified land, resource access or use rights (such as customary rights holders)? If No, the project fails the risk assessment. If Yes, proceed to Q3.	YES	Q3-B Ownership is held by the State. Permian Global Malaysia holds an agreement with the government for the project implementation. AENOR reviewed the land agreements and contract between Permian and the State /2/
Q3. a-b)	The land ownership and resource access/use rights are held by different entities as the land is owned by the government with the project having right of use.	2	b) The land ownership and resource access/use rights are held by different entities as the land is owned by the government with the project having right of use. AENOR has reviewed rights during the onsite visit as well as during the desk review.
Q4. c-e)	No instances of Government intervention in the past 20 years or specific instances of expropriation and government intervention in land rights in the project area have been conclusively resolved against the government in a court of competent jurisdiction.	0	Since its establishment, the Forestry Department has established forest reserves throughout the state, and is currently the custodian for about 3.6 million hectares or 49.1% of the state's land mass. Based on the powers vested under the Forest Enactment 1968 and Forest Rules 1969, the department has undertaken various efforts to protect and manage the state's forests.
Q5. f-h)	No disputes exist over the project area.	0	The VVB verified this information both with the assessment of the Law, the agreements and onsite testimonies. The VVB has performed interviews asking to the interviewees about their knowledge. The total project area is public land owned by Sabah Forestry Department and managed by RBJ.
Q6. i-k)	There are not any disputes over access or use rights. See Q5-h	0	The VVB verified this information both with the assessment of the Law, the agreements and onsite testimonies. The VVB has performed interviews

			asking to the interviewees about their knowledge. The total project area is public land owned by Sabah Forestry Department and managed by RBJ.
Q7. l-m	Have the risks of upstream and sea impacts undermining the carbon stocks of a WRC project been demonstrated as insignificant or effectively mitigated for the ten years that follow the risk assessment?	m	The project site is roughly 70 km away from the sea and hence there are no expected impacts by the sea level. The majority of the project area sits within an altitude of 200 meters above sea level and hence there are no expected upstream impacts. AENOR reviewed the GIS files /4-26/ as well as through the onsite visit.
Q8.n)	Mitigation: Project area is protected by a legally binding agreement (e.g., a conservation easement, conservation servitude or protected area) to continue management practices that protect carbon stocks for the duration of the project crediting period.	-2	The classification as a protected area (which originated due to the project), is permanent. The agreement with Permian is at least for 30 years. AENOR reviewed the agreements /2/ and the crediting period through Verra Registry and current MR /1/.
Q8.o)	Mitigation: Where disputes over land tenure, ownership or access or use rights exist, documented evidence is provided that demonstrates the project is taking action to try to resolve the disputes or clarify overlapping claims	-2	N/A.
Total Land Tenure (LT) [as applicable, ((a or b) + (c, d, or e) + (f, g or h) + (i, j or k) + (l or m) + n + o)] Total shall not be less than zero.		0	This score was reviewed by AENOR by assessing each of the individual ratings on the Verra Hub and confirms that is correct and aligned with the NPRTTool.

Stakeholder Engagement			
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating	VVB Assessment
Q1)	Are local populations, including those living in the project area or within 20 km of the boundary of	NO	The local population within 20km of the project are not reliant on the project area, nonetheless, the project provides

	the project area, reliant on the project area? If No, the risk rating for stakeholder engagement is zero and you can proceed to political risk. If Yes, proceed to Q2		significant benefits and improves their livelihoods through the protection of the area and direct benefits from project activities. Furthermore, extensive consultations were conducted with more than 50% of the stakeholders.
Q2. a-b)	Have more or less than 50 percent of stakeholders living within and reliant on the project area been consulted?	0	This rating is Zero (0), since the answer to Q1 is NO
Q3. c-d)	Have more or less than 20 percent of stakeholders living outside the project area within 20 km of the project area, and who are reliant on the project area been consulted?	0	This rating is Zero (0), since the answer to Q1 is NO
Total Stakeholder Engagement (CE) [as applicable (a or b) + (c or d)] Total shall not be less than zero.		0	This score was reviewed by AENOR by assessing each of the individual ratings on the Verra Hub and confirms that is correct and aligned with the NPRTTool.

Political Risk			
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating	VVB Assessment
Q1. a-e)	Malaysia has a governance score of 0.41 , which is within the category (d).	1	The VVB confirmed this through the website of the World Bank Institute's Worldwide Governance Indicators (WGI) and the NPRT analysis.
Q2)	Mitigation: Malaysia is implementing REDD+ Readiness activities.	-2	The country is implementing REDD+ Readiness activities. AENOR has reviewed such activities at national level.
Total Political (PC) [as applicable ((a, b, c, d or e) + f)] Total shall not be less than zero.		0	This score was reviewed by AENOR by assessing each of the individual ratings on the Verra Hub and confirms that is correct and aligned with the NPRTTool.

According to the results the External Risk obtained following risk rating:

External Risk	
Total External Risk (LT + SE + PC)	0
Total shall not be less than zero.	

Natural Risks:

Natural Risk (Fire)		VVB Assessment
Significance	Insignificant (less than 5% loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event): The project demonstrated zero fires within the project area in 2022 and 2023. There isn't a single report of fire incidents in the project area between 2022 and 2023. Wildfires in Sabah are relatively infrequent due to its humid climate and forest management practices, it is important to recognize that under certain circumstances, such as during dry periods or due to human activities, significant wildfires can occur. For example, in 1997 and 1998, a series of devastating fires burned more than 10 million hectares in Indonesia, affecting parts of Borneo, including Sabah. These fires were largely caused by the conversion of forests into palm oil plantations and other agricultural activities. The project area has the opposite activities, and hence is protecting the area from the forest conversion.	The VVB confirmed this through direct observations during the on-site visit, stakeholder interviews and documents review through the Verra Hub evidence. AENOR has reviewed the following paper: <i>A Review of Forest Fire Combating Efforts, Challenges and Future Directions in Peninsular Malaysia, Sabah, and Sarawak</i>. AENOR reviewed the satellite images together with the Permian Team, in order to review the fire monitoring. AENOR also can confirm the lack of relevant forest-fires through the week onsite. AENOR did not find any sign of past fires.
Likelihood	Once every 100 years or less frequently, or risk is not applicable to the project area No forest-fires have occurred within the project area	
Score (LS)	1	

Mitigation	Prevention = 0.5: the PP constantly monitors the forest-fire events and their potential events.	
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Natural Risk (Pest and Disease outbreaks)		VVB Assessment
Significance	Insignificant (less than 5 percent loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event)	There are no pests and diseases reported in natural forests in Sabah. There is some knowledge in forest plantations but not applicable to the Kuamut project. AENOR interviewed different people and asked about the presence of pest and diseases in the forests and non of them recognized to be aware of any type of disaster. Also, AENOR has reviewed some evidence provided by the PP to support this risk, such as the Forest Research Centre (FRC) from the Sabah Forestry Department.
Likelihood	Once every 100 years or less frequently, or risk is not applicable to the project area	
Score (LS)	1	
Mitigation		

Natural Risk (Extreme Weather)		VVB Assessment
Significance	Insignificant (less than 5 percent loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event)	While historically there aren't significant impacts caused by extreme weather events, there is an increase of rainfall perceived in recent years. The project has recognized and documented the impact of extreme rainfall and flooding as natural disturbances. The monitoring report confirms that the sustained rainfall during the 2023 wet season caused a significant expansion of the flooded area, exceeding the 2.5-hectare threshold for such events. As a result, the event was manually digitized and classified as flood-related, leading to a recorded forest loss of 3.42 hectares, which is not considered significant. The project also assessed its hydrological stability and concluded that while some areas experienced minor fluctuations in surface runoff due to changes in evapotranspiration and fog water interception, the overall hydrological impact remains neutral. This
Likelihood	Once every 50 to less than 100 years	
Score (LS)	1	
Mitigation		

		indicates a stable water balance despite extreme weather events. Furthermore, conservation efforts, such as forest regeneration and watershed management, have helped reduce soil erosion and improve water infiltration, likely decreasing the long-term risk of flooding and benefiting the Kinabatangan River basin ecosystem. A detailed analysis of the project's contribution to regulating the hydrology of the area is provided in section 3.3 of the monitoring report. While extreme rainfall and flooding have been identified as risks, they are not considered an ongoing or unmitigated threat to the project's permanence. The project continues to monitor all relevant environmental parameters to identify and address any emerging risks. AENOR confirms the above mentioned event, as well as the lack of extreme events during the onsite visit. Testimonies also confirmed the information stated by the PP. AENOR has also searched for additional events in different webpages, and did not find any relevant event within the project area.
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Natural Risk (Geological)		VVB Assessment
Significance	Insignificant (less than 5 percent loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event)	Sabah does not experience regular earthquakes or volcanoes. Some small geological events might occur such as landslides. Impact is considered insignificant. Please see CL 12 #9 The VVB also confirmed this through direct observations during the on-site visit, stakeholder interviews and literature review. AENOR considers that the prevention measures are realistic. And the conservation of forests, specially in hilly areas, is essential to avoid landslides (which were observed in other areas out of the project)
Likelihood	Once every 100 years or less frequently.	
Score (LS)	1	
Mitigation	Prevention = 0.5 Through the conservation efforts, the project promotes natural regeneration of areas that may be affected by geological risks, such as landslides	

Future Climate Impact:

Regarding the AFOLU Non-Permanence Risk Tool, the project area is within the following reference regions: **South East Asia = 100%** AENOR reviewed the shapefiles /4-26/ to crosscheck this NPRT information, and deems this is correct.

The CID impact level is calculated automatically by the NPR Calculation Tools. The Calculation Tools associate the projected change value of each CID with one of five impact categories.

Adaptive Capacity:

In the AFOLU Non-Permanence Risk Tool **7** adaptive capacity criteria are met by the project:

5. Variety: The project supports multiple climate action strategies, including restoration and biodiversity conservation which contributes to several policies at national and state level in Sabah. The VVB has reviewed the Malaysia National Adaptation Plan, Sabah Forestry Enactment 1968, Sabah Biodiversity Conservation Strategy. Additionally, The project involves local communities, government agencies, local NGOs who have been working with communities for more than 25 years (PACOS) as well as one of the most recognized research organization in S.E. Asia (SEARRP).
6. Learning capacity: As described above, the project includes an adaptive management plan/ that allows responding to potential changes required as well as a profound climate adaptation analysis that identifies future challenges. Additionally, The project employs adaptive management strategies informed by hydrological modelling, remote sensing, and biodiversity monitoring to track climate impacts. Regular training for local stakeholders enhances knowledge on ecosystem resilience.
7. Room for change: Climate vulnerability analysis has guided changes in land-use planning and watershed conservation to mitigate increased rainfall variability and soil erosion.
8. Leadership: Permian Malaysia is a subsidiary of Permian Global, which is one of the leading companies worldwide in developing high quality forest carbon projects for almost 20 years. The Permian projects include in large extent ecosystem-based adaptation measures through forest conservation and restoration as well as increasing resilience of communities involved in the projects.
9. Resources: The project team includes significant experience from broad range of professional fields, from biological sciences, policy, mathematicians, social sciences, etc. In addition, the project already secured financial resources to cover the project needs and it's beneficiaries.
10. Fair governance: The project has implemented Free, Prior, and Informed Consent (FPIC) processes, ensuring that local and Indigenous communities

have a say in governance and benefit-sharing. All these engagements were reviewed by AENOR.

11. Innovation: The project integrates AI-driven biomass monitoring, bioacoustic biodiversity tracking, and sustainable agroforestry models to enhance climate adaptation and resilience. AENOR has observed the different innovation technologies implemented by the PP for carbon, community and biodiversity monitoring.

Regarding AFOLU Non-Permanence Risk Tool v4.2, the SLR risk shall be assessed where the project is in a coastal zone using the AFOLU Non-Permanence Risk Assessment Calculation Tool.

The project area **is not allocated in a coastal zone**, as indicated in the NPRT, which as automatically calculated. So this SLR risk is applicable to SMPP, as shown in the table below:

SLR CID Assessment	
Category Description	Significance Level
Ecosystem Degradation	No degradation
Coastal Flooding	Without flooding
Coastal Erosion	No erosion
Degree of Salinization	Without saline intrusion

Below is the assessment for the Future climate impact on natural risk:

Future Climate Impact on Natural Risk	Aggregated Sub-Total Risk	Future Impact Factor	TOTAL
Natural risk associated with climate change impact (NR-c)	1.5	1.18	1.77
Natural risk NOT associated with climate change impact (NR-nc)	0.5	1	0.5
Sea Level Rise (SLR)	N/A	N/A	0
Total Natural Risk			2.27

Therefore, the total risk rating is:

Risk Category		Rating
a	Internal Risk	0
b	External Risk	0

C	Natural Risk	2.27
Overall Risk Rating (a + b + c)		12

The calculated non-permanence risk deduction of 12% is the allowable minimum non-permanence risk deduction. AENOR has checked that the information stated in the Non-Permanence Risk Report is consistent with the support documents provided. AENOR deems that the overall risk rating is credible and coherent.

AENOR has checked that information provided in the Non-Permanence Risk Report through the Project Hub, as well as supporting documents complementary to the NPR tool in the Verra Hub. The assumptions and justifications provided to determine the risk rating of each risk factor are developed and they are based on provided documents using conservative assessments. AENOR deems that information provided is reliable and appropriate from official sources, thus, the overall risk rating is credible and realistic.

4.4.4 Dissemination of Monitoring Plan and Results (VCS, 3.18; CCB, CL4.2)

Section 3.1.4 of the MR clearly describes the different ways to disseminate the Monitoring plan and the results. The main ways are the following:

1. Permian Global Website: AENOR has checked the Permian webpage, and confirmed that the information is located there. Also, the interviewees recognized to know that several documents are found in such webpage.
2. Social Media Platforms: different social networks such as LinkedIn or Instagram are used. The VVB can confirm that the various results and achievements are regularly posted on Instagram and LinkedIn, allowing many people to access this content. The interviewees also acknowledged that they can access these posts via Instagram.
3. Localized materials: Permian produces materials in Malay language, in an accessible manner. These materials can be found in the HQ but also, they are shared in the communities. AENOR reviewed the evidence of such materials /158-167/, but also confirmed the presence of those materials onsite, and confirmed with local stakeholders that indeed, these materials are distributed in the communities.
4. Newsletters: with the support of PACOS Trust, local communities also can receive news through WhatsApp groups. AENOR during the onsite visit confirmed the fluent communication between PACOS Trust and the different communities.

All of the interviewees recognized to know about the process and got access to the documents and summaries of the monitoring plan. In opinion of AENOR the monitoring plan and the results were disseminated in accordance with the validated monitoring plan. AENOR confirms that the languages of document sharing were English and Malay through the

information gathered from the interviews. Hence, AENOR confirms that the climate monitoring results were disseminated in accordance to the PD.

4.4.5 Optional Gold Level: Climate Change Adaptation Measures (CCB, GL1.3)

The PP has explained in section 3.3 of the MR /1/ the way in which the climate change effects and measures are evaluated. The tool used is Costing-Nature, which is a platform that provides a comprehensive tool for analyzing and mapping the supply and demand of ecosystem services globally. It helps assess the impacts of human activities on the environment by utilizing spatial data at various resolutions, from local to national scales. This system is designed for policy support in natural capital accounting and conservation strategies. The platform allows users to visualize baseline data, model different scenarios, and assess ecosystem service provision in the context of conservation or development investments. It aims to understand the resource costs and opportunity costs of protecting nature, focusing on the ecosystem services that benefit society.

AENOR has reviewed the information on the MR /1/ and crosschecked with the results provided in the abovementioned platform.

Regarding the outcomes or specific measures for the project, The Kuamut Project in Sabah, Malaysia, has implemented various measures to address the impacts of climate change through forest conservation and restoration, with positive effects on water quality, soil erosion, and the water balance in the region. Below is a summary of the main measures adopted and their benefits:

1. Forest Conservation and Restoration: Efforts have been made to recover forests in key areas, particularly in steep terrains and near riverbanks. These actions led to a recovery of 4,300 hectares of forest cover between 2021 and 2023, resulting in an increase in forest biomass and helping to stabilize local water flows. The benefits of this recovery include:
 - a. Reduction of Soil Erosion: Forest conservation has reduced soil erosion by 2.6% within the project area, decreasing soil loss by 40,000 to 60,000 tons annually.
 - b. Improvement in Water Quality: Forest restoration has helped preserve water quality by reducing pollution in the project areas compared to adjacent areas affected by deforestation and agricultural activities.

AENOR considers that both effects are reliable the KCRP is an IFM project, which its main function is forest restoration. Hence, soil erosion and water quality will be affected. The first one will be reduced due to the increase in forest cover. The second one also affected by the biomass density and soil quality, will be improved.

2. Water Balance Management

The water balance in the project area has remained stable, with a slight improvement in the higher zones due to the interception of fog water through forest restoration. The effects include:

- a. **Increased Fog Water Interception:** Higher areas of the project have seen an increase in fog water capture, contributing to an additional 56.5 million cubic meters of water, improving water availability for local ecosystems and communities.
- b. **Stabilization of Water Flow:** Despite local variations in evapotranspiration (AET), conservation efforts have stabilized water flow, benefiting both ecosystems and communities along the Kinabatangan River Basin.

Idem, the restoration of the forests improve the water interception from the fog. AENOR observed onsite, the high precipitation and water availability in the project. AENOR considers that the water balance is well structured in the project.

3. Reduction of Soil Erosion

Soil erosion in the region has been mitigated thanks to the forest restoration efforts. The project has managed to prevent soil erosion over a significant area, contributing to:

- a. **Reduction of Soil Carbon Loss:** The reduction in erosion has prevented the release of up to 13,860 tons of CO₂ annually, helping to mitigate climate change.
- b. **Benefits for Aquatic Biodiversity:** Less erosion also reduces sedimentation in local water bodies, improving water quality and protecting aquatic ecosystems in the Kinabatangan River Basin.

AENOR considers that both effects are reliable the KCRP is an IFM project, which its main function is forest restoration. Hence, soil erosion and water quality will be affected. The first one will be reduced due to the increase in forest cover. The second one also affected by the biomass density and soil quality, will be improved. Additionally, biodiversity will be benefited from those measures.

4. Improvement in Water Quality

The Human Footprint Water Quality (HFWQ) index showed that, despite deforestation and agriculture in neighboring areas, the project's intervention has maintained relatively stable water quality with less contamination compared to other parts of Sabah.

5. Adaptation to Climate Risks

The project has helped strengthen the region's climate resilience through the following measures:

- a. **Adaptation of Ecosystems and Local Communities:** Forest conservation efforts have reduced water stress, ensuring water availability even during extreme drought periods, which is crucial for local communities dependent on regional water sources.
- b. **Reduction of Flood Risks:** Forest restoration has reduced the risk of flooding by improving water infiltration into the soil and decreasing surface runoff, contributing to the stability of the Kinabatangan River Basin and protecting local communities like the Orang Sungai.

Communities confirmed that the restoration of the forests protect them from potential floodings. In spite of not are very frequent within the project area, the proper water system, linked with the quality of the soils, promoted by good runoff, will make communities feel safer.

6. Regional and Project-Level Results

At the regional level, areas surrounding the project have experienced higher risks of water contamination and increased erosion due to deforestation. In contrast, the measures adopted in Kuamut have stabilized these factors locally, highlighting the importance of continuing forest conservation initiatives for long-term adaptation.

This summary outlines the key measures adopted by the project and the environmental and social benefits achieved, aligning forest conservation efforts with climate change adaptation goals in the Sabah region.

Due to the specific nature of the activities, their direct impacts and results are obvious. Furthermore, all the stakeholders asked by the audit team during the interviews were well aware of the adverse effects of climate change and the contribution of project activities to reduce these effects. All interviews mentioned primarily the effectiveness of floodings and other negative effects have been minimized since the project started, reporting no fires or floodings during the monitoring period.

Based on the evidence and testimonies, it is the opinion of the audit team that the activities implemented by the project deliver the intended impacts on climate change adaptation. Hence, AENOR deems that the measures that the project proponent has implemented to mitigate or get adaptation to the climate change are reliable, effective and are consistent according to the information provided on the MR. Hence, the project qualifies for the Exceptional Climate Benefits Gold Level.

4.4.6 Optional Gold Level: Climate Change Adaptation Benefits (CCB, GL1.4)

As indicated in the MR /1/ section 3.3 and the VR section above, The Kuamut Project is addressing potential climate change impacts by conserving and restoring forests, particularly in the upper areas connecting to Danum Valley. This has led to significant climate adaptation and biodiversity conservation benefits. The project has also reduced soil erosion, decreasing sediment influx into rivers like the Kinabatangan, benefiting nearby communities and

agricultural activities. Additionally, the project has mitigated CO₂ emissions caused by soil carbon losses and improved water quality through better land management.

These efforts suggest potential savings in water treatment and sanitation costs, while also improving access to clean water for drinking and agriculture, positively affecting human health and economic activities. The project also supports local biodiversity, both terrestrial and aquatic, and contributes to climate resilience by reducing soil carbon loss and mitigating natural disturbances.

The list of climate adaptation benefits of the current MR are described in table 3.11 of the MR. They are summarized below:

Type	Description	VVB Assessment
Hydrological Resilience	Increases water supply by 620 to 1260 Olympic swimming pools annually through fog water interception via forest conservation	AENOR confirmed onsite the good health of the forests as well as the availability of water and the functioning of the hydrological cycle. These findings were supported through direct landscape observation, identification of cloud forest zones, interviews with local stakeholders, and evidence of sustained water presence in streams and springs.
Soil Conservation	There are likely higher benefits in terms of erosion reduction (e.g., rain splash and gully erosion), though these were not included in the modeling	AENOR confirmed that forest restoration and protection are strong indicators of soil conservation. This conclusion was drawn from field observations of erosion control features, intact forest floor layers, and testimonies from landowners regarding decreased soil loss in restored areas.
Water Quality	Improves water quality by reducing human impacts on water quality indicators	During the onsite visit, AENOR observed multiple rivers and streams within the project area. Water clarity, the presence of aquatic life, and vegetated riverbanks were indicators of improved water quality, which was attributed to reduced human disturbance through forest protection.
Economic	Reduces water sanitation costs and provides a reliable water supply for agriculture downstream	The link between forest health and community well-being was confirmed through interviews. Local residents reported improved water reliability and quality, which reduces the need for filtration and contributes

		to agricultural productivity, highlighting the economic value of forest conservation.
Climate Resilience	Stabilizes hydrological systems and maintains soil carbon storage, enhancing climate change adaptation	AENOR observed that improved forest conditions contribute to greater soil moisture retention and reduced vulnerability to extreme weather. Interviews and field evidence supported the role of forest recovery in maintaining ecosystem functions critical for climate adaptation.
Biodiversity, Communities	Generates environmental, social, and economic co-benefits through improved land management.	AENOR documented the presence of diverse flora and fauna, including sightings of endangered species, which reflects a high-quality ecosystem. Additionally, local communities reported greater access to ecosystem services and participation in conservation-related initiatives, reinforcing the project's co-benefits.

4.5 Community

4.5.1 Community Impacts (CCB, CM2.1)

Kuamut Rainforest Conservation Project (KRCP) in 2022 and 2023 laid a strong foundation for community engagement and development in the Kuamut region. Continuous support and involvement from both the community and project partners are crucial for addressing basic needs, enhancing socio-economic conditions, and ensuring sustainable management of natural resources.

The MR section 4.1 stated actual, direct and predicted, indirect benefit in the table as types of community impacts for youth, community group of Kuamut cluster, community group of Karamuak cluster, hunters, and other community group located further away from 20 km radius. The community impacts achieved by the project during the monitoring period for those groups:

- Youth groups at the Karamuak cluster and Kuamut cluster (including women and girls), the type is actual and direct benefit, which are:
 - Increased employment opportunities, improved understanding on the role of the KRCP for the communities and how they can be involved. (Assessed reviewing the hiring and employment opportunities, HR policy /47/, list of Laws and Legislation which cover the employment terms and conditions, Legal compliances, Contracts employees /61-65/, employment data SEARRP /60/, staff ToR and Timesheets 2022 and 2023 /60/, Registration youth.jpg, Community-Employment data from LORNA, and onsite interviews)
 - Increased skills training opportunities, improved quality of life and inclusive governance, (Assessed by reviewing the trainings /27/, training attendant lists , proposal of the courses and confirmation of the attendance during the onsite interviews)
 - Change in well-being is improved employment prospects and economic stability, leading to better quality of life. (Assessed with the hiring and employment /47/, KRCP socio economic baseline report /56/, KRCP socio economic training /98/, Anthropology surveys, Sustainable Developments Contributions of the Monitoring Report and onsite interviews)
- Hunters from the Karamuak cluster and Kuamut cluster, the type is predicted and indirect benefit. There is no impact directly caused by the project since the cessation of hunting inside the project area was established before the project start. (Assessed with the review of CDP presentation workshop /73/, CDP workshop report Kuamut /74-90/, CDP workshop report Karamuak /74-90/, RBJ Patrol reports 2022 and 2023 /154/ and onsite interviews). Additionally, the PP has taken several surveys in

different villages to understand the behaviors of people about hunting prohibitions. According to the information provided in the MR and the testimonies gathered from the onsite visit, AENOR considers that the indicator about hunting is properly described.

- Community groups located further away from the 20 km radius. The type is predicted and indirect benefit. Various levels of magnitude impacted refer to success of project activities leads to greater incomes among particular community groups, which may foster unanticipated animosity among other groups or between communities. Change in well-being can be predicted in differential income from the project that may raise animosity among other communities away from the project. (Assessed by the review of KRCP socio economic baseline report /56/, project maps and direct observation during the onsite visit)

In addition, the MR section 4.4.1 describe where the project introduced various benefits and has updated the framework from 2023 onwards based on the community development plan, a dedicated medical transportation boat for Kuamut village was mooted and the process to source for it began in mid-2023, The construction of water gravity systems in Kuamut and Tangkuyan started in this reporting period, with expected completion by December 2024, short term employment or job opportunities were opened up for the participation of local communities in Kg Tangkuyan and Kg Kuamut, activities such as donations for school events and initial engagement with local schools have been conducted to support education in the community, forest conservation and biodiversity aims to protect the natural environment that supports the communities' ambition to see eco-tourism happens as the forest is also providing essential ecosystem services (Assessed by the review of CDP Workshop Kuamut Cluster, Bengkel FPIC Kg. Kuamut /74-90/ and onsite interviews).

The PP has explained the justification of such assumptions, explained under each community group, they vary among FPICs, Trainings Records, Employment Payrolls and consultations. Also, the rationale and methodological choices are the measurements of the impacts with different records, but also with legislation (Since the establishment of the Class II Forest in the late 60's, hunting activity was forbidden inside the project area and later classified as Class I at the start of the project maintaining the prohibition to hunt, and it was noted on the population of several species). The participation was demonstrated with the records of trainings, participation in consultations such as FPICs and CDPs. The Audit team, considers that these topics were properly covered, and each one is justified and demonstrated with the review of the FPICs, trainings and even conversations with Stakeholders during the onsite visit.

The project proponent has provided different evidence to demonstrate the community benefits mentioned above. Some of the evidences are Progress report implementing partners /97-104/, Dissemination activities /158-167/, Water meetings /105/, and Trainings

/27-34/. Additionally, the audit team has verified these benefits through onsite visit, where different interviews have been carried out and other documentation such as community organizer and Forest ranger contracts has been shown to the verification team. Also, the verification team during visit interviewed the women and girls as community group (validated on the PDD). The PP has updated the section and AENOR has reviewed evidence related with community such as Field Safety Guideline and Procedures for Handling emergency conditions /46/, SEARRP KRC progress report Aug-Dec 2023 /97/, PM KRCP Risk and emergency manual /48/ and MOA Water gravity /141/ in which PP is committed to mitigating negative risks and impacts in order to maximize the positive effects of KRCP in the communities. Therefore, is the opinion of AENOR that the assessment of impacts is accurate and reflects faithfully the project benefits in communities.

4.5.2 Negative Community Impact Mitigation (VCS, 3.19; CCB, CM2.2)

The PP identified the potential negative impacts listed below and took measures to mitigate these impacts so that the project has had a net positive impact on communities.

The MR section 4.1.2 stated the project incorporates various strategies to mitigate negative impacts on community well-being, focusing on environmental concerns, safety of marginalized groups, and conservation efforts. And further in section 4.4.2. stated the project ensuring that women and youth are included in all stages of project implementation, with dedicated sessions to address their specific concerns and aspirations, thereby preventing any negative impacts on their well-being. (Assessed by the review of Bengkulu FPIC Kg. Kuamut and Karamuak clusters /108/, CDP report /126-131/ V Pacos progress report 1 /45/, Pacos progress report 2 /45/, BSM and GRM report /102-103/ and onsite group discussion)

Since the Project Area has been designated as a Class I Forest Reserve under the 1968 Forest Enactment it now enjoys the status of totally Protected Area under state law, meaning that all unauthorized access is prohibited together with all forms of land clearance or harvesting of natural resources. This lends full legal protection to all HCVs within the Project Area, including those of relevance to local communities such as ancestral settlements. (Assessed with the Legal compliances /292/, 1st and 2nd Meetings of the NKCA management committee /207-208/, CDP Kuamut cluster /126-131/ and onsite interviews).

In terms of mitigating the negative impact of declining high conservation value (HCV) attributes, the PP engaged the local community through the various workshop sessions of Free Prior Inform Consent (FPIC) where description of the project was provided to the local communities of the 8 villages. The Project reiterated these facts during the co-designing of the Community Development Plan with the local communities, to build their understanding for the protection of the forest and its associated ecosystems by the local community. (Assessed by the review of Bengkulu FPIC /108/, CDP Kuamut cluster and CDP Karamuak cluster /126-131/ and onsite interviews).

The PP has developed the Community Monitoring Plan (CMP) /134/ to assess potential negative impacts early on. This proactive approach allows for timely detection and mitigation of adverse effects, and at the same time the project's grievance mechanism implemented as a channel for community members to express concerns and seek resolution. This ensures that any negative impacts can be addressed promptly, enhancing community well-being and satisfaction. The audit team has reviewed CMP table in section 4.3.1 of MR, Pacos progress report 1 /45/, Pacos progress report 2 /45/, BSM and GRM report /102-103/ and onsite group interviews. As confirmed by the Head of villages, NKCA community committee, KRCP community organizer, Pacos project staff, RBJ forest ranger and SEARRP field project staff during interviews, AENOR deems the information provided in the MR is correct.

4.5.3 Net Positive Community Well-being (VCS 3.19; CCB, GL1.4, CM2.3)

The MR section 4.1.3 stated The Kuamut Rainforest Conservation Project (KRCP) has demonstrably improved the net well-being of all identified community groups compared to their conditions under the without-project land use scenario. The project has created significant economic, social, and environmental benefits, fostering resilience and sustainability while addressing the challenges that local communities face. These improvements extend across multiple dimensions, including livelihoods, governance, health, education, and climate change adaptation.

During the monitoring period, the KRCP has directly employed 38 full time workers, including 5 women, 224 people from the local communities were engaged as casual workers, improved the income and livelihood of 257 individuals of community including 76 women with sustainable income generating opportunities. KRCP has conducted 22 engagement sessions covering topics such as Free, Prior, and Informed Consent (FPIC), the co-development of the Community Development Plan, and the Benefit Sharing Mechanism More than 843 community members with 293 women directly benefitting from overall well being activities such as workshop, training and sports activity. 706 community members including 256 women participated in governances and decision-making workshops, and 125 women gained improved access to clean water. Auditor team has assessed by reviewing attendant list of the engagement records, KRCP socio economic training /98/, Workshops, Pacos progress report 1, Pacos progress report 2, Bengkel FPIC /108/, CDP Kuamut cluster and CDP Karamuak cluster /126-131/, Legal compliances /292/, observation and onsite interviews.

Additionally, the project has significantly improved the health, access to clean water and education for community. Providing access to education and training for 91 local community including 31 women, enhancing their skills and increasing their potential for economic mobility. Supporting the local health clinic and incorporating community needs into the Community Development Plan, emergency boat for medical evacuations, the construction of gravity fed water system with engaged 138 local community members including 24 women and reached completion 30% by the end of 2023. The project has strengthened local

governance structures to enhance climate resilience through community committees and engagement sessions, residents have taken an active role in decision-making, ensuring that adaptation strategies align with local needs. Audit team has assessed by the review of CDP Kuamut cluster and CDP Karamuak cluster /126-131/, MOA Water gravity Tangkuyan Kuamut /141/, Health Courtesy visit /91/, KRC GF report Kuamut Tangkuyan, Kuamut Rainforest Conservation Socio-economic Collection Briefing /98/, Anthropology survey, Workshops and meetings, Field staff Training /27/, and onsite interviews.

During the visit, the verification team interviewed community group members. The PP has working to address this finding by refined clearly demonstrate how the project activities have assisted communities to adapt to the probable impacts of climate change. The KRCP has delivered substantial improvements across multiple well-being indicators, therefore, in opinion of AENOR, the claim of net positive community well-being impacts during the monitoring period is supported by evidence, is credible and reflects faithfully the project benefits to these communities. According to AENOR observations, the net impacts of the project activities are positive for community groups compared with their anticipated well-being conditions under the without-project.

4.5.4 Protection of High Conservation Values (CCB, CM2.4)

The MR section 4.1.4 describes how the project ensures that none of the High Conservation Values (HCVs) related to community well-being in the project zone are negatively affected, as stated below:

- **Legal Protection:** The Project Area, designated as a Class I Forest Reserve under the 1968 Forest Enactment, enjoys Totally Protected Area status under state law. This legal framework prohibits all unauthorized access and forms of land clearance or harvesting of natural resources, providing full legal protection to all HCVs within the Project Area, including ancestral settlements. This ensures that these HCVs related to community well-being remain safeguarded throughout the project implementation. (Assessed by the review Forest 1968 (Rules1969) /290/, 1968 Forest Enactment /290/, Legal compliances /292/, 1st and 2nd Meetings of the NKCA management committee /208/, Bengkel FPIC /108/, CDPs /126-131/ and onsite interviews).
- **Risk Mitigation Measures:** For other community-related HCVs in the Project Zone, the project incorporates safeguards to mitigate potential risks of negative impacts. (Assessed by the review of the 202210 Basic First Aid Training Report Phase 1 20221107 /33/, Field Safety Guideline and Procedures for Handling Emergency Conditions 20220907 /46/, 20231028 First Aid Training Phase 1&2 Report October 2023 /34/, SEARRP complaints procedure /37/, PM KRCP Risk and Emergency Manual v.01 final /48/, and onsite interviews).

During the visit, the verification team interviewed community groups at Kuamut and Karamuak clusters especially women and youth groups. Communities at Kuamut and Karamuak also clear that local community gathering resources for subsistence during MR. The PP is working

to address this issue and clarified with stated that HCV 5 and HCV 6 are recognized by the project as identified in the PD, nonetheless the access to these areas is legally prohibited as comply with the laws and regulation of 1968 Forest Enactment. In opinion of AENOR, none of the project activities have had, nor are likely to have, a negative impact on community-related HCVs. They are designed to either protect or enhance existing HCVs, as was verified by AENOR during the verification process.

4.5.5 Other Stakeholder Impacts (VCS, 3.18; 3.19; CCB CM3.2-CM3.3)

The MR section 4.2.1 stated that other stakeholder in the project is Yayasan Sabah and Sabah Forestry Department as non-community stakeholder. The PP has implemented various activities to mitigate the negative impacts on the well-being of non-community stakeholder, some of them as below:

- Engagement and consultation in decision making processes with Yayasan Sabah and Sabah Forestry Department throughout the planning and implementation stages. (Assessed by the review of Organizational Chart of YS, Forest Northern Kuamut Conservation Area 2016, CDP Kuamut cluster, 1st and 2nd Meetings of the NKCA management committee, Workshops and meetings, KRC sports /30-32/, and onsite interviews)
- Capacity building and training to enhance the skills and capabilities of staff members from Sabah Forestry Department and Yayasan Sabah. (Assessed by the review of Workshops and meetings, Courtesy visit school and clinic /91/, and onsite interviews)

The MR section 4.2.2 describes that project activities have not resulted in net negative impacts on the well-being of other stakeholder. All project financial liabilities provided by the PP and that ensures financial well-being of other stakeholder remains unaffected by project activities, ongoing dialogue ensures that other stakeholders are comfortable with their roles and responsibilities within the project. During the visit, the verification team interviewed the PP, Yayasan Sabah and local communities and crosschecked the Community Monitoring Plan of MR, community database /52/, CDP Kuamut and Karamuak clusters /126-131/. AENOR could verify that net positive community impacts from the project activities within the project area have also positively affected stakeholders not directly impacted by these activities, as is the case with financial liabilities, stakeholder engagement and shared understanding and cooperation with the PP. The audit team concluded that the likelihood of net negative impacts on the well-being of other stakeholder groups is adequately addressed in the monitoring report and the net impacts of project activities on the well-being are positive.

4.5.6 Community Monitoring Plan (CCB, CM4.1, CM4.2, GL2.2, GL2.3, GL2.5)

The KRCP Community Monitoring Plan was developed early in the project lifetime and successfully validated and verified to the Gold Level for exceptional community benefits. The PP provided the Community monitoring plan including the stakeholder consultation, community engagement, data collection method, main indicator, specific indicator, aspects measured, results, well-being impacts on communities, risk and impacts on household of Kuamut and Karamuak clusters, risk and impacts on women and youth group. Over 2 years frequency of monitoring and results of the most recent monitoring, is included in section 4.3.1 of the MR. Through document review AENOR confirmed the monitoring plan is in place and monitoring is going on.

The PP has demonstrated that monitoring is able to identify positive and negative impacts on the more vulnerable women group and youth group in the communities. Extensive consultation and community engagement to enrich the monitoring process of the project between project staff and communities to get feedback regarding their attitudes and expectations toward the project and other aspects of life in the community. (Assessed by the review of 1st and 2nd Meetings of the NKCA management committee /208/, Workshops and meetings, and onsite interviews).

Verification team assessed the evidence provided which are mainly the photographic evidence, attendance list and meeting report that evidence the community participation. The photographic evidence provided have been contrasted with the KRCP progress report 1 and 2, and the community benefits database /52/ and asked during the visit to confirms dates, frequency and sampling methods used. Finally, these evidences are in accordance with the validated project design and with the procedures and systematics used in the verification event. Complementary, through the onsite visit, the audit team assessed through interviews the implementation of the monitoring activities with the different community committee members and activities. AENOR confirms that community monitoring plan is implemented as per validated CCB-VCS-PD. However, small modifications have been suffered in the plan, and these small changes were reported in the section about minor changes to project description. These modifications do not affect the accuracy or the implementation of the monitoring plan.

The KRCP Community Monitoring Plan is properly designed, and it includes very useful parameters. The table include data from the focal issue, the indicator variable within each result, the targeted communities, the predicted impact, the frequency of monitoring and the results for 2022 and 2023. AENOR reviewed all columns of the table, and crosschecked these figures with the database and additional evidence. These results were also crosschecked onsite with testimonies or observations.

4.5.7 Community Monitoring Plan Dissemination (CCB, CM4.3)

The PP has provided summaries and detailed results of community monitoring to the communities and stakeholders through various methods, not only available for public scrutiny but also effectively communicated to and understood by the communities and stakeholders involved in the project, such as community workshops, regular meetings, survey and interviews, and summary documents and Memos. Additionally, the community monitoring plan and results has made publicly available and are accessible through Progress report, Online Platforms of The South East Asia Rainforest Research Partnership (SEARRP) website (www.searrp.org), and appendices in reports.

This was verified by the audit team during community interviews, in which interviewees confirmed that they were aware of the results of the monitoring results and that the PP shares them on a regular basis.

4.5.8 Optional Gold Level: Short-term and Long-term Community Benefits (CCB, GL2.2)

The MR section 4.4 stated the project is seeking for verification for the Gold level for its exceptional community benefits. The Kuamut Rainforest Conservation Project during monitoring period generates short term and long-term benefits for community groups, as describes below:

- Short term benefits in terms of access to clean water, healthcare access and education support. The project was opened up short term employment or job opportunities to build gravity feed water system to address immediate needs for safe drinking water for community at Kuamut and Karamuak clusters. At the same time, the project identified community health needs and laid the groundwork for the communities and initial engagement to support education in the community through donations school events. (Assessed by the review of KRC GF Report Kuamut Tankuyan, MOA Water gravity Tangkuyan & Kuamut /101/, Water test Result Kg Tangkuyan /141/, Health courtesy visit /91/, Solidarity engagement (Sports and cultural activities) /30-32/, Community-Employment data /60/, observation and onsite interviews)
- Long term benefits in terms of agroecology and food security, infrastructure development, environmental and cultural preservation, and community empowerment and governance. Feasibility studies have conducted and result the important needs of electricity for household at Karamuak and Kuamut clusters, and the project has supported all the villages with 6 hours supply of electricity at Karamuak and 18 hours supply of electricity at Kuamut. The project also focus on conservation and biodiversity to protect the natural environment that supports communities' ambition to create eco-tourism, cultural heritage documentation practices to ensure valuable aspects of community identity are maintained and

passed on to future generations. At the same time, the project was building capacity for community organizer which are youth group and women group, empower and establishment the community committee called KRCP AJK (Ahli Jawatan Kuasa) community committee to enhance local governance in project planning and implementation. (Assessed by the review of CDP Kuamut cluster /126-129/, CDP Karamuak cluster /130-131/, Bengkel FPIC /108/, Workshops and Trainings, Anthropology surveys, Kuamut Rainforest Conservation Socio-economic Collection Briefing, and onsite interviews).

The PP provided difference evidences for audit team to tracking short and long terms net positive well-being benefits for the community in Kuamut and Karamuak clusters. During onsite visit, the verification team has interviewed the youth and women of community organizer, women of AJK community member, head of villages, and PACOS project staff to evaluate the impacts for household and community groups, and very clear information that the project has supported significantly for their livelihood and well-being in short- and long-term period. However, there is number of agreements in Community Development Plan that the project have not completely implemented in monitoring period, such as 30% of completed water feed gravity and delayed payment of benefit sharing RM100 (Malaysia currency) as income for each household and agriculture activities for daily life needs (455 total applicants registered). Therefore, in opinion of AENOR, the project is verified for gold level status of its exceptional community benefits and on track to generate short term and long-term net positive well-being benefits for smallholders and community members during the monitoring period is supported by evidence, is credible and reflects faithfully the project benefits to these communities. According to AENOR observations, the net positive well-being impacts of the project activities are positive for household and community groups.

4.5.9 Optional Gold Level: Smallholder/community member Risks (CCB, GL2.3)

The MR section 2.2.7 identified potential risks could arise are community disengagement or conflict due to inadequate involvement or perceived inequities in benefit sharing. This could arise from misunderstandings or lack of trust between the project stakeholders and local communities, resulting in lack of support from communities to the project and hindering the benefits provided by the project to communities. The verification team assessed by the review of Pacos progress report /45/, Bengkel FPIC Kg.Kuamut and Bengkel FPIC Kg. Karamuak /108/, CDP Kuamut cluster and CDP Karamuak cluster /126-131/, and during onsite visit has interviewed the AJK community member that benefit sharing mechanism has been implemented through various project activities. However, the community group and KRCP community organizer was provide information to the audit team that there is delayed of payment for community household to received the RM100 cash benefit sharing of the project, and microfinance program will be carried out in phases or staggered with full

understanding and participation of the community members. The community group members are aware and can accept the process and there is no grievance arise for the PP.

In opinion of AENOR, the PP has been successfully managed the identified risks with continuous community engagement through FPIC processes and collaboration with Pacos community organizer ensures that the community is actively involved in decision-making. To prevent conflicts, the project includes equitable benefit-sharing mechanisms, capacity-building initiatives, and alternative livelihood programs. Specifically, for the alternative livelihoods and their monitoring, the PP has provided several full time and part time jobs, as well as other training programs. These opportunities helped to enhance household incomes, reducing illegal activities. AENOR confirmed such opportunities through onsite testimonies. Therefore, AENOR confirms that the project is verified for gold level status of its exceptional community benefits in relation to manage the identified community member risks.

4.5.10 Optional Gold Level: Marginalized and/or Vulnerable Community Groups (CCB, GL2.4)

The MR section 4.4.2 describes in the table how the project generates net positive impacts on well-being, identified and address the negative impacts that might prevent benefits and appropriate measures to avoid any marginalized and/or vulnerable smallholders/community members. Additionally, in appendix 2 of MR stated that exclusion of marginalized groups reduced social equity, ineffective community engagement (women, youth, Indigenous Peoples) from decision-making.

The project identified women and youth from Karamuak cluster and Kuamut cluster as marginalized and vulnerable groups, and demonstrated in livelihood, education and skills activities that women and youth groups being able to participate and gain the benefits from the project implementation, such as providing food and catering services in the construction water pipe gravity or any workshops and training activities, being trained on research and earning a predictable amount of money as recruited staff if the project. (Assessed by the review of Pacos progress report, Community-Employment data and onsite observation and onsite interviews).

During the visit, the verification team interviewed the women and youth groups and verify how the project demonstrated to addressed any barriers and takes appropriate measures to avoid and mitigate negative impacts to women and youth groups. The audit team observed that the project conducted specific workshop and training tailored to address barriers of women and youth needs, and ensures have access to resources and opportunities as provided by the project. The audit team crosschecked the evidences provided by the PP with review Bengkel FPIC Kuamut cluster, Bengkel FPIC Karamuak clusters, CDP kuamut cluster, CDP Karamuak cluster /126-131/, Kuamut Rainforest Conservation Project Grievance mechanism 2024 /146.147/, MR 2 - Employment & Casual Work 2022-2023 /60/, 1st Aid report October 2023 20231109 /28/. In opinion of AENOR, the PP successfully and

adequately fulfilled the requirements of GL2.4 of the Climate, Community & Biodiversity Standards, generates net positive benefits, addressed their barriers and takes appropriate measures to avoid the negative impacts, through implementing gender-sensitive policies and activities ensuring women participation in decision making, project activities, and others.

4.5.11 Optional Gold Level: Net Impacts on Women (CCB, GL2.5)

The PP describes in the MR section 4.4.3 that the KRC project has been instrumentally and successfully gain the women involvement and participation in the activities, and generates net positive impacts on the well-being of women, such as 78 women in Kuamut and Tangkuyan have experienced increased water quality and improved access to drinking water, reducing the burden of water collection and improving overall health, women leading 4 small community committee groups on socio-economic, women have been actively included in community committee ensuring their voices and perspectives are considered in project planning and implementation, women made up a total of one third of the participants in all the training sessions ensuring they received equal opportunities to develop skills and knowledge, and total of 31 local community women participated in the 6 training sessions implemented by the project. (Assessed by the review of Pacos progress report 2 /45/, Bengkel FPIC Kuamut cluster /108/, Bengkel FPIC Karamuak clusters /108/, CDP kuamut cluster /126-131/, Trainings /27-34/, Kuamut Rainforest Conservation Socio economic Collection Briefing /135/, and onsite interviews).

During the onsite visit, the verification team interviewed the women group as well as women of AJK community committee member at Kuamut and Karamuak clusters, women of community organizer member and observed significant influence on decision making process and participation from the women groups in the project activities during monitoring period. In opinion of AENOR, the project has significant addressed the net positive benefits on the well-being of women and maintain high dynamic level of participation among women, community members and project staff. Therefore, AENOR deems that the project fulfills the CCB requirements.

4.5.12 Optional Gold Level: Benefit Sharing Mechanisms (CCB, GL2.6)

See section [4.3.17](#) of the Verification Report.

4.5.13 Optional Gold Level: Governance and Implementation Structures (CCB, GL2.8)

The MR section 4.4.5. describes that the governance and implementation structures of the Kuamut Project have been designed to promote the full and effective participation of smallholders and community members in decision-making and implementation processes. The PP provided various evidence to the audit team to verify the governance and implementation structures as below:

- Two-Level Committee Structure, the KRC project in the community level consist of two level of structures are Kuamut Management Committee and Steering Committee. The Kuamut Management Committee (KMC) or called KRC villages committee including Ketua Kampung/JKKK at the villages as members, who has oversight responsibilities, ensuring that the project aligns with its overall objectives, endorsing decisions made at the community level. The steering committee or at the local name called Ahli Jawatan Kuasa (AJK) have role to ensures the decisions are in line with the project strategic direction and operational feasibility. (Assessed by the review of the Organization chart & relationship with PACOS, KRCP Community Component 2022-2023 (1).pptx /52/, Pacos_progress report 1 (Jan23-Jul23) /45/, and onsite interviews).
- Local Community Involvement at the Village Level, the involvement of local community members is coordinated by PACOS Trust, a project partner known for its deep community ties and expertise in community-driven development. PACOS trust has local community organizer to assist and maintain communication with the local community members. PACOS Trust as well as the community organizer collects valuable insights and feedback that are crucial for tailoring the project to meet local needs effectively. (Assessed by the review of Workshops , Trainings, KRCP Community Component 2022-2023 (1).pptx, Pacos_progress report 1 (Jan23-Jul23), Pacos progress report 2 and onsite interviews).
- Project Technical Working Level, serves as a collaborative platform where project partners and implementing partners come together to discuss, deliberate, and agree on the project workplan and timelines. The involvement of these partners ensures a multifaceted perspective on how the project should proceed, considering technical, social, and environmental aspects. (Assessed by the review of Workshops, Trainings, CDP Kuamut and Karamuak clusters, Pacos_progress reports and onsite interviews).
- Escalation and Endorsement Process, integration of Community Input maintained decisions made at the Technical Working level, which incorporate community input gathered at the village level, are escalated to the Steering Committee and ultimately to the Kuamut Management Committee for endorsement. (Assessed by the review of Bengkel FPIC Kuamut /108/, Bengkel FPIC Karamuak /108/, CDP Kuamut and Karamuak clusters /126-131/, Pacos_progress report 1 (Jan23-Jul23) /152/, Pacos progress report 2 /153/, and onsite interviews).

During the onsite visit, the verification team interviewed the KMC/Ketua Kampung, Ahli Jawatan Kuasa/AJK, community organizer and PACOS trust staff to verify and understanding the governance structure of the KRC project at the community level. The interviewees were aware of their roles and responsibilities as well as agreed in the FPIC and CDP workshops activities. In opinion of AENOR, the KRC project governance and implementation structures enable full and adequately effective participation of smallholders/community members in project decision-making and implementation.

4.5.14 Optional Gold Level: Smallholders/Community Members Capacity Development (CCB, GL2.9)

The MR section 4.4.6 describes that The KRC project has implemented several initiatives to develop the capacity of community members, and relevant local organizations or institutions. This has enabled them to participate effectively and actively in project design, implementation, and management. During the visit, the PP has provided evidences that demonstrated number of participation from local community and local organization such as Community committee and KRCP Ahli Jawatan Kuasa / AJK, local community members, women groups, and youth groups. A total of 6 training sessions were organized by the KRCP Project in monitoring period, empowering a total of 137 individuals of which 37 were female, out of which 91 were local community members including 31 females. (Assessed by the review of Workshops, Trainings, Bengkel FPIC Kuamut, Bengkel FPIC Karamuak, CDP Kuamut clusters, CDP Karamuak clusters, PACOs_progress report and onsite interviews).

The project is developing the capacity of smallholders/community members, and relevant local organizations, to participate effectively and actively in project design, implementation, and management, through the agreements made by the KRCP Project with the representative of the community members. The KRCP AJK Community Committee on the costings, delivery and workforce by the local community members. The construction of the gravity feed water system was managed by the local community themselves and a reporting back meeting on the progress of the gravity feed water system.

In opinion of AENOR, the project successfully addressed and developed the capacity of community groups, local organizations and community institutions at Kuamut and Karamuak clusters to participate effectively and actively in project design, implementation and management. Therefore, AENOR deems that the project fulfills the CCB GL2.9 requirements.

4.6 Biodiversity

4.6.1 Biodiversity Changes (CCB, B2.1)

The MR states in section 5.1.1 the biodiversity changes achieved by the project during the monitoring period, considering these changes as positive for biodiversity conservation.

AENOR confirmed, and several findings were raised about this topic, that the changes in biodiversity are linked to those expected changes reported in the validated PDD. Additionally, some Minor changes to PDD are detailed in the MR and VR about these changes.

The changes in BD are the following:

1. Gradual dispersal of Rare, Threatened or Endangered (RTE) species throughout the Project Area:
 - a. Bornean Orangutan (*Pongo pygmaeus*, CR) population change → AENOR reviewed the Orangutan-Nests monitoring. These reports /240-241/ demonstrated an increase in the Bornean Orangutan population. AENOR also reviewed camera traps records /232-236/. Additionally, onsite visit allowed AENOR to see hundreds of orangutan nests. Finally, several individuals of Bornean Orangutan were observed during the onsite visit. All these indicators demonstrate the good and increasing population of this endangered species.
 - b. Continued presence of other RTE species → other several species were monitored by the PP. AENOR had the opportunity to observe some of these species onsite such as (Pygmean Elephant, Long-tailed Macaque, Helmeted Hornbill, Pig-tailed Macaque and others.), additionally, records of the camera traps /232-236/ were reviewed and confirmed the presence of other species. Finally, AENOR reviewed the Presence of HCV 1 species documentation /225-241/. Additional papers are provided by the PP to demonstrate the presence of Orangutans as well as other RTE species.
2. Natural forest regeneration leads to increase in mature forest habitats:
 - a. Aboveground biomass – reflecting forest structure and quality → AENOR can confirm through remote sensing assessment that there has been relatively consistent vegetation growth and an overall increase in aboveground biomass since the last monitoring period in 2015-2021, particularly in areas that were severely degraded by intensive logging. this will result in an increase in better 'quality' forest habitat within the Project Area, which can subsequently support higher levels of biodiversity. The increase in aboveground biomass brought about by natural forest regeneration with the Kuamut Project Area can be attributed to two main factors resulting from the project's implementation:

- i. Termination of logging activities and prevention of conversion to mosaic plantings
- ii. Minimal forest disturbance

AENOR confirms that through comparison between current and previous MRs, and their consequently biomass maps /4-26/, that there is a clear increase in ABG Biomass, and hence, the rest of the positive things. An aerial inspection of the project area during the beginning of the onsite visit was fundamental for AENOR to understand the good health of the forests. It was double checked later, with several tracks until reaching the monitoring plots.

In opinion of AENOR, information about benefits on biodiversity from project activities is accurate since is based on record taken from project stakeholders and PP, based on sources reliable and appropriate and the attribution of biodiversity changes to the project's activities is well justified.

4.6.2 Mitigation Actions (VCS, 3.19; CCB, B2.3)

The reason because of the Project Area contains high numbers of RTE species (HCV 1), is part of a large, Intact Forest Landscape (IFL) (HCV 2), contains rare and threatened ecosystems (e.g., some very small areas of kerangas forest - kerangas is the Malaysian term for Sundaland heath forest; HCV 3) and provides many ecosystem services (i.e., the protection of water catchments, control of erosion of vulnerable soils and slopes etc.; HCV 4), the whole forested area can be considered as supporting HCVs and is treated as such.

Some of the mitigation activities are:

1. Reclassification of the Project Area → and linked to this activity, the stop of logging operations and the avoidance of mosaic plantings. AENOR confirmed through onsite visit, that the project is Class I, and hence, is totally protected. The quality of the ecosystems is consistently high and well-preserved. Aerial flight allowed AENOR team to compare the project scenario with the reference area, in which some palm oil plantations were found as well as rubber trees or other crops. After several paper reviews /2/ /275/ /279/ and onsite interviews, AENOR considers that this protection is beneficial for the biodiversity, and hence all HCVs are enhanced.
2. Maintenance and enhancement of HCV attributes → AENOR confirms that RBJ is part of the patrolling and BD monitoring of the project. They are in charge of detecting potential illegal activities. AENOR interviewed staff to confirm their roles, functions and monitoring procedures. Hence, AENOR reviewed the Patrolling and threat monitoring: RBJ patrol reports 2022 and 2023 /154/. This report /154/ represents the outcome of the activities undertaken as part of the MR. Additionally, AENOR reviewed the Helicopter surveys /252-257/ and other RBJ reports for the years 2022 and 2023 (these reports form the RBJ patrolling report). Hence, AENOR considers that the mitigation activity is fully covered by the PP and positive though the BD and the whole project.

3. Consistency with the precautionary Principle → The assumption that species documented in the surrounding landscape are likely to be present in the Project Area, given the similar forest type, supports the need for protection even in the absence of full scientific certainty. However, The reclassification and protection of the Project Area and the cessation of potentially harmful activities such as logging and mosaic planting are proactive measures that prevent environmental harm, and hence, the quality of the KRCP is higher than in some of the ecosystems nearby (which mosaic plantations or crops).

Verification team during the onsite visit, confirmed that the information stated in section 5.1.2 and along the whole biodiversity section is right. Therefore, verification team concludes that the mitigation actions taken are appropriate and in accordance with validated project description.

4.6.3 Net Positive Biodiversity Impacts (CCB, B2.2)

Since the reclassification of the Project Area from a Class II (Production) to a Class I (Protection) Forest Reserve in 2015/2016, the project has provided immediate biodiversity benefits by protecting key forest habitats, ecosystems, and their functions. Throughout the lifetime of the project, natural regeneration of heavily degraded forest areas will result in an increase in the total area of habitat with characteristics and properties more similar to old growth forests. Such improvements to forest quality through natural restoration will be beneficial for forest dependent species, or species that primarily rely on old growth forest, and will result in increased ecological resilience.

	Evidence gathering activities, evidence checked, and assessment conclusion
Species and habitat	The project has demonstrated to have several RTE species within the boundaries of the KRCP. AENOR has reviewed several records, such as camera traps /232-236/, patrolling surveys /180-224/, scientific papers /258-288/, and confirmed through onsite inspections.
Areas needed for habitat connectivity	The Project Area is important for landscape-level connectivity in central Sabah as it is continuous with a number of other forest reserves. AENOR flew the project area and surroundings, from Kota Kinabalu to Danum Valley. During this trip, AENOR was able to observe different ecosystems, and confirms that the KRCP is a very important link for different species and ecosystems. Interviews with communities also confirmed this statement.
Lowland forest habitat	Much of the Kuamut Project Area comprises lowland habitats (<300 m asl), which are dominated by 'lowland mixed dipterocarp forest', 'lowland seasonal freshwater swamp forest' and 'lowland mixed dipterocarp and kerangas forest'. Several species found in these ecosystems are <i>Mulleripicus pulverulentus</i> , <i>Pityriasis gymnocephala</i> ,

	<i>Pongo pygmaeus</i> and <i>Helarctos malayanus</i>. AENOR checked the presence of these species both onsite and through records such as surveys or camera traps images. Camera traps and bioacoustic recorders (also reviewed by AENOR onsite and during the desk review) have been set up at various lowland sites, with dung beetle and Forest Integrity Assessment (FIA) surveys conducted in 2022. No project activities will negatively affect lowland habitats or the rare, threatened, or endangered (RTE) species they support, and the locations of such species will not be disclosed publicly. AENOR also reviewed the dung beetle report /168/ and the Forest Integrity Assessments /242-244/. Regarding Dung Beetle Reports, Dung beetles are used as proxies to assess mammal communities due to their ecological dependence on mammal feces for feeding and nesting. Their sensitivity to habitat quality and limited dispersal capacity make them effective indicators of local mammal presence and habitat conditions. Previous studies have shown that dung beetle community composition is influenced by mammal assemblages, habitat structure, and spatial factors, relationships that differ among functional groups within beetle communities. In the Kuamut Project, dung beetle sampling (via pitfall traps), alongside camera trap data, has provided strong and consistent evidence of the richness and quality of mammal populations. These findings highlight the value of dung beetles as reliable bioindicators when used in conjunction with other monitoring tools.
Hill and submontane forest habitat	The hill and submontane forest habitats (300-900 m asl) are largely found within the south and southeastern part of the Project Area and contain a number of different forest types that primarily include: 'upland ultramafic forest', 'upland mixed dipterocarp forest' and 'upland mixed dipterocarp and kerangas forest' as depicted on the forest formations/ecosystem types map created by Sabah Forestry Department Forest Research Centre. AENOR also visited these areas and confirm the positive effects. A number of camera traps and bioacoustics devices have been deployed in some of the upland habitats in 2022-2023. AENOR reviewed such records and confirms the benefits found in these type of ecosystems. Several interesting species were also identified onsite within this habitat.

The net effect of the project on biodiversity in and around the project area is positive, as confirmed by AENOR. Through direct interviews with stakeholders the audit team confirmed that the information stated on the MR is true, and the project activities have only positive incomes for biodiversity as well as for social sectors. Also, AENOR has reviewed several documentations remotely and confirms that the information provided is reliable and truly. The project has created benefits within the project zone that are unparalleled in comparison with the biodiversity baseline scenario. The benefits which exist within the project zone greatly

outweigh the impacts of any potential unmitigated negative offsite action. Because of the project and its implemented project activities, the net effect of the project on biodiversity in and around the project zone is positive as it was demonstrated to AENOR.

4.6.4 Species Used (VCS, 3.19; CCB, B2.5, B2.6)

This section is not applicable for the KRCP, because the project is an IFM project, which enhance the restoration and protection of natural ecosystems, and hence, no species are introduced, and no invasive species have been identified. AENOR asked to different stakeholders about these two items below, and none of the interviewees declared to know about the existence of invasive species or other introduced.

	Evidence gathering activities, evidence checked, and assessment conclusion
Species introduced	No species are introduced.
Existing invasive species	No invasive species are identified.

4.6.5 High Conservation Values Protected (CCB, B2.4)

The KRCP supports HCVs 1, 2, 3 and 4, which are:

1. **HCV 1:** Presence of rare, threatened, and endangered (RTE) species.
2. **HCV 2:** Intact Forest Landscape (IFL).
3. **HCV 3:** Rare and threatened ecosystems, such as small areas of kerangas forest (Sundaland heath forest).
4. **HCV 4:** Essential ecosystem services, including protection of water catchments and erosion control on vulnerable soils and slopes.

Regular patrols, satellite monitoring, and biodiversity surveys are conducted, including monitoring of RTE species such as the Bornean Orangutan. AENOR has reviewed the patrolling reports /238-2568/, the orangutan monitoring reports /237-241/ and has also confirmed through technical sessions with the project proponent (PP) that monitoring occurs frequently, allowing for the detection of negative events or illegal activities within days. AENOR considers that designating the forest as a Class I Forest is the best way to classify the project as a protected forest. Additionally, ongoing biodiversity monitoring through aerial surveys, camera traps, and other methods demonstrates the project's commitment to protecting and monitoring various HCVs.

AENOR substantiated that all HCVs are interconnected, and the protection and monitoring measures in place are effective for the preservation and enhancement of

HCVs 1, 2, 3 and 4. AENOR has concluded that the HCVs have been properly identified and, based on the site visit, there is no evidence that they are negatively impacted by the project's implementation. Interviews and previous audits also confirm this assessment.

4.6.6 GMO Exclusion (CCB, B2.7)

The project has not and will not utilize GMOs in any form.

4.6.7 Inputs Justification (VCS, 3.19; CCB, B2.8)

Project activities have not necessitated the additional use of chemical fertilizers, pesticides or biological control agents. AENOR asked about inputs into the project, and is clear that this IFM project is based in natural regeneration through Class I protection.

4.6.8 Negative Offsite Biodiversity Impacts (CCB, B3.1) and Mitigation Actions (VCS, 3.19; CCB, B3.2)

There is one potential negative effect that could occur out of the project area. Hunting activities could be refocused to other forest reserves outside of Project Area/Zone following the reclassification of the area to a Class I (Protection) Forest Reserve and implementation of regular security patrols by RBJ. Regarding the article Habitat degradation and indiscriminate hunting differentially impact faunal communities in the Southeast Asian tropical biodiversity hotspot, the hunting pressure in Sabah is generally low, and infrequent.

Additionally, AENOR conducted interviews with the patrolling team, who confirmed that they also monitor hunting and other illegal activities outside the project area. As the PP also conducts aerial inspections, these flights allow for the monitoring of illegal activities beyond the project area. Furthermore, the PP states that since the surrounding areas are also government-owned, any illegal activities would fall under law enforcement jurisdiction. As a result, regional enforcement efforts are carried out to prevent potential illegal activities and negative impacts. Therefore, AENOR considers it unlikely that negative events would occur outside the project area.

4.6.9 Net Offsite Biodiversity Benefits (CCB, B3.3)

The project has had a significant positive impact on biodiversity within the Project Area, with habitat protection, reclassification to a Class I Forest Reserve, and ongoing monitoring leading to the regeneration of natural habitats and stable populations of key species like the Bornean Orangutan. The protection has also enhanced landscape connectivity, benefiting species movement and genetic diversity. While there is potential for hunting activities to be displaced outside the Project Zone, studies and patrols show that hunting pressure remains low (see section 4.6.8 above), with minimal evidence of illegal activities. The continued presence of rare and endangered species within the project area further supports its positive

impact. When comparing the benefits of the project to the potential negative effects outside the project zone, the benefits far outweigh any potential offsite consequences, such as the relocation of hunting. The project's overall positive net impact on biodiversity is evident, with minimal offsite negative effects.

AENOR has reviewed the patrolling reports /238-258/, additional literature /258-288/, and confirmed through the onsite visit, that the project serves as a landscape connectivity, and hence, is useful to connect other type of environments. AENOR also observed (among others), the following animals out of the project area, which means that in general, the net offsite BD benefits are clear: Pygmy Elephant, Bornean Orangutan, Hornbills, Asian Small-clawed Otter, Leopard Cat, or long-tailed macaques among others.

As none of the potential, albeit negligible, negative biodiversity impacts require mitigation as this stage of the project, the net effect of the project on offsite biodiversity during this monitoring period is positive and should remain positive for the remainder of the project. Because of the project and its implemented project activities, the net effect of the project on biodiversity in and around the project zone is positive as it was demonstrated to AENOR.

4.6.10 Biodiversity Monitoring Plan (CCB, B4.1, B4.2, GL3.4)

A plan for biodiversity monitoring was developed early in the project lifetime and successfully validated. During this monitoring period, the project continued to implement the biodiversity monitoring plan based on the causal model for maintained or enhanced biodiversity in the project area. Through document review AENOR confirmed the monitoring plan is in place as described in PD and monitoring is going on with no deviation from the validated monitoring plan. Key activities conducted during biodiversity monitoring, are the following:

- Measuring carbon plots
- Remote sensing and statistical modelling
- FIA surveys
- Aerial nests surveys
- Camera traps
- Song meters
- Dung beetle trapping
- Satellite monitoring
- Security patrols

The PP has provided a table in the biodiversity monitoring plan section that summarizes the type of monitoring, the results, the frequency, and the methods among other variables.

For example, during the 2022–2023 monitoring period, the project implemented a range of biodiversity and threat assessment activities with varying frequencies. Aboveground biomass and canopy height were monitored annually through carbon plots and remote sensing, revealing steady forest regeneration. A pilot Forest Integrity Assessment was conducted at 49 sites, with full annual monitoring planned from 2025.

Biodiversity indicators such as the presence of RTE species were assessed via camera traps and bioacoustic devices, deployed during two distinct periods in 2022 and 2023. From 2025 onwards, these will be deployed biannually. Aerial nest surveys for Bornean Orangutans were conducted in November 2023 and are scheduled every 3–5 years. Dung beetle richness and forest integrity were also assessed through pilot studies, with future surveys planned on a 3–5 year cycle.

Regarding threat monitoring, monthly security patrols and continuous satellite monitoring detected no illegal logging and very limited hunting. Camera traps recorded no evidence of poaching activity.

These results indicate that biodiversity is being effectively monitored at meaningful frequencies, allowing for early detection of trends and threats. Together with the observed stability of species populations and forest recovery, the frequency and coverage of monitoring strongly support the project's positive impact on conservation outcomes.

In addition to the visit, in which AENOR was able to see the records of certain monitoring variables, it also reviewed other documentation provided by the PP, such as the preparatory document for the biodiversity monitoring plan to be developed in 2022. AENOR also reviewed the explanatory document of Dr. Sarah Scriven (who accompanied the VVB on the visit) which explains the types of monitoring strata, the type of plots, camera traps, etc. /177/ This document also explains the best techniques for sampling different species found in the territory. AENOR has also reviewed the databases of images obtained by photomapping /177/ and has verified that the records in this database coincide with the real images.

AENOR has also reviewed images of aerial sampling that has been done for some indicators, and in addition, this has also been explained by the PP during the aerial flight that was made during the visit. The patrol reports /238-258/ have also been reviewed and compared with the BD monitoring plan table.

The orangutan inventories /237-241/, dung beetle surveys /168-169/, and bioacoustics surveys have also been reviewed by AENOR both onsite and remotely. Finally, AENOR confirms that the FIAs have also been carried out with the frequency and in the manner indicated in the validated monitoring and PD plan.

The trigger species identified in the KRCP are: Bornean Orangutan, other CR and EN mammals (such as Pangolin, Elephant or Bay Cat, etc) and CR and EN Birds (such as Helmeted Hornbill or straw-headed Bull-Bul, etc). For those trigger species identified in section 5.4.1 of the MR, the PP has provided an accurate monitoring. These species are included in the activities mentioned above, such as the dung beetle studies, the bioacoustics methods or the patrolling activities. The camera traps are also useful for all these species.

Complementary, the VVB has reviewed during the onsite visit all the BD aspects and current problems associated as well as the implementation of Biodiversity monitoring plan and conservation of trigger species. The biodiversity monitoring plan complies with the validated PD. Therefore, the monitoring plan is in compliance with the validated CCB-VCS-PD. In opinion of AENOR the monitoring plan is effective to have a real idea of the situation. Measures scheduled and designed by the project proponent to maintain or enhance the biodiversity are correct and results confirm their effectiveness. AENOR confirms dates, frequency and sampling methods used are in accordance with the validated PD and its validated minor changes and with the procedures and systematics used in the verification event. AENOR also compared the current monitoring plan with the previous one, and considers that the changes and updates, even the current achievements are reasonable and accurate. Hence, AENOR confirms that biodiversity monitoring plan is implemented as the MR and the validated PD.

4.6.11 Biodiversity Monitoring Plan Dissemination (CCB, B4.3)

AENOR has reviewed the information on section 5.3.2 of the MR and stated that different methods are used for BD MP dissemination. The first method is making the information publicly available. The PP has indicated different ways to check the MP, such as Verra Registry, Permian Webpage, SEARRP webpage, and some other researching webpages. AENOR checked all these webpages and confirmed that the information is available.

The second method is the dissemination to stakeholders and communities. For this method, the PP has been supported by SEARRP and PACOS. AENOR reviewed the community development plan (CDP) /73-90/, which was not only used for biodiversity but community monitoring. Some village members, who were interviewed by AENOR are also part of the PP, and they recognized to be involved in the distribution of the monitoring plans. The rest of the interviewees confirmed such statements. Whatsapp groups are also used to communicate some additional information.

Hence, as in the community MP dissemination, the VVB considers that the MP sharing information is appropriate, in English and local languages, and all stakeholders could have access to those reports and information.

4.6.12 Optional Gold Level: Trigger Species Population Trends (CCB, GL3.3)

The PP has provided information about the trigger species population trends in section 5.4.1 of the MR, but also within the BD monitoring plan, since some of these species are clearly monitored in KRCP.

Section 4.6.10 of this VR also provides details about the population trends and monitoring of trigger species.

Additionally, the ways in which the RTE species are monitored are described in the RTE Species List /232-233/. These spreadsheets explains what methods were used for each

species. For example, for Bornean Orangutan, which is Critically Endangered, the method for detection was Helicopter surveys, camera trapping and ad-hoc visual encounters. AENOR confirmed such methods, and also confirms that during the onsite visit they were able to identify direct individuals of orangutans, review the camera traps records, and observe hundreds of orangutan nests. The Borneo Bay-Cat is monitored through camera trapping. AENOR confirmed the records from these devices. The elephant, which is categorized as endangered, is monitored through camera trapping and ad-hoc visual encounters. AENOR observed onsite both methods. Other animals such as Hornbills, are monitored through visual encounters. AENOR also observed several individuals of the different Hornbill species.

AENOR considers that the key trigger species, Bornean Orangutan, are properly monitored and hence, the population likely follows a positive growth trend which was confirmed with the comparison of the results of different years as well as with onsite interviews.

4.6.13 Optional Gold Level: Effectiveness of Threat Reduction Actions (CCB, GL3.4)

There has been a considerable increase in the number of species identified since the previous monitoring period. It is the opinion of the audit team that the main threats to biodiversity are being properly tackled by project activities. Habitat loss caused by logging and illegal hunting has been effectively reduced, as demonstrated by the data provided by the PP, such as tables and graphics of animal population, which were crosschecked with raw data from current and previous MRs.

The population trends of trigger species within the project area and the actions taken to maintain or enhance the population status of these species in the project zone are discussed with the PP. Additional papers have been reviewed to understand the baseline scenario for some populations and how it was increased during the project lifetime. Finally, the VVB confirmed that continuous protection efforts, regular patrolling, and monitoring activities are effectively contributing to the reduction of threats to trigger species. In AENOR's opinion, the Project Proponent is implementing effective measures to maintain or improve the conservation status of these key species.

4.7 Additional Project Implementation Information

There is no more additional information.

4.8 Additional Project Impact Information

There is no more additional information.

5 VERIFICATION CONCLUSION

5.1 Verification Summary

After reviewing all project information, procedures, calculations, supporting documentation, and the interview process, AENOR confirms that the monitoring conducted by the Project Proponent, along with the supporting Monitoring Report, is accurate and consistent with the Verified Carbon Standard version 4.7, the CCB Standards Third Edition, the validated PD, and the selected methodology (VM0010 v1.4), without any qualifications or limitations. AENOR confirms that the Kuamut Rainforest Conservation Project (KRCP), Monitoring Report (Version 3 dated 01/04/2025) has been implemented in accordance with the validated PD including any validated changes as applicable.

The assessment was conducted to provide a reasonable level of assurance of conformance against the defined audit criteria and materiality thresholds within the audit scope. Based on the audit findings, a positive evaluation statement reasonably assures that the project GHG assertion is materially correct and is a fair representation of the GHG data and information.

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent AENOR instructions required. The technical review was performed by a technical reviewer(s) qualified in accordance with AENOR's qualification scheme for VCS/CCB verification.

The threshold for materiality with respect to the aggregate of errors, omissions, and misrepresentations relative to the total reported GHG emission reductions was one percent (1%), as established for large projects by the VCS Standard.

It is opinion of AENOR, with a reasonable level of certainty, that the reasonableness of assumptions, the described limitations, the methods that supported each one of the claims about project implementation during the monitoring period and the claimed estimated and calculated ex-post emission reductions are free from major errors, omissions, or inaccuracies. The assessment team has no restrictions or uncertainties with respect to the compliance of the project with the verification criteria.

AENOR confirms all verification activities, including objectives, scope and criteria, level of assurance, monitoring and project documentation adherence to VCS Version 4.7 (and all associated updates), and CCB Project Design Standards (Third Edition), as documented in this report are complete. AENOR concludes without any qualifications or limiting conditions that the KRCP meets the requirements of VCS Version 4.7 (and all associated updates) and CCB Standards Third Edition for the monitoring period (01-January-2022 to 31-December-2023). The verification of the ex-post emissions of the KRCP has been conducted by AENOR in accordance with ISO 14064-3:2019.

AENOR confirms that the project has been verified for the climate, community, and biodiversity benefits, including Gold Level Exceptional Climate, Gold Level Exceptional Community and Gold Level Exceptional Biodiversity Benefits as described in the Monitoring Report.

5.2 Verification Conclusion

AENOR has verified that the project is in compliance with the verification criteria of Verified Carbon Standard version 4.7 and the CCB Standards Third Edition without qualifications or limitations, with a reasonable level of assurance.

The project has been implemented in accordance with the validated VCS-CCB PD.

AENOR is able to issue a positive verification opinion for the monitoring period from 01 January 2022 to 31 December 2023, for the 1,838,121 tCO₂e, before discounting the buffer. After discounting the buffer, which is 12% and corresponds to 263,308 tCO₂e, the final VCUs to be issued correspond to an amount of 1,574,813 VCUs, as reported in the VCS&CCB MR.

The verification consisted of the following three phases: i) a desk review of the MR and monitoring plan implementation; ii) follow-up interviews with project staff and stakeholders and on-site visit; iii) the resolution of outstanding issues and the issuance of the final Verification Report and opinion. In the course of the verification process corrective actions and clarifications were raised. All have been successfully closed as explained in the findings sheet annexed to this report (Appendix 3).

The verification of the ex-post emissions of the project has been conducted by AENOR in accordance with ISO 14064-3:2019.

It is not applicable any conclusion about adaptive activities and resilience for this project. Likewise, AENOR confirms the project benefits on community and biodiversity for the current monitoring period as described in the Monitoring Report version. In opinion of the AENOR's verification team, the project is achieving their climate, community and biodiversity objectives.

Verification period: From 01-January-2022 to 31-December-2023

Verified GHG emission reductions and carbon dioxide removals in the above verification period:

The non-permanence risk rating (%)	12%
If applicable, the long-term average, whether it has been properly updated, and if it has been reached.	N/A because there is No harvesting nor thinning activities in this project.
Whether a loss has been appropriately accounted for, in accordance with the VCS Program rules, if applicable.	N/A (see finding CAR 10 about the potential loss event and the non-applicability of such). The loss of vegetation is not considered as loss event based on the VCS Definitions.

Vintage period	Baseline emissions (tCO₂e)	Project emissions (tCO₂e)	Leakage emissions (tCO₂e)	Buffer pool allocation (tCO₂e)	Reductions VCUs (tCO₂e)	Removals VCUs (tCO₂e)	Total VCU issuance (tCO₂e)
01-Jan-2022 to 31-Dec-2022	618,210.3	-479,872.6	178,044.6	131,771	365,979	422,287	788,266
01-Jan-2023 to 31-Dec-2023	618,210.3	-477,919.8	178,044.6	131,537	365,979	420,568	786,547
Total	1,236,420.6	-957,792.4	356,089.1	263,308	731,958	842,855	1,574,813

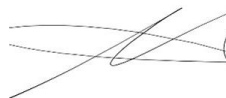
5.3 Ex-ante vs. Ex-post ERR Comparison

Vintage period	Ex-ante estimated reductions/removals (tCO ₂ e)	Achieved reductions/removals (tCO ₂ e)	Percent difference	Explanation for the difference
01-Jan-2022 to 31-Dec-2022	638,050.82	788,266	21.06%	Monitored growth rate was higher than estimated for the Ex-ante emissions. This was also because of the use of more accurate data for protected species.
01-Jan-2023 to 31-Dec-2023	638,050.82	786,547	20.85%	AENOR compared the results obtained with the results of the previous year. It was clear for the VVB that the usage of different parameters and values, more updated than those explained in the PDD, have supposed an increase in the ERs achieved. This has been always aligned with conservancy principles. the updated methodology is fully aligned with The project's initial objectives, and the changes enhance the accuracy and conservativeness of the carbon stock estimates.
Total	1,276,101.64	1,574,813	20.96%	Ex-ante estimated reductions/removals come from the PD: 461,766.88 (project scenario, page 148 of PD); 369,790.54 (baseline, page 140 of PD); 106,499.67 (leakage, page 155 of PD), and assuming a buffer of 12%, the correct figure is 638,050.82.

Madrid, 13 August 2025



Javier Cócera
Lead auditor



Marcos Recio
Lead auditor

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Section	Information	Justification	Assessment method and conclusion
2.4.6	All agreements between project proponents and other implementing partners governing the implementation of project activities	These agreements contain specific terms, conditions, and intellectual property considerations that are confidential to the parties involved. Disclosure could compromise contractual negotiations, proprietary methodologies, and the strategic interests of the project partners.	AENOR reviewed the agreements and considers that there are several sections that have to be excluded, and therefore are considered confidential.
2.4.6	Detailed 30-year financial projections for the project, including all project-related costs and ex-ante carbon estimates	This information is commercially sensitive as it contains proprietary financial data that could impact the project's competitive position and market dynamics if disclosed. It includes cost structures, anticipated revenues, and investment returns that are crucial for maintaining strategic and financial confidentiality.	AENOR reviewed the agreements and considers that there are several sections that have to be excluded, and therefore are considered confidential.
2.4.6	Detail Workplan and Budgets	The workplans and budgets include sensitive operational strategies and financial allocations that are critical to the project's execution. Public disclosure of this information could undermine the project's competitive advantage and operational integrity.	The budgets of the project, as well as the balances and other information is deemed confidential. AENOR reviewed during the onsite visit such agreements and considers it is sensitive.
NPRT	Financial Viability Analysis	This document includes details about the cost of the project and revenues which are commercially sensitive.	The financial evidence of the NPRT can be considered confidential, as the rest of the plans

			and agreements before. However, other sections and evidence of the NPRT are not sensitive.
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APPENDIX 2: PROJECT RISKS TABLE

Item	Identified risk(s)	Evidence gathering activities, evidence checked, and assessment conclusion
Natural and human induced risks to stakeholders' wellbeing	Over-reliance on project benefits without long-term sustainability	Promoting economic independence by encouraging sustainable alternative livelihoods for the community, driven by the choices made by the community itself. AENOR has reviewed the benefit sharing plan /134/, as well as one example of the contract agreements with communities /55/ (it is expected that it will be developed during next year). Onsite interviews were also used to confirm the benefits of the project on the communities.
Natural and human induced risks to stakeholders' wellbeing	Increased human-wildlife conflicts due to forest conservation	The damage in crops and livelihoods is mitigated by trainings /93/ carried out by the communities, to avoid such conflicts, as well as with direct communication and coordination with the Sabah WL Department. During the interviews, the SHs recognized that the encounters with elephants are not hostile, and also that they learnt how to deal with tea,, as well as avoid the risk thanks to different trainings and coordination.
Risks to stakeholder participation	Exclusion of marginalized groups Reduced social equity, ineffective community engagement (women, youth, Indigenous Peoples) from decision-making	The PP has ensured and guaranteed the women participation in all kind of SH engagements. The Policies /43-47/ demonstrate the equality between genders and groups. AENOR during the onsite visit interviewed all type of genders, ages and social groups. All of them recognized fully participation and did not declare any sign of discrimination.

Risks to stakeholder participation	Lack of capacity or knowledge to participate in project activities	The project has implemented several trainings /27/, which were reviewed by AENOR and asked about them during the onsite visit. All staff demonstrated good skills in the different activities they performed.
Working conditions	Unsafe working conditions in remote areas	AENOR has reviewed the SOPs /45/ and Policies /46-47/ that PP has implemented in remote areas. AENOR also reviewed the medical kit that all workers have in the working places. They are also trained to avoid wildlife dangerous encounters. Onsite interviews also confirmed such evidence.
Safety of women and girls	Lack of gender-sensitive policies and risks to women and girls	The PP has ensured and guaranteed the women participation in all kind of SH engagements. The Policies demonstrate the equality between genders and groups. AENOR during the onsite visit interviewed all type of genders, ages and social groups. All of them recognized fully participation and did not declare any sign of discrimination.
Safety of minority and marginalized groups including children	Marginalization of minority and vulnerable groups, including children	The PP has ensured and guaranteed the equal participation in all kind of SH engagements. The Policies demonstrate the equality between genders and groups. AENOR during the onsite visit interviewed all type of genders, ages and social groups. All of them recognized fully participation and did not declare any sign of discrimination.
Pollutants (air, noise, discharges to water, generation of waste, and release of hazardous materials and chemical pesticides and fertilizers)	No risk identified	The project will not generate significant pollutants, including air and noise pollution, water discharges, hazardous waste, or the release of chemical pesticides and fertilizers, because it is designed with strict environmental safeguards. The project is located in the middle of Sabah, and the audit team did not find any sign of pollution or chemical waste.
Discrimination	Unequal distribution of project benefits	the benefit sharing is transparent and clear. AENOR reviewed the BS agreement /55/ but also, other equal policies /44/. Onsite interviews did not find any sign of discrimination.

Sexual harassment	Risk of sexual harassment in project areas	Implementing anti-harassment policies /43/ which were reviewed by AENOR, clear reporting/grievance mechanisms /147/. Permian Global, Permian Malaysia, PACOS, SEARRP and RBJ have policies in place to prevent any kind of harassment. Onsite interviews did not find any sign of discrimination
Equal pay for equal work	Wage disparities among workers within the project	HR policies /43/ are complied by the PPP. Onsite interviews did not find any sign of discrimination
Gender equity in labor and work	Gender inequality in conservation and forest management work	HR policies /43/ are complied by the PPP. Onsite interviews did not find any sign of discrimination
Forced labor ¹	No risk identified	The project will not generate risks related to forced labor, child labor, or human trafficking, including among staff and contracted workers employed by third parties, because it upholds strict labor policies aligned with international human rights and labor standards. All project activities comply with national labor laws and International Labour Organization (ILO) conventions, ensuring fair and ethical working conditions. Onsite interviews did not find any sign of discrimination
Child labor	No risk identified	
Human trafficking	No risk identified	
Recognition of, respect of, and promotion of the rights to IPs, LCs and customary rights holders	Conflicts over land tenure and resource rights	The project abides by the current legislation in Sabah in relation to the establishment of Class 1 Protection Forest. This includes the recognition of the boundaries with project zone communities. AENOR reviewed the ownership of the project /2/, but also discussed about these rights during onsite interviews with several communities.
Preserving and protecting cultural heritage	Failure to integrate traditional and Indigenous knowledge into conservation strategies	This knowledge was collected when developing the Community Development Plan and continuous adjustment to the project design.

¹ The identified risks and commensurate mitigation or preventative measure(s) for forced labor, child labor, and human trafficking, must be inclusive of staff and contracted workers employed by third parties.

		Local traditions were preserved and respected, and the input provided by the communities during the stakeholder engagement is proof of that.
Preserving and protecting cultural heritage	Potential restrictions on cultural sites or spiritual practices	AENOR reviewed the HCVS for Communities and BD. The mapping was crosschecked with onsite interviews, and consider that there is not a big risk of potential restrictions on cultural sites or spiritual practices.
Protecting and preserving property rights, customary rights, or protecting legal or customary tenure/access rights to territories, property, and resources, including collective and/or conflicting rights	No risk has been identified	The project abides by the current legislation in Sabah in relation to the establishment of Class 1 Protection Forest. This includes the recognition of the boundaries with project zone communities. AENOR reviewed the ownership of the project /2/, but also discussed about these rights during onsite interviews with several communities.
Impacts on biodiversity and ecosystems	No risk identified	The project will not generate risks of negative impacts on biodiversity and ecosystems because it is specifically designed to restore and conserve forest landscapes, enhance ecosystem connectivity, and protect endangered species. AENOR visited the project area in February 2025, and confirmed that the project is protecting and enhancing ecosystems. Including tropical trees, and trigger or endangered species. The aerial inspection also demonstrated a good quality on the ecosystems, so on the other hand, the project is providing positive impacts to the ecosystems.
Soil degradation and soil erosion	No risk identified	Forest restoration and enhancement directly counteract soil degradation processes. The presence of vegetative cover, including native species and ground vegetation, reduces surface runoff and protects against rain splash and gully erosion. During the field visit, AENOR observed well-conserved soil profiles, stabilized slopes, and no visible signs of active erosion, confirming effective soil protection through forest management.

Water consumption and stress	No risk identified	The forest restoration approach reduces water stress by enhancing natural water retention and infiltration capacities. Additionally, the Project Proponent is applying low-impact water use practices, such as a gravity-fed irrigation system /105/, which minimizes water extraction from natural sources. These measures were verified onsite and supported by interviews with local stakeholders, confirming that water use remains within sustainable limits and poses no risk to local water availability.
Habitats (and areas needed for habitat connectivity) for rare, threatened, and endangered species	No risk identified	The project will not generate risks of negative impacts on biodiversity and ecosystems because it is specifically designed to restore and conserve forest landscapes, enhance ecosystem connectivity, and protect endangered species. AENOR visited the project area in February 2025, and confirmed that the project is protecting and enhancing ecosystems. Including tropical trees, and trigger or endangered species. The aerial inspection also demonstrated a good quality on the ecosystems, so on the other hand, the project is providing positive impacts to the ecosystems.
Areas needed for habitat connectivity	No risk identified	The project will not generate risks of negative impacts on biodiversity and ecosystems because it is specifically designed to restore and conserve forest landscapes, enhance ecosystem connectivity, and protect endangered species. AENOR visited the project area in February 2025, and confirmed that the project is protecting and enhancing ecosystems. Including tropical trees, and trigger or endangered species. The aerial inspection also demonstrated a good quality on the ecosystems, so on the other hand, the project is providing positive impacts to the ecosystems.
Invasive species	No risk identified	The project is not using invasive species. The BD monitoring staff declared no presence of invasive species in the project area.

Ecosystem conversion	Unintended effects of conservation areas restricting community access to resources	The communities are getting benefitted by other means. Alternative activities or works, such as being part of the monitoring team are one of the opportunities implemented by the PP. More sustainable opportunities will come in future verification years according to the PP, such as road reparation, sanitization process, better policies and other employment opportunities. These above mentioned measures are effective to compensate potential restrictions.
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APPENDIX 3: FINDINGS

Non Conformities (NCs)/Corrective Action Request (CARs)

NC/CAR id.	01	Date: 14/02/2025		
NC/CAR description				
Within the initial table, the VVB has identified an incongruence between the crediting period, the PDD length and the Verra registry Length. Also, in section 2.1.7, there is an error regarding the crediting period of the MR, compared to the PDD and the Verra Registry. Also, within this table, about the total number of years of crediting period, indicate the total number of years eligible for crediting. If crediting period is renewable, include years eligible for renewal (e.g., seven years, twice renewable = 21 years)				
Project Proponent's Response		Date: 26/02/2025		
<i>The MR initial table was amended to align with the Verra registry. Also, section 2.1.7 was corrected accordingly. A deviation from the PD is included in section 2.2.4 (Minor Changes to Project description) indicating the change of crediting period to align with the Verra registry. It is also indicated in the table that the project is renewable once = 60 years.</i>				
Documentation provided by the project proponent				
Revised MR version 2				
VVB's evaluation		Date: 27/03/2025		
1. The crediting period within the initial table still differs from the Verra Registry (10/12/2025) and the PDD (1/12/2045). Explain also the origin of such differences. 2. The crediting period is different than Verra Registry. Project Registration Date 13/04/2023 Crediting Period Term 1st, 11/12/2015 - 10/12/2045 <table border="1"> <tr> <td>Crediting period</td> <td>11 December 2015 to 12 December 2045</td> </tr> </table> Hence, there are different dates in the registry, PD, MR and PD Deviations. Complementarily, regarding the MR template, within section 2.2.4, minor changes to project description deviations: Document any community or biodiversity changes to project design not requiring a project description deviation that occurred during the monitoring period compared with the validated project description. However, the crediting period modification is not referred to Community or Biodiversity.			Crediting period	11 December 2015 to 12 December 2045
Crediting period	11 December 2015 to 12 December 2045			

Project Proponent's Response	Date: 31/03/2025
The correct date was modified to 10/12/2045 instead of 12/12/2045 in all necessary sections. Also, the change was deleted in section 2.2.4 and mentioned in section 2.2.5. The reason of these discrepancies is purely an oversight.	
VVB's evaluation	Date: 02/04/2025
All topics have been addressed and deemed correct. Therefore, CAR 01 is closed	

NC/CAR id.	02	Date: 14/02/2025
NC/CAR description		
The following issues are identified based on the Gold Level status: 1. Within the gold level criteria table, it is stated that employment generated by the project includes 40 full-time positions as of 2023. However sections below it is said that The Kuamut Project is committed to employing local communities as staff of the project. In this reporting period of 2022, the Kuamut Project hired a total of 11 individuals on a full-time basis and 17 on a part time basis. For 2023, 14 individuals were hired on FTE and 23 part-time. From this, a total of 7 are from Karamuak and Kuamut villages. 2. Within the initial table, the gold level status is explained the access of water quality and drinking water. However, during the interview with communities on the audit visit that the water infrastructure activities were completed in 2024 or out of the monitoring period, and only 2 (two) village (Tangkuyan and Kuala Kuamut) has gained the access.		
Project Proponent's Response		Date: 17/03/2025
1. The correct number of FTE is 38 for this reporting period of 2022 and 2023. The gold level criteria table and sections 2.1.1 of the MR were updated accordingly. The evidence in folder CAR#2 provided includes the summary of all FTE and the contracts. 2. The MR has been updated to state that the work has started in this reporting period to build the gravity feed water system in Kg Kuamut and Kg Tangkuyan. As end of Dec 2023, it was 30% completed. It was only fully constructed in May 2024. Nonetheless, the 245 number of people continued receiving benefits from the installation of gravity feed water system of Sg Tinkar by the project in the previous reported monitoring period. A water quality study was done by the project that showed its quality is still good. This data of people receiving clean water is now included in sections 1.2		
Documentation provided by the project proponent		
Revised MR Version 2; Evidence on 2022-2023 KRCP Employment in evidence folder CAR#2 Evidence of Sample of contracts (all contracts are available to the auditor's request) in folder CAR#2		

VVB's evaluation	Date: 27/03/2025
1. The MR is now corrected. The evidence clearly demonstrates that the total number of employees is 38 individuals. It increased from 32 to 38 since 2022 to 2023. 2. The information has been updated and deemed correct. Therefore CAR 02 is closed	

NC/CAR id.	03	Date: 14/02/2025
NC/CAR description		
The following errors have been found in section 1 of the MR: a. In section 1.1, according to the template: "Insert the brief summaries of two to five benefits of the project not captured by the standardized benefit metrics in Section 1.2". however, there are some benefits in section 1.1 which are repeated or are very similar than those in section 1.2, for example increased sustainable job and Biodiversity conservation. b. In section 1.1, under topic 3) increased job, it is said that a total of 104 people have been employed. However, in other parts is said that Employment generated by the project includes 40 full-time positions as of 2023. Additionally, the project has positively impacted the livelihoods of 145 people, including 41 women, by providing them with sustainable income-generating opportunities c. In section 1.2, the figure 2,951,057.2 tCO₂e and 2,596,930, which are the achievements of project life time are incorrect according to the sum between this MR and the previous one. d. In section 1.2, the 230 trainings are incorrect based on this MR and previous ones. Idem for the 124. Also there are errors within livelihoods and health achievements for the project life time (280 and 245). Also for the figure of 78 women under health conditions. Education is also incorrect since the lifetime achievement is lower than the MR achievement. There is also an error regarding the 495 people who increased water quality. Also for the 203 women who experienced water quality improvement. e. In section 1.2, under well-being, the 645 people is incorrect, and also the 278. Finally, the Biodiversity conservation is incorrect due to the following reasons: 1) in the summary of the MR it is stated that "In our 2022-2023 monitoring, we identified three Critically Endangered (CR) and 11 Endangered (EN) fauna species, all classified as 'trigger' species"; 2) regarding the project lifetime, the values differs when summing current and previous MR. f. In section 1.2, within employment category it is stated that there are 40 people employed. However, Section 2.3.16 states: "The Kuamut Project is committed to employing local communities as staff of the project. In this reporting period of 2022, the Kuamut Project hired a total of 11 individuals on a full-time basis and 17 on a part time basis. For 2023, 14 individuals were hired on FTE and 23 part-time. From this, a total of 7 are from Karamuak and Kuamut villages."		
Project Proponent's Response		Date: 17/03/2025

- a. Table 1.1 now describes unique project benefits not captured in table 1.2. Since these are different to the ones in the PD (which were similar to table 1.2) this was reported as minor change to the PD.
- b. Section 1.1. was modified entirely to include unique project benefits not captured in section 1.2. The information related to employment and livelihoods was corrected in all corresponding sections.
- c. At the time of MR1 there was no definition for the difference between reductions and removals so there was no alternative other than considering them all together. The correct values of reductions and removals are now included in table 1.2 as well as the cumulative over the project lifetime.
- d. We have reviewed and implemented all the corrections suggested by the auditor. The correct values during this monitoring period and the cumulative values are all revised in accordance to the evidence provided.
- e. Tracking wellbeing of community has been revised. The first monitoring period was 245 people and the second monitoring period was 362, the cumulative value is 607 people.

Biodiversity point 1). The correct number of Critically Endangered (CR) fauna species recorded during this monitoring period should be 3 (Bornean Orangutan: Pongo pygmaeus; Sunda Pangolin: Manis javanica and Helmeted Hornbill: Rhinoplax vigil). This number has now been changed in Table 1.2. We have not included the number of RTE tree species in the 'Achievements during the Monitoring Period' column as the RTE tree species are a result of sampling across different monitoring periods in 2015-2016 and 2021-2022. Instead, we have added the total number of RTE tree species recorded in the Project Area to the 'Achievements during the Project Lifetime' column as recorded so far.

Biodiversity point 2). Yes, the numbers of RTE species do not align when summed across the current and previous MR periods, resulting in differing totals. This is because the IUCN Red List status is dynamic, and some species have undergone changes in their status since the last monitoring period. Hence, the number of RTE species listed in the 'Achievements during the Project Lifetime' column of the table, reflects the number of species that have been observed at any point since project inception, but the IUCN status are reflective of April 2024 for fauna and March 2024 for flora. In addition, four and not six CR fauna species were observed in the Project Area since the project's inception (six referred to the number of CR plants); this has been changed in Table 1.2.

- f. Section 2.3.16 has been corrected to reflect the rightful numbers of employed personnel of the project and is consistent with section 1.2.

Documentation provided by the project proponent

Revised MR version 2

Evidence on employment and contracts in evidence folder CAR#3

Evidence on biodiversity included in the Biodiversity evidence folder (previously shared)

VVB's evaluation

Date: 27/03/2025

1. For this issue: a. The achievements during the monitoring period are the same than those achieved in the total project lifetime. Clarify and justify whether this is correct or not. Achievements during the project lifetime are formed by the sum of the different MR achievements. MR1+MR2+MR3... b. Provide additional details in the minor changes section. 2. This issue was totally updated, and there is not any problem now. 3. Value updated and deemed correct. 4. Training = ok; Total number of people with improved livelihoods or income generated as a result of project activities = not correct; Health = ok; Total number of people for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario = not correct; water = ok; 5. Wellbeing = ok; Biodiversity = ok 6. Section updated and deemed correct.		
Project Proponent's Response		Date: 31/03/2025
1a. Please note that the table 1.1 was modified entirely to describe unique project benefits not captured in table 1.2. This table differs from the PD and previous MR1, thus these benefits are registered for the first time, thus equal to the project lifetime. 1b. Additional details of the changes made in table 1.1 are provided in section 2.2.4 4. The following corrections were made: - Total number of people with improved livelihoods or income generated as a result of project activities: 135(MR1) + 257 (MR2) = 392 - Total number of people for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario: 42(MR1) + 2(MR2) = 44		
VVB's evaluation		Date: 02/04/2025
1. Clear and correct 2. Clear and correct Therefore, CAR 03 is closed		

NC/CAR id.	04	Date: 14/02/2025
NC/CAR description		

The template of the MR has specific requirements, however, in the following sections the project is not aligned with such requirements:

- a. In section 2, according to the template, “Provide a summary description of the implementation status of the project, including the following (no more than one page)”, however, this requirement is not met.
- b. In section 2.1.12, the net impact on SDG indicator column is not correct according to the template. Please review it and fill it out properly.
- c. In section 2.2.5 (and other sections of the document) the font style is not aligned with the MR template.
- d. In section 3.2.1, according to the template: “Include all relevant equations here and provide sufficient information to allow the reader to reproduce the calculation” however, this requirement is not met
- e. In section 3.2.4, the template indicates to remove the instructions. However, this requirement is not met. Also in section 2.5.6.
- f. In section 4.1.3, for projects validated at the Gold Level for climate change adaptation benefits: demonstrate how the project activities have assisted communities to adapt to the probable impacts of climate change. However, this requirement is not met.

Project Proponent's Response

Date 17/03/2025

- a. *Section 2 has been revised and condensed to comply with the one-page limit.*
- b. *The "Net Impact on the SDG Indicator" column has been reviewed and updated to align with the template requirements.*
- c. *Sections 2.2.5 and others – The font style throughout the document has been standardized to match the MR template.*
- d. *The equations and calculations provided in the PD were updated because of the availability of new more accurate and up-to-date datasets at the time of MR1 (now see updated Appendix 1 with relevant equations).*
- e. *Instructions have been removed from Sections 3.2.4 and 2.5.6.*
- f. *Section 4.1.3 has been refined to clearly demonstrate how the Kuamut Project enhances climate adaptation through ecosystem protection and forest regeneration. Key benefits, such as improved water availability, reduced soil erosion, and enhanced water quality, are now explicitly linked to adaptation outcomes. The revised section highlights how these efforts support sustainable agriculture, prevent land degradation, and strengthen community resilience, aligning with the Gold Level criteria as detailed in Section 3.3 of the MR.*

Documentation provided by the project proponent

Revised MR Version 2

VVB's evaluation		Date: 27/03/2025
a. Section updated. However, the value 1,838,1239.9 tCO₂e is incorrect. Review all figures to be aligned in the document and spreadsheet. b. Increase/decrease activity has been included. c. Updated and deemed correct. d. Information about equations, included in Annex 1, is deemed correct e. Instructions removed as per MR template. f. New finding: in section 2.1.2, the audit history does not include the current period of this report.		
Project Proponent's Response		Date: 31/03/2025
a. The correct values of 731,958 tCO₂e in total GHG emission reductions and 842,855 tCO₂e removals (after buffer) are now included. f. The current period is now included in section 2.1.2		
VVB's evaluation		Date: 02/04/2025
1. Section updated 2. Section updated Therefore CAR 04 is closed		

NC/CAR id.	05	Date: 14/02/2025
NC/CAR description		
Following errors are identified in section 2.1.12: a. within table 1, the 5th column has an incorrect name. b. please review the whole table and follow the instructions. It is filled out incorrectly.		
Project Proponent's Response		Date: 17/03/2025
<i>A revised SDG table for section 2.1.12 has been prepared, taking into account instructions provided.</i>		
Documentation provided by the project proponent		
Revised MR Version 2		
VVB's evaluation		Date: 27/03/2025
a. table corrected b. the table has been corrected. However, explain the origin of the 244 people increasing their economy. Provide the origin, and explain why this contribution in the current MR is the same than the whole project lifetime contribution.		
Project Proponent's Response		Date: 01/04/2025

b. The 244 people comprises of

- 173 from Kuamut and Karamuak;
- 33 are Sabahans from surrounding districts of Lahad Datu, Tawau, Keningau and Kota Kinabalu engaged as part time employees under SEARRP and PACOS to carry out specific job functions and
- 38 are Sabahans employed as full-time staff of SEARRP, PACOS and RBJ, from the district of Lahad Datu, Sandakan, Tawau and Keningau including 6 are from the local community of Kuamut and Karamuak.

The above information is already included under the column “Current project contributions”

The tracking of people earning above the poverty line was only made in this reporting period and henceforth, we will continue to track the earnings in all the activities conducted.

VVB’s evaluation

Date: 02/04/2025

The clarification provided is deemed correct and aligned with the evidence.

Therefore, CAR 05 is closed

NC/CAR id.

06

Date: 18/02/2025

NC/CAR description

Section 2.2.4 is referred to minor changes to PD. It is said that no changes were made to project design. However, there are changes in the people involved and also in the crediting period. Also in section 2.2.6.6, the changes in the project proponent are not reported. Therefore the information in the MR is not correct.

Project Proponent’s Response

Date: 26/02/2025

Section 2.2.4 now provides detailed information of the minor changes made compared to the project description.

Documentation provided by the project proponent

Revised MR Version 2

VVB’s evaluation

Date: 27/03/2025

The PP has provided more details in section 2.2.4.

However, according to the MR template: Include justification for the changes and demonstration that the changes are in conformance with the requirements of the Climate, Community & Biodiversity Standards criteria, and indicators

Apologize the VVB indicated in the first round of finding that there are deviations about the crediting period and the project design. However, section 2.2.4, according to the template, is more related to Community and BD changes.

Hence, the changes about crediting period has to be located in section below

Project Proponent’s Response

Date: 31/03/2025

The corresponding changes were moved to section 2.2.5. The following sentence was added to justify the changes made: *“These changes do not represent any changes in the design of the project neither deviate from the project description. These changes were made to ensure conformance with CCB requirements (program rules 3.5.6).”*

VVB’s evaluation
Date: 02/04/2025

CAR 06 is closed

NC/CAR id.
07
Date: 18/02/2025
NC/CAR description

The following incongruences have been found in section 2.3 of the MR:

1. In section 2.3.4 of the MR, with regards to the following statement: “During this monitoring period, these workshops were conducted in multiple villages including Kg. Tulang-Tulang, Kg. Desa Permai, Kg. Kuamut, Kg. Tangkuyan, Kg. Kenang-Kenangan, Kg. Tamoi, Kg. Karamuak Luar, Kg. Karamuak Dalam, and Kg. Tenaga Baru.” Section 2.3.9 does not indicate the Kenang Kenangan community. It neither is included in the 7 villages shapefile. Please explain that. The community is neither included in the FPIC consultations for 2022, and in one of the evidence provided this community is included within KG Tamoi.
2. In section 2.3.5, it is said that between 2021 and 2023... however this MR is 2022-2023. Also, for this section, provide specific examples for the 2022-2023 MR. Provide details about working conditions. Potential problems, and actions to mitigate them.
3. In section 2.3.9, according to the evidence provided, the dates are not accurate. For example the consultation on October 12th in Karamuok LLuar, within the evidence, the date is October 11th. Please review the dates.
4. In section 2.3.11 under the FPIC workshops, and According to the KRCP village profiles and social baselines: The data collected is presented as a village profile for each community. One village Kg.TenagaBaru was not included in the assessment because the community had delayed their decision to join the project implement during the FPIC workshop in their village.

• A total of 138 surveys were conducted for the social assessment for the 7 villages. The data collected is presented as a village profile for each community. One village - Kg. Tenaga Baru was not included in the assessment because the community had delayed their decision to join the project implement during the FPIC workshop in their village.

Project Proponent’s Response
Date: 27/02/2025

1. Kg Tamoi is the older name for Kg Kenang-Kenangan, and it is used interchangeably by the local communities. The 7 communities that participated in this reporting period are: Kg. Tulang-Tulang, Kg. Desa Permai, Kg. Kuamut, Kg. Tangkuyan in the Kuamut cluster and Kg. Kenang-Kenangan (old name is Kg Tamoi), Kg. Karamuak Dalam and Kg Karamuak Luar. The only community not included in this monitoring period is Kg Tenaga Baru in the Karamuak cluster. Therefore, only 7 communities are included in the shapefiles
2. The date in section 2.3.5 has been corrected to January 2022 and December 2023.
Section 2.3.5 is on Risks from the Project and No net Harm. A rewrite has been provided with listed activities in the description in that section including participation and involvement of stakeholders.
3. The date of the file name has been corrected to 11Oct 2022. Date of activity was held on the 11 October 2022.
4. Yes we can confirm that this was the case, we did the FPIC with 8 villages but only 7 agreed to participate during the reported monitoring period. Thus, profile of village and data collected are from 7 villages only.

Documentation provided by the project proponent

Revised MR version 2

VVB's evaluation
Date: 28/03/2025

1. The clarification is deemed correct. And the new information is reviewed and accepted by the VVB.
2. The information has updated and moved to annex 2
3. The date of October 2022 is still being 12th October, while the evidence and other sections of the document indicates 11th October.
4. Clarification is deemed correct.

Project Proponent's Response
Date: 31/03/2025

3. The date was corrected to 11 October 2022 in section 2.3.9

VVB's evaluation
Date: 02/04/2025

The date has been updated accordingly to the evidence.
CAR 07 is closed

NC/CAR id.
08
Date: 18/02/2025
NC/CAR description

The following errors were found in the community section:

1. In section 4.1.1 the community groups under section 4.1.1 are different than those which were validated on the PDD. Therefore a PDD deviation is required explaining the purpose of such change. Otherwise, the community groups must be the same than those explained in the PD. The names of the community groups need to be called as indicated in the PDD (verbatim). If there are any changes, a PDD deviation is required.
2. In section 4.4.2, the community groups identified such as marginalized or vulnerable, are named differently than the PDD.

Project Proponent's Response
Date: 27/02/2025

1. *The project has now re-written this section to reflect the rightful community groups as identified in the PD, Also, the community group of Women and Girls was included as considered relevant by the project.*
2. *The Project have reverted back to the original identification of marginalized and vulnerable community group in the PD but including youth as well. This is noted as a minor change to the PD section 2.2.4*

Documentation provided by the project proponent

Revised MR version 2

VVB's evaluation
Date: 28/03/2025

1. The groups must be the same than those validated in the PDD. If there is any change or any new inclusion, a PD Deviation must be raised. Use the same community groups (verbatim), and/or include a PD Deviation when necessary.
2. The groups must be the same than those validated in the PDD. If there is any change or any new inclusion, a PD Deviation must be raised. Use the same community groups (verbatim), and/or include a PD Deviation when necessary.

Project Proponent's Response
Date: 30/03/2025

1. The groups community groups of "Karamuak cluster and Kuamut cluster" as well as the "community groups not directly benefiting from project activities located further away from the 20km radius used to identify the communities participating in the project activities" that were identified in the PD are now in the MR.
2. The community group of "women from the Karamuak cluster and the Kuamut cluster" identified in the PD is now included in the MR as "women and youth in Karamuak and Kuamut Cluster" to also include youth population which was not covered in the PD. This minor change is noted in section 2.2.4

VVB's evaluation
Date: 02/04/2025

Both topics are corrected. CAR 08 is closed

NC/CAR id.	09	Date: 18/02/2025
NC/CAR description		
The following errors were identified under the Biodiversity section (5) of the MR: 1. In section 5.1.1, the name of the types of changes in Biodiversity must be named as in the PDD. If there are any changes in the definition of or nomenclature of these changes, a PDD deviation is needed. Complementarily, the template indicates "Impacts must include all those identified in the project description and any other unplanned impacts". 2. For all species named, please include their scientific name written properly. 3. In section 5.1.1, within "Gradual dispersal of Rare, Threatened or Endangered (RTE) species throughout the Project Area" the PP refers to appendix XX. Please indicate what is the correct appendix.		
Project Proponent's Response		Date: 13/03/2025
1. <i>The two main estimated changes to biodiversity outlined in the PDD are named in the same way in section 5.1.1. of the MR, Please note that the formats of the tables are slightly different, but the name of the types of changes is maintained the same. No deviation from PD is required.</i> 2. <i>Latin names for all species mentioned have been added throughout the MR text.</i> 3. <i>Reference to the appendix XX was removed, instead this should read: see 'Kuamut Project MR2 - Camera Trapping Report.docx' report in the 'Presence of HCV 1 species: Camera trapping 2022 and 2023' supporting evidence folders.</i>		
Documentation provided by the project proponent		
Revised MR version 2 Camera trapping report 2022 and 2023 in the biodiversity evidence folder (previously sent)		
VVB's evaluation		Date: 28/03/2025
1. The expected changes names in the PDD are: a. RTE floral and faunal species b. Mature forests and habitat complexity However, the tables of the MR are different than those in the PDD and the PP is combining both to adapt the BD change. This "issue" is due to the new MR template. 2. All names are properly written. 3. The evidence provided is deemed correct Therefore CAR 09 is closed		

NC/CAR id.	10	Date: 18/02/2025
NC/CAR description		

The following incongruences have been identified regarding carbon calculations:

1. According to the Carbon calculation summary spreadsheet, table of page 131 (the one about vintage period, baseline emissions, project emissions...) is incorrect. Please review all tables to align the figures with the output from R and the summary carbon calculation.
2. In several sections, the PP has included the loss from the loss event (1952.8 tco2e) in spite of is not clear or justified if the loss event and the discount is required or not.
3. In table 1.2, the emissions reductions and removals achieved during this MR are incorrectly reported. And hence, the total achievements during the project lifetime. (please, review all tables of the MR)

Project Proponent's Response

Date: 13/03/2025

1. *These have now been updated to follow the updated buffer calculation in version 1.4 of the methodology.*
2. *As outlined in Sections 3.1.3, Monitoring Plan, and 3.2.2, Project Emissions, our approach to forest disturbance monitoring in the project area conservatively assumes that any change in forest structure exceeding the 2.5-hectare threshold qualifies as a disturbance. Both the field visit ^{2(a)} and the review of satellite imagery archives confirmed that this area has experienced flooding for several years. However, sustained rainfall during the 2023 wet season caused an expansion of the flooded area [3.42 ha | 1952.8 tco2e].
Following the helicopter aerial survey of the flood event conducted during the audit field visit, discussions with the auditor confirmed that this area does not meet Verra's methodology's minimum threshold of 5% of the project's total carbon stock to be classified as a significant loss event (VCS Program Definitions, v4.4 - P.14). As a result, the submission of a loss event report to Verra was not required.
Despite this, we have conservatively included the area as a natural disturbance in the calculation of project emissions, as it exceeded the 2.5-hectare minimum threshold we established for such events.*
3. *The previous methodology did not have the ability to separate removals and reductions. These have been separated in this methodology and we had separated them to date, causing this confusion. This has now been corrected in table 1.2*

Documentation provided by the project proponent

Revised MR version 2

VVB's evaluation

Date: 28/03/2025

1. Figures are updated and do match with the carbon calculations.
2. The information is clear and deemed correct
3. Table updated and deemed correct

Therefore CAR 10 is closed

NC/CAR id.	11	Date: 18/02/2025
NC/CAR description		
Inconsistences description demonstrated in Section 2.5.10. It is described that no actions are taken that could influence or prejudice the outcome of any unresolved disputes. However, other paragraph describes the illegal logging and hunting activities in the section. And this could be assumed as conflict or disputes in historical and ongoing on the monitoring period. During the audit visit and interview with the RBJ Forest Patrol, the auditor has found that there is no longer any problem related to illegal logging and hunting activities.		
Project Proponent's Response		Date: 26/02/2025
<i>Section 2.5.10 was amended to clarify that no unresolved neither ongoing disputes took place within the project zone that are relevant to the project. The reference to historical past illegal activities was removed. It is important to clarify that such reference was made only to indicate activities that may have occurred in the past prior to the project implementation.</i>		
Documentation provided by the project proponent		
Revised MR Version 2.0 Minutes of the meetings with communities during the reported period in folder CAR 11& CL3		
VVB's evaluation		Date: 28/03/2025
Section updated and deemed correct. CAR 11 is closed		

NC/CAR id.	12	Date: 18/02/2025
NC/CAR description		
During the visit, the audit team has identified that most of the monitoring staff unknew the name of the species found within each plot. For the current verification the VVB considers that this issue is not a problem, since other staff knew the names and were able to identify also because all trees within the plot were labelled and crosschecked with the raw data However this issue could be a problem if new trees appear within the plot of whether the team only maintain people without botanical knowledge. The VVB request actions to solve the problem for this verification or future ones. This CAR could be moved into a FAR (Forward Action Request) if the actions are going to be taken for the next verification. (The VVB confirms that for this MR this is not an issue)		
Project Proponent's Response		Date: 27/02/2025
<i>The PP acknowledges the need to increase the capacities of the field work staff in relation to botanical identification of tree species. Prior to the next verification, the project will conduct capacity building sessions to increase knowledge in identification of tree species within the project area. We agree with a FAR for this purpose.</i>		
Documentation provided by the project proponent		

N/A	
VVB's evaluation	Date: 28/03/2025
The CAR will be moved into a Forward Action Request (FAR - 1) CAR 12 is closed	

Clarifications (CLs)

CL ID	01	Date: 18/02/2025
CL description		
The following clarifications are needed: 1. In section 1.2, within category Net estimated ERs in the project area against without project scenario, Please ,explain why in the previous MR this category was considered N/A, and in this 2nd MR, the achievements in the Project lifetime are not the same than those in the MR. 2. In section 2.1.4, the change in the project proponent table is not reported under minor deviations. This is a representative change from the PDD. Please clarify. 3. In section 2.1.9, please explain if there are other tools or modules used. Also, the version of the methodology is incorrect. 4. In section 2.1.12, the contributions over project lifetime column is not quantifiable. Please, include Brief description of the cumulative quantifiable impact of the project's activities related to the SDG indicator, over the project lifetime. Review the example of the template. 5. In section 2.1.12, regarding the ongoing provide clean water supply and access to medical facilities in Karamuak cluster, the figure and the quantifiable value is missing		
Project Proponent's Response		Date: 27/02/2025
1. <i>In the previous MR, this category was marked as N/A because the methodology version 1.3 applied at that time did not enable this level of disaggregation. For this second MR, the figures for the net estimated emission removals and reductions were separately calculated and reported, which was not done in the previous MR. This results in apparent differences when comparing lifetime achievements. The cumulative project lifetime figures now incorporate the updated methodology, field assessments, and adjusted calculations based on refined models and assumptions.</i> 2. <i>The Project Proponent remains the same. The change in contact person is reported under minor deviation in section 2.2.4.</i> 3. <i>Tools used included: Tool for AFOLU Non-Permanence Risk Analysis The methodology version used was 1.4, which incorporates the corrections and clarifications issued on 10 June 2024.</i> 4. <i>Section 2.1.12 has been updated, and numbers have been provided in the new version of the MR</i> 5. <i>Section 2.1.12 has been updated, and numbers have been provided in the new version of the MR</i>		

Documentation provided by the project proponent	
Revised MR version 2.0	
VVB's evaluation	Date: 28/03/2025
1. Clarification is deemed correct 2. Updated 3. Section updated and deemed correct 4. Section 2.1.12 updated and deemed correct 5. Filled out properly Therefore CL 01 is closed	

CL ID	02	Date: 18/02/2025
CL description		
Please, provide further clarifications or information about the following topics: 1. In section 2.2.1, Please provide specific dates (including the month) for all activities of Community and BD. Also provide further dates about the start date, previous MRs, public comments or others. 2. In section 2.2.1, provide evidence of the attendance lists of the field training on BD. 3. Under section 2.2.3, on table 2.2, it is said that this analysis was performed using the most up-to-date plot data from 2021-2022. Please, explain if the analysis is still valid for the current MP and why. 4. In section 2.2.7, please explain if there are other risks to the staff, not only related to CCB, but also more personal risks. 5. In section 2.2.8 à Please, under benefit permanence, explain whether the people involved in the project is still being benefited, and also, explain the measures and actions implemented from the previous MR. Hence provide More details		
Project Proponent's Response		Date: 25/02/2025

1. *Dates have been provided in section 2.2.1.*
2. *We have now added additional details to Table 2.3 in section 2.2.1 on the field training for the biodiversity monitoring component of the project. This provides references to all the supporting information, which included attendance lists for all training courses.*
3. *Yes, plot data from 2022 was used, and our analysis demonstrates this is valid. Moreover, Verra's VM0010 methodology for Improved Forest Management (IFM) does not explicitly specify the required frequency for vegetation plot surveys, allowing the use of any forest inventory data that is no more than 10 years old (VM0010 – V1.4 (Section 8.1.1)). Instead, the frequency of these inventories may vary depending on the specific characteristics of each project.*
As stated in the Project Description (PD), due to the challenges associated with monitoring vegetation plots in the project area and to efficiently capture the ecological dynamics of the forest, it was proposed to conduct surveys every five years. The most recent vegetation plot survey was carried out between 2021 and 2022 (with the majority measured in 2022), overlapping with the monitoring period. Our validation analysis (figure 3.3, page 102) shows exactly how well this plot data is working.
The proposed methodology for estimating and monitoring Aboveground Carbon Stock integrates vegetation plot data with Remote Sensing techniques to generate accurate annual biomass maps over an eight-year period (2016–2024). This approach enables the estimation of forest change rates by fitting linear models. By adopting this method, we significantly increase the number of observations used to estimate growth rates, thereby improving overall accuracy and reducing the variance in biomass growth estimates.
4. *Following the VCS/CCB template requirements, it asks for using the table to identify and describe actions needed and implemented to mitigate likely natural and human-induced risks to the expected climate, community, and biodiversity benefits during this monitoring period. Thus, it doesn't require information on broader staff-related risks. Specific information on risks to the staff is provided in Appendix 2 and under section 2.3.17 Occupational Safety Assessment (evidence provided).*
5. *The project continues to provide benefits to the local communities, ensuring long-term sustainability beyond the initial monitoring period. Since the last report, activities such as training, capacity building, and sustainable livelihood initiatives have been maintained and expanded. Community members remain actively engaged, with some initiatives now independently managed, reducing reliance on external support.*
Additionally, actions implemented since the previous monitoring period include enhanced biodiversity and forest regrowth monitoring, strengthened fire resilience strategies, and increased stakeholder engagement to support policy influence. More detailed information, including quantitative data, has been incorporated into the updated MR.

Documentation provided by the project proponent

MR version 2	
Evidence on attendance lists of the field training on BD in folder Evidence/Biodiversity/Other documents (previously sent)	
Evidence on risks to staff provided in folder CL 2	
VVB's evaluation	Date: 28/03/2025
1. The section has been updated with very clear information 2. Evidence provided is deemed correct. 3. Clarification is deemed correct 4. The justification is deemed correct 5. New information has been included. Hence, CL 02 is deemed closed	

CL ID	03	Date: 18/02/2025
CL description		
the following clarifications are needed under section 2.3: 1. In section 2.3.1 it is stated that No changes in stakeholder identification were recorded since validation. However, section 2.2.6.5 indicates the following: "An initial project scoping and identification of stakeholder communities in 2016, followed by community engagement activities conducted from 2017-2019 (referred to collectively here as the Social Baseline Assessment), served to identify communities situated within a 20 km radius of the project area and identifying those who have a stake in the project area. On this basis the project designated a "project zone", which is where the project has and will continue to implement initiatives that are designed to deliver net positive benefits to target communities. The following map shows the location of the project-engaged communities". Please describe the stakeholder identification process. Also, The process(es) used to identify stakeholders likely impacted by the project and a list of such stakeholders. 2. In section 2.3.2, please explain the language of the materials shared. Also, Explain dates of such meetings, and provide evidence. Also, provide further details about the sharing methods, specifically workshops and reports and explain what documents have been shared. 3. In section 2.3.3 please, provide the number of meetings carried out during this MR. also explain how these meetings were informed. According to CCB requirements, explain how has been actively disseminated to communities in relevant local or regional languages and how widely publicized information meetings have been held with communities and other stakeholders. Finally, the summaries provided as evidence are those from the MR1. 4. In section 2.3.3, regarding the following statement: "The translated summaries are distributed in physical copies at the local level", please explain where have these summaries been located. 5. In section 2.3.6, please provide more details and explain the role of PACOS trust. Who forms this team , the functions, etc		
Project Proponent's Response		Date: 18/03/2025

1. *The initial stakeholder identification process was conducted in 2016 during the project scoping phase and was further refined through community engagement activities from 2017 to 2019 as part of the Social Baseline Assessment. This was reported in the previous monitoring period. Section 2.1.8 of the PD provides a detailed description of the stakeholder identification process which was validated in 2023. There were no changes stakeholder identification since then, therefore the section 2.3.1 indicates that No changes in stakeholder identification were recorded since validation, which complies with latest VCS/CCB template.*
2. *We have updated the Monitoring Report to explicitly include the translation of all shared materials into Bahasa Malaysia, details on dissemination methods (e.g., village leaders, WhatsApp, bulletin boards, and community gatherings), and confirmation that all meetings were documented with attendance records, photos, and minutes. Please review Evidence Folder CAR #11 & CL #3 and CL#3*
3. *The monitoring report has been updated to include the summary and details of the 22 community engagement activities conducted during this period. The report of all the 22 community engagement sessions is in the evidence folder marked CL#3*
4. *The translated summaries have been physically distributed in village halls, schools, and public bulletin boards in each participating village. Additionally, copies were shared directly with village leaders members and the Community Committee for further dissemination. Digital versions were made available on the project website and shared via WhatsApp groups and local networks to ensure broad accessibility. Evidence shown during the field visit included pictures when information was shared.*
5. *PACOS Trust, a community-based organization in Sabah, Malaysia, is a key project partner of this project, responsible for community engagement, FPIC processes, and other community-related activities. Their team, composed of experienced organizers and facilitators, ensures that costs, risks, and benefits are transparently communicated through participatory methods. They use clear language, visual aids, and timely information-sharing, while also maintaining continuous engagement through meetings and feedback mechanisms to empower communities in informed decision-making. More information on PACOS Trust can be sourced from <https://pacostrust.com/about/who-are-we/>*

Documentation provided by the project proponent

Revised MR version 2.0
Reports of engagement activities in evidence folder CL#3
Permian Global web page link
Pacos Trust web page link

VVB's evaluation
Date: 31/03/2025

1. Updated and deemed correct
2. Section updated and deemed correct
3. Updated and deemed correct
4. Clarification deemed correct
5. Clarification is deemed correct

Therefore CL 03 is closed

CL ID	04	Date: 18/02/2025
CL description		
Please clarify or demonstrate the following sections: 1. In section 2.3.6, it is stated that, to ensure that information was understandable, it was communicated in clear and simple language, avoiding technical jargon. Visual aids such as charts, infographics, and illustrations were used to explain complex concepts. Regarding the levels of understanding, please demonstrate that the information has been provided to communities in an understandable form and in a timely manner prior to any decision they may have been asked to make with respect to participation in the project. 2. Under section 2.3.8, provide evidence about the Follow-up communications: One month before the site visit, follow-up reminders were sent out through various channels, including letters, emails, and text messages, to ensure that everyone was aware and had the visit on their schedules. 3. In section 2.3.9, Provide evidence of the MoUS. 4. In section 2.3.9, there are some meetings and consultations in different dates of 2022, but, what about 2023? There are several evidence and minutes for 2022, but they have not been reported in the MR. 5. In section 2.3.9, Provide specific details and further information. When were the meetings carried out, where, etc. regarding the stakeholder input, please provide more examples. 6. In section 2.3.10, regarding the following statement, "The project team has also engaged in continuous socioeconomic studies to better understand the needs and challenges of the communities. These studies involve detailed data collection on household incomes, resource management, and community needs, which are then used to refine project activities and ensure they are aligned with the community's priorities", please provide the evidence. 7. In section 2.3.10, provide explanations about the initiatives to enhance the livelihoods (CDP Draft Presentation...); also, explain if the CDP provided are the ones developed during this MR or if there are more. Also, regarding the table of comments received and actions taken, explain in which CDP was this topic discussed. 8. In section 2.3.10, regarding public comments, during the visit the VVB has known that the PP received a public comment out of the public period. However, this comment needs to be reported, addressed and explained in such section.		
Project Proponent's Response		Date: 17/03/2025

<i>The MR has been updated to demonstrate that information was provided in an understandable and timely manner before community participation. The FPIC process, led by PACOS Trust, ensured clear communication through local languages, visual aids, and interactive discussions. Please refer to Section 2.3.6 for details and Review CL # 3, Item # 1 Evidence folder.</i> <i>The requested information has been provided in Folder CL#4, Item CL #1 & 2 for your review.</i> <i>In Evidence Folder marked CL#4 item 3</i> <i>Information has been updated in the MR in section 2.3.9 with dates of meetings in 2023 added.</i> <i>Section 2.3.9 has been updated to include specific details on meeting dates, locations, and additional stakeholder input, addressing your observation.</i> <i>The Socio-economic baseline study report was the output of the survey and saved in the Evidence Folder CL#4 item 6</i> <i>The CDP was developed in this monitoring report period of 2022-2023. The agreed CDP was presented and agreed by the community in the meeting dated 25 January 2023. The documentation is in the evidence folder. In summary, the community wanted a focus on agriculture activities including cocoa farming, fishing, tree nursery and backyard garden establishment for food security i.e. rice cultivation as part of their community development plan. But priority setting by the community during the subsequent benefit sharing mechanism workshop, dictates that access to basic infrastructure like water supply be prioritized. All information are captured in the Evidence Folder CL#4 item 7</i> <i>Public comment received after the public consultation period has been added to section 2.3.10 Continued consultation and adaptive management</i>	
Documentation provided by the project proponent	
Revised MR version 2 Reports of CDP Workshop and BSM workshop in Evidence folder CL#4 Evidence Folder CL #3, Item # 1 with evidence on communications, translations to local language, etc. Public comment and response (previously shared)	
VVB's evaluation	Date: 31/03/2025
- The information provided is clear. Also the evidence is deemed correct - The evidence provided is deemed correct - The evidence provided is deemed correct - Section updated and evidence deemed correct - The socio-economic study provided is deemed correct - Section updated, and evidence provided considered correct - Section updated, and evidence provided considered correct - Provide further details about the public comment. The evidence was provided and discussed during the onsite visit	
Project Proponent's Response	Date: 01/04/2025

A summary of the comments received are included in section 2.3.10		
VVB's evaluation		Date: 02/04/2025
Further details are included in section 2.3.10 about the public comments. the response provided by the PP was assessed and is considered very clear		
CL 04 is closed		

CL ID	05	Date: 18/02/2025
CL description		

Please provide further details and evidence when needed, under the following sections:

1. In section 2.3.1.1, regarding the progress meetings and briefings, Provide further details about these meetings. Dates and evidence.
2. In section 2.3.11, regarding 5. Surveys and baseline studies, Please, provide the results for the 2023 social baseline. Also provide the evidence of the statement: “documentation and evidence of adequate information sharing”. Also, provide further details about the conclusions and specific dates to find such evidence. In general, for these meetings, more real information about what occurred in this MR is missing.
3. The PP has claim that no grievance reported in the monitoring period. However, there is no evidence provided and not clear description of procedures in the section 2.3.14 of MR.
4. In section 2.3.12, for this section, please provide specific values and specific information for the 22-23 period. The information provided is very generic, such as the information of the PDD.
5. Please, provide the evidence of the staff handbook, the safety SOPs and other policies.
6. In section 2.3.14, provide additional details about suhakam. Regarding the GRM, please try to align the information of the VCS standard 3.18.4 within this section, including the different steps and mandatory requirements.
7. In section 2.4.1, regarding the trainings of the staff, please provide details about the achievements occurred in this MR.
8. In section 2.5.1, provide the evidence about the following statement: “The Kuamut Management Committee met twice for the duration of this 2nd monitoring report, with its 1st meeting held on the 29 September 2022 and the 2nd meeting on the 25 August 2023 deliberating on matters of activities that has been implemented by the project partners including patrolling, biodiversity monitoring and preparation for the verification of the Kuamut Project, under the VERRA’s standards of Voluntary Carbon and Climate, Community and Biodiversity Assurance.”
9. In section 2.3.4 provide the evidence of the following: Emphasized the importance of community engagement and accurate documentation. Publicity: Announced internally within PACOS Trust and to community organizers. Invitations sent to selected field staff and community organizers.
10. Under section 2.3.4 provide evidence about: Announced through village leaders, flyers, and posters.; Word-of-mouth communication within the communities.; Use of community bulletin boards and local gathering places to post information.
11. Within section 2.3.4, regarding the progress meetings and briefings, please, explain when and how many were done. For each interview or consultation, please provide additional details, include dates, results and if possible, try to attach any picture. Ensure that the dates do match with the evidence provided.

Project Proponent’s Response

Date: 17/03/2025

1. Section 2.3.11 was revised and includes details of the dates meetings took place. A summary of the activities with local community is captured in the evidence folder with names of meetings and dates, entitled "2022-2023 KRCP Document Summary" and all corresponding reports in the evidence folder CL#5 item no 1.
2. Socio economic baseline survey report in the evidence folder CL#5 item 2. All meeting reports are in the evidence folder where the reports indicate the date of the activities, the number of people involved, the issues presented, discussed and agreed on, and evidence of attendance and pictures of the meetings are captured in the respective report itself.
3. Section 2.3.14 has been updated to reflect that there were no grievances reported or received in this reporting period. A description on procedures to receive and handle has been provided in the revised section. Evidence was provided in evidence folder CL#5 item no 3.
4. The MR has been revised to reflect specific sessions conducted with the local communities. Summary tables of meetings conducted and training sessions held has been updated in section 2.3.12
5. Staff Handbook and Safety Protocols of Permian and Partners are in the Evidence folder CL#5 item 5.
6. Details of SUHAKAM and compliance with VCS Standard 3.18.4 were included in section 2.3.14 of the MR The Human Rights Commission of Malaysia (SUHAKAM) was established by Parliament under the [Human Rights Commission of Malaysia Act 1999 \[Act 597\]](#). The ACT is included in the Evidence folder CL#5 item 6.
7. The MR has been updated to include a summary of the training topics and involvement of community members. The summary and reports of each training is included in the evidence folder CL#5 item 7
8. The minutes of the 2 Kuamut Management Committee meetings are in the folder of Evidence CL#5 item 8
9. Section 2.3.4 has been updated to provide the list of all the 22 community engagement sessions. All Community Organizers and field staffs of KRCP project are required to participate in any training sessions organized for them and this is communicated via email and WA messages.
10. This is in reference to ~~the~~ CDP workshops with the local community. Prior to the CDP development, during the FPIC process and MOU between the Project and Villagers, an AJK Community Committee was set up. These are representatives of the local community who have been nominated by their communities to be part of the project. The Project communicated with the AJK about the upcoming CDP workshop via WA, letters and calls with the village heads and to communicate. Letters to community leaders of the announcement attached in Evidence folder CL#5 item 10.
11. A total of 22 workshops, meetings and trainings were held in this reporting period between the project and local community. A summary list of the engagement sessions with dates and number of participants are described in the section 2.3.4 Further details of those sessions are in the Evidence folder CL#5

Documentation provided by the project proponent

Revised MR

All evidence described in the response above is included in Folder marked CL#5

VVB's evaluation	Date: 31/03/2025
1. The information in the whole 2.3 section is aligned with the VVB requirement. The evidence provided is deemed correct. 2. The evidence provided is deemed correct 3. The procedures are properly described now 4. Evidence provided is deemed correct 5. All SOPs and Policies are provided and deemed correct 6. Evidence provided and section updated 7. Evidence provided is deemed correct 8. Evidence provided and deemed correct 9. Section updated and deemed correct 10. Evidence provided is deemed correct 11. Section updated and deemed correct Therefore CL 05 is closed	

CL ID	06	Date: 18/02/2025
CL description		

Please, provide additional clarifications or evidence about the following:

1. In section 2.5.3, explain if any change has occurred in this MR with regards to the human rights or if it remains equal.
2. In section 2.5.5 please provide in the MR the definition of class I and Class II forest.
3. In section 2.5.6, explain if there is any type of funds or money for the communities, or if all benefits are practical cases.
4. In section 2.5.7, the section states: "This phase identified 14 settlements, with 11 inhabited, categorized into the Karamuak and Kuamut clusters", however explain why in the villages shapfile only there are 8 villages or settlements.

OBJECTID	Name	Habitation
7	Kg. Tenaga Baru	Inhabited
8	Kg. Keramuak L...	Inhabited
9	Kg. Keramuak D...	Inhabited
10	Kg. Tamoi (Kena...	Inhabited
11	Kg. Tulang-Tula...	Inhabited
12	Kg. Desa Permai	Inhabited
13	Kg. Kuamut	Inhabited
14	Kg. Tangkuyan	Inhabited

5. In section 2.5.7, Please explain and summarize the FPIC carried out during this MR and if the PP has identified some new topics.
6. Under section 2.5.8, the MR states that the project area contains no permanent human settlements. Explain if these settlements have rights or further details.
7. In section 2.5.8, provide the evidence for the sole license holder of the Project Area in Annex 3
8. In section 2.5.9, it is said that the project collaborate with local law enforcement to take legal actions against perpetrators of illegal activities. Please explain who are these local law people.
9. In section 2.5.9, please provide some evidence to demonstrate the mitigation for illegal activities. For example, the workshops and campaigns, or even the school programs.

Project Proponent's Response

Date: 17/03/2025

1. *There is no change to the rights of the community in this reporting period. The whole Project area is a Protected Area, Class I and as such entry into the area is prohibited unless written approval from the Sabah Forestry Department. Section 2.5.3 has been updated to reflect this.*
2. *MR Section 2.5.5 has been updated to provide definition of Class 1 and Class 2 of Sabah Forest Reserve.
Definition of Class 1 and Class 2 of Sabah Forest Reserve as per Sabah Forestry Department website link <https://forest.sabah.gov.my/forest-resources/#:~:text=Class%201%20%2D%20Protection%20Forest%20Reserve,permitted%20in%20this%20forest%20reserve>.*
3. *As part of the project's Benefit Sharing Mechanism, a monthly cash payment of RM100 was discussed. However, it was communicated that this payment would only commence after the sale of carbon credits.
All other project benefits will be provided in non-cash form. Key initiatives, including the gravity feed water system and the procurement of a dedicated medical boat for the Kuamut cluster, were launched in 2023.*
4. *To avoid confusion with the process undertook during the initial stages of the project, that sentence referring to 14 settlements was removed. Please note that some villages were not inhabited, and some were abandoned from the time the initial surveys were conducted (see PD section 2.1.8). The MR has been updated to reflect that only 8 villages lie within the 20km radius with 2 villages on the periphery i.e. Kg Balat and Kg Imbak. The 8 villages are within the 20km radius were engaged as part of the project's community. These eight villages were identified in the Project Design phase (PD section 2.1.8).*
5. *The Free, Prior, and Informed Consent (FPIC) process was conducted through workshop-style engagements, where community members were introduced to the Kuamut Rainforest Conservation Project (KRCP). The sessions covered key aspects of the project, including its objectives, implementing partners, expected impacts over the next 30 years, and the role of local communities in achieving these goals.
A key outcome of the FPIC process was the identification of community needs and priorities, which directly informed the co-development of the Community Development Plan (CDP). As a result, seven villages agreed to participate in the project, while one village, Kg Tenaga Baru, opted out.*
6. *There are no human settlements in the Kuamut Forest Reserve. Therefore, there is no human being residing in the area; thus no one has any legal rights to the area. Please note that the area is a Class I category of protection which prevents any settlements neither access to the area.*
7. *Permian has an agreement in place with the State Government of Sabah which states the appointment of Permian to carry out protection and restoration activities in the Project Area and the rights given to access and market the carbon credits in the Project Area. Agreement is located in the Evidence folder marked CL#6 item7. Confidential document mentioned in Appendix 3.*
8. *RBJ is responsible for patrolling the project area and represents the local law enforcement together with the Sabah Wildlife Department, on matters of illegal hunting of any protected species of Sabah and Sabah Forestry Department, on matters of illegal felling of timber species. Section 2.5.9 was amended to reflect this clarification.*
9. *The Project in collaboration with project partner, RBJ Sdn Bhd, carried out monitoring and patrolling activities on the ground, as a means to deter potential illegal loggers/hunters coming*

<i>into the area. Some of the reports of the patrolling activities are in Evidence Folder CL#6 item no 9.</i>		
Documentation provided by the project proponent		
Revised MR 2 Evidence Folder CL#6		
VVB's evaluation		Date: 31/03/2025
1. Clarification provided is deemed correct 2. Section updated and hence, deemed clarified. 3. Please provide the evidence for such agreement. The sales of credits already occurred after the previous MR. 4. Clarification is deemed correct 5. Clarification is deemed correct 6. Clarification is deemed correct 7. The evidence provided is deemed correct 8. The evidence provided is considered correct 9. The evidence provided is deemed correct		
Project Proponent's Response		Date: 01/04/2025
Please note that the payment of RM100 was only discussed during this reported monitoring period as mentioned in the response above (2022-2023) and the sale of the carbon credits took place in March 2024, thus no payments were made during this monitoring period. Nonetheless, an example of the signed agreement with the community is provided in the evidence folder CL#06		
VVB's evaluation		Date: 02/04/2025
The evidence provided is deemed correct. Hence, CL 06 is closed		
CL ID	07	Date: 18/02/2025
CL description		

Please clarify the following under section 3.1.1:

1. In section 3.1.1, under the parameter “Relationship between Aboveground Carbon Density and LiDAR based Top of Canopy Height” the purpose of this parameter and the justification are missing.; idem for Biomass conversion and expansion factor applicable to wood removals in the project area.
2. In section 3.1.1, from the parameter “residual Stand Damage Factor” Onwards, the parameters identified in the MR did not appear in the PDD in spite of the section is parameters available at validation. These parameters are reported in the previous MR but not in the PDD. Please explain the reason. If there is a change in the PDD, a PD Deviation is required in spite of the previous VVB did not detect the change and it is already verified.
3. In section 3.1.1, regarding the equation 4 from chavé: $AGBest = 0.0673 \times (pD2H)^{0.976}$, please explain if this equation is used for ex-post calculations. Also explain if there are not equations for none of the trees in the project area.
4. In section 3.1.1, under the parameter SLF (fraction of wood products), the paper and paperboard values are missing.
5. In section 3.1.1, explain the source and the value applied for the parameter “forest regrowth rate post timber harvest for stratum I”
6. In section 3.1.1 under parameter “mean volume of extracted timber per unit area for species j in stratum I”, please explain the source and where is located such evidence.
7. regarding the parameter “the area of stratum I in land parcel p that was harvested 1 year ago”, please provide the value applied within the parameter table.

Project Proponent’s Response

Date: 18/03/2025

1. The justification of parameters in section 3.1.1 have been added to the tables.
2. The parameters added in the MR for “Residual Stand Damage Factor” were updated following Verra’s request for more accurate species conservation information during the previous PRR. Once the protected species were updated this subsequently affect the Residual Stand Damage Factor. This effect of using more up-to-date datasets is now described as a PD deviation.
3. The equation is used for ex-post calculations and species specific based on the wood density parameter. Explanation/clarification added to the comments section of the table in section 3.1.1.
4. Paper and paperboard values added to the parameters list.
5. The sources and values applied for each stratum are explained in detail in the section “Justification of choice of data or description of measurement methods and procedures applied”. Also, the value zero (0) is indicated for stratum 1 which is a no-go area.
6. Clarification added to the comments section of the table which reads: “This comes from plot data and Lidar maps, combined with what is allowed based on policy”. The evidence includes the plot data, lidar data and the timber volume maps in the data folders provided.
7. These values correspond to the baseline but were not clearly reported in the PD template. These are not monitored values but we have added them here for clarification and in the MR..

Year of Logging	Area (ha)
2016	6177.69
2017	7902.44
2018	5587.26
2019	9036.81
2020	5915.17
2021	2213.69
2022	0
2023	0

Documentation provided by the project proponent

VVB’s evaluation

Date: 27/03/2025

1. The justification and the purpose of the parameters is now included under section 3.1.1
2. The PD Deviation has been applied. However, indicate that those changes provide from the previous MR (and were already accepted by Verra) and through previous PRR
3. Justification is deemed correct
4. The values have been added
5. Updated
6. Updated
7. Updated and deemed correct

Project Proponent’s Response

Date: 31/03/2025

Section 2.2.5 now includes the following explanation of the new parameters added: *“Additional data and parameters for monitoring GHG emission reductions and removals were included in the previous MR that was approved by VERRA and the VVB. These were also included in the current MR”*

VVB’s evaluation

Date: 02/04/2025

Section updated and deemed correct. CL 07 is closed

CL ID

08

Date: 18/02/2025

CL description

Please, clarify the following topics under section 3.1.2 and 3.1.3:

1. The parameter “Annual carbon stock change in aboveground biomass of trees, in each strata, in the project scenario” is duplicated.
2. The parameter “Aboveground biomass stock present in the project scenario (but absent in the baseline scenario) before burning” is stated that it is N/A. however explain If it’s not applicable or if is applicable but the value is 0 due to the lack of fires.
3. In section 3.1.2, explain if is possible to provide the value for the parameter “carbon stock in ABGB in areas disturbed!. Idem for Biomass carbon of trees cut and removed through illegal logging.
4. In section 3.1.3, please provide a scheme of the structure of the personnel and the company. also the competencies of the personnel carrying out these activities.
5. In section 3.1.3à please explain where is possible to find the appendix 1, or provide it as evidence. Also the appendix 4.
6. In section 3.1.3 à please, explain the following sentence of biomass mapping: “It is important to note that while the forest growth monitoring process utilises both remote sensing and field measurements, it is very much supported with the field plot measurements, and it is possible to accurately model the regrowth without measuring the field plots every monitoring period.”
7. Under section 3.1.3 à please provide the SOPs indicated in the header “ the procedures used for handling...” also under this section it is stated (see figure), but the number of the figure is missing.

Project Proponent’s Response

Date: 28/02/2025

<i>The duplicated table has been removed.</i> <i>This parameter is applicable but the value is '0' due to the lack of fire events during the monitoring period. The value monitored has been updated from N/A to '0'.</i> <i>The carbon loss (1952.8 tC·ha⁻¹) has now been added to the table's value monitored row.</i> <i>Section 3.1.3 now includes a diagram of the organizational structure and description of the responsibilities and competencies of the personnel that carried out the monitoring activities.</i> <i>Appendix 1 can be found at the end of the document. All references to appendix 4 were typos, these have been corrected.</i> <i>This statement highlights that the approach used for forest growth monitoring enables the accurate estimation of growth values without requiring annual measurements or measurements for each monitoring period. The modelling used to estimate AGB and forest regrowth integrates field plot measurements with remote sensing data to produce precise annual biomass and growth estimates.</i> <i>The SOPs mentioned in this section actually refer to the specific SOPs for each field activity. For example, vegetation plot surveys, camera-trapping, audio-recording surveys, etc; have their own SOPs embedded for these activities. Field activities and data reporting should follow these SOPs, and the procedure for organising and storing data is suggested through the Figure 3.12 flowchart. Specific field activity SOPs have been shared with the VVB under the evidence folders. Figure caption and cross reference have been updated (Figure 3. 12).</i>		
Documentation provided by the project proponent		
MR version 2 Field activities SOPs (CL#8)		
VVB's evaluation		Date: 31/03/2025
- Section updated - Parameter updated - Parameter updated - Diagram and functions are properly provided - Clarification is considered correct - Clarification is deemed correct - Updated and SOPs provided Therefore, CL 08 is closed		
CL ID	09	Date: 18/02/2025
CL description		

Please, explain the following statements:

1. Under section 3.1.4, please, based on the VCS standard and CCB requirements, please Explain how this dissemination is done in appropriate means.
2. it is said that as indicated in section 2.2.4 the baseline has been updated. However, this is not explained in section 2.2.4.
3. in section 3.2.3, under table 3.8, explain if the parameter LFME for stratum 3 and 4 is fixed or differs during each audit. According to section 3.1.1 and 3.1.2, the parameter 0.2 is not reported.
4. In section 3.2.4, within the vintage period table, provide further details within the explanations for the difference between ex-ante and ex-post

Project Proponent's Response

Date: 01/03/2025

1. Section 3.1.4 has been revised including more details on how dissemination was done through the internet and with local communities and stakeholders.
2. Please note that the baseline revision is described under PD deviation and Methodology deviation since it is considered more than a minor change to the PD
3. LFME has been added to section 3.1.2. LFME is the "Leakage factor for market-effects calculations," as defined here: https://verra.org/wp-content/uploads/2024/10/VM0010_IFM_LtPF_v1.4_Clean_10282024.pdf#page=48 it is reassessed each MR but in response to its two input parameters PMPi and PMPft - PMPft is not monitored because we need a state-wide biomass map which we only have for 2016 and Sabah Forestry have not provided updated harvest data to us. PMPi uses the estimated timber harvest from the MR.
4. A conservative ongoing forest growth rate was used for the PD. The forest has recovered from its historic degradation extremely positively – this accounts for a significant proportion of the difference between ex-ante and ex-post. The other factor is that during since the writing of the PD, we were provided with a list of protected tree species – these species made up a far smaller proportion of the tree community than was estimated during the PD and therefore the amount of available harvestable timber was underestimated during the PD. These points are now summarised in the “Explanation for the difference” column of the table in 3.2.4

Documentation provided by the project proponent

VVB's evaluation

Date: 02/04/2025

1. Section updated and deemed correct
2. The explanation provided is deemed correct
3. Clarified
4. Section updated

Therefore CL09 is closed

CL ID

10

Date: 18/02/2025

CL description

Please clarify the following under the community section (4) or provide additional information:

1. In section 4.1.1, the following info is missing in the community groups: according to the template: "Describe whether the impact is predicted or actual, direct, or indirect, and whether it is a benefit, cost, or risk"
2. In section 4.1.2, regarding the following statement : The project will introduce and support various small-scale business opportunities such as agriculture, cocoa processing, and eco-tourism, please provide the evidence.
3. please explain what are the HCVs for the community. Also, In the PD section 2.17. Project Zone map, Figure 7 and 8. It is demonstrate the existing of HCV 5 and HCV 6 in the project zone and stated "Some HCV 5 (gathering of natural resources for subsistence) and HCV 6 (sites of cultural significance) are situated within the northern part of the project area near both the Kuamut and Karamuak clusters, though no agricultural areas were identified inside the project area". The audit visit and interview with the communities also clear that local community gathering resources for subsistence during MR.
The following issue:
 - a. There is no clear description and activities of HCV 5 and HCV 6 demonstrated during monitoring period in the MR
 - b. There are no clear activities demonstrated in order to the right of statutory or customary tenure, use, access or management rights to lands, territories and resources in the project zone (HCV 5 and HCV 6) refer to CCB standard (G5.2-3)
4. In section 4.3.2 the PACOS_progress report 1 is repeated. Explain if this is the same.
5. In section 4.4.1 à provide evidence to demonstrate the short term and long term community benefits, such as the access to clean water, the healthcare access, the educational support or others. Idem for the roads and transportation plans.

Project Proponent's Response

Date: 17/03/2025

1. *Tables in section 4.1.1 have been updated indicating whether the impact is predicted or actual, direct, or indirect, and whether it is a benefit, cost, or risk.*
2. *The statement "The project will introduce and support various small-scale business opportunities..." was removed as it is an activity to be implemented in the future*
3. *The PD section 4.2.4 states as follows: "Since the Project Area has been designated as a Class I Forest Reserve under the 1968 Forest Enactment it now enjoys the status of Totally Protected Area under state law, meaning that all unauthorized access is prohibited together with all forms of land clearance or harvesting of natural resources. This lends full legal protection to all HCVs within the Project Area, including those of relevance to local communities such as ancestral settlements." Therefore*
 - a. *HCV 5 and HCV 6 are recognized by the project as identified in the PD, nonetheless the access to these areas is legally prohibited.*
 - b. *The Class I Forest reserve determines strict protection of the area, which was defined prior to the project start. Thus, right of statutory or customary tenure, use, access or management rights to lands is limited by the protection status of the project area*
4. *The repeated reference to Pacos progress report 1 was removed.*
5. *Section 4.4.1 has been revised to detail the project's contribution to community benefit in this reporting period. Evidence of the Reports are in the evidence folder marked CL#10 item no 5*

Documentation provided by the project proponent		
Revised MR version 2		
Evidence of MOA between Project and AJK Community Committee on Gravity Feed Water System establishment and Feasibility Report on Access to Clean water in Folder marked CL10 item 5		
VVB's evaluation		Date: 31/03/2025
1. Section updated 2. Section updated 3. Clarification is deemed correct 4. Section updated 5. The clarification and the evidence are deemed correct Therefore CL 10 is closed		
CL ID	11	Date: 18/02/2025
CL description		
Please, clarify the following under biodiversity section (5): 1. In section 5.1.4 à please indicate or clarify what are the HCVs for the Biodiversity section. 2. In section 5.2.1 àplease, describe the actions taken to mitigate the negative impact. 3. In section 5.3.1 àthe info about BD monitoring is very complete. However, please provide a summary including the following information: • All biodiversity variables identified in the monitoring plan. • Dates, frequency, locations, sampling methods used, and other information concerning the monitoring process. •Results and evaluation of monitoring. 4. In section 5.4.1,à under trigger species, the Bornean orangutan is described twice.		
Project Proponent's Response		Date: 13/03/2025

1. *We have added text at the start of section 5.1.4 to clarify the environmental HCVs described in the Biodiversity section — HCV 1, 2, 3, and 4. The justification for each classification is now explained, including the presence of RTE species that qualify the area as HCV 1, the large contiguous forest landscape supporting ecosystem integrity that qualifies it as HCV 2, the likely presence of small areas of kerangas (Sundaland heath) forest that would qualify certain parts as HCV 3, and the critical ecosystem services, such as erosion control and water regulation, that justify its classification as HCV 4.*
2. *We have added text to MR section 5.2.1 to include information on mitigation measures implemented by RBJ to reduce potential negative offsite impacts resulting from the displacement of hunting activities following the reclassification of the Project Area to a Class I (Protection) Forest Reserve.*
3. *We have already provided a summary of our biodiversity monitoring activities in section 5.3, which consolidates more detailed reports from the supporting information. However, as requested by the auditor and to enhance clarity, we have now added Table 5.1. to the start of section 5.3.1 that provides a concise summary of our monitoring. Table 5.1 includes columns for: (1) biodiversity indicators measured, (2) monitored changes, (3) dates, (4) frequency, (5) location, (6) results and evaluation, and (7) references to the MR section or supporting documentation with full details.*
4. *We have now removed the duplicated information on the Bornean Orangutan in section 5.4.1. on the trigger species.*

Documentation provided by the project proponent

MR version 2

VVB's evaluation
Date: 31/03/2025

1. HCVs are clear now
2. Updates in section 5.2.1 are not correct. This information is not aligned with the template
3. The table provided is very clear and correct
4. Section updated

Project Proponent's Response
Date: 01/04/2025

2. Please now find the new text in table that aligns with the template.

VVB's evaluation
Date: 02/04/2025

Updated and deemed correct. CL 11 is closed

CL ID
12
Date: 18/02/2025
CL description

the following clarifications are needed under the NPRT:

1. Internal risk – Project management – Q2 – please, provide an explanation document to justify all Q2 questions (since under the NPRT is not possible to justify these Q2 questions).
2. Internal risk – financial viability – Q1 à please provide the financial plan (confidential)
3. Internal risk – opportunity cost - à Q2, please provide more details about the election of the risk score. Also, regarding the mitigation, please provide the evidence to show the 100 years legally binding agreement.
4. Internal risk – project longevity à- provide evidence about the 100 years. The crediting period indicates 30 years. Also in external risk, Q8, 30 years are indicated but not 100 years. Please clarify and provide evidence.
5. Natural risk - fire -à provide further details regarding fire mitigation
6. Natural risk – pests: clarify the significance and the likelihood of pests and disease since the following paper provides some examples about pests in Sabah: FOREST PEST OCCURRENCES: SOME RECENT INCIDENCES IN SABAH.
https://www.researchgate.net/publication/328874234_FOREST_PEST_OCCURRENCES_SO_ME_RECENT_INCIDENCES_IN_SABAH
7. Natural risks – pests: provide further details about pests and diseases mitigation
8. Extreme weather – please explain if extreme raining and floods are not considered a risk in the project, when the PP has indicated the following in the MR: “we observed that sustained rainfall during the 2023 wet season caused the flooded area to expand significantly, so we decided to conservatively include it as a natural disturbance as it exceeded the minimum area (2.5 ha) we established for this type of event. Since the automatic land cover classification analysis classified this event as 'water', it was decided to perform a manual digitization of the total area affected by the flood event. 3.42 hectares were lost due to this flood, and we account for this using our high-resolution biomass maps”.
9. Geological risk: please clarify if the 2015 earthquake with a 6.0 scale is not representative of likelihood and significance. Also, during geological risk, the VVB has observed during the aerial inspection, that many landslides have occurred in the project (out of the MR). however, the VVB considers that these phenomenon could have also occurred in the previous MR and hence, be considered as a possible risk. Please clarify.
10. Adaptive capacity: please, improve the explanations and review the evidence requested through the NPRT in table 12.

Project Proponent's Response

Date: 18/03/2025

1. a) Not applicable.

The Kuamut Rainforest Conservation Project does not focus on planting trees but rather on protecting and regenerating existing native forests. The project prevents logging and promotes natural forest recovery.

b) Not applicable

The Kuamut Rainforest Conservation Project has strong enforcement measures in place. Monthly patrols by RBJ cover all key access points using vehicles, boats, helicopters, and satellite monitoring. No major illegal activities were detected inside the Project Area in 2022-2023, and a small encroachment outside the area (80x80m) was immediately reported and addressed. Security gates at Km 11, Jalan Danum, and Haranky control vehicular movement, while satellite imagery and camera traps provide real-time tracking. The reclassification of Kuamut Forest Reserve to Class I Protection status eliminated logging risks, reducing the likelihood of large-scale encroachment. The project also engages local communities to prevent illegal activity. Given these measures, the claim that more than 50% of stocks require enforcement does not apply.

c) Not applicable.

The project is managed by experienced teams from Permian Malaysia Sdn. Bhd., Yayasan Sabah, Rakyat Berjaya Sdn. Bhd., and the Sabah Forestry Department, all of which have extensive expertise in forestry, biodiversity conservation, carbon crediting, and community engagement.

Additionally, the project collaborates with SEARRP and PACOS Trust, further strengthening its capacity in scientific monitoring and community outreach. The leadership team includes individuals with over 20 years of experience in their respective fields.

d) Not applicable.

The management team is based in Malaysia and maintains a local presence. Permian Malaysia Sdn. Bhd. is headquartered in Kuala Lumpur, while the Sabah Forestry Department, Yayasan Sabah, and Rakyat Berjaya Sdn. Bhd. operate in Kota Kinabalu, Sabah, ensuring proximity to the project site (<https://permianglobal.com/projects/kuamut-rainforest-conservation-project/>)

e) Not applicable.

The project actively monitors and reports disturbances. A single non-fire natural disturbance (flooding) was identified in 2023 and was promptly investigated, documented, and accounted for in carbon calculations. This flood was not significant to be considered a loss event as per VCS guidance..

f) Not applicable (ALM is not the focus of this project).

The Kuamut project is not an ALM (Agricultural Land Management) project.

g) Not applicable (ALM is not the focus of this project).

h) Applicable (-2) the management team includes individuals with more than 20 years of experience in AFOLU projects worldwide.

2. Financial viability is provided in the evidence folder CL#12

3. The opportunity cost was assessed in relation to logging. The NPV of project activities is over 50% more profitable than that of the most profitable alternative land use activity. Therefore the score should be (f)-4. See the financial analysis provided in folder CL#12.

4. *The designation of Class I Protection Forest is set in perpetuity; thus the project area is protected by legally binding agreement for at least 100 years.*

5. *As described in section 3.2.2. Project emissions, the fire risk in the Kuamut project area is not significant. Nonetheless, the Kuamut Rainforest Conservation Project implements a comprehensive fire mitigation strategy to prevent, detect, and respond to fire risks within and around the project area. Utilizing real-time monitoring systems, the project tracks potential fire threats through NASA FIRMS alerts, which help detect hotspots within a 5000-meter buffer around the project boundary. These alerts trigger immediate field verification by designated teams to assess the presence of fires and determine appropriate responses. The project integrates advanced satellite technology, including Sentinel-2, Landsat 8-9, and Planet imagery, as well as radar-based analysis from Sentinel-1 SAR, to assess fire impact using indices such as the difference normalized burn ratio (dNBR) and burn area index (BAI), ensuring precise monitoring of affected zones.*
To prevent fires, the project has established multiple proactive measures, including firebreaks and fire management training for local communities to minimize human-induced wildfire risks. Surveillance is reinforced through regular helicopter, vehicle, and ground patrols, with guard posts strategically placed at key access points to monitor movements in and out of the protected area, deterring activities that could lead to fire outbreaks. Security personnel are stationed at these posts to enforce regulations and maintain forest integrity. When fire risks are identified, field response teams are deployed immediately to contain and mitigate any potential spread, leveraging their training and coordinated intervention strategies.
A crucial aspect of fire risk reduction is the reclassification of the project area as a Class I Protection Forest, which fosters natural forest regeneration. This process increases moisture retention and enhances ecosystem resilience, reducing the likelihood of large-scale fires.

6. *Given the Kuamut Forest's protected status and its secondary forest composition, the overall risk of significant pest infestations is lower than in plantation forests. Nonetheless, continuous monitoring and maintaining biodiversity are essential to mitigate any potential pest-related threats. The paper mentioned in the finding is about the presence of pests in forest plantations that are monocultures and, in some cases, exotic species.*

7. *The Kuamut Forest, now designated as a Class 1 Protection Forest in Sabah, Malaysia, is primarily composed of secondary forest earmarked for conservation. Class 1 Protection Forests are areas where logging and other forms of resource extraction are prohibited to preserve biodiversity and ecosystem functions.*
In such protected secondary forests, the likelihood of pest infestations is generally lower compared to monoculture plantations. This reduced risk can be attributed to higher biodiversity, which supports a variety of natural predators and maintains ecological balance. For example, studies have shown that selective logging has relatively little effect on termite assemblages, suggesting resilience in these ecosystems
<https://royalsocietypublishing.org/doi/10.1098/rstb.1999.0521>

8. *The project has recognized and documented the impact of extreme rainfall and flooding as a natural disturbance. The monitoring report confirms that sustained rainfall during the 2023 wet*

season caused a significant expansion of the flooded area, surpassing the 2.5-hectare threshold established for such events. As a result, the event was manually digitized and classified as a flood-related disturbance, leading to a recorded forest loss of 3.42 hectares, which is considered not significant as a loss event.

The project has also assessed its hydrological stability and concluded that while some areas experienced minor fluctuations in surface runoff due to changes in evapotranspiration and fog water interception, the overall hydrological impact remains neutral. This suggests that the project area exhibits a relatively stable water balance despite extreme weather events. Additionally, conservation efforts, such as forest regeneration and watershed management, have contributed to reducing soil erosion and improving water infiltration. This has likely decreased the risk of flooding over the long term, benefiting the Kinabatangan River basin ecosystem. A detailed analysis of the contribution of the project to regulate the hydrology of the project area is provided in section 3.3 of the monitoring report.

Thus, while extreme rainfall and flooding have been identified as risks (see section 2.2.7 Risk to the project), they are not considered an ongoing or unmitigated threat to the project's permanence. Nonetheless, recognising that the project area, like any natural ecosystem, is subject to various environmental dynamics, we maintain continuous monitoring of all relevant environmental parameters. This approach ensures the identification and incorporation of any emerging environmental variables that may pose a potential risk to the project in the future.

9. The 2015 earthquake (6.0 magnitude) is not considered indicative of an ongoing geological risk, as no similar seismic activity has been recorded before or since. Concrete evidence can be found in "Tongkul, 2017. Active tectonics in Sabah -seismicity and active faults", which concludes as follows: "Active tectonics, both compressional and extensional, is very much alive in Sabah based on the occurrence of earthquakes and presence of active faults accommodating plate motions in the region. However, the crustal movement is quite small and its surface expressions are not easily discernible", furthermore, figure 6 in the same paper shows Earthquake distribution in Sabah (1973-2016), none of which occurred near the project area (see evidence in folder CL#12).

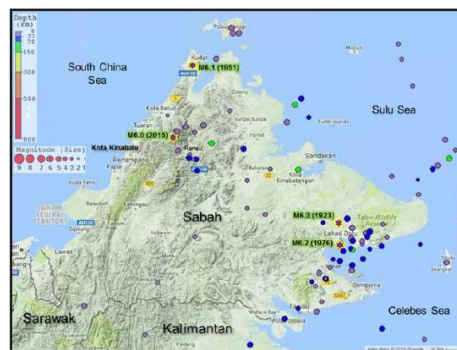


Figure 6: Earthquake distribution in Sabah (1973-2016) extracted from IRIS earthquake database mostly showing shallow depth (less than 70 km). The yellow star shows the location of earthquake with magnitude 6 and above extracted from USGS database.

<i>Additionally, high-resolution satellite imagery and field verification confirm that the project area remains stable, with no significant geological threats impacting carbon stocks or project sustainability.</i> <i>During the monitoring period, no geological disturbances, such as earthquakes or landslides, were recorded in the project area. These disturbances are assessed through multi temporal land cover analysis and continuous monitoring of the project area using High-resolution optical satellite imagery. The landslides observed by the VVB during the aerial audit inspection resulted from a single event that occurred outside this monitoring period (December 2024). This natural disturbance was caused by intense and continuous rainfall during the monsoon season in the last quarter of 2024. Therefore, it will be assessed and accounted for in the next monitoring report.</i> <i>Despite the uniqueness of this event and its direct link to heavy rainfall during the wet season, 'landslides' have been added to Table 2.2.7 as a potential risk to the project.</i> 10. The criteria for evaluating adaptive capacity to future climate change was further expanded in a separate document provided as evidence in folder CL#12	
Documentation provided by the project proponent	
MR version 2 Financial viability plan in folder CL#12 (CONFIDENTIAL) Paper: Active tectonics in Sabah – seismicity and active faults in folder CL#12 NPRT <i>criteria for evaluating adaptive capacity to future climate change</i> in folder CL#12	
VVB's evaluation	Date: 31/03/2025
1. The information provided is deemed correct, and is aligned with the NPRT risk 1.1 2. Evidence provided is deemed correct 3. This is clear now 4. Please, explain if within the agreement with Sabah Gov, or within the Protection agreements is there any clause explaining the longevity or the perpetuity 5. The explanation is deemed correct. Please include these explanations also within the NPRT, and share the new version with the VVB (Verra Hub) 6. The clarification is deemed correct 7. Provide such clarification also within the Verra Hub/natural risks 8. The explanation is deemed correct. Also the categorization in significance and likelihood are deemed reasonable 9. The explanations are deemed reasonable and correct. Evidence associated are correct as well 10. Evidence provided is deemed correct	
Project Proponent's Response	Date: 01/04/2025

4. In Sabah, Class I protection forest reserves, which have the highest level of protection under the State's Forest Enactment Act (1984), are permanently protected by law from land conversion, timber exploitation, or extraction of forest products, with only environmental protection and biodiversity conservation activities permitted.

<https://forest.sabah.gov.my/forest-resources/>

<https://news.mongabay.com/2015/12/christmas-gift-to-the-planet-massive-rainforest-reserve-created-in-borneo/>

They are protected by law from any form of land conversion or timber exploitation. To change the status of a Forest Reserve (either gazettement or de-gazettement) requires a two-thirds majority of the Sabah State Assembly. The protection status of Class I forest reserves is established in the Forest Enactment from 1968.

Please find the following additional evidence in folder CL#12 in Audit second round:

- The two gazettes which changed the status of Kuamut from a Class II to a Class I Forest Reserve in the evidence folder.
- Document "Legal Classes of Forests and Conservation Areas in Malaysia" provided as evidence
- Forest Enactment from 1968

5. All responses are uploaded in a new submission of NPRR through the Verra project hub

VVB's evaluation

Date: 02/04/2025

All topics are updated. Hence, CL 12 is closed

CL ID

13

Date: 18/02/2025

CL description

During the audit visit, there was information from interview with AJK committee, community's member, School teacher and Head of village. The issues affected to the MR are the following:

- a. It is not clear the number of community and stakeholder engaged in MR section 2.2.1.
- b. The activities implemented not fully describe in detail
- c. Not clear number of participants of workshop and training with evidence in section 2.3
- d. Dissemination of project document and monitoring report to the community and stakeholder, provide with evidence
- e. Provide evidence of all activities
- f. Definition of stakeholder in section 2.3.4
- g. Not clear description of risk, cost and benefit

Provide all the activities implemented with evidence in section 2.3.10

Project Proponent's Response

Date: 13/03/2025

a. For this reporting period of 2022-2023, the project carried out 22 activities that had participation of stakeholders and local communities. The list of all the activities conducted are described in the updated Section 2.2.1 with its associated evidence are in evidence folder. b. The MR has been updated to describe the activities in Section 2.2.1 with a table on the numbers of local community participation. c. The MR in Section 2.3 .1 has been updated to include a table of participants for all the activities that was implemented. Details of each activities in reports in evidence folder. d. Printed version of the translated summaries of the Project Document and Monitoring Report were handed to the communities in person by the Community Officers of the KRCP Project. Please see picture of handing over in the Evidence Folder named CL#13. e. All Reports of the community engagement sessions of workshops, meetings and trainings are stored in the Evidence Folder f. The MR has been updated in Section 2.3.4 to define stakeholders of the project as well as the activities carried out with stakeholders. g. The MR has been updated in Section 2.3.6 to describe the Risk, Cost and Benefit for the Project.	
Documentation provided by the project proponent	
Revised 2 nd MR Evidence requested are in folder marked CL#13	
VVB's evaluation	Date: 31/03/2025
All topics a-g, are updated, and are deemed correct. Therefore CL 13 is closed	

Forward Action Request (FARs)

FAR ID	1	Date: 28/03/2025
FAR description		
During the visit, the audit team has identified that most of the monitoring staff unknow the name of the species found within each plot. For the current verification the VVB considers that this issue is not a problem, since other staff knew the names and were able to identify also because all trees within the plot were labelled and crosschecked with the raw data However this issue could be a problem if new trees appear within the plot of whether the team only maintain people without botanical knowledge. The VVB requests actions to solve the problem for this verification or future ones.		

FAR ID	2	Date: 13/08/2025
FAR description		
Since no baseline harvest was forecasted for the current monitoring period (2022–2023), the next VVB, at the subsequent verification, thoroughly assess and ensure the application of the correction and clarification to VM00010, v1.3 to the ongoing forest growth in parcels that would have been harvested after 2021.		

APPENDIX 4: EVIDENCE LIST

Nº	Name of the file
	MONITORING REPORT AND MAIN DOCUMENTS
1	CCB VCS_2ndMR_Proj2609_01JAN2022_31DEC2023_v3.docx
2	Management Agreement (Signed) 06.08.21.pdf
3	PROJ_DESC_2609_07032023.pdf
	GEOGRAPHIC FILES
4	kuamut_finalAuditMR2_AENOR.qgs_cloud.qgs.qgz
5	ActiveFReserveOutlines
6	ClusterAnalysisFlatOutline
7	Deforest_Vector
8	kuamut_bounds
9	kuamut_deforest
10	mgmt_strata_merge
11	MosaicCoupes
12	MosaicPLANT
13	MosaicUNplanted
14	NFMCoupes
15	NoGo
16	CalulatedParcelsStrata_VM10v1.3.csv
17	dem30_filled_Sabah.tif
18	KuamutSlope30m.tif
19	KuamutSlope100m.tif
20	lidar_dtm_geoid_corr_gdal.tif
21	Mosaic_THP_ParcelsACD_10cm.csv
22	Mosaic_THP_ParcelsV_EX_10cmDBH.csv
23	Mosaic_THP_ParcelsV_EX_31cmDBH.csv
24	NFM_THP_ParcelsACD_10cm.csv
25	NFM_THP_ParcelsV_EX_10cmDBH.csv
26	NFM_THP_ParcelsV_EX_40cmDBH.csv
	TRAINING AND SOP
27	2022 - 2023 KRCP Training.xlsx
28	1st Aid report October 2023 20231109Sunrev.docx
29	Field Staff Training 22-26 Oct 2023.pdf
30	KRC sport - volleyball participants (1).pdf
31	KRC sport preparation - community communal works attendees (1).pdf
32	KRC Sports - Football participants (1).pdf
33	202210 Basic First Aid Training Report Phase 1 20221107.docx
34	20231028 First Aid Training Phase 1&2 Report October 2023.docx
35	OSH Monitoring HIRARC.pdf
36	OSH PKS 17 - PEMANTAUAN TEMPAT KERJA.pdf

37	RRSB_SEARRP-complaint-form_01.11.21.pdf
38	SEARRP guidelines for employee conduct_ENG 200817.docx
39	SEARRP risk assessment.pdf
40	SEARRP_complaints_procedure_25.03.24-1.pdf
41	SEARRP_Risk_Register_January_23.xlsx
42	SEARRP-Code-of-Conduct_v2.2-ENG-25.03.24.pdf
43	Sexual_harrassment_policy_V07_08.08.2023-1.pdf
44	Whistleblower-Policy-05.07.24.pdf
45	PACOS SOP updated Jan 2022.pdf
46	Field Safety Guideline and Procedures for Handling Emergency Conditions 20220907.docx
47	KRCP Project - Visitor Code of Conduct and Cultural Etiquette Policy.pdf
48	PM_KRCP_Risk and Emergency Manual_v0.1 final.pdf
49	Philipson_Kuamut_SOP_Final_With_DataSheets.pdf
	PUBLIC COMMENTS
50	2609__Public_comment_10August 2024.pdf
51	VCS_ID_2609_Comment_Response_050924.pdf
	PPTs
52	KRCP Community Component 2022-2023 (1).pptx.pdf
53	KRCP Intro & Biodiversity.pdf
54	KRCP Patrolling Component.pdf
	COMMUNITY
55	Signed letter for RM100.pdf
56	KRCP socio-economic baseline Report.pdf
57	2022 - 2023 KRCP Summary of Activities Conducted.xlsx
58	2022 04 Benjamin Tinggi Ranger Hutan Community Forest.pdf
59	2022 04 Naharudin Ranger Hutan MFC.pdf
60	2022 2023 KRCP Employment 11March2025.xlsx
61	2022 Henri Ranger Hutan.pdf
62	Juslin Contract 2023.pdf
63	Melia Contract 2023.pdf
64	Nazlee contract 2023.pdf
65	Rozaliah Contract 2023.pdf
66	1. MOU Desa Permai.pdf
67	2. MOU Kuamut.pdf
68	3. MOU Tangkuyan.pdf
69	4. MOU Tulang-Tulang.pdf
70	5. MOU Karamuak Dalam.pdf
71	6. MOU Kenang-Kenangan.pdf
72	7. MOU Keramuak Luar.pdf
73	CDP Draf presentation workshop.pdf
74	Desa Permai - CDP.pdf

75	Kenang-kenangan - CDP.pdf
76	Keramuak dalam - CDP.pdf
77	Keramuak luar - CDP.pdf
78	Kuamut - CDP.pdf
79	Surat Jemputan Pembentangan CDP Kg. Desa Permai.pdf
80	Surat Jemputan Pembentangan CDP Kg. Kenang -Kenangan.pdf
81	Surat Jemputan Pembentangan CDP Kg. Keramuok Dalam.pdf
82	Surat Jemputan Pembentangan CDP Kg. Keramuok Luar.pdf
83	Surat Jemputan Pembentangan CDP Kg. Kuamut.pdf
84	Surat Jemputan Pembentangan CDP Kg. Tangkuyan.pdf
85	Surat Jemputan pembentangan CDP Kg. Tulang-Tulang.pdf
86	Tangkuyan - CDP.pdf
87	Tulang-tulang - CDP.pdf
88	CDP presentation workshop 25Jan2023.pdf
89	CDP Workshop Report _Kuamut Cluster.pdf
90	CDP Workshop Report _Karamuak Cluster.pdf
91	Courtesy visit 29 Nov 2023 (1).pdf
92	Documentation Kuamut Rainforest Conservation Solidarity Sport (1).pdf
93	Field Staff Training _23-24 Oct 2023.docx.pdf
94	FPIC Workhsop Kg. Karamuak Dalam, Tongod - 12 Oct 2022.pdf
95	MOU Karamuak Dalam.pdf
96	FPIC Workhsop Kg. Desa Permai & Tulang-Tulang - 28 Sept 22.pdf
97	KRC SEARRP Progress report Jan-July 2023.pdf
98	KRCP Socio Economic Training 24June2023.pdf
99	Meeting and signing MOA Gravity pipe system with Kuamut-Tangkuyan.PDF
100	Meeting Gravity Pipe System with Kuamut & Tangkuyan 23Aug2023.pdf
101	Progress Meeting on Gravity Feed Water with Kuamut&Tangkuyan 29Nov2023.pdf
102	Report of KRCP BSM & GRM in Karamuak 23May2023.PDF
103	Report of KRCP BSM & GRM in Kuamut 24May2023.PDF
104	SEARRP-KRC _Progress report Aug-Dec 2023.pdf
105	Water Pipe gravity meeting - Kg. Kuamut and Kg. Tangkuyan 19July2023.pdf
106	Community Organizer Certificate Training - Rozaliah & Welday (karamuak Cluster).pdf
107	Community Organizer Certificate Training - Ruzniel & Melia (Kuamut Cluster).pdf
108	Bengkel FPIC Kg. Karamuok Dalam, Tongod - 12 Oct 2022 (1).pdf
109	FPIC attendance Kg. Karamuak Dalam.pdf
110	FPIC Attendance Kg. Karamuak Luar.pdf
111	FPIC Workhsop Kg. Karamuak Luar, Tongod - 12 Oct 2022.pdf
112	MOU Keramuak Luar.pdf
113	FPIC Attendance Kg. Tamoi.pdf
114	FPIC Workhsop Kg Tamoi - 29 Sept 2022.pdf
115	MOU Tamoi.pdf
116	FPIC Attendance Kg. Tenaga Baru.pdf

117	FPIC Workshsop Kg. Tenaga Baru, Tongod - 13 Oct 2022.pdf
118	FPICAT~1.PDF
119	FPICWO~1.PDF
120	MOU Desa Permai.pdf
121	MOU Tulang-Tulang.pdf
122	FPIC Attendace Kg. Kuamut and Kg. Tangkuyan.pdf
123	FPIC Workshsop Kg. Kuamut & Tangkuyan - 28 Sept 22.pdf
124	MOU Kuamut.pdf
125	MOU Tangkuyan.pdf
126	CDP Workshop Attendance - Karamuak Cluster.pdf
127	CDP Workshop_Karamuak Cluster.pdf
128	CDP Workshop Attendance - Kuamut Cluster.pdf
129	CDP Workshop_Kuamut Cluster.pdf
130	CDP Presentation Workshop Attendance - Kuamut Cluster and Karamuak Cluster.pdf
131	CDP presentation workshop.pdf
132	Attendee Karamuak Cluster.pdf
133	Attendee Kuamut Cluster.pdf
134	BRIEFING ON THE IMPLEMENTATION OF ACTIVITIES AND BENEFIT SHARING MECHANISMS OF THE KRC PROJECT - COMMUNITY COMPONENTS IN 2023 .pdf
135	Kuamut Rainforest Conservation Socioeconomic Information Collection Briefing.pdf
136	List of RAs.pdf
137	SE attendees.pdf
138	Attendee - Kuamut.pdf
139	Meeting with the KRCP committee Kuamut & Tangkuyan (Gravity Pipe System).pdf
140	Meetings attendee - kuamut and tangkuyan.pdf
141	Water Pipe gravity meeting - Kg. Kuamut and Kg. Tangkuyan community meeting 19 July 2023.pdf
142	Attendance meeting project update 29.11.2024.pdf
143	ATTENDEES- Gravity pipe construction meeting.pdf
144	Minutes meeting Project update Gravity Pipe system (Kuamut cluster).pdf
145	Summary KRCP 29 November 2023 (1).pdf
	GRM
146	Complaint resolution process for KRCP.pdf
147	Kuamut GRM Implementation.pdf
	RESPONSES TO FAR
148	20240709_Consultancy_Agreement_Permian_SEARRP_21.08.2024_GRGEsigned.pdf
149	Kuamut Rainforest Conservation Project Grievance mechanism 2024.docx
150	Letter of Engagement for 2022-23 service fee signed.pdf
151	Letter of Engagement for 2023-24 service fee signed.pdf
152	PACOS 2024 Service Agreement - signed (final).pdf
153	PACOS_SEARRP_Permian 2023 contract final (signed).pdf
154	RBJ_Permian_signed Services Agreement_6 Aug 2021.pdf
155	Responses to VERRAs FAR.docx

156	Revised_KRCP_SEARRP_budget_2024to29_06.08.2024.xlsx
157	Social and Economic Impact Plan - Kuamut.docx
	MR SUMMARIES AND DISSEMINATION
158	Executive Summary second MR_BM Translation.docx
159	Executive Summary second MR_BM Translation.pdf
160	Executive Summary second MR_BM Translation_20240917 2P.pdf
161	MR#2 Pic 1.jpg
162	MR#2 pic 3.jpg
163	MR#2 pic 9.jpg
164	MR#2 pic5.jpg
165	MR#2 pic6.jpg
166	MR#2 pic7.jpg
167	MR#2 pic8.jpg
	BIODIVERSITY
168	Permian_Kuamut_Dung beetles 2022_Zenodo from Li Yuen 20231110.xlsx
169	NTU 2023 Dung Beetle report and publication and data sharing storage in Zenodo.pdf
170	NTU TEELab 202301 Kuamut Rainforest Conservation Project Biodiversity Data Management and Analysis Workshop.pdf
171	Verra 2023 Kuamut Rainforest Conservation Project Validation and Verification Documents and Registry.pdf
172	A4Datasheets & Setting Information for Camera Trapping & Acoustic Recording 20221220.pptx
173	Field Safety Guideline and Procedures for Handling Emergency Conditions 20220907.docx
174	Kuamut Biodiversity Data Analyses Workshop - Report 20230117.docx
175	Kuamut Biodiversity Monitoring Implementation Planning 20220909.pptx
176	Kuamut Biodiversity Monitoring Plan 20220708 (submitted for validation).pdf
177	Scriven 202303 Representative Points for BioD Sampling.pdf
178	Kuamut_RoadDevelopment_Dec2022.pptx
179	Kuamut_Update_LoggingNorthBoundaries_16042023.pdf
	PATROLLING
180	A REP M&P PLAN LDU DEC 2021.pdf
181	A1.M&P ANNUAL WORK PLAN (AWP) 2022.pdf
182	B. REP PROD M&P LDU JAN-MAR 2022.pdf
183	Bb. Field Visit 24-28 JANUARY 2022 - February 7, 2022.pdf
184	Bbb. BIENNIAL FD-LDU-3.39-3-Vol.2-27 - July 11, 2022.pdf
185	Bbbb. Bi-Annual MCP Rep FD-KK-5.01-12-VOL.2-24 - June 15, 2022.pdf
186	C. REP M&P LDU APR 2022.pdf
187	D. REP M&P LDU APR 2022(1).pdf
188	E. REP M&P SDK APR 202@.pdf
189	F. REP M&P SDK MAY 2022.pdf
190	G. REP M&P LDU MAY 2022(1).pdf
191	Gg. MCP REP FD-KK-5.01-12-VOL.12-21 - May, 2022.pdf

192	H.REP M&P SDK JUN - JUL 2022.pdf
193	I. REP M&P LDU JUN 2022.pdf
194	J. REP M&P LDU JUN 2022.pdf
195	K. REP M&P LDU JUL.pdf
196	L. REP M&P LDU JUL 2022.pdf
197	M. REP M&P LDU AUG 2022.pdf
198	N. REP M&P LDU AUG 2022(1).pdf
199	O. REP M&P LDU SEPT 2022.pdf
200	P. REP M&P SDK SEPT 2022.pdf
201	Pp. FD-LDU-3.39-3-VOL.1-43 - September, 2022.pdf
202	Q. REP PROG M&P LDU OCT 2022(11).pdf
203	R. REP PROG M&P LDU NOV 2022.pdf
204	S. REP PROG M&P LDU DEC 2022.pdf
205	T. M&P REP LDU DEC 2022.pdf
206	U. M&P SUMMARY 2022(1) refine 10Oct2023.docx
207	U1.M&P FIELD REPS LISTING AND SUMMARY 2022.docx
208	U2.NKCA Management Committee Minutes 1st Meeting.pdf
209	A. M&P REP LDU LDU JANUARY 2023.pdf
210	Aa. REP M&P LDU JANUARY 2023.pdf.pdf
211	B. REP M&P LDU FEBRUARY 2023.pdf.pdf
212	Bb. REP M&P SDK FEBRUARY 2023.pdf.pdf
213	C.REP M&P Jan -August 2023.docx
214	D. M&P REP LDU JUNE 2023.pdf
215	E. REP M&P LDU AUGUST 2023.pdf.pdf
216	F. REP M&P LDU SEPTEMBER 2023.pdf.pdf
217	Ff. REP M&P SDK SEPTEMBER 2023.pdf.pdf
218	G. REP M&P LDU OCTOBER 2023.pdf
219	Gg.00REP M&P SDK OCTOBER 2023.pdf.pdf
220	H. M&P LDU NOVEMBER 2023.pdf
221	Hh. M&P NOVEMBER 2022.pdf.pdf
222	Monitoring and Patrol Program Summary Jan -October 2022.xlsx
223	Patrol Monitoring Reports Summary 2022.docx
224	Patrol Monitoring Reports Summary 2023.docx
	HCV
	BIOACOUSTICS
225	021-04-02 Kuamut Species of Interest.pdf
226	2023-12-18 Instrumentation damage assessment.pdf
227	D021-04-01R1 Kuamut report_draft.docx
228	PGR agreement for services with Social Environment CIC_13Oct23_FINAL.pdf
229	Q21-03-001-A00 Kuamut Bioacoustics Proposal .pdf
230	R21-01C-002A Kuamut Rainforest Progress Report.pdf
231	SEARRP20-02_report_v1.pdf

	CAMERA TRAP
232	KRCP RTE Species detected 2022-2023 Compiled 20240801 2100 SAS UPDATED.pptx
233	KRCP RTE Species detected 2022-2023 Compiled 20240805.pptx
234	Clean_camtrap22_UniqueEventsFinalDays.csv
235	Clean_camtrap23_UniqueEventsFinalDays.csv
236	Kuamut Project MR2 - Camera Trapping Report.docx
	ORANGUTAN
237	Final_overview report _Kuamut_OU_2024_Oram.pdf
238	Final_Methodology_Kuamut_OU_2024_Oram.pdf
239	Final_Results_Kuamut_OU_2024_Oram.pdf
240	Kuamut OU survey Raw data - nest counts and GPS.xlsx
241	Waypoint-Nest Count Map.pdf
	FIA SURVEYS
242	FIA_Data_Summary.csv
243	Suggitt et al 2021 Testing the effectiveness of the FIA tool.pdf
244	Kuamut Project MR2 - FIA Report.docx
	FLOODING EVENT
245	2023 flooding event.pdf
246	Jln Sg. Bangan3.JPG
247	Kuamut jalan Sg. Bangan1 (1).JPG
248	Kuamut_FloodEventJuly2023.jpg
249	Kumaut Jln Sg. Bangan2.JPG
250	Sandakan.gpx
251	Sandakan_Updated.kmz
	HELICOPTER SURVEY
252	20230329_105946.mp4
253	20230329_110045.jpg
254	20230329_110140.jpg
255	20230329_110145.jpg
256	20230329_110158.jpg
257	20230329_110201.jpg
	LITERATURE BIODIVERSITY
258	Ancrenaz et al. 2005 Orangutan Aerial surveys Sabah 2005.pdf
259	Asner et al. 2018 Aboveground Carbon Map 30m Sabah.pdf
260	Breareley et al. 2016 Ecology of Asian dipterocarps PED.pdf
261	Brozovic et al. 2018 Moonrats Kuamut.pdf
262	Dumbrell & Hill 2005 Selective Logging Butterflies Biol Cons.pdf
263	Edwards et al. 2009 Value of Logged Forests Cons Bio.pdf
264	Gardner 2017 Banteng Survey Report Kuamut FR.pdf
265	Guharajan et al. 2023 Sun bear habitat use in Sabah.pdf
266	Hearn et al. 2018 Spatio temporal ecology Felids Borneo.pdf
267	Kaur 2020 Hornbills Tree cavities Kinabatangan.pdf

268	Khal et al. 2021 BirdNET Classifier.pdf
269	Lambert & Collar 2002 Logged Forest Bird Diversity.pdf
270	MacDonald et al. 2018 Clouded Leopards Connectivity.pdf
271	Nakamura et al. 2017 Forest Canopies.pdf
272	Nichols et al. 2007 Dung beetle responses to tropical forest modification Review.pdf
273	Okuda et al. 2019 Canopy Height Logged Forest.pdf
274	Peh et al. 2005 Logged and Primary Forest Bird Diversity Malaysia.pdf
275	Philipson et al. 2020 Active Restoration for Carbon Science.pdf
276	Rovero & Marshall 2009 Camera trapping photographic rate as an index of density in forest ungulates JAE.pdf
277	Saner et al. 2012 PLOS Logging and Carbon Sabah.pdf
278	Santika et al. 2017 Orangutan trends Borneo.pdf
279	Scriven et al. 2015 PAs and Connectivity under Climate Change.pdf
280	Simon et al. 2019 Sabah Orangutan 2014-2017 survey.pdf
281	Slade et al. 2011 Dung Beetles Logging regimes Sabah.pdf
282	Slik et al. 2013 Large Trees and AGB in the Tropics GEB.pdf
283	Suggitt et al. 2021 Testing the effectiveness of the FIA tool.pdf
284	Suratman et al. 2011 Forest types and tree communities of Imbak Canyon Sabah Malaysia.pdf
285	Thompson et al. 2009 CBD Series Forest Resilience.pdf
286	Tilker et al. 2019 Hunting and Degradation SE Asia.pdf
287	Voigt et al. 2018 Orangutan Decline Borneo.pdf
288	Winarni et al. 2009 Great Argus Pheasant Sumatra.pdf
	NPRT
289	Active tectonics in Sabah.pdf
290	ForestEnactment1968_3.pdf
291	Kuamut Financial Viability (2022-23_CONFIDENTIAL.pdf
292	Legal classes of forests and conservation areas in Malaysia - Sahabat Alam Malaysia.pdf
293	No 7 of 2015 - FE (Amendment).pdf
294	No 13 of 2016 - FE (Amendment).pdf
295	NPRT table 12 Criteria for Evaluating Adaptive Capacity to Future Climate Change.docx
	CLIMATE
296	Kuamut_GEE_LandCoverClassificationAnalysis_2022.url
297	Kuamut_GEE_LandCoverClassificationAnalysis_2023.url
298	HSL_CFMap_Kuamut2023.jpg
299	Kuamut_HSL_LC_2023_V6.tif
300	Kuamut_HSL_LC_2024_V7.tif
301	HSL_CloudFreeComposite_Kuamut2023.jpg
302	HSL_CloudFreeComposite_Kuamut2024.jpg
303	HSL_CompositeMaskedImageryusedKuamut2023.csv
304	HSL_CompositeMaskedImageryusedKuamut2024.csv
305	HSL_STAC_Fusion_Kuamut2022.ipynb
306	HSL_STAC_Fusion_Kuamut2023.ipynb

307	Kuamut_HSL_Median2023_V6.tif
308	Kuamut_HSL_Median2024_V7.tif
309	FIRMS_alerts_Sabah2022_2023.pdf
310	FIRMSMR2_2022_2023.pdf
311	GFW22_23_HighestConfidence_KMP.jpg
312	GFW22_23_HighestConfidence_KMP.pdf
313	GFW22_HighestConfidence_KMP.jpg
314	GFW22_HighestConfidence_KMP.pdf
315	GFW22_IntegratedAlerts_KMP.jpg
316	GFW22_IntegratedAlerts_KMP.pdf
317	GFW23_HighestConfidence_KMP.jpg
318	GFW23_HighestConfidence_KMP.pdf
319	GFW23_IntegratedAlerts_KMP.jpg
320	GFW23_IntegratedAlerts_KMP.pdf
321	ActivityShiftingLeakage.R
322	AnnualisedCalculations.R
323	auto-release.R
324	coupes_helpers.R
325	DefineStrata.R
326	deforest_emissions.R
327	deforest_extract.R
328	download-gh-release.R
329	err_functions_baseline.R
330	err_functions_leakage.R
331	err_functions_project.R
332	err_functions_summarise.R
333	EstimateMarketLeakage.R
334	forest_plot_growth_rate.R
335	geoid_tools.R
336	ggplot_targets.R
337	Kuamut_TreeAllometrics.R
338	KuamutTree2Plot.R
339	leaflet_utils.R
340	mergeDEM_Sabah.R
341	MosaicAreaGrowthRate.R
342	ParcelCalculations_VM10v1.3.R
343	proj-growth-rate-multi.R
344	protected-trees-stats.R
345	slopeAnalysis.R
346	SlopeCorrection.R
347	spat_exp_to_shp.R
348	split_strata_ext_region.R

349	tar_vis_style.R
350	TimberHarvestPlan_Mosaic_Coupes.R
351	TimberHarvestPlan_NFM_Coupes.R
352	uncertainty-analysis.R
353	utils-rmarkdown.R
354	workflow_setup.R
355	Copia de carbon-calculations-summary-kuamut-mr-2-Net_VCUs_2022_2023.xls

APPENDIX 5: ATTENDANCE LISTS

AENOR
Costa Rica
 PROJECT: KR-CP
 MEETING TOPIC: Interview with Community Organiser of PACS (CRP, PACS Community Consultative Management Agency)
 LOCATION: Kg. Tangkuyon, Karamot
 DATE: 4 February 2015

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	melio eto	Staf Lapangan		
2	Haroldy Manahan	Staf Lapangan		
3	Yusuf Nuryana Manahan	Staf Lapangan		
4	Juan, Erik Tison	Staf Lapangan		
5	BERG Dymitrius, Eric Saurant	Staf Lapangan		

AENOR
Costa Rica
 PROJECT: KR-CP
 MEETING TOPIC: Joint and Inter-Pipe Inspection
 LOCATION: Dini Abdon and Pipe Water Community
 DATE: 5 February 2015

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	Haroldy Manahan	Staf Lapangan	Tangkuyon	
2	Yusuf Nuryana Manahan	Staf Lapangan	Tangkuyon	
3	Kenny Maligang	Staf PACS		
4	melio eto	Staf Lapangan	Tangkuyon	
5	Edmond Gamar	Pangurus Pip Garindi	Kuala Karamot	
6	BUTALY HANG	KUPAKATI	Tangkuyon	
7	Dericho Matz	KUPAKATI	Tangkuyon	
8	Philip Chin	PACS	Tangkuyon	
9	Alvin Chan	PERMAN		

AENOR
Costa Rica
 PROJECT: KR-CP
 MEETING TOPIC: Interview with the community (KPS)
 LOCATION: Kg. Kuele Karamot
 DATE: 5 February 2015

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	SINTIK NORA	JKKK	Tangkuyon	
2	Edmond Gamar	Kole Karamot	Kg. Dasa Permai	
3	Andres CHUNG	Pangurus Pip Karamot	Kg. Tangkuyon	
4	Edmond Gamar	Pangurus Pip Garindi	Kg. Karamot	
5	Dericho Matz		Kg. Karamot	
6	El-Bena Jahan		Kg. Tangkuyon	
7	Ruben Tades	Suri Karamot	Kg. Tangkuyon	
8	Edmond Gamar	Suri Karamot	Kg. Tangkuyon	
9	Edmond Gamar	Suri Karamot	Kg. Karamot	
10	Edmond Gamar	Kole Karamot	Kg. Tangkuyon	
11	Johan, Staggan	Karamot (Karamot Tangkuyon)		

AENOR
Costa Rica
 PROJECT: KR-CP
 MEETING TOPIC: Interview with School Teacher and Health Staff (Costa Rica, Karamot and Karamot at Tangkuyon)
 LOCATION: Kg. Kuele Karamot
 DATE: 5 February 2015

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	Edmond Gamar	Teacher	Kg. Karamot	
2	Edmond Gamar	Health Staff	Kg. Karamot	

AENOR
Costa Rica
 PROJECT: KR-CP
 MEETING TOPIC: Interview with the community
 LOCATION: Kg. Tangkuyon, Karamot
 DATE: 6 February 2015

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	Edmond Gamar	PACS	Kg. Tangkuyon	
2	Edmond Gamar	PACS	Kg. Tangkuyon	
3	Edmond Gamar	PACS	Kg. Tangkuyon	
4	Edmond Gamar	PACS	Kg. Tangkuyon	
5	Edmond Gamar	PACS	Kg. Tangkuyon	
6	Edmond Gamar	PACS	Kg. Tangkuyon	
7	Edmond Gamar	PACS	Kg. Tangkuyon	
8	Edmond Gamar	PACS	Kg. Tangkuyon	
9	Edmond Gamar	PACS	Kg. Tangkuyon	
10	Edmond Gamar	PACS	Kg. Tangkuyon	
11	Edmond Gamar	PACS	Kg. Tangkuyon	

AENOR
Costa Rica
 PROJECT: KR-CP
 MEETING TOPIC: Interview with the community
 LOCATION: Karamot Community Forestry Office
 DATE: 6 February 2015

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	Edmond Gamar	FOREST OFFICER	Karamot Community Forestry Office	
2	Edmond Gamar	FOREST OFFICER	Karamot Community Forestry Office	
3	Edmond Gamar	FOREST OFFICER	Karamot Community Forestry Office	
4	Edmond Gamar	FOREST OFFICER	Karamot Community Forestry Office	

AENOR
Contra

PROJECT: KCCP
MEETING TOPIC: Interview with PACS
Community consultation, engagement, management (April) DATE: 6 February 2025

LOCATION: Kg. Bismillah

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	Chandi Lamin Baring	Community Engagement Lead	PACS Trust	[Signature]
2	Kenny Maying Lawrence	Project Assistant	PACS Trust	[Signature]
3	Robert Woon	Project Manager	PACS Trust	[Signature]
4	Philip Chin	Technical Expert	PACS TRUST	[Signature]
5	JACKLYN JETILUS	ASSISTANT PROJECT COORDINATOR	PACS TRUST	[Signature]
6	William Burman	COMMUNITY FIELD STAFF	PACS TRUST	[Signature]
7	ROZALINA ARI	FIELD STAFF	PACS TRUST	[Signature]
8	WELLY JALKE	FIELD STAFF	PACS TRUST	[Signature]
9	ASMA HANZ BUN DATEND	FIELD STAFF	PACS TRUST	[Signature]
10	SOON BUN BEND STAFU	FIELD STAFF	PACS TRUST	[Signature]

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AENOR
Contra

PROJECT: KCCP
MEETING TOPIC: Interview with Community (ASD)
KCCP - PACS Community Consultation & Engagement DATE: 7 February 2025

LOCATION: Village Hall Karamak

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
01	NASSIP BIN RI BULI	ASD	Kg. TONG KEDI	[Signature]
02	SAMUD BIN MANDIA	ASD	Kg. KEDAMBA DALAM	[Signature]
03	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
04	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
05	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
06	JUSMI BIN JINJI	ASD	Kg. KEDAMBA DALAM	[Signature]
07	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
08	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
09	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
10	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
11	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
12	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
13	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
14	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
15	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
16	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]
17	ABIMAD BIN ABDO	ASD	Kg. KEDAMBA DALAM	[Signature]

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AENOR
Contra

PROJECT: KCCP
MEETING TOPIC: Opening Meeting and Introduction DATE: 3/2/2025

LOCATION: STAFFED - KOTA KINABALU

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	JAMES COLEMAN	AENOR / VVB		[Signature]
2	Andi Guntur Armand	AENOR / VVB		[Signature]
3	ANNE LAMING	PACS TRUST / CEO		[Signature]
4	JOAN CHAN	PERMAN GLOBAL / Project Manager		[Signature]
5	CHRISTOPHER PUNJIAN	PERMAN GLOBAL / Project Developer		[Signature]
6	JAMES RUS BENDS	PERMAN GLOBAL / Project Developer		[Signature]
7	SARAH STEVEN	PERMAN GLOBAL / Project Developer		[Signature]
8	SUMITRA	PERMAN GLOBAL / Project Developer		[Signature]
9	Chandi Lamin Baring	PACS TRUST / Community Engagement		[Signature]
10	My Wong Kheok	Perman Malaysia / CEO		[Signature]
11	Chandi Lamin Baring	Perman Malaysia / CEO		[Signature]
12	JACKSON GUNTERMAN	Monitoring (Inspector) (RB)		[Signature]
13	Philip Chin	PACS TRUST		[Signature]
14	Robert Woon	PACS TRUST		[Signature]

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AENOR
Contra

PROJECT: KCCP
MEETING TOPIC: PACS and Biding Issue DATE: 8 February 2025

LOCATION: Sarawak

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	My Wong	Perman Malaysia	CEO/COORDINATOR	[Signature]
2	Joan Chan	Perman Global	HEAD OF OPERATIONS	[Signature]

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AENOR
Contra

PROJECT: KCCP
MEETING TOPIC: PACS and Biding Issue DATE: 8 February 2025

LOCATION: KINABALU

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	JAMES COLEMAN	Head of Programme	PACS TRUST	[Signature]
2	ANDI GUNTUR ARMAND	DATA MANAGER	PACS TRUST	[Signature]
3	ANDI GUNTUR ARMAND	DATA MANAGER	PACS TRUST	[Signature]
4	PHILIP CHIN	TECHNICAL EXPERT	PACS TRUST	[Signature]
5	Chandi Lamin Baring	Community Engagement Lead	PACS TRUST	[Signature]
6	ANDI GUNTUR ARMAND	EXECUTIVE DIRECTOR	PACS TRUST	[Signature]
7	JOAN CHAN	Head of Operations	PERMAN MALAYSIA	[Signature]
8	My Wong	CEO	PERMAN MALAYSIA	[Signature]
9	Kenny Maying Lawrence	Support Staff	PACS TRUST	[Signature]
10	JACKSON GUNTERMAN	ASD, PACS COORDINATOR (Support Staff)	PACS TRUST	[Signature]

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AENOR
Contra

PROJECT: KCCP
MEETING TOPIC: Canopy Inspection DATE: 4/2/24

LOCATION: Mt. Darum

ATTENDANCE LIST

No	NAME & SURNAME	ROLE/PROFESSION/STAKEHOLDER GROUP	COMMUNITY	SIGNATURE
1	CAPT. SAMUEL BUNEL PUNJIAN	MILITARY - PUNJIAN	SARAWAK ARMY	[Signature]

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CCB v3.0, VCS v4.4

APPENDIX 6: IMAGES FROM THE ONSITE VISIT



Figure 1: *Elephas maximus borneensis*



Figure 2: Monitoring team



Figure 3: monitoring team in one plot



Figure 4: *Rhacophorus nigropalmatus* (Wallace's flying frog)

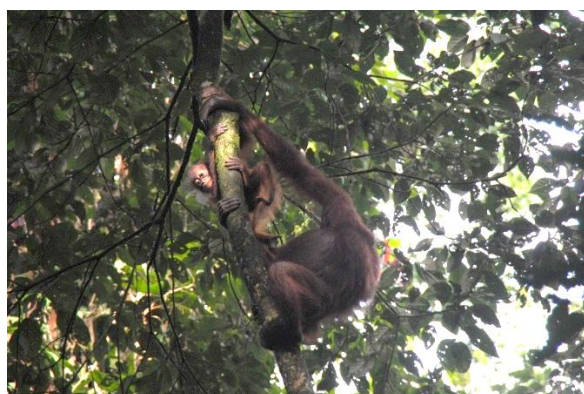


Figure 5: Orangutan (*Pongo pygmaeus*)



Figure 6: VVB verifying BD-Camera trap



Figure 7: VVB in one of the meetings



Figure 8: VVB with water tanks in the project



Figure 9: views of the canopy from the Helicopter Survey



Figure 10: Flooding event

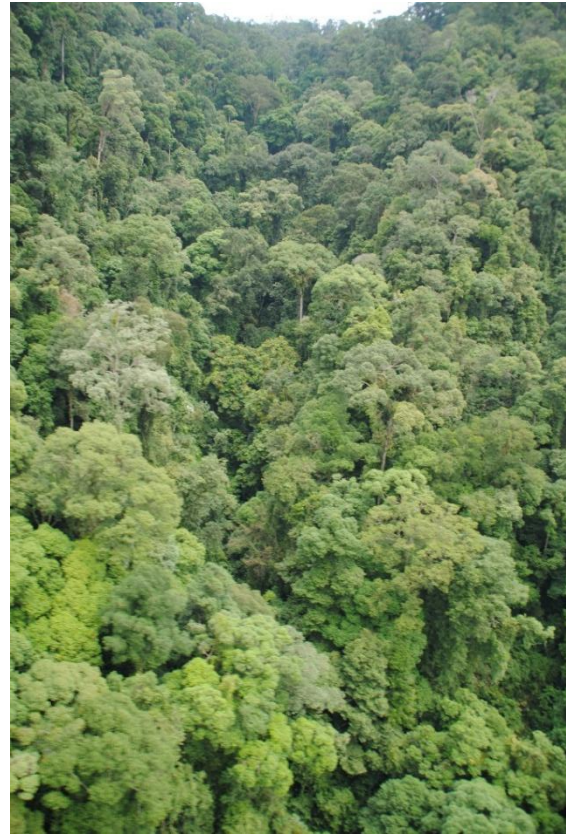


Figure 11: Canopy view



Figure 12: Harlequin tree frog (Rhacophorus pardalis)



Figure 13: Pig-tailed Macaque (Macaca nemestrina)

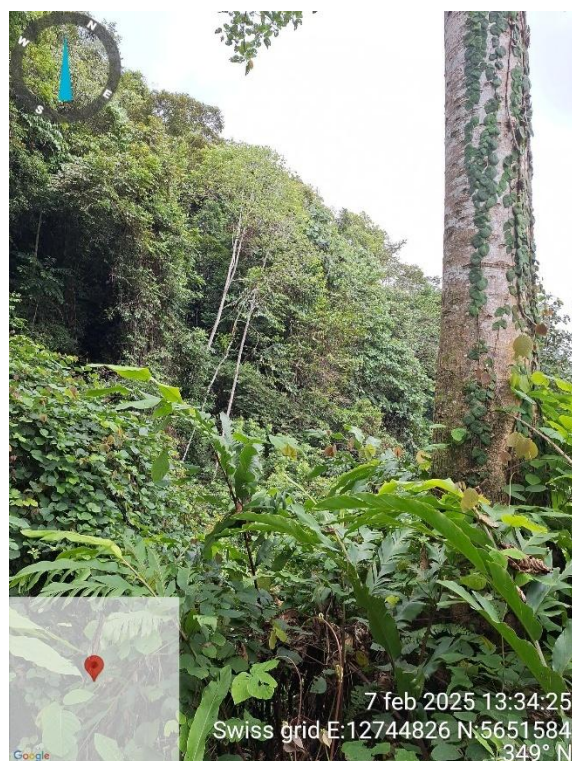


Figure 14: random picture of the project area



Figure 15: Labelled tree in one of the plots



Figure 16: monitoring team

