



VCS VERIFICATION REPORT

“RIAU ECOSYSTEM RESTORATION CARBON PROJECT”



Document Prepared by Earthood Services Pvt. Ltd.

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Summary:

Earthood Services Pvt. Ltd. (ESPL) was commissioned by Himpanzee Pte Ltd to verify the project activity “Riau Ecosystem Restoration Carbon Project (RER)” in Indonesia (Project ID:2403).

This assignment is an independent assessment by a Third Party (ESPL) of the proposed RER project against all defined criteria set for the verification under the VCS Standard v4.3. verification is conducted using ESPL procedures which are developed in line with the requirements specified in the VCS Validation and Verification Manual v3.2. The purpose of the Verification is to confirm that ‘RER Project’ and all related monitoring documentation are in accordance with all rules and requirements of the VCS Standard v4.3, VCS Methodology Requirements, v4, the applied GHG methodology “REDD+ Methodology Framework (REDD+ MF) (VM0007)” version 1.6 and its associated tools and modules as well as the VCS Non- Permanence Risk Tool, v4, and Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities (T-ADD) v1.

The RER Project main objective is to seek to protect and restore 130,090 ha of peatland ecosystem located in the Republic of Indonesia while at the same time preserving biodiversity and enhancing local livelihoods. The Project will avoid 78,425 ha of forest clearing and conversion to an industrial forestry plantation. The Project at its heart is tasked with demonstrating how peat landscapes can be responsibly managed to protect biodiversity and enhance local communities. Forest protection preservation is augmented by the ring of Acacia plantations that surrounds the Project and which acts as a natural buffer to the Project Area.

During the Verification process 03 clarifications, 03 corrective actions and 0 forward action request were raised.

There were no uncertainties associated with the validation process.

In conclusion, it is ESPL’s opinion that the project activity “The RER Project” in Indonesia, meets all relevant requirements for VCS Standard and guidelines, and correctly applies the methodology VCS VM0007 v1.6 for the calculation of baseline, for determining additionality and to monitor emission reductions through its monitoring period which starts from 06/08/2016 to 31/07/2020 for the WRC component and 01/01/2017 to 31/07/2020 for APD. For this Monitoring period, the Project estimates to have GHG emission reduction or removal of 15,264,400 tCO₂e. Considering 10% buffer the total VCUs generated for this monitoring period is 13,737,960 tCO₂e.

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1 INTRODUCTION

1.1 Objective

- Verification is a requirement for all VCS projects and is seen as obligatory process to provide assurance to stakeholders of the quality of the project and its proposed generation of Verified Carbon Units (VCUs) for that monitoring period.
- For the above said purpose, ESPL has been contracted by Himpanzee Pte Ltd to undertake the verification of the project activity “The RER Project” in Indonesia” (which is under the VCS pipeline with ID 2403).
- The objective of this verification are as following:
- To ensure and verify that the monitoring report prepared and the procedures followed are in compliance with the guidelines and procedures described in the monitoring plan of validated PD as well as with the applied methodology;
- To verify the monitoring report with deviations are in compliance with monitoring plan and VCS rules
- To verify that the data monitored and reported were accurate, ample, consistent, transparent and free of material error or gaps by checking the monitoring records and the emissions reduction calculation; and
- To verify and certify GHG emission reduction reported for the project for the period from 6th August 2016 – 31st July 2020 for WRC and 1st January 2017 – 31st July 2020 for APD.

1.2 Scope and Criteria

- The verification scope is given as an independent and objective review of the monitoring report and ex-post determination of the monitored reductions in GHG emissions from “The RER Project” for the period from 06/08/2016 to 31/07/2020. The verification is based on the following RER Project documents:
- Monitoring report (MR) /81/,
- Validated project design (PD) /11/,
- Final validation report (FVR) /85/,
- Emission reduction calculation excel sheets /12/, and

- Supporting documents made available to the verification team (listed in Appendix 2 of this report).
- These documents were reviewed against the requirements of the VCS standard version 4.3 /2/, VCS guidelines, related rules and guidance /34/, the VCS Validation and Verification manual version 3.2 /3/ and the applied methodology /8/, modules /4//5//65//66//67//68//69//70//71// and /72/ and tools /7/ and /9/.
- For a transparent verification opinion, ESPL has performed verification based on a risk-based approach focusing mainly on the significant risks to meet the qualification criteria and the ability to generate VCUs.
- The verification is not meant to provide any consulting towards the client. However, stated request for clarifications and/or corrective actions may provide input for improvement of the project design. The work carried out by ESPL is free from any conflict of interest.

1.3 Level of Assurance

- In accordance with Section 4.1.2 of the VCS Standard v4.3 /2/, the level of assurance of this verification report is reasonable. As per the verification, MR is correct and is a fair representation of the actual project details and estimated emissions reduction (ERs). The Project is prepared as per with the VCS requirements, guidelines and applied methodology, modules and tools for information relating to GHG quantification, monitoring and reporting.

1.4 Summary Description of the Project

- The RER Project seeks to protect and restore 130,090 ha of peatland ecosystem located in the Republic of Indonesia while at the same time preserving biodiversity and enhancing local livelihoods. The Project will avoid 78,425 ha of forest clearing and conversion to an industrial forestry plantation. The Project is on the island of Sumatra and in the Province of Riau. Specifically, it is located on the Kampar Peninsula, which is a rain-fed domed peatland forest made up of four former logging concessions.
- The four concessions that make up the Project area are PT. Gemilang Cipta Nusantara (20,123 ha), PT. The Best One Unitimber (40,666 ha), PT. Sinar Mutiara Nusantra (32,776 ha) and PT. Global Alam Nusantara (36,525 ha). All have long been gazetted as part of the Forest Production Estate (Hutan Produksi) by the Indonesian Ministry of Environment and Forestry.
- On four Production Forest concessions, the RER project design includes the installation of three following Project activities:

1. Avoiding the development of 78,425 ha of natural forest into *Acacia crassicaarpa* plantations; and,
 2. Avoiding the planned draining, degradation and subsidence of 78,425 ha of peat swamp forest through the drainage activity required for a commercial scale *Acacia crassicaarpa* plantation.
 3. Rewetting 9,106 ha of the landscape through the damming and subsequent blocking of 146 km of legacy canals located in the Project Area.
- The Project will ensure carbon remains locked in the environment and that the biodiversity conservation of this unique lowland domed peat swamp forest of Riau can be preserved for generations to come. For this Monitoring period, the Project estimates to have GHG emission reduction or removal of 15,264,400 tCO₂e. Considering 10% buffer the total VCUs generated for this monitoring period is 13,737,960 tCO₂e.
 - The biodiversity of the Kampar Peninsula has been recognised by Birdlife International, The International Union for Conservation of Nature (IUCN), the Wildlife Conservation Society (WCS) and World Wildlife Fund (WWF) as an “Important Bird Area” (2004), a “Key Biodiversity Area” (2006), and a “Tiger Conservation Area”(2007). Globally threatened species such as the Sumatran Tiger, Sunda Pangolin, Storm’s Stork, Flat-head Cat, and Malaysian Sun Bear are known to exist in the Project Area.
 - The project also aims to develop livelihood options and improve socio-economic conditions of the people (appx. 17,000 people living just outside the RER concession areas) residing adjacent to the project area.

2 VERIFICATION PROCESS

- The verification process is based on the approach depicted in the VCS Standard v.4 /2/ and VCS Validation and Verification manual v.3.2 /3/.

2.1 Method and Criteria

- The verification process of RER project consisted of the following steps:
- Document review of the MR /81/, PD /11/ in line with the VCS Standard /2/, applied methodology /8/, modules /4//5//65//66//67//68//69//70//71// and tools /7/ and /9/ and preparation of verification protocol;

- On-site visit to the project activity and interviews with Project Proponent (PP), project consultant, local communities, project employees and other relevant stakeholders;
- Resolution of outstanding issues
- Evaluation of the findings through direct communication with the PPs
- Preparation of the verification report.
- Internal quality control and technical review (TR) by the ESPL.
- Issuance of final verification report
- Site inspections were carried out including the re-measurement of some sub-set of the permanent sample plots assessed as part of the PP's monitoring procedures. However, because the biomass inventory (for REDD) was validated and has not changed, inventory plots were not selected for detailed review/re-measurement. To ensure the risk of auditing error is minimized to a reasonable level and ensure effectiveness & efficiency, the samples were observed and verified in selected permanent sample plots (PSPs) /79/ through on-site assessment and satellite imageries analysis. 27.5% of PSPs i.e. 11 out of 40 PSPs were validated and verified. This helped in efficient validation and verification at low cost. A risk-based approach was used to select the samples to allow a review of members targeted to represent a wide geographic range of sites; sufficient to provide the necessary sample size and to meet a reasonable level of assurance and ensure that there is likelihood of material discrepancies and misrepresentations is almost negligible. Field sampling and techniques were based on the best professional judgment of the VVB to meet a reasonable level of assurance. Samples from all the 4 concessions of the project area (PA) were selected to have a reasonable level of assurance. The VVB ensured that the data samples must be representative of the whole PA and will include samples from each project parcels.
- To establish a reasonable level of assurance and verify the validated data for historical land use analysis and ERs, extensive review of all remote sensing (RS) /21//24//25//58//73//74/ data was undertaken.
- The PA and adjacent lands were visited to allow the VVB to establish a reasonable level of assurance regarding the implementation of project activities (to select key areas for direct observation of planned deforestation monitoring, stratification, fire conditions, any infrastructure development within the PA, communities locations and stated project activities), and to further confirm the reported areas of ex post disturbance.

- To ensure the risk of auditing error is minimized to a reasonable level and ensure effectiveness & efficiency, and the likelihood of material discrepancies and misrepresentations to negligible, a project specific verification and sampling plan was developed to guide the verification auditing process. The methodology of the verification and sampling plan is based on the VCS guidance documents and ISO 14064-3:2006. Any modifications applied to the plan were made based upon the conditions observed for monitoring to detect the processes with highest risk of material discrepancy.

2.2 Document Review

- Monitoring report from 06/08/2016 to 31/07/2020, ER spreadsheet, validated PD, FVR and supporting documents was primarily used for the verification report finalization. This process included:-
 1. Review of data and information presented to verify their completeness
 2. Review of the PD, MR, Monitoring plan, applied methodology and modules and Standard operating procedures (SOPs) considered to finalize the MR and finalizing the ERs.
- The verification assessed the Project's compliance with the following documents:
 - VCS Standard version v4.3 /3/
 - Agriculture, Forestry, and Other Land Use (AFOLU) Requirements v3.6 /34/
 - VM0007 REDD Methodology v1.6 /8/
 - AFOLU Non-Permanence Risk Tool v4.0 /7/
 - VCS Verification Template VCS v.4.1 /4/
 - VCS Validation Verification Manual v3.2 /3/
 - ISO 14064-3:2006 for Standard Sampling /86/.
- ESPL studied the MR and the ER excel sheet and asked the PP to submit all the supporting documents which has served as the basis for finalization of the MR. The CAR and CLs were raised, and then the revised monitoring report and the supporting documents were evaluated to confirm the actions taken by the PP to the CAR and CLs issued by the VVB. The documents reviewed by ESPL are listed in Appendix 1 of this report. ESPL reviewed the final version (V4.22) of the monitoring report to confirm that all changes agreed had been incorporated.

2.3 Interviews

- The interviews were carried out with the PP, communities and the other relevant stakeholders in the visit to the PA: 9th March 2021 to 17th March 2021. VVB team also visited the PPs office during the site visit period. Below is a list of people interviewed.

DATE	NAME	DESIGNATION AND ORGANIZATION	ASSESSMENT TOPIC
10/3/2021	Lucita Jasmin	Director for Sustainability & External Affairs, ASIA PACIFIC RESOURCES INTERNATIONAL LTD (APRIL)	Assessment of project development and design, implementation and operation as per the PD, land ownerships and agreements with the land owners, and environmental Licenses
10/3/2021	Bradford M. Sanders	Head of operations, RIAU ECOSYSTEM RESTORATION	Assessment of project development and design, implementation and operation as per the PD, environmental licenses, Stakeholders engagement, monitoring, sampling design, etc.
10/3/2021	Dian Novarina	Director, PT. GEMILANG CIPTA NUSANTARA	Assessment of project development and design, implementation and operation as per the PD, and environmental Licenses
10/3/2021	Bambang Prayitno	Director, PT. THE BEST ONE UNITIMBER	Assessment of project development and design, implementation and operation as per the PD, land ownerships and environmental Licenses
10/3/2021	Ikhsan Gosli	Director, PT. GLOBAL ALAM NUSANTARA	Assessment of project development and design, implementation and operation as per the PD, land ownerships and environmental Licenses
10/3/2021	Rudi Hartono	Director, PT. SINAR MUTIARA NUSANTARA	Assessment of project development and design, implementation and operation as per the PD, land ownerships and environmental Licenses
10/3/2021	Ralph J. Strebel	Project Developer, Himpanzee Pte Ltd	Assessment of project development and design, implementation and operation as per the PD, land ownerships and environmental Licenses

10/3/2021	George Kuru	Assistant Project Developers, Ata Marie Group Ltd.	Assessment related to spatial analysis, sampling, carbon stock estimates: Sampling strategy (classes/types of forest) and level of accuracy used for carbon stock estimates in the PD, baseline development, etc.
8/3/2021	Catur K	PSP analyst April Group	Assessment related to carbon inventory and sampling strategy.
10/3/2021	Hartjahyo Ariawan	Community Development RER	Related to stakeholder engagement and community consultations
10/3/2021	Harun Pardede	Community Development RER	Related to stakeholder engagement and community consultations
10/3/2021	Kuswondo	Carbon Analyst RER	Assessment related to carbon inventory and sampling strategy.
11/3/2021	Juni	GIS Analyst RER	Assessment related to spatial analysis, sampling, carbon stock estimates: Sampling strategy (classes/types of forest) and level of accuracy used for carbon stock estimates in the PD
11/3/2021	Dibyo K	Estate Manager PT GCN	Project boundary assessment and management of the area
11/3/2021	Royni L S	Forest Protection PT GCN	Project boundary assessment and management of the area
12/3/2021	Saroji	Yayasan Bidara	Community engagement and consultations
12/3/2021	Supriyanto	Yayasan Bidara	Community engagement and consultations
12/3/2021	Suherman	Crew Leader Teluk Meranti	Project boundary assessment and management of the area
12/3/2021	Ernawati	Teluk Meranti (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Minur N	Teluk Meranti (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits

12/3/2021	Meri Erianti	Teluk Meranti (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Fitri Yanti	Patondaaan (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Syahril	Kuala Panduk (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Arizal	Kuala Panduk (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Andrizal S	Petondaaan (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Jasman	Segamai (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Sukri	Segamai (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Wan M Ali	Pulau Muda (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
13/3/2021	Anton S	Babinsa (Indonesia Army)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
13/3/2021	H. Simanjuntak	Polsek Teluk Meranti	Project management
12/3/2021	Syukri D	Teluk Binjai (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits

12/3/2021	Junaidi	Teluk Binjai (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Jumaidi	Teluk Meranti (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
12/3/2021	Joni	Teluk Meranti (community representative)	Stakeholder interview to know the project background, level of their involvement and related issues, risks and benefits
14/3/2021	Zakirman	Camat Teluk Meranti	Project management
14/3/2021	Aceng	Safety Officer	Project management, monitoring, and reporting
14/3/2021	Wahyudi	Security Ranger-Sangar Post Guard (PT SEN)	Project management, monitoring, and reporting
14/3/2021	Arfan	Security Tangerang-Serkap Post Guard (PT SEN)	Project management, monitoring, and reporting
14/3/2021	M. Iqbal	Environment officer PT GCN	Project management, monitoring, and reporting
14/3/2021	Cembri	Document Control RER	Document management, data sharing and data control. Knowledge sharing and outreach.

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2.4 Site Inspections

- Site inspection was conducted from 9th March 2021 to 17th March 2021. The aim of the site inspections was to:
 - Confirm the implementation of the project as per the validated PD and the MR
 - Reassess the sample plots, stratification and sampling plan, SOPs and QA/QC procedure followed in data collection and reporting to ensure maximum accuracy measurement, reporting and verification of the reported monitoring parameters and calculation
 - Check monitoring equipment and guidelines followed
 - Review the ER spreadsheets to assess the quantification and ensure that the calculation is in line with the applied methodology and validated PD
 - Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan
- The site inspections were carried out including the re-measurement of a sub-set of the sample plots assessed as part of the PP's monitoring procedures. This was done through site assessment and remote sensing analysis.
- A ground inspection was made of the project and surrounding areas. The following areas were visited, and interviews conducted for VCS elements: PT GCN, PT SMN and PT TBOT. PT GAN was overall checked by the remote sensing data since the area is too remote and was difficult to be visited in the given schedule. The site visit ground inspection was performed to assess monitoring efforts, management activities including but not limited to; assess deforestation activities, and community member feedback. The local expert visited the offices of Himpanzee, APRIL Group, Ata Marie, and Bidara. The local experts meet the fisherman visiting the project area to get their overall opinion about the project design, development and implementation. 7 water table monitoring point were visited and is appropriate as mentioned in the PD. The local expert visited - Velt Dam in Makmur (1 Dams), Sandbag Dam in Puskopol (1 Dams), Sandbag Dam in Sangar (1 Dams) and Sandbag Dam in Serkap (1 Dam) which were appropriate and as located and mentioned in the PD. The local experts also checked the location of the proxy areas and project boundary (checked the coordinates in Puskopol (3 points), in Sangar (2 Point)).

- During the project site visit, a strong sample of biodiversity components of the project were assessed including the full range of Community Based Development Activities which were active and achieved during the monitoring period. The main activities undertaken by the VVB team were as follows:
 - Interviewed project staff (see Section 2.3 of this report) to collect information pertaining to the monitoring procedures and project implementation
 - Conducted appropriate and comprehensive interviews and cross-checks to confirm the accuracy of the data (collection and recording) for methodology required monitoring efforts.
 - Interviewed community individuals and leaders to confirm implementation of project activities and issues (if any)
 - Cross checked all the major documents available with the PP and the carbon consultant in their offices to cross check the project design and implementation.
 - Interviewed project staff to confirm the appropriateness of the VCS AFOLU Non-Permanence Risk score claimed for the project (see Section 4.6 of this report)
 - Off-sites interviews with the PP and the carbon consultants were also conducted with the team lead and the technical expert to understand the project design and implementation and also to assess the requirements of the PP with the project outcome.
- There are no communities in the project area, the only people who enter the project area are fishermen groups in the Serkap River. This fisherman group only consists of 30 members (21 active members) and each activity is monitored because access is only through the Serkap River and through the ranger guard post and always checked according to the SOP of the Security ranger.
- Forest land cover as stated in the PD has been checked while flying by helicopter and handheld GPS, in accordance with the explanation of the PP. Currently there is a Tiger Colina (Sumatran tigers) that have been monitored since being released on the RER in December 2020 using GPS collar, besides that 80 camera traps have been installed throughout the RER area. the results of camera trap monitoring are reported periodically. As with Sumatran tiger monitoring, some animals are threatened with extinction, are vulnerable to periodic monitoring by installing camera traps, as well as monitoring migratory birds in the RER area.

2.5 Resolution of Findings

- As an outcome of the verification process, the audit team can raise different types of findings:

- A Clarification Request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met
- Where a non-conformance arises the team leader shall raise a Corrective Action Request (CAR). A CAR is issued, where:
- The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- The VCS standard, methodology and modules requirements have not been met;
- There is a risk that emission reductions cannot be monitored or calculated.
- The verification process may be halted until this information has been made available to the team leader's satisfaction. Information or clarifications provided as a result of a CL may also lead to a CAR.
- During the verification process, total 3 CARs and 3 CLs were raised and resolved satisfactorily. The list of CARs/CLs raised and the response provided, the verification, reasons for their closure and references to correction in the relevant documents are provided in Appendix 2 of this report.

2.5.1 Forward Action Requests

- No FAR has been raised during this verification.

2.6 Eligibility for Validation Activities

- ESPL is accredited for validation and verification for the scope 14 as well as by the VERRA board.

3 VALIDATION FINDINGS

- Verification activity was performed to check the correctness of methodology deviation (discussed below in section 3.2). No other verification activities were performed for gap validation and no new instances were added to the project activity.

3.1 Participation under Other GHG Programs

- Not applicable. The same is verified through the interview with the PP confirming. The undertaking to confirm the same has been submitted by the PP /57/. The double counting risks were also checked and verified that no such risk is applicable as mentioned in the validated PD.

3.2 Methodology Deviations

- The project has two deviations from the applied methodology:
- **First Deviation** - The deviation only relates to the procedure for measurements of the peat depth and does not relate to any other part of the methodology. The RER Project has temporarily deviated from the peat depth measurement requirements of VMD0016 – Methods for Stratification of the Project Area (X-STR) ver 1.2 because it was not available at the time the Project undertook its peat depth sampling efforts.
- The temporary deviation is also appropriate as it is not reasonable to have the Project reassess its peat map where it is clear that such a re-assessment will have no impact whatsoever on the GHG emission reductions or removals.
- **Second Deviation** - The Project has opted to exclude a number of emissions from the Baseline and the Project. Each exclusions are explained in sub-section 3.6.2 of the PD. These omissions might be considered deviations/alterations from the methodology. VM0007 and its modules allow for the exclusions, however, for transparency purposes, the Project has opted to include these exclusions in this section. All of the exclusions are conservative and only relate to the measurement of emissions, they do not relate to any other aspect of the methodology.
- **Third Deviation** - The historical cumulative deforestation rate to calculate emissions from activity shifting leakage for avoiding planned deforestation/forest degradation and avoiding planned wetland degradation (LK-ASP V1.3) as a methodology deviation. This has been included as PP accounts that regressions of historical cumulative and historical annual will generate the same estimates of future deforestation. However, as per the applied methodology (REDDMF - VM0007 V1.6) and the module (LK-ASP - VMD0009 V1.3) requires that the total area deforested by the deforestation agent each year should be used to generate trends.
- The above is a minor deviation in statistical calculations in the activity shifting leakage reporting, the reason a regression of cumulative deforestation is that these data are generated directly from the datasets with the minimum of transformation required. The deviation is consistent with the requirements of VCS Standard v4.3, Section 3.18. The deviation is only used in relation to data that is used to monitor leakage reporting and the use of the deviation will not negatively impact the conservativeness of any calculation of GHG emission reductions or removals.
- It was concluded by the VVB that the methodology deviations are appropriate, and the deviation will achieve the same level of accuracy or are more conservative than what is set out in the methodology. Methodology deviations does not negatively impact the conservativeness of the quantification of emissions and emissions reductions.

3.3 Project Description Deviations

- PP has reported four PD deviations in section 3.2.2 of the MR v4.22. Following are the deviations reported:
- **First Deviation – Monitoring of PSPs:** In the MR some minor variabilities were reported in biomass estimation and showing some negative AGB growth.
- For biomass measurement, PP has laid 40 PSPs during the baseline, and it was reported in PD that at least 50% of the total PSPs will be remeasured during the monitoring of the project. However, due to a considerable time gap some boundary markers were lost. This was since some of the plots during the monitoring were not exactly located at the same place. PSPs were measured as close to the original location as possible. GPS accuracy is +/- 10% they were not always in “exactly” the same location, which led to minor variability of +/- 10%. Since as per VCS Standard V4.3. Section 3.19.3, Project description deviations should not be considered as a precedent-setting. Hence, to rectify the potential for loss of PSPs locations, great care was taken to ensure that boundary marker would survive. During 2020 biomass inventory, GPS was used by the monitoring teams to locate any missing boundary marker location in the PSPs being established. Further, all trees are now permanently “tagged” with aluminum markers permanently affixed to the tree.
- **Second deviation - Deforestation Rate:** In the PD, PP has used 8.2% of RER area deforestation instead of proxy deforestation rate for calculation of baseline emissions. However, due to inconsistencies in the calculation and estimation of verifiable deforestation rate which was also not in line with the steps prescribed in the Module BL-PL V1.3, PP has used the deforestation rate estimated from the 6 proxy areas (as recommended in section 5, step 1.3 of module BL-PL, VMD0006, V1.3). The estimated proxy deforestation rate estimated is 7.82%. the MR and the ERR sheet now only include and indicates proxy deforestation rate. The deviation reported has been appropriately described and justified by the PP in section 3.2.2 of the MR and the project remains in compliance with the VCS Program rules. Also, the deforestation rate considered for MR ERR calculation is conservative. The project will now use the proxy deforestation only for baseline emissions calculation. The deforestation rate has been calculated based on section 1.3 and equation 4 of the module BL-PL (VMD0006). All the methods and steps to calculate the deforestation rate of the six proxy areas are in accordance with VMD0006, VM0007 and the VCS Rules.

- The only change was the deforestation rate was updated from 8.2% to 7.82% to correct a calculation error. The corrected updated deforestation rate (7.82%) is the estimated average annual deforestation rate of the six proxy areas (the deforestation rate of these six proxy areas ranging from 4.3% to 41.23%). This is considered a conservative approach, and it is noted 7.82% is more conservative than the earlier 8.2%.
- As the calculation of the updated deforestation rate is in accordance with the methodology, it does not affect the applicability of the methodology. The baseline is appropriate as it has been calculated in accordance with the methodology, in accordance with the VCS Program Rules, and is conservative for the reasons set out above. The correction of an earlier error does not affect the additionality of the Project. The Project is still in compliance with the VCS Program Rules as there has been no departure from the methodology and or the Rules in the calculation of the deforestation rate.
- It has been assessed and confirmed that the updated calculated deforestation rate is in accordance with and follows the applicable methodology and the VCS Program rules, therefore no further assessment is required. VVB concludes that the project deviation reported in section 3.2.2 of the MR v4.22, that the deviations does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology.

- **Also, VMD0006-BL-PL – Section 5.1 - Agent of Planned Deforestation:** In this monitoring report PP has used “class of deforestation agents” and not “agent of deforestation”, as there are 4 entities (companies) practicing similar deforestation practices of industrial plantation. The class of deforestation agents identified for this MR has been assessed by the VVB checking the stratification of the region and confirming it through secondary literature of the historical records that the identified class of agents are the most common purchaser of similar lands in the identified strata. A table (table number 28) is included in section 5.1, sub-section 5.1.1 of the MR shows the spatial similarities between the project area and the proxy areas. The stratification done by the PP reflects the biophysical parameters relating to vegetation cover, soil type, elevation, slope, temperature, precipitation, and activity related parameters like distance from the transport network and distance to pulp processing facilities. PP has submitted the stratification map /89/ for verification, and the same has been checked and confirms the stratification mentioned by the PP in sections 3.2.2 and 5.1 of the MR V4.22. VVB confirms that does not impact the applicability of the methodology, the additionality of the project, or the appropriateness of the baseline, as well as how it has assessed that the project is still in compliance with VCS Program rules in line with the sections 3.12.1 and 3.12.3 of the VCS Standard V4.3, section 5, Part 1, point 1.1 of the Module BL-PL-VMD0006, v1.3.
- Also, in line with the requirements of Section 5, Part 1 (1.3) of the of the module VMD0006 v1.3, and the applied methodology VM0007 v1.6, PP has also demonstrated that the management practices of the baseline class of deforestation agents, i.e., that April and its Long-Term Supply Partners have similar conversion and management practices as other HTI concession holders of Riau. PP has demonstrated that the management and conversion practices of the class of deforestation agents, i.e., that past deforestation practice in the proxy areas were similar than/less than past deforestation in other HTI concessions of Riau through the remote sensing analysis and with other supporting data. The management and conversion practices of the chosen proxy areas and the other remaining HTI concessions were compared using the highly regulated Indonesian legislation for managing HTI areas, global data sets, and Landsat imageries (2019) based analysis /73/, /74/, /94/ and /95/. The VVB evaluated the supporting evidence and justifications and independently verified the data using the available Global data sets. The VVB considered the PP's rationale to be satisfactory.

- Third deviation - APD Crediting Start Date:** In the PD, start date of ERRs estimation for both WRC and APD activities is 6th August 2016 (section 1.8 of the PD). However, as per section 3.7 of VCS Standard v4.3, the project start date of an AFOLU project is the date on which activities that led to the generation of GHG emission reductions or removals are implemented. Hence, to be in conformance with the applied standard, PP has revised the APD crediting start date which is 1st January 2017. The APD activity crediting start date is linked to the implementing of management and protection plans as outlined in each of the concession's long-term management plan or RKU. All the RKU's /84/ of the project area require security and protection of the forest landscape which will lead to protection and conservation of the project area's forests. The ERRs estimation has also been revised accordingly. The deviation reported has been appropriately described and justified by the PP in section 3.2.2 of the MR and the project remains in compliance with the VCS Program rules.
- Fourth Deviation – Revisions in the steps followed in Sections 5.1 & 5.2 - Baseline & Project Emissions:** The changes were made to simplify the assumption and calculation steps for easy understanding. The sections are now regrouped and edited to ensure greater comprehension and ability by any given reader to recreate the steps followed for Project's calculations and equations. VVB has checked the revised steps and found it to be now more precise and comprehensive. The deviation reported has been appropriately described and justified by the PP in section 3.2.2 of the MR and the project remains in compliance with the VCS Program rules.
- VVB concludes that the project deviation reported in section 3.2.2 of the MR v4.22, that the deviations does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology. PP has explained the changes and reasons for the changes related to all deviations. Also, there is a deviation related to WRC baseline estimation for the rate of peat loss due to drainage. PP has used equation 13 of VMD0016- X-STR for the calculation of Rate of peat loss (Ratepeatloss-BSL,I,t) due to peat drainage in the baseline.

3.4 Grouped Project

- Not applicable. The project is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

- Identify the implementation status of the project activity(s) and describe the steps taken to assess the following:

ITEM	VERIFICATION FINDINGS
Presence of any material discrepancies between project implementation and the project description	For RER project, validation and verification took place concurrently. On the basis of the site assessments & observations, interviews conducted with PP, communities and other relevant stakeholders, and assessment of the documents provided, the VVB confirmed that there are no material discrepancies between project implementation and the PD.
The implementation status of the monitoring plan and the completeness of monitoring, including the suitability of the implemented monitoring system (i.e., process and schedule for obtaining, recording, compiling and analyzing the monitored data and parameters)	Through the site assessments & observations, interviews conducted with PP, communities and other relevant stakeholders, assessment of the documents provided and review of VM0007 procedures and all applicable relevant modules & tools, and comparison of monitoring results against the validated PD, the VVB confirmed the implementation status of the monitoring plan and the completeness of monitoring including the suitability of the implemented monitoring system.
The existence of any material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology	It was confirmed through the site assessments & observations, interviews conducted with PP, communities and other relevant stakeholders, and assessment of the documents provided, that no material discrepancies between the actual monitoring system and the monitoring plan set out in the PD and the applied methodology
Whether the GHG emission reductions or removals generated by the project have become included in an emissions trading program or any other mechanism that includes GHG allowance trading	Through the assessment of the national law, REDD+ actions and other emission trading programs and other mechanisms that include GHG allowance trading in Indonesia, it was confirmed that there is no risk of double counting (as mentioned in section 3.1 of the report) is associated as mentioned in the validated PD (sections 1.15 and 1.16). Also, PP has not received or pursued any other form of environmental credit as confirmed through a risk-based review by the verification team. The undertaking for the same has also been submitted by the PP /57/.
Whether the project has received or sought any other form of	As mentioned above, PP has not received or sought any other form of environmental credit as confirmed through a risk-based review by the verification team.

environmental credit, or has become eligible to do so since validation or previous verification	
Whether the project has participated or been rejected under any other GHG programs since validation or previous verification	As mentioned above, PP has not received or sought any other form of environmental credit as confirmed through a risk-based review by the verification team.
Sustainable development contributions	It was concluded through the review of supporting documents provided and interviewing PP, communities and other stakeholders it was the project sustainable development goals as mentioned in the validated PD and FVR.

-
- No material discrepancies found between project implementation and the project design description. The VVB checked the monitoring plan and the completeness of monitoring and found that there are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology. The PP has not applied for approval of this project under any other GHG emission trading program and also there is no risk of double counting (as mentioned in section 3.1 of this report and 1.9 and 1.10 of the MR) of ER generated by the project.
- CL 01 was raised and resolved successfully. Refer Appendix 2 for the same.

4.2 Safeguards

4.2.1 No Net Harm

- As stated in section 2.1 of the MR & 2.1 of the validated PD, and as per the interviews & observation made during the site visit by the VVB, the project have positive impacts on the climate, community and biodiversity of the project area.
- The project helps in restoring the affected natural forest due to Acacia plantation, there are no changes to the environment other than naturally occurring forest growth and the limited rehydration of approximately seven per cent of the landscape by the blocking of legacy canals. The Project will have positive outcomes for both climate change mitigation through carbon storage and the prevention of oxidation of the peat soils that would have otherwise occurred in the baseline scenario. Further, there will be positive impacts on biodiversity conservation through the preservation of critical habitats of the endemic and endangered flora and fauna. There are no negative impacts on community groups and for maintenance or enhancement of HCV attributes related to community well-being. This was verified assessing the supporting documents submitted /29//30/ like communities' comments received during the consultations and on-site discussions & observations.

- The only risk identified by the PP is worker safety as fieldwork in the tropical peat swamp forest and surrounding area is potentially hazardous. To mitigate the risk APRIL/RER have robust worker safety systems in place, both for APRIL and RER employees. This was also assessed during the site visit interviews conducted by the audit team. There are SOPs /83/ in place for many work activities. Maintaining the safety of RER employees when in the field is a legal requirement and an obligation by RER and APRIL. The company also undertake training and capacity building programs to ensure that proper operational procedures are followed. The PPs management and operations are regularly reviewed, and management strategies are revised as per the requirements. This adaptive management system is an inherent part of APRIL's PEFC, Singapore Green and ISO certification /32/ both of which have requirements for ensuring occupational health and safety. The robust health and safety protocols followed by the PP was also evident during the site visit. During the site visit it was witnessed by the audit team that day to day ground operations follows the safety SOPs and includes safety briefings in the field, prior to boarding a boat or helicopter. Safety officers were present on project site.
- During on-site visit, the audit team observed that people were receptive to these activities. Local people were aware regarding forest protection and conservation benefits. Overall, the VVB on the basis of supporting documents and site visit and interviews with local stakeholders and PP concluded that there is no negative impact of project activities on the environment and the communities. The validation body finds that it will provide positive environmental, social, and biodiversity benefits and hence is in accordance with section 3.16.1 of the VCS Standard v4.3

4.2.2 Local Stakeholder Consultation

- The MR section 2.2 discusses in detail the way stakeholders were involved in the project design initially. It also lists the ongoing meetings with different stakeholders, especially community groups. Meetings/consultations regarding design and implementation of benefit sharing arrangements are included.

- It was concluded during the site visit that the communities are still involved in the project development and implementation process and are aware about its benefits and impacts. Adequate level of consultations were carried on during the project development and implementation process and requirements from community members are being considered in each stage. Sufficient levels of information are reaching stakeholders. Communication between the project and communities is on regular basis, strong and open, by all appearances. The BIDARA is one of the project developers and responsible for community engagement. The BIDARA employees are locals from two of the communities residing adjacent to the project area. Hence, BIDARA makes a robust channel for community outreach and engagement since local people trusts BIDARA and are confident about the project implementation and benefits. No grievances were raised during the consultations conducted, hence no updates to the MR were made as a result of the feedback received from the local stakeholder consultation.
-
- Stakeholders seem to be generally satisfied, with the project during this monitoring period. The comments raised during the consultations were addressed by the PP. Also, all the reports of PRA's /30/ and socioeconomic surveys /29/ conducted so far were assessed. The SOPs for community engagement, meetings, monitoring and livelihood assessment are also developed by the PP and were assessed by the audit team /78/. Relevant Labour laws and the associated rights of workers in the host country applicable for the project has been listed in the PD. The same has been communicated to the local communities /81//82/. PP has followed proper strategy and engagement process with the stakeholders and has clearly communicated the requirement and process of project validation and verification requirements. Detailed process followed for communicating the project validation and verification and the third part site visit information to the stakeholders has been mentioned in the section.
- Hence, concluded that the project carried out effective community consultation and the project adhere to section 3.162, 3.16.3 and 3.16.4 of the VCS Standard v4.3. Supporting evidences submitted by the PP /11//29//30/31//39/

4.3 AFOLU-Specific Safeguards

- PP is exempted from these as they contracted with VVB before the 19 March 2020 deadline for the AFOLU Safeguards to be applicable. Minor updates have nonetheless been made to the section in an effort to remain transparent in section 2.5 of the PD/11/.

- This was validated and verified and the team finds the information in the sections 2.5 of the PD /11/ is consistent with overview of substantive updates to program rules & requirements.¹

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

- The data and parameters used to calculate the GHG emission reductions and removals, and the steps taken to assess the following for each of them:

Sl. No.	Data/Parameter	Unit	Accuracy of GHG emission reductions and removals	Whether methods and formulae set out in the PD have been followed	Appropriateness of default values
1	N	Dimensionless	Number of sample points	Measured and calculated as per the requirements of CP-AB Module v1.1. Confirmed that reported value is equal to that in Section 4.2 of MR Section 5.2 of the validated PD and reported in the ER excel sheets.	NA, validated
2	DBH	cm	Diameter at breast height of a tree in cm	Measured and calculated as per the requirements of CP-AB Module v1.1. Confirmed that reported value is equal to that in Section 4.2 of MR, Section 5.2 of the validated PD and reported in the ER excel sheets.	1.3 cm above ground, which is as per the module considered. , validated from the RER biomass inventory SOP
3	H	m	Total height of tree	Measured and calculated as per the requirements of CP-AB Module v1.1. Confirmed that reported value is equal to that	NA, validated

¹ Effective immediately for AFOLU projects, unless evidence of contracting for validation prior to 19 March 2020 is provided. <https://verra.org/wp-content/uploads/2019/09/VCS-V4-Summary-of-Effective-Dates.pdf>

				in Section 4.2 of MR and Section 5.2 of the validated PD.	
4	$\Delta C_{WPS-REDD}$	Net GHG emissions in the REDD project scenario up to year t - t CO ₂ e	402,949 t CO ₂ e	Calculated according to requirements of the M-REDD Module v2.2. Confirmed that reported value is equal to that in Section 4.2 of MR, Section 5.2 of the validated PD and reported in the ER excel sheets (RER Monitoring Model Final, V3.1.xlsx, at [Monitoring Report].[/(FI15)]).	402,949 t CO ₂ e, validated
5	$\Delta C_{LK-AS,planned}$	Net greenhouse gas emissions due to activity shifting leakage for projects preventing planned deforestation t CO ₂ e	0	Calculated according to requirements of the LK-ASP Module v1.3. Confirmed that reported value is equal to that in Section 4.2 of MR	0, validated
6	$GHG_{WPS-WRC}$	Net GHG emissions in the WRC project scenario up to year t t CO ₂ e	1,389,482 t CO ₂ e	Calculated according to requirements M-PEAT Module v1.1. Confirmed that reported value is equal to that in Section 4.2 of MR, Section 5.2 of the validated PD and reported in the ER excel sheets (RER Monitoring Model Final, V3.1.xlsx, at [Monitoring Report].[/(EY16)])	1,389,482 t CO ₂ e, validated
7	GHG_{LK-ECO}	Net GHG emissions due to ecological leakage from the WRC project activity up	0	NA. No ecological leakage found due to project activity. This will be re-assessed at the time of baseline updation. Confirmed that reported value is equal to that in Section 4.2 of MR, Section 5.2 of the validated PD and reported in the ER excel sheets.	0, validated

		to year t, t CO ₂ e			
8	C _{ABtree,Dense} swamp forest	Carbon stock in abovegro and biomass of trees in plot sp. instratum I - t C	258.96 t CO ₂ e / ha	Calculated according to requirements CP-AB Module v1.1. Confirmed that reported value is equal to that in Section 4.2 of MR, Section 5.2 of the validated PD and reported in the ER excel sheets (RER Monitoring Model Final V3.1.xlsx, at [AGB Inventory].[AF16])	258.96 t C, validated
9	C _{ABtree,Medium} swamp forest	Carbon stock in abovegro and biomass of trees in plot sp in stratum i - t C	194.22 t CO ₂ e / ha	Calculated according to requirements CP-AB Module v1.1. Confirmed that reported value is equal to that in Section 4.2 of MR, Section 5.2 of the validated PD and reported in the ER excel sheet (RER Monitoring Model Final V3.1.xlsx, at [AGB Inventory].[AF17]).	194.22 t C, validated
10	C _{ABtree,Sparse} swamp forest	Carbon stock in abovegro and biomass of trees in plot sp in stratum i t C	135.07 t CO ₂ e / ha	Calculated according to requirements CP-AB Module v1.1. Confirmed that reported value is equal to that in Section 4.2 of MR Section 5.2 of the validated PD and reported in the ER excel sheet RER Monitoring Model Final – Total V3.1.xlsx, at [AGB Inventory].[AF18]	135.07 t CO ₂ e / ha, validated
11	C _{ABtree,peat} dome forest	Carbon stock in abovegro and biomass of trees in plot sp in stratum I - t C	343.47 t CO ₂ e / ha	Calculated according to requirements CP-AB Module v1.1. Confirmed that reported value is equal to that in Section 4.2 of MR, Section 5.2 of the validated PD and reported in the ER excel sheet (RER Monitoring Model Final – Total V3.1.xlsx, at [AGB Inventory].[AF19])	343.47 t CO ₂ e / ha, validated
13	ΔC _{BSL,i}	Net carbon stock	15,667,348 tCO ₂ e (cumulative for	Calculated according to requirements of the BL-PL module v1.3.	15,667,348 tCO ₂ e, validated

		changes in all pools in the baseline stratum i - t CO ₂ e	MR period 6 August 2016 to 31 July 2020 for WRC CIW and 1 January 2017 to 31 July 2020 for REDD APD and WRC RWE)	Confirmed that reported value is equal to that in Section 4.2 of MRSection 5.2 of the PD and Excel sheet RER Monitoring Model Final, V3.1.xlsx, at [Monitoring Report].[/(FH15)])	
14	GHG _{BSL-E,i,t}	Greenhouse gas emissions as a result of deforestation activities within the project boundary in the baseline stratum i during project year t - t CO ₂ e year ⁻¹	0	Calculated through remote sensing analysis and according to requirements of the BL-PL module v1.3 Confirmed that reported value is equal to that in Section 4.2 of MR	0, validated
15	A _{planned,i}	Total area of planned deforestation over the entire project lifetime for stratum i - Ha	78,395.9 ha	Data sources or own measurements. Calculated according to requirements of the LK-ASP Module v1.3. Confirmed that reported value is equal to that in Section 4.2 of MR Section 5.2 of the validated PD and reported in the ER excel sheet (RER Monitoring Model Final – Total V3.1.xlsx, at [REDD – Area Avoid Deforested].[B7])	78,395.9 ha, validated
16	Project Forest Cover Monitoring Map	Map showing the location of forest land within the	Maps provided for 2016 to 2020. No evidence or indication of deforestation or	Confirmed that reported value is equal to that in 4.2 of the MR and Section 5.2 of the validated PD.	Validated.

		project area at the beginning of each monitoring period. If within the Project Area some forest land is cleared, the benchmark map must show the deforested areas at each monitoring event	forest degradation.		
17	$A_{DefPA,i,u,t}$	Area of recorded deforestation in the project area in stratum i converted to land use u at time t - Ha	0	Remote sensing imagery, Calculated according to requirements M-REDD Module v2.2. Confirmed that reported value is equal to that in 4.2 of the MR and Section 5.2 of the validated PD.	0, validated.
18	F_{LU}	Land use factor before or after conversion Dimensionless	1	Stock Change Factors are provided in Tables 5.5, 5.10, and 6.2 of the IPCC 2006GL Volume 4, Calculated according to requirements M-REDD Module v2.2. Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD.	1, validated
19	F_{MG}	Management factor	1	Stock Change Factors are provided in Tables 5.5, 5.10,	1, validated

		before or after conversion Dimensionless		and 6.2 of the IPCC 2006GL Volume 4, Calculated according to requirements M-REDD Module v2.2. Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD.	
20	FI	Input factor before or after conversion Dimensionless	1	Stock Change Factors are provided in Tables 5.5, 5.10, and 6.2 of the IPCC 2006GL Volume 4, Calculated according to requirements M-REDD Module v2.2. Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD.	1, validated
21	AWPS _{i,t} or A _{i,t}	Area of project stratum <i>i</i> in year <i>t</i> - Ha	130,090 ha	GIS coverages, ground survey data and/or remote imagery (satellite or aerial photographs). Confirmed that reported value is equal to that in Section 4.2 of the MR and 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted	130,090 ha, Validated
22	Rate _{peatloss-WPS,i,t}	Rate of peat loss due to subsidence and fire in the project scenario in stratum <i>i</i> in year <i>t</i> - m yr ⁻¹	2.26 cm/yr	Calculated according to requirements M-PEAT Module v1.1 Confirmed that reported value is equal to that in Section 4.2 of the MR. Also confirmed while cross checking the excel sheets submitted (–RER Monitoring Model Final V3.1!)[Model - Peat Depth and Drained].[EL31])	2.26 cm/yr, Validated
23	E _{REDD,WPS,SS,i,Pool#}	Percentage of uncertainty of Carbon	8.65%	Calculated according to requirements X-UNC Module v2.2 Confirmed that reported value is equal to that in Section 4.2 of	8.65%, Validated

		stock or GHG sources (eg, trees, down dead wood, soil organic carbon, emission from fertilizer addition, emission from biomass burning etc.) in the project scenario, %		the MR and Section 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted ([RER Monitoring Model Final V3.1]![AGB Inventory].[P19])	
24	U _{REDD,WPS,SS,i} ,pool#	Percentage uncertainty (expressed as 95% confidence interval as a percentage of the mean where appropriate) for carbon stocks and greenhouse gas sources in the project case (1, 2...n represent different carbon	8.65%	Calculated according to requirements X-UNC Module v2.2 Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted ([RER Monitoring Model Final V3.1]![AGB Inventory].[P19])	8.65%, Validated

		pools and/or GHG sources) %			
26	GHG _{peatburn-WPS,i,t}	CO ₂ emissions from burning of peat within the project boundary in the project scenario in stratum <i>i</i> in year <i>t</i> - t CO ₂ e ha ⁻¹ y ⁻¹	0 t CO ₂ e ha ⁻¹ y ⁻¹	Calculated according to requirements BL-PEAT Module v1.1 Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted ([RER Monitoring Model Final V3.1]![Monitoring Report].[BW15 and BW 16])	0 t CO ₂ e ha ⁻¹ y ⁻¹ , Validated
27	GHG _{proxy-CO₂,i,t}	Soil emission of CO ₂ as per the chosen proxy in stratum <i>i</i> at year <i>t</i> t CO ₂ e ha ⁻¹ y ⁻¹	73.34 t CO ₂ e ha ⁻¹ y ⁻¹	The estimation of GHG emissions in rewetted (for RPD projects) or undrained or partially drained (for CUPP projects) peat follows similar procedures as described in Module <i>BL-PEAT</i>. Confirmed that reported value is equal to that in Section 4.2 of the MR and 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted ([RER Monitoring Model Final V3.1]![Peatland Allometrics].[F5])	73.34 t CO ₂ e ha ⁻¹ y ⁻¹ , Validated
28	GHG _{proxy-CH₄,i,t}	Soil emission of CH ₄ as per the chosen proxy in stratum <i>i</i> at year <i>t</i> - t CH ₄ ha ⁻¹ y ⁻¹	0.0756 t CH ₄ ha ⁻¹ y ⁻¹	The estimation of GHG emissions in rewetted (for RPD projects) or undrained or partially drained (for CUPP projects) peat follows similar procedures as described in Module <i>BL-PEAT</i>. Confirmed that reported value is equal to that in Section 4.2 of the MR. Also confirmed while cross checking the excel sheets	0.0756 t CH ₄ ha ⁻¹ y ⁻¹ , Validated

				submitted ([RER Monitoring Model Final V3.1]![Peatland Allometrics].[F7])	
29	$A_{\text{peatsoil-WPS},i,t}$	Area of peatland (not open water, not burnt) in stratum i in year t in the project scenario ha	139,090 ha	GIS coverages, ground survey data and/or remote imagery (satellite or aerial photographs). Confirmed that reported value is equal to that in Section 4.2 of the MR and 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted	139,090 ha, validated
30	$\text{GHG}_{\text{peatditch-CO}_2,i,t}$	Emission of CO_2 from ditch and open water stratum i at year t - $\text{CO}_2\text{e ha}^{-1}\text{y}^{-1}$	3.01 t $\text{CO}_2\text{e ha}^{-1}\text{y}^{-1}$	Intergovernmental Panel on Climate Change. 2013. 2013 Supplement to the 2006 IPCC guidelines for national greenhouse gas inventories: Wetlands. Methodological guidance on lands with wet and drained soils and constructed wetlands for wastewater treatment. Gyldenkaerne, S. and Lin, E. (eds). Japan: Institute for Global Environmental Strategies [IGES]. Calculated according to requirements BL-PEAT Module v1.1 Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted ([RER Monitoring Model Final V3.1]![Peatland Allometrics].[F12])	3.01 t $\text{CO}_2\text{e ha}^{-1}\text{y}^{-1}$, Validated
31	$\text{GHG}_{\text{peatditch-CH}_4,i,t}$	Emission of CH_4 from ditch and open water stratum i at year t -	2,259 kg $\text{CH}_4\text{ ha}^{-1}\text{yr}^{-1}$ equivalent to 63.2 t $\text{CO}_2\text{e ha}^{-1}\text{y}^{-1}$.	Intergovernmental Panel on Climate Change. 2013. 2013 Supplement to the 2006 IPCC guidelines for national greenhouse gas inventories: Wetlands. Methodological guidance on lands with wet and drained soils and constructed	63.2 t $\text{CO}_2\text{e ha}^{-1}\text{y}^{-1}$, Validated

		CO ₂ e ha ⁻¹ y ⁻¹		wetlands for wastewater treatment. Gyldenkaerne, S. and Lin, E. (eds). Japan: Institute for Global Environmental Strategies [IGES]. Calculated according to requirements BL-PEAT Module v1.1 Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted ([RER Monitoring Model Final V3.1]![Peatland Allometrics].[D11 and F11])	
32	A _{ditch-WPS,i,t}	Total area of ditch and other open water stratum i in year t in the baseline scenario - Ha	120.3 ha at the end of the monitoring period	Calculated and confirmed through remote sensing analysis and in line to requirements of the X-STR Module v1.2. Confirmed that reported value is equal to that in Section 4.2 of the MR and Section 5.2 of the validated PD. Also confirmed while cross checking the excel sheets submitted (RER Monitoring Model Final V3.1)![RWE - Surf Area Drainage canals].[Y21])	120.3 ha, Validated
33	A _{peatburn-WPS,i,t}	Area of peat burnt in stratum i in year t in the project scenario - Ha	0	Calculated and confirmed through remote sensing analysis and in line to requirements of the X-STR Module v1.2. Confirmed that reported value is equal to that in Section 4.2 of the MR and 5.2 of the validated MR. Also confirmed while cross checking the excel sheets submitted ([RER Monitoring Model Final V3.1]![Monitoring Report].[BW15 and BW 16])	0, Validated

34	GHG _{peatsoil,W} PS,i,t	GHG emissions from microbial decomposition of the peat soil in stratum <i>i</i> in year <i>t</i>	10,803,525 t CO ₂ e	Calculated according to requirements BL-PEAT Module v1.1 Confirmed that reported value is equal to that in Section 5.2 of validated PD and verified as reported from the MR 4.2. also confirmed while cross checking the excel sheets submitted ([–RER Monitoring Model Final V3.1][RWE - Emissions Peat Soils].[B16])	10,803,525 t CO ₂ e, Validated
35	Ecological leakage process as described in Table 5.1	NA	0	Observed as per Module LK-ECO	0, validated

- All the values are provided in the MR and ER calculation sheet are cross verified with its sources and confirmed no manual transposition errors between data sets have occurred. Also, the consistency of values within MR is checked and found to be OK.
- Hence verification team conclude that the GHG emission reductions and removals have been quantified correctly in accordance with the project description and applied methodology.

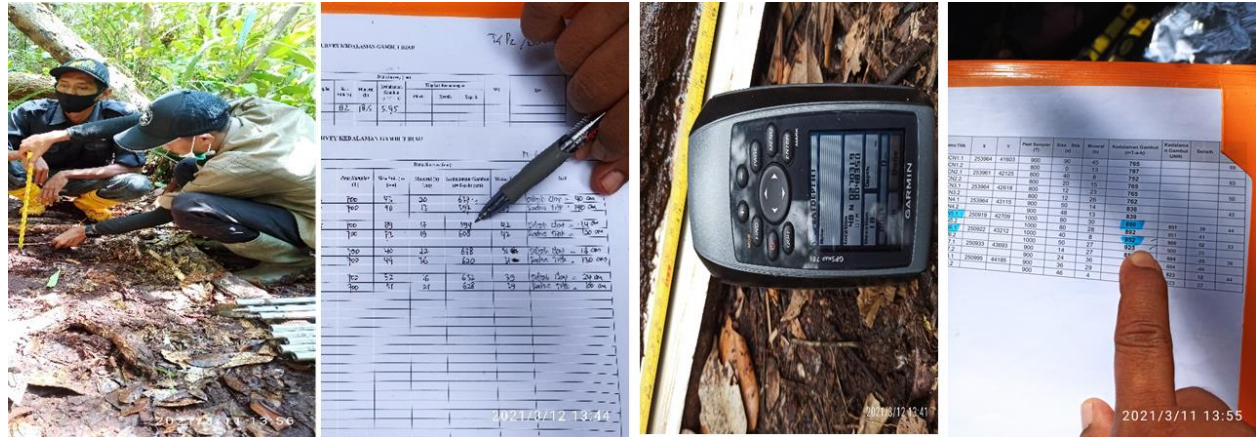
CL 02 and 03 and CAR 02 and 03 were raised and resolved successfully. Refer Appendix 2 for the same

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

- The evidence used to determine the GHG emissions reductions and removals is of sufficient quantity (i.e., all necessary information has been provided to allow the audit team to trace and, as necessary, recalculate the quantification of GHG reductions and removals), and of proper quality (i.e., information presented is free of misstatements, whether material or immaterial) to allow the audit team to provide a verification opinion.
- The GHG emissions and removals of the project are analysed on the basis of land use change based on image characteristics combined with field monitoring forest inventory measurements and calculation procedures. All these documents have been evaluated by the audit team, as described in Section 4.4 of this report. The verification team interviewed the project monitoring expert and team of the project and confirmed their qualifications and expertise. Through the assessment of carbon inventory report and the monitoring SOPs /14//15//26/ and /28/ of the project, GHG emission reductions were found to conform to the project design and monitoring plan which ensured a high degree of data reliability and also that adequate monitoring mechanisms are in place where the required parameters need to be monitored. The evidence provided to determine emission reductions reported in the Monitoring Report included values, description, units, QA/QC procedures and sources. This evidence has been cross-checked with the project's emission reduction calculation spreadsheets. The procedure for data recording, transfer and final reordering was also verified and found to be in compliance with the monitoring plan outlined in the PD and the SOPs /14//15/.
- The audit team recalculated the emissions reduction calculations for the said monitoring period and uncertainty analysis for each selected carbon pool and confirmed the calculations are correct and in line with the methodology and associated modules. The audit team confirms that for measurement of carbon stocks; sufficient measurement plots has been included to achieve this precision of 95% level across the measured stocks.

- The soil peat depth and SOC verification was carried out in two phases; first based on the desk review soil peat depth measured during the peat inventory by the PP and cross checking it with secondary literature /22/. The second step was ground assessment of peat measurement carried out during site visit. During the site visit, 6 sample points for peat depth measurement were taken. The peat augers were used for soil depth measurement. All these peat inventory field data collected by the VVB + the peat inventory data provided by the PP was be overlaid on the modeled peat map to cross check the modeled peat estimates in comparison peat depth measured in field.
- The audit team further validated the boundaries through an independent sampling of peat in the field and through the remote sensing analysis. During the site visit, 6 sample points for peat depth measurement were taken. The peat augers were used for soil depth measurement. Also, peat thickness was determined by field sampling and remote sensing analysis exercise across the two Concessions area PT-TBOT and PT-GCN. confirmed the results mentioned by the PP in the MR and ER sheets is accurate for the sampling points considered.





- The forest biomass and carbon plots were estimated during the site visit field surveys and were also verified using high resolution Sentinel-2 L2A canopy density information derived using NDVI, under Dense, Moderate, Sparse, Open and no-vegetation categories.



Figure 2: biomass estimation carried out during audit site visit

- Hence, overall based on the analysis it is verified the baseline information used on forest carbon and health were precise.
- The canal and dam intervention were also identified and verified using high resolution sentinel images, along with field-based reporting. The spatial analysis confirms all the samples selected for validation are accurate showing location of canal and dam from main river areas.





Figure 3: Dams, Canals, Subsidence Poles, Dip wells and Automatic Level Loggers inspections during the audit site visit

- The verification team interviewed personnel from the client relevant to the project management and monitoring and confirmed their qualifications and expertise. The data collection, recording and processing system meets the requirements of the monitoring plan as per the methodology in terms of sufficiency of the quantity and appropriateness of quality of the evidence used to determine the GHG emission reductions. Further the QA/ QC procedures adopted by client for the monitoring of the GHG emission reductions were found to conform with the project design and monitoring plan which ensured a high degree of data reliability.
- Throughout the verification, the project proponent demonstrated a commitment toward conservativeness and took all measures appropriate to ensure the reliability of evidence provided.

4.6 Non-Permanence Risk Analysis

An overall rating was calculated is 4%, however the value considered is 10%. since the AFOLU Non-Permanence Risk Tool /7/ requires a minimum risk rating of 10%. The non-permanence risk report and risk calculation Sheet are provided by PP, the risk assessment was conducted according to the VCS Procedural Document “AFOLU Non-Permanence Risk Tool” (version 04) /7/.

Each risk category was calculated based on the VCS guidance. The information was cross-checked and verified through document review, onsite visits of the project area and interviews conducted. Details of the assessment are provided as follow.t onsite visits of the project area and interviews conducted. Details of the assessment are provided as follow.

Risk factor	Rational	Conclusion
Internal risk		

Project management risk	RER and APRIL maintain management teams located less than 1 day of travel from the Project Area. APRIL's nearby management and concessions allow constant and regular oversight of the Project Area. APRIL also has a helicopter that can allow access to the Project Area in less than an hour. The PPs APRIL and RER maintains an adaptive and flexible management approach to its activities such that its operations are regularly reviewed, and management strategies are revised. This adaptive management system is an inherent part of APRIL's PEFC, Singapore Green and ISO certification /32/. The PP has sufficient expertise to develop and implement AFOLU projects including forest management and planning monitoring of ecosystems, protection of forest areas, carbon project development, quality assurance and quality control systems, financial management, community engagement, etc. the PP is also experienced in successfully getting VCS and other GHG programs registered and verified. There is a specific mitigation plan made by project proponent for potential risks to the project, which has been verified in the monitoring plan. Hence, the total score of the risk is -4	A risk rating of -4 is appropriate given the rationale provided and all statements made are substantiated.
Financial Viability	Project Cash flow breakeven period is less than 4 years from the current risk assessment. The Project Proponent, APRIL, is a leading global producer of pulp and paper products and has substantial cash reserves as well as debt facilities.	A risk rating of 0 is appropriate given the rationale provided and all statements made are substantiated.

	The project Proponent APRIL has secured cash assets far in excess of 80% of the funding needed to cover the total cash out prior to reaching the Project breakeven point. The Project Proponent has callable cash and short deposit reserves, substantial sums, secured receivables, readily available debt facilities and excess available liquidity. Proponent APRIL has adequate callable financial resources to cover more than 50% of the total cash outlay needed for the Project prior to it reaching a breakeven point. Hence the total score of the risk is 0	
Opportunity cost	It is the current opinion of the Project that the net present value from harvesting, the most profitable alternative land use activity, is one hundred percent (100%) more profitable than from Project activities. Therefore this mitigation is scored as 8. The Project is subject to a legally binding agreement (concession licenses) with the Republic of Indonesia's Ministry of Environment and Forestry to continue management practices that protect the carbon stocks and restore the ecosystem balance of the forest over the life span of the Project and subject to approved annual as well as 10-year management plans. The mitigation score is -2. The Project will continue management practices that protect the credited carbon stocks until at least 2072 in line with its Ecosystem Restoration concession license.	A risk rating of 6 is appropriate given the rationale provided and all statements made are substantiated.

	Hence the total score of the risk is 6	
Project longevity	The project crediting period is appx. 57 years. Agreements between the landowner and the project owner are available defining the validity and the land used. The right of forest planting and management within the project boundary during the project crediting period as verified by checking the project agreement is with the PP. This mitigation is scored as 2	A risk rating of 1-5 is appropriate given the rationale provided and all statements made are substantiated.
Total internal risk	4	
External risk		
Land Tenure and Resource Access/Impacts	Project area is protected by legally binding commitment (eg, a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period. Land tenure in the Project Area is held by the Republic of Indonesia. The RER Project, through its subsidiary companies, PT GSN. PT. SMN, PT GAN and PT TBOT are all private entities that are subsidiaries of APRIL, which holds for each of the four areas a 60-year Ecosystem Restoration license from the Indonesian Ministry of Environment and Forestry. The Project Area is nonetheless accessible by community members for the collection of Non-Timber Forest Products (NTFP). The project does not anticipate potential upstream and sea impacts that could undermine credits in the next 10 years as the entire project area is located on a peat dome with higher	A risk rating of 0 is appropriate given the rationale provided and all statements made are substantiated.

	areas in the central portion of the Project Area. The land tenure is safe because the land concession license is for the duration of the complete Project Crediting Period. There exists a technical land dispute related to overlapping land claims in PT. GCN concession (see RER VCS PD Section 2.2.2 and Section 2.2.3 by the Segamai Village that was identified in the 2016 consultations. However, PP notes that to clarify and resolve the technical land dispute, both the PT GCN concession and the newly formed Segamai Village Forest (Hutan Desa) must complete their operational documentation with the Ministry of Environment and Forestry. PP must do this because they are a Production Forest (Hutan Produksi). PT GCN has completed this, i.e., its long and short-term management plans (RKU/RKT) and formal boundary application process (Tatas Batas). The Segamai Village Forests has unfortunately not progressed on its side during the monitoring period. RER remains supportive of the Sagami Village Forest and its efforts to complete operationalization. Supporting evidences submitted by the PP are sufficient to demonstrate that the conflicts with the communities and any negative impacts the project might have on them are minimized. The issue was also discussed with the community people during the VVB's site visit in 2021 and no socioeconomic concerns were raised by them. Therefore, total land tenure risk is 3.	
Community Engagement	No community lives inside the project area and are not reliant on the project	A risk rating of -5 is appropriate given the rationale provided and all

	area. However, still the communities living adjacent to the project boundary are consulted and were involved during the project development and implementation process. The Project's positive benefits, among other things, include local employment within the RER program (security Rangers, restoration staff and contract labor supply), a forest honey program, a no-burn vegetable garden program, a sustainable fisheries program, etc. the mitigation score is -5 Therefore, this mitigation is scored as -5.	statements made are substantiated.
Political Risk	The mean of the Governance Score across the six indicators of the World Bank Institute's Worldwide Governance Indicators (WGI) averaged over the most recent five years of available data provide a score of -0.13. Therefore, this mitigation is scored as 2. The project is located in Indonesia and . Indonesia is implementing REDD+ Readiness under the World Bank Forest Carbon Partnership Facility, via the UN-REDD Program, through the FAO, under UNDP and UNEP. Through these programs (and others), the Government of Indonesia has been implementing a REDD+ policy framework covering key components such as GHG credit ownership, clear REDD+ policies, a national MRV program, a national forest reference emission level (FREL), and a host of other multi-stakeholder REDD implementation activities. Therefore, this mitigation is scored as -2. Hence, this mitigation is scored as 0	A risk rating of 0 is appropriate given the rationale provided and all statements made are substantiated.

Total external risk	0
Natural Risk	
Natural Risk (e.g., Fire, Pest and Disease outbreaks, Extreme Weather)	Major : Fire (F) 0.5 Pest and Disease Outbreaks (PD) 0 Extreme Weather (W) 0 Geological Risk (G) 0 Other natural risk (ON) NA Therefore, this mitigation is scored as 0.5 A risk rating of 0.5 is appropriate given the rationale provided and all statements made are substantiated.
Overall risk rating	Internal Risk + External Risk + Natural Risk 4+0+0.5 = 4.5

The calculation has been verified as per the VCS tool applied for the non-permanence risk calculation and it concluded to be appropriate. The AFOLU Non-Permanence Risk Tool requires a minimum risk rating of 10. The calculation of total tradable VCUs is done by multiplying the risk factor with the calculated net emission reductions as per the GHG ER spreadsheet /12/.

5 VERIFICATION CONCLUSION

ESPL has been appointed by Himapnzee Pte Ltd to perform the verification of the net emission reductions (NER) reported for the project titled “Riau Ecosystem Restoration Carbon Project (RER)” (Project ID: 2403) for the first monitoring period from 06 August 2016 to 31 July 2020 (06 August 2016 to 31 July 2020 for WRC and 1 January 2017 – 31st July 2020 for APD). The verification was based on the validated PD, corresponding FVR, MR, ERRs spreadsheets, other supporting documents made available by the PP to ESPL, and on-site assessment by the ESPL verification team.

On the basis set out within the project’s Monitoring Plan mentioned in the validated PD v.12 (with certain deviation as reported in section 3.3 of this report and section 3.2.2 of the MR V4.22) and the applied VCS Methodology VM0007 v.1.6 (with certain deviation as reported in section 3.2 of this report and section 3.2.1 of the MR V4.22), the management team of RER has prepared the GHG emissions data and the reported GHG ERRs in the Monitoring Report v.4.22.

The verification was carried out in accordance with the requirements of the VCS Validation and Verification manual v3.2 and VCS Standard v4.3. As a result of the verification, the verification team confirms that for this reporting period:

- The project is implemented as described in the validated PD with certain deviations. However, the deviations do not impact the applicability of the methodology, additionality, or the appropriateness of the baseline scenario. The project remains in compliance with the applied methodology and standard.
- The monitoring plan is in accordance with the approved monitoring methodology indicated in the validated PD and applied methodology VCS VM0007 v.1.6 with certain deviations. The deviations have achieved same level of accuracy and does not impact negatively to the conservativeness of ERRs estimation.
- The monitoring has been carried out in accordance with the validated PD with certain deviations as reported in section 3.3 of this report.
- The monitoring aspects (i.e., additional monitoring parameters, monitoring frequency and calibration frequency) were in place and functional
- The GHG emission reductions achieved were calculated correctly on the basis of approved monitoring methodology and without any material misstatements.

We have verified that the information included in the final monitoring report (v04.22, dated 04/08/2022) was correct and that the emission reductions achieved have been determined correctly and fairly stated.

Based on the information the VVB have seen and evaluated, confirms the following statement:

Reporting period VCS: From 06 August 2016 to 31 July 2020 (06 August 2016 to 31 July 2020 for WRC and 1 January 2017 – 31st July 2020 for APD).

- Verified GHG removals in the above reporting period:

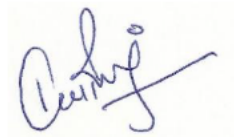
Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)	Buffer pool allocation	VCUs eligible for issuance
2016	270,004	237,748	0	32,257	3,226	29,031
2017	3,345,358	393,444	0	2,951,914	295,191	2,656,723
2018	4,066,125	119,661	0	3,946,464	394,646	3,551,818
2019	4,786,892	-161,690	0	4,948,582	494,858	4,453,724
2020	3,198,969	-186,213	0	3,385,182	338,518	3,046,664

Total	15,667,348	402,949	0	15,264,400	1,526,440	13,737,960
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Approved by

Dr. Kaviraj Singh



Date: 11 July 2023

Place: Gurugram, Haryana

Managing Director

- Earthood Services Privated Limited
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APPENDIX 1: LIST OF DOCUMENTS REFERRED

Ref. No	Title of Document	Version	Date
1	VCS Program Guide	4.0	19/09/2019
2	VCS Standard	4.3	22/06/2022
3	VCS Validation and Verification Manual	3.2	19/10/2016
4	VMD0016 X-STR	1.2	08/09/2020
5	VMD0017 X-UNC	2.2	08/09/2020
6	VCS Project Development Process	3.0	26/11/2012
7	AFOLU Non-Permanence Risk Tool	4.0	19/09/2019
8	VM0007 REDD+MF	1.6	08/09/2020
9	T-ADD EB 35 Annex 19		-
10	VCS Verification Report Template	4.1	-
11	Project Description (PD)	12	12/07/2021
12	Emission Reductions Calculation Spread sheet – RER Monitoring Model Final	3.1	04/08/2022
13	VERRA webpage with global consultation (https://registry.verra.org/app/projectDetail/VCS/2403)/		13/01/2021 to 13/02/2021
14	SOP - Peat survey MRV	-	-
15	SOP - Carbon stock MRV	-	March 2017
16	Shape files – Project Area	-	-
17	Model 25 – RWE	-	-
18	Model 25 – CIW	-	-
19	Model 25 – CIW + REDD	-	-
20	License and project ownership documents Ownership document - PT. GLOBAL ALAM NUSANTARA, 2014	-	

	Ownership document - PT. GEMILANG CIPTA NUSANTARA, 2012 Ownership document - PT. SINAR MUTIARA NUSANTARA, 2014 Ownership document - PT. THE BEST ONE UNITIMBER, 2014		
21	Kml file of geographical coordinates	-	-
22	Research papers - Wantzen, KM et al. 2008, Whitten T, Damanik SJ, Anwar J, Hisyam N. 2000., Whitten, A., Damanik, S. J., Anwar, J. & Hisyam, N., 1997. , Whitten, T. & Laumonier, Y. 1997., Anderson, J., 1963., Page, S. E., Rieley, J. O., Shotyk, O. W. & Weiss, D., 1999. Dynamics of carbon of peat soils under severalland uses in Kampar Peninsula, Riau Province,Indonesia Suratman et al 2021 IOP Conf. Ser.: Earth Environ. Sci.648 012100 https://iopscience.iop.org/article/10.1088/1755-1315/648/1/012100/pdf Mapping the depth and carbon stock for peatland in Meranti, Riau Indonesia Novarina. D.,et, al., Asia Pacific Resources International Limited (APRIL), Indonesia 2 Bogor Agricultural University (IPB), Indonesia 3 Lampung University (Unila), Indonesia /https://peatlands.org/assets/uploads/2019/06/ipc16p279a379novarinariduyanto.etal_.pdf https://www.wri.org/insights/save-indonesias-carbon-rich-peatlands-start-mapping-them Carbon Stocks from Peat Swamp Forest and Oil Palm Plantation in Central Kalimantan, Indonesia Novita, N., Kauffman, J.B., Hergoualc'h, K., Murdiyarso, D., Tryanto, D.H., Jupesta, J. (2021). Carbon Stocks from Peat Swamp Forest and Oil Palm Plantation in Central Kalimantan, Indonesia. In: Djalante, R., Jupesta, J., Aldrian, E. (eds) Climate Change Research, Policy and Actions in Indonesia. Springer Climate. Springer, Cham. https://doi.org/10.1007/978-3-030-55536-8_10 https://link.springer.com/chapter/10.1007/978-3-030-55536-8_10#citeas	-	-

23	Maps showing location of communities and villages	-	-
24	Deforestation Rate Estimation of Proxy Areas	-	31/08/2020
25	Sentinel images - USGS www.usgs.gov	-	-
26	SOP – Weather Monitoring	-	-
27	Methods of AGB Inventory	-	14/10/2020
28	SOP - Hydrology MRV	-	-
29	RER Ethnographic Survey	-	-
30	Participatory Rural Appraisal (PRA) reports		05/01/2016
31	Mapping Potential and Conflict Resolution report	-	April 2017
32	APRIL's PEFC, Singapore Green Certification	-	2/3/2018 – 17/01/2021
33	Documents proving that the project area is legally authorized and documented to be converted to non-forest land'	-	
34	VCS AFOLU Requirements	3.6	21/06/2017
35	Website - UN Sustainable Development Goals (www.undp.org)	-	-
36	CIW 25 – RWE+REDD	-	25/06/2016
37	Methods Peat Land Identification and Peat Thickness Measurement	-	14/10/2020
38	Undertakings for not participating into another GHG programmes and credit mechanisms	-	26/01/2021
39	2015 MoU Kelurahan Teluk Meranti 2016 MoU Kelurahan Teluk Meranti 2017 Desa Bagan Melibur 2018 Desa Bagan Melibur 2019 MOU Reward Desa Pangkalan Terap	-	-
40	Government Regulation: Forest Management and Exploitation Plan	-	08/01/2007
41	Approval of converting the project area legally to non-forest land (in BAU)	-	April 2011
42	Laws and regulations related to forestry and ecosystem restoration relevant to the project	-	

43	Transition to timber plantation based forestry in Indonesia: towards a feasible new policy	-	2009
44	RER company details	-	-
45	RER Project Financial Excel sheet	-	-
46	Policies, Drivers and Land-Use Trends In Industrial Forest Plantation Development In Indonesia	-	-
47	Non Permanence Risk Analysis Report_RER	-	-
48	Purchase order and Reciept of GeoReinfox material	-	01/05/2016
49	RER - Grievance Policy	-	26/08/2016
50	Monitoring, Reporting and Verification (MRV) Plan for the Riau Ecosystem Restoration Carbon Project	-	-
51	Deforestation Rate Estimation of Proxy Areas for RER project	-	31/08/2020
52	APRIL's ISO certification	-	2015
53	Report Mapping Potential and Conflict Resolution in the RER Project area	-	2017
54	Household survey report	-	2016
55	RER – Annual financial audit reports	-	-
56	RER Partnership Agreement		24/03/2021
57	RER Declaration letter – Management of double counting		26/01/2021
58	Landsat TM images	-	-
59	RER MRV Plan	-	-
60	IPCC GPG LULUCF	-	26/01/2021
64	RER - Plantation records	-	-
65	VMD0001 CP-AB	1.1	11/10/2013
66	VMD0006 BL-PL	1.3	08/09/2020
67	VMD0009 LK-ASP	1.3	08/09/2020
68	VMD0013 E-BPB	1.2	08/09/2020
69	VMD0015 M-REDD	2.2	08/09/2020
70	VMD0042 BL-PEAT	1.1	08/09/2020
71	VMD0046 M-PEAT	1.1	08/09/2020

72	T-SIG EB 31	-	-
73	Global forestwatch data - Proxy Data http://commodities.globalforestwatch.org	-	-
74	Google earth - https://www.google.com/earth		
75	SOPs: - Biodiversity Survey and Monitoring, - Flora Survey, - Fauna Survey and - RER-ENV-003-PR Sumatran tiger management in the RER concession area	-	-
76	Recorded flora and fauna list in the PA	-	-
77	IUCN Red List of Threatened Species - https://www.iucnredlist.org/	-	-
78	SOPs Community Meeting Community Mapping Village Monitoring Livelihood Assessment	-	-
79	RER - Shapefiles of PSPs	-	-
80	Peatland surveys and shapefiles	-	-
81	Monitoring Report	04.22	04/08/2022
81	Law No. 1/1970 regarding Work Safety, (Articles: 3,9,12-14)	-	1970
82	Law No. 13/2003 regarding Labour, (Articles: 86 & 87)	-	2003
83	RER SOPs related to worker safety 1. RER-IMS-004- PR Regulatory Monitoring, Analysis and Compliance (Dual Language) rev 00 2. RER-IMS-009- PR Accidents, Incidents, Nonconformity, Corrective, and Preventive (Dual Language) rev 3. RER-IMS-008- PR Objective Target Programme (Dual Language) rev 00		

	4. RER-IMS-007- PR Hazard Identification, Risk Assessment and Determination of Control Measures rev 00 5. RER-FSS-011- PR Emergency First Aid 6. RER-FSS-008- PR Investigation and Occupational Incident Reporting 7. RER-FSS-002- PR FIRE HANDLING CRISIS POSTS (Dual Language) rev 00		
84	PT TBOT RKU (English and Bahasa version) PT SMN RKU (English and Bahasa version) PT GAN RKU (English and Bahasa version) PT GCN RKU (English and Bahasa version)	-	-
85	RER Final Validation Report	2	16/07/2021
86	ISO 14064-3-2006 – Specification with the guidance for the verification and validation of the GHGs statements		
87	Security Contract with PT SEN		
89	Stratification map – raster file		
90	Secondary literature review related to GHGpeatditch-WPS,i,t 2013 Supplement to the 2006 IPCC Guidelines https://www.ipcc.ch/site/assets/uploads/2018/03/Wetlands_Supplement_Entire_Report.pdf - TABLE 2.1 Page 2.12 Basuki, S., Suwardi & Munoz, C.P. (2012) Emission of CO₂ and CH₄ from plantation forest of Acacia crassiparva on peatlands in Indonesia. In: Proceedings of the 14th International Peat Congress. Stockholm, Sweden, 3–8 June (the same has been referred by 2013 IPCC Wetland Guidelines) Subsidence and carbon loss in drained tropical peatlands Hooijer, A., Page, S., Jauhiainen, J., Lee, W.A., Lu, X.X., Idris, A. & Anshari, G. (2012) Subsidence and		

	carbon loss in drained tropical peatlands. Biogeosciences 9: 1053–1071		
	Carbon dioxide emissions from an Acacia plantation on peatland in Sumatra, Indonesia Jauhiainen, J., Hooijer, A. & Page, S.E. (2012a) Carbon dioxide emissions from an Acacia plantation on peatland in Sumatra, Indonesia. Biogeosciences 9: 617–630		
91	List of HTI Concessions in Riau Province, Indonesia (Data from Ministry of Environment & Forestry, Indonesia)		
92	Dam completion record of 2016 Dam installation and maintenance records		
93	supporting documents to show the mitigation measures by the PP related to risk of land area overlapping with SK HD Segamai: • SK HD Segamai 2013, Decision of the Minister Environment and Forestry of the Republic of Indonesia, Page 1 • See SK HD Segamai 2015, Decision of the Minister Environment and Forestry of the Republic of Indonesia, Page 1 • See SK HD Segamai 2017, Decision of the Minister Environment and Forestry of the Republic of Indonesia, Page 1 • PHPL is the acronym for Pengelolaan Hutan Produksi Lestari (Sustainable Production Forest Management), while PSKL is the acronym for Perhutanan Sosial dan Kemitraan Lingkungan (Social Forestry and Environmental Partnerships) • SK IUPHHK-RE GCN 2012, 20,265 ha of production forest area was granted to PT GCN, Page 5 • Berita Acara Tata Batas GCN 2015, Page 1 • Cooperation commitment letter and MOM GCN-Segamai 2022, Pages 1 - 4 • MOU Kel Nelayan Serkap Jaya Lestari 2016-2018, pages 1 – 5 • Reference Map showing overlap • RER Progress Report 2020		

94	2019 Landsat imageries of some of the Sinar Mas concessions Analysis of LULC XLXs		
95	Kml file of all the listed HTI concessions in Riau on the peatland area		

APPENDIX 2: LIST OF FINDINGS

CAR: Corrective Action Request

CL: Clarification Request

FAR: Forward Action Request

Table 1. Remaining FAR from validation and/or previous verification

FAR ID	01	Section no.	E.2	Date: DD/MM/YYYY
Description of FAR				
NA				
Project participant response				Date: DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
DOE assessment				Date: DD/MM/YYYY
NA				

Table 2. CL from this verification

CL ID	01	Section no.	MR: 3.1	Date: 07/05/2021
Description of CL				
Please provide the supporting monitoring documents to verify the following: - REDD APD implementation and monitoring status (Table 19): - Remotely Sensed Images from 2016, 2019 and 2020 - Hot Spot data from 2016,2017,2018,2019 & 2020 - WRC implementation and monitoring status (Table 23) - Remotely Sensed Imagers from 2016 through 2020 - Dam Maintenance Records - Dam Monitoring records - Water Table Monitoring Data (from 61 dip wells and 9 level loggers) - Subsidence Data (from 81 subsidence poles)				
Project participant response				24/05/2021

CL-01.1 (REDD APP Implementation)

- a) Remotely sensed images
Remotely sensed images for 2016, 2019 and 2020 has been provided as set forth below.
- b) Hotspot Data
Hotspot data for 2016-2020 has been provided as set forth below.

CL-01.2 (WRC implementation and monitoring status)

- a) **Remotely sensed images**
Remotely sensed images for 2016 through 2020 has been provided as set forth below.

- b) **Dam Maintenance Records**

An excel sheet titled “**Dam Insp_Maint Summary 2016-2020.xlsx**” has been provided that summarizes the inspections and maintenance of all dams during the monitoring period. Maintenance was only required in 2017, 2018 and 2020. The excel sheet is being used by the Project to track all dam monitoring and the recommended maintenance, if any.

PP is providing the field “maintenance reports” that indicate what maintenance was undertaken for the Dams that need assistance. PP is also providing the inspection field report for 2017, 2018 and 2020 for dams that were inspected, and maintenance was required (Dam Inspection_Maint Field Report Forms.pdf). Both field reports contain information about the dam, its location =, the date of inspection or maintenance and what was recommended for work as well as the work that was completed. Pp notes that some of the locations on the field report do not exactly correspond to the actual location. This is because of user errors with the GPS equipment, or failure to take the reading at the correct location. The Project monitoring team has been made aware of these discrepancies and is undertaking efforts to ensure that there will be greater accuracy in the future inspections and maintenance.

- c) **Dam Monitoring records**

PP has provided an excel sheet titled “**Dam Insp_Maint Summary 2016-2020.xlsx**” that summarizes the monitoring inspections and maintenance of all dams during the monitoring period. The excel sheet is being used by the Project to track all dam monitoring and the recommended maintenance, if any.

PP is also providing the inspection field report for 2017, 2018 and 2020 (Dam Inspection_Maint Field Report Forms.pdf)for dams that were inspected and maintenance was required. Inspection reports are only from 2017, 2018 and 2020 as only those years was maintenance required. Corresponding maintenance field reports are also provided as discussed above.

- d) **Water Table Data**

Although water table data is being monitored for the project, no water table data was used in the calculations of emission reductions or removals. Water table data is only used in the project for baseline readjustment. Further there are no water table depth parameters set out in §4.2 of the Monitoring Report – Parameters Monitored at Verification nor are any required for any of the monitoring modules used by the project for estimation of ERs.

e) Subsidence Data Although water subsidence data is being monitored for the project, no subsidence data was used in the calculations of emission reductions or removals. Subsidence data is only used in the project for baseline readjustment. Further there are no subsidence parameters set out in §4.2 of the Monitoring Report – Parameters Monitored at Verification nor are any required for any of the monitoring modules used by the project for estimation of emission reductions.	
Documentation provided by project participant	
For CL01.1(a) A3_Landsat 27 Oct 2020.jpg A3_Landsat 18 May 2019.jpg A3_Landsat 26 June 2016.jpg For CL01.1(b) Hotspot Data RER_KP 2016-2020 High Confidence.xlsx HS 2020.jpg HS 2019.jpg HS 2018.jpg HS 2017.jpg HS 2016.jpg For CL01.2(a) A3_Landsat 27 Oct 2020.jpg A3_Landsat 18 May 2019.jpg Landsat 16 Jun 2018.jpg Landsat 31 Jul 2017.jpg A3_Landsat 26 June 2016.jpg For CL01.2(b) & (c) Dam Insp_Maint Summary 2016-2020.xlsx Dam Inspection_Maint Field Report Forms.pdf	
DOE assessment	26/05/2021

Data provided for CL 1.2-points (b) and (c) is fine and the CL is closed. Justification provided for CL 1.2 points (d) and (e) are satisfactory and the clarifications requested are closed.

However, CL 1.1 and 1.2 point (a) the data provided are not sufficient. To cross check the growth and actual change in the project area, the following data are requested to be submitted by the PP:

1) Avoided Planned Deforestation (APD) Implementation & Monitoring Status

- a) Land Use map for 2015 and 2020 (for two time points at least)
- b) Forest cover/ Density map for 2015 and 2020 (if prepared)
- c) Inventory data for 2020 supporting table 21 and Table 22 (Please refer format of sub-sheet “AGB Inventory” of “Model 25 – Total with Monitoring report” sheet).

2) Wetlands Restoration and Conservation

- a) Land Use map for 2015 and 2020 (for two time points at least)
- b) Forest cover/ Density map for 2015 and 2020 (if prepared)

Project participant response

28/05/2021

CL 01.1 Avoided Planned Deforestation (APD) PP presumes that the correct map years being requested are 2016 and 2020 as they correspond to the monitoring period (not 2015).

- a) PP notes that the original forest classification (forest cover / density map) was created according to the AGB inventory and land cover classification conducted at the time. We have generated LANDSAT imagery for 2016 and 2020 and analysed them for land use change based on image characteristics combined with field monitoring of fires and land clearing / forest degradation. The results of these analysis is that there has been no deforestation or forest degradation from either fires, logging or land clearing. This is the case at 2016 and 2020. PP assumes therefore that there is no forest stratification changes to be made to the forest cover / density map. Therefore, the forest cover / density stratification maps for 2016 and 2020 are the same as the original stratification map provided in the MR and the PD.
- b) Land use maps under the baseline is referred to as the “Map 1- Operation Plan of the Project” in the PD and the boundaries of annual plantation and associated deforestation is according to year 1 (2016) through to year 7 (2021) of the map. The boundaries of REDD are shown in “Map 25- Boundary map of the REDD project activity within the Project boundaries” in the PD. The areas are calculated and shown in “Table 50- REDD and Non-REDD Areas within Plantation Development Area” (in the PD). The annual area of REDD is shown in the MR in “Table 78- Areas converted to plantations by land cover type in baseline”. There is no specific map of these planned deforestation areas on a year by year basis.
- c) PP has provide the inventory data that supports the tables in question in the file: Inventory & Growth.xlsx.

CL 01.2 Wetlands Restoration and Conservation (WRC) The areas of peatland development under the baseline is shown in “Table 125- Areas of drained land and surface areas of drains in the baseline”. The currently drained areas which will be restored in the project are listed as RWE and RWE+REDD and the areas to be drained in the baseline are listed as CIW and CIW+REDD.

Under the project, all drained areas are restored by blocking the existing legacy canals. The reduction in drained areas (i.e. the restoration of wetlands) is described in “Table 151- Area drained by legacy canals” of the PD.

Documentation provided by project participant	
210528 Monitoring Report v4.pdf	
Inventory & Growth.xlsx	
DOE assessment	DD/MM/YYYY
The documents provided are fine and the CL is closed.	

CL ID	02	Section no.	PD: 4.3	Date: 07/05/2021
Description of CL				
- In sub-section 4.3.3 PP has mentioned that all data will continue to be kept for at least 10 years. However, there are many project data which will be even required after the re-assessment of baseline i.e., after 10 years, e.g., land ownership, stakeholder/FPIC meetings details, project boundaries shapefiles, etc. Hence, please clarify or rephrase the statement. - Point 8 of section 4.3.2 and 4.3.3 are both related to data management. Please check and revise accordingly. - Please check the sub-section numbering mentioned after 4.3.3.				
Project participant response				24/05/2021
CL-02.1 The MR at section 4.3.3 has been updated to state: All hardcopy data will continue to be kept for at least 10 years. All hardcopy data that is necessary to be kept for longer, such as data required for baseline re-assessment, land ownership documents, stakeholder meeting notes, project boundary documents etc will be kept for the 10-year period as hardcopy and then will be kept for the duration of the project in a digital format. All other digital data will also be kept in a digital format on hard drives or cloud-based storage systems for the duration of the project. CL-02.2 The MR has been updated at sect 4.3.2.1, point 8 and now states: Hard copy data will continue to be stored and managed following APRIL's ISO Data Management procedures and will be kept for at least 10 years. All hardcopy data will be kept for the 10-year period as hardcopy and then will be converted to a digital format and kept for the duration of the project on hard drives or cloud-based storage systems. All other digital data will also be kept in a digital format on hard drives or cloud-based storage systems for the duration of the project. CL-02.3 The MR has been updated so that the sub-section numbering flows appropriately.				
Documentation provided by project participant				
210524 Monitoring Report v3.pdf				
DOE assessment				26/05/2021
The updated MR is fine, the CL is closed.				

CL ID	03	Section no.	MR: 4.2	Date: 19/05/2021
Description of CL				
In many parameters under section 4.2 of the MR, PP has mentioned the value applied as "N/A". Please provide clarification for putting "N/A" for these parameters instead of actual values.				
Project participant response				24/05/2021
PP has updated the Monitoring Report to include values for §4.2 – Parameters Monitored, or if no value was applicable, a justification for the same.				
Documentation provided by project participant				
210524 Monitoring Report v3.pdf				
DOE assessment				26/05/2021
The updated MR is fine. However, the following issues are to be addressed.				
a) Please check the description and revise of GHGREDD,WPS,SS,i, Pool# (comment added in the MR section 4.2) b) For GHGpeatsoil-BSL,i,t, value applied and its related description is not clear. Please rephrase (comment added in the MR section 4.2)				
Project participant response				28/05/2021
CL 03 – Monitoring Parameters a) PP has updated the MR and the cited parameter so the the name of the parameter is now "E_{REDD-WPS,SS,i,pool#}". The MR has also been updates to include the correct value for the "E_{REDD-WPS,SS,i,pool#}": 8.65%. b) PP has updated the MR to correct the description for GHGpeatsoil-BSL,i,t, the updated text now is: GHG emissions from microbial decomposition of the peat soil within the project boundary in the baseline scenario during the monitoring period (17 June 2016 to 31 July 2020) is 16,160,267 t CO₂e. This is the equivalent of 3,923,384 t CO₂e yr⁻¹ over the monitoring period				
Documentation provided by project participant				
210528 Monitoring Report v4.pdf				
DOE assessment				04/06/21
The updated MR is fine and the CL is closed.				

Table 03 - CAR from this verification

CAR ID	01	Section no.	PD: 5 (5.1.4), 5.2 and 5.3	Date: 07/05/2021
Description of CAR				
1. The points discussed in step 1.1 is to be discussed in part 1.3 of the same section as defined in Section 5 of module VMD0006 BL-PL. Please check and revise. Also, as per step 1.1 of the BL-PL tool, PP has to determine the agent of planned deforestation which could be individual, organization or corporation. PP in this step has not mentioned clearly the agents identified for deforestation in the region. Please check and add the same. 2. In step 1.3 of sub-section 5.1.4 Please check the average of deforestation rate of proxy areas calculated in Table 36. 3. In step 1.6 of sub-section 5.1.4 - In table 83 for above • PT. Harapan Jaya (Tasik) proxy area the deforestation rate is 41.38%. please check the deforestation rate value and revise in either of the place. • Also, for PT. Peranap Timber (Serapung) proxy area the deforestation rate is 4.44%. please check and revise the range. 4. Please add the total baseline emissions calculated in the monitoring period in the conclusion (section 5.1) 5. Please add the total project emissions calculated in the monitoring period in the conclusion (section 5.2) 6. Please add the total leakage emissions calculated in the monitoring period in the conclusion (section 5.3)				
Project participant response				24/05/2021

CAR-1.1 The MR has been updated with additional language regarding the organizations involved in plantation forestry in Riau:

The deforestation agents in this case are the forest plantation companies in Indonesia who manage IUPHHK-HT licenses for the development of plantations. There are numerous companies of this type in Sumatra, Kalimantan and Papua. In Riau Province alone there are 54 companies operating IUPHHK-HT licenses.

CAR-1.2 The MR has had the deforestation rate table updated.

The average deforestation rate is correctly calculated pursuant to Project equation no. 11. The equation originated from equation 4 of module VMD0006 BL-PL. (The table has been slightly updated as some of the values were reanalysed and have been corrected. However, the values have not changed significantly, and the average remains close to the original value.

It is incorrect to use a simple average of all 6 deforestation rates divided by 6 (the number of proxy areas). The above noted equation from the module is a weighted average of all of the proxy areas divided by the number of years that are being used in the proxy area calculation.

CAR-1.3

- a) The MR has been updated and now states: The range of the deforestation rates are 4.3%-41.21%.
- b) Please see revised table 37. The annual deforestation rate for PT. Peranap Timber (Serapung) is correct (The values of the table have been updated based on a reanalysis which brought to light a number of minor errors. The deforestation rate average for PT. Peranap Timber (Serapung) is calculated using Project Equation No. 11.

CAR-1.4 The MR has been updated at §5.1.12 to include the total baseline emissions in the monitoring period which is "38,525,759 t.CO₂-e"

CAR-1.5 The MR has been updated to include the total Project emissions in the monitoring period at §5.7 which is "24,632,978 t.CO₂-e".

CAR-1.6 The MR has been updated to include the total project emissions from leakage in the monitoring period which is "0".

Documentation provided by project participant

210524 Monitoring Report v3.pdf

DOE assessment

27/05/2021

All the requested changes made are okay in the MR except the following

- a) In section 5.1.4, step 1.3 - The shapefile for PT. Essa Indah Timber (Serapung) proxy area: show total area of the proxy area is 9681.8 ha, where in the report it is 10,023 ha. Please check and confirm.

CAR 1.4 - Please cross check the total value of baseline emissions in section 5.1 of the MR with the excel sheet provided ("Model 25 – Total with Monitoring Report" – sub-sheet "Monitoring report") and revise the value.

CAR 1.5 – There is no final value added in section 5.2 Project Emissions. Please check and add.

Project participant response

28/05/2021

CAR 1.3 The requested GIS files have been provided	
CAR 1.4 The MR has been updated so that the total baseline emissions during the Monitoring Period corresponds to Table 124 in the MR.	
CAR 1.5 The MR has been updated to include a total value for Project Emissions at the end of §5.2 that corresponds to Table 124 in the MR.	
Documentation provided by project participant	
PT EIR GIS Fies.zip 210528 Monitoring Report v4.pdf	
DOE assessment	01/06/2021
1.The values mentioned under tables provided under section 5.2 and 5.4 are not consistent to the corresponding tables in the excel sheet. Request to also tally the table numbers in the excel sheet/MR .	
Project participant response	Date: 23/06/2021
TR CAR 01.1 PP has updated Tables 92, 94, 105 of §5.2 and Tables 121-123 & 127 and 129. All other tables have been reviewed and updated as necessary as well. Further PP has updated the project calculations to “Model 26 with Tables” so that the table numbers listed in the sub-sheet “Monitoring Report” now correctly correspond to the tables listed in the RER-CP Monitoring Report.	
Documentation provided by project participant	
210622Monitoring Report.v3.1.docx Model 26 with tables v5.xlsx	
DOE assessment	Date: 18/07/2021
All the changes made are fine and the CAR is closed.	

CAR ID	02	Section no.	MR: 4.1, 4.2	Date: 05/06/2021
Description of CAR				

In section 4.1/2 of the MR, some of the values derived/calculated cannot be traced in the supporting excel sheets: 1. PP is requested to provide under the 'source of data' the excel file name and sheet for traceability of the value applied. 2. The justification of choice of data or description of measurement and procedure applied shall also be included for all the parameters as per the guidelines to fill the MR template. 3. Request to attend to the inconsistency of the value of the Δ CBSL,planned; section 4.1, value mentioned is 14,741,697, while in section 4.2 mentions 19,697,112.	
Project participant response	23/06/2021
TR CAR 02.1 PP has provided a separate standalone document entitled "Parameter with sources commented" where the location of the parameter is indicated in relation to the excel spreadsheet "Model 25 with Totals v5.xlsx." TR CAR 02.2 PP has updated the MR with justification for each parameter as indicated by the guidelines for the MR Template. TR CAR 02.3 PP has updated the Parameters so that the value for Δ CBSL,planned correspond both for §4.1 and §4.2.	
Documentation provided by project participant	
210622Monitoring Report.v3.1.docx Model 26 with tables v5.xlsx Parameter with sources commented.docx Proxy Deforestation v5.xlsx	
DOE assessment	Date: 18/07/2021
All the changes made are fine. However, the following points are still to be added/checked: 1) In some of the parameters the 'source of data' the excel file name and sheet for traceability of the value applied has still not been done. Please check and add (comments mentioned in the MR) 2) Please cross check the value of the following with the excel sheet submitted: a. GHGproxy-CO₂,i,t - Model 26 sheet – Monitoring Report, b. GHGproxy-CH₄,i,t - Model 26 sheet – Monitoring Report,	
Project participant response	Date: 21/07/2021
The PP has update the PD to address the noted issues.	
Documentation provided by project participant	
210721_RER_Monitoring_ReportV3.3.pdf	
DOE assessment	Date: 25/0720/21
The updated MR is okay and the CAR is closed	

CAR ID	03	Section no.	MR: 4.1	Date: 05/06/2021
Description of CAR				
1. For many of the parameters fixed ex-ante the values in the MR are different from that in the PDD. PP is requested to provide justification for the values considered for this monitoring period. 2. Some of the parameters (eg 'GHG_{WPS-WRC}') are appearing to be fixed ex-ante and also under monitored parameters. PP is requested to justify if the value is fixed at validation the entire crediting period or is being monitored. PP is also required to clarify the reason for different values mentioned as fixed then the monitored value. 3. The applied value for parameter 'R; Root to shoot ratio appropriate to species or forest type / biome; note that as defined here, root to shoot ratio is applied as belowground biomass per unit area:aboveground biomass per unit area (not on a per stem basis)' does not match for any category mentioned under source of data. Please justify 4. This parameter D%planned,i,t has been found to be mentioned more than once (repeats 6 times are for various modules/methodology). PP is requested to include the module and the parameters for clarity.				
Project participant response				23/06/2021
TR CAR 03.1 PP notes that the the parameter values at validation are calculated according the full project period. The parameter values at verification are calculated according the monitoring period except where the parameter definition explicitly requires calculation for the full monitoring period. TR CAR 03.2 PP notes that the main variables which have actively been monitored and have a direct impact on project emissions estimates are the tree growth rates and land use change. The forest growth rates were determined to be higher than the allometric assumptions but we have decided to (conservatively) retain the use of allometrics for forest growth until more data is gained in the future. There has been no land cover change through deforestation, forest degradation, land drainage or fires etc. Therefore there is no change to the project emissions estimates. TR CAR 03.3 PP has updated the parameter D%planned,i,t so that the value in the source applies to the values reported. TR CAR 03.4 PP has removed the duplicate parameter D%planned,i,t as well as a number of others that were inadvertently mentioned more then a single time. PP has also provided notations in the Parameters section of the MR to describe the differences in D%Planned between the entire project and the monitoring period.				
Documentation provided by project participant				

210622Monitoring Report.v3.1.docx Model 26 with tables v5.xlsx	
DOE assessment	17/7/2021
The corrections made in the MR and ER Excel Sheet Model 26 v5.3. The CAR is closed	

History of the document						
Version	Date	Nature of Revision	Prepared by		Reviewed by	
			Name	Date	Name	Date
2.0	16/10/2015	In line to UN reports	Abhishek Mahawar	16/10/2015	Ashok Gautam	16/10/2015
1.0	10/11/2014	Editorial	Abhishek Mahawar	10/11/2014	Ashok Gautam	11/11/2014
0	01/07/2013	Initial adoption	Abhishek Mahawar	28/06/2013	Kaviraj Singh	01/07/2013