



Verification Report

Version 1.3

27 January 2026

Aster Global Environmental Solutions, Inc.





Forest Carbon Partnership Facility (FCPF) Carbon Fund Verification Report (VER)	
ER Program Name and Country	Zambézia Integrated Landscape Management Program (ZILMP) Republic of Mozambique
Reporting Period Covered In this Report	01-01-2021 to 31-12-2022
Number of FCPF ERs	0
Number of ERs allocated to the Uncertainty Buffer	0
Number of ERs allocated to the Pooled Reversal Buffer	0
Number of FCPF ERs from enhanced removals through afforestation/ reforestation	0
Name of the VVB	Aster Global Environmental Solutions, Inc.
Contact information of the VVB	Name: Aster Global Environmental Solutions Contact: Janice McMahon Phone: +1 330.294.1242 ext. 102 Email: jcmahon@asterglobal.com Address: 3800 Clermont St. NW North Lawrence, OH 44666
Report Version	1.3
Date of the Verification Report	27-01-2026
Report Approved by	Shawn McMahon



1. VERIFICATION STATEMENT

The review and cross-check of explanations and justifications included in the Monitoring Report dated 27-11-2025 and supporting documents have provided Aster Global Environmental Solutions, Inc., (herein referred to as Aster Global) with sufficient evidence to determine with a *reasonable* level of assurance the compliance of the reported information with the FCPF Methodological Framework, the Validation and Verification Guidelines and other applicable normative documents.

The scope covered by the verification includes the ER Program’s crediting period [01-01-2018 to 31-12-2024], the reporting period [01-01-2021 to 31-12-2022], the accounting area [5,310,265 hectares], the REDD Country Participant’s Forest Monitoring System, the national REDD+ Programs and Projects Data Management System and the following GHG sources, sinks, REDD+ activities and carbon pools:

Sources/Sinks/Reservoirs	<p>REDD+ Activities (sources and sinks)</p> <ul style="list-style-type: none"> Emissions from deforestation – included Emissions from forest degradation – excluded Removals from forest carbon stocks enhancement – excluded Sustainable management of forests – excluded Conservation of carbon Stocks – excluded <p>Carbon Pools</p> <ul style="list-style-type: none"> Aboveground biomass in tress – included Belowground biomass in trees – included Biomass in non-woody vegetation – excluded Dead organic matter – excluded Leaf Litter – excluded Soil organic carbon – excluded <p>GHG</p> <ul style="list-style-type: none"> CO₂ – included CH₄ – excluded N₂O – excluded
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During the verification process, the audit team issued findings as specified in the FCPF Validation and Verification Guidelines v2.7 Section 11. The VVB issued Major Corrective Actions (MCARs), Minor Corrective Actions (mCARs), and Observations (OBS).

A total of 32 MCARs, 1 mCAR and 1 Observation were raised in two (2) rounds of review. All of the 32 MCARs were successfully addressed by the ER Program and closed by the VVB, and 2 Observations remained to be considered and/or addressed during the next verification event. These findings are described in Appendix 1 of this report.

Aster Global is able to verify with a reasonable level of assurance that the Emissions Reductions generated by Zambézia Integrated Landscape Management Program (ZILMP), quantified in accordance with the verification criteria, amount to -7,464,202 tonnes CO₂ equivalent (tCO₂e). Aster Global verified that the uncertainty buffer ERs amount to 0 tCO₂e and that the non-permanence ERs amount to 0 tCO₂e. A total of 4,146,257 FCPF ERs have been reversed and need to be cancelled from the Buffer ERs. As a result, no FCPF Units are eligible for issuance for this reporting period. There are no uncertainties associated with the verification conclusion.

Statement Issuing Date: 27 January 2026

Intended User: [World Bank Group, FCPF Carbon Fund Participants]

TEAM LEADER: Shawn McMahon

LEGAL REPRESENTATIVE: Janice McMahon

Version of the template: 1.4, August 2024

2. AGREEMENT

2.1 Level of Assurance

The level of assurance determined the depth of detail that the verification team used to determine if there were any errors, omissions, or misrepresentations. Aster Global assessed the ZILMP's implementation of general principles, data collection and processing, sampling/monitoring descriptions, documentation, calculations, etc., to provide reasonable assurance to meet the requirements of the FCPF Carbon Fund and to satisfy the professional judgement of the audit team.

Based on the previous provisions and considering the findings raised during the audit, a positive evaluation statement reasonably ensures that the FCPF Program GHG assertion is materially correct and is a fair representation of the GHG data and information provided in the ER Monitoring Report and supporting documents.

2.2 Objectives

As outlined in the Validation and Verification Guidelines (VVG) - (Section 8.2)¹, the general objectives of the validation/verification of the ZILMP include the following:

- Review of ER Monitoring Report and supporting information to confirm the correctness of presented information;
- Identify if the methodological steps and data are publicly available in accordance with applicable criteria;
- Assess whether the start date of the crediting period proposed by the ER Program is in compliance with the definition provided in the FCPF Glossary of terms;
- Assess the extent to which reported ERs /Reference Level have been reported with a transparent and coherent step-by-step process that enables reconstruction and have meet the requirements of applicable criteria;
- Assess the extent to which the reported GHG emissions / Emission Reductions / Reference Level (or the revised Reference Level if technical corrections are applied) is materially accurate, i.e. free of material misstatements, errors or omissions;
- Identify source(s) of Uncertainty due to both random and systematic errors related with the Reference Level setting and any sources of bias that can impact the estimate of the Total ERs, and determine whether the ER Program has conducted the Uncertainty analysis in compliance applicable criteria;
- Assess the Forest Monitoring System of the ER Program and validate that there are controls for sources of potential errors, omissions, and misstatements in place;
- Identify components of the Forest Monitoring System that require attention and/or adjustment in future monitoring and reporting or identify areas of risk of future noncompliance.

Similarly, as outlined in the VVG - (Section 8.2)¹, the specific objectives of the verification of ZILMP include the following:

- Assess the extent to which the methodologies and methods used to estimate GHG emissions and removals during the Reporting Period are consistent with the Reference Level and with the Monitoring Plan as described in the ER Monitoring Report;
- Assess the extent to which the ER Monitoring Report includes a complete and accurate report, to the extent possible, on the implementation of its strategy to mitigate and/or minimize potential Displacement and on any changes in major drivers in the ER Accounting Area;

¹ Forest Carbon Partnership Facility, Validation and Verification Guidelines, Version 2.7, January 2025 (Section 8.2)

- Assess the extent to which the ER Monitoring Report contains a complete and accurate report on the mitigation, to the extent possible, of significant risks of Reversals identified in the assessment, and addresses the sustainability of ERs;
- Determine whether the ER Program has quantified ERs allocated to the Uncertainty, Reversal, and Pooled Reversal Buffer during the Reporting Period in compliance with the Methodological Framework and other applicable criteria;
- Assess the extent to which systems to avoid that ERs generated under the ER Program have not been counted or compensated for more than once have been adequately implemented and confirm that issuance has not occurred in other known registries;
- Determine whether the national or centralized REDD+ Programs and Projects Data Management System are implemented and operated in compliance with the Methodological Framework and other applicable criteria;

The verification process ensured that all required objectives have been met during the course of audit.

2.3 Criteria

The criteria applicable to the verification included the following:

- FCPF Methodology Framework, Version 3, April 2020
- Buffer Guidelines, Version 4.2.1, March 2025
- Guideline on the application of the Methodological Framework Number 1, Version 1, June 2016
- Guidelines on the application of the methodological Framework Number 2, Version 2, November 2020
- Guideline on the application of the Methodological Framework Number 3, Version 1, November 2018
- Guidelines on the application of the Methodological Framework Number 4, Version 1, November 2020
- Process Guidelines, Version 6.3, March 2025
- FCPF Validation and Verification Guidelines, Version 2.7, January 2025
- FCPF – Glossary of Terms Version 2.3, January 2025
- ISO 14064-3:2006
- ISO 14065:2013
- ISO 14066:2011
- IAF MD 6:2014
- Forms and templates as published and available by FCPF
- Training Presentations presented by FCPF
- Formal clarification provided by the FMT

Following are the Criteria and Indicators applicable for verification:

Criteria / Indicators	Topic	Verification
6	Data availability	X
7, 8, 9.1	Identification and address source(s) of uncertainty	X
9.2, 9.3	Estimation of residual uncertainty	X
14.1	Consistency of monitored estimates with RL.	X
17.3, 17.4	Monitoring and reporting of displacement mitigation	X
18.2	Addressing reversals	X
19	Account for reversals	X
22	Calculation of Emission Reductions	X
23	Double counting	X
37	REDD projects and programs DMS	X

2.4 Scope

The general scope of the verification includes:

- Crediting period of the ER Program
- The applicable ER Program Reporting Period (Verification)
- The ER Program Accounting Area
- The GHG sources and sinks associated with the REDD+ activities accounted for as required by the Methodological Framework
- The carbon pools and greenhouse gases to be accounted for as required by the Methodological Framework
- The REDD Country Participant’s Forest Monitoring System as described in the ER Monitoring Report
- The national or centralized REDD+ Programs and Projects Data Management System.

2.5 Materiality

The verification process based on the desk review and country visit found that there are not quantitative and/or qualitative material discrepancies affecting the GHG assertion or leading to overestimations of the reported GHG emissions and removals. The process for estimating the threshold of materiality is described below:

Qualitative and quantitative materiality refers to “errors”, “omission” and “misrepresentation” that either individually or in the aggregate form affect the GHG assertion. As detailed in the AGG, the following criteria are used to evaluate whether a given discrepancy is deemed material:

- Qualitative issues related to management system and controls, poorly managed documentation, and non-compliance with the applicable requirements of the Methodological Framework and other applicable criteria;
- Any errors in reporting factual information in the ER Monitoring Report as required by the FCPF Methodological Framework;
- 1% materiality threshold applies to any over-estimation of Reference Level and ERs. Underestimation of the Reference Level or Emission Reductions will not be considered a material discrepancy.

Any material discrepancy identified by the VVB through the application of the above criteria were considered as non-conformities in the assessment. Any discrepancies not qualifying under the above criteria are treated as immaterial.

3. METHODOLOGY AND PLANNING

3.1 Verification team

The Verification Team is described as follows:

Name	Role	Activities				
		Desk review	Site visit	Reporting	Supervision	Technical review
Janice McMahon	<ul style="list-style-type: none"> • Project Manager / Planning / Team Coordination / Quality Assurance Quality Control (QAQC) 			X	X	X

Shawn McMahon	<ul style="list-style-type: none"> Team Leader/ Lead Validator / Verifier, Desktop Review / Client communications 	X		X	X	
Justin Ziegler	<ul style="list-style-type: none"> Forest Biometrician / Team Member / Desktop Review 	X				
Sandesh Shrestha	<ul style="list-style-type: none"> Remote Sensing and GIS Specialist / Team Member / Virtual Site Visit / Desktop Review / Client communications 	X	X	X		
Ashley Laux	<ul style="list-style-type: none"> Project Forester / Team Member 	X				
Caris Lyons	<ul style="list-style-type: none"> Environmental Scientist / GIS Specialist / Team Member 	X				
Kevin Markham	<ul style="list-style-type: none"> Principal Scientist / Team Member 	X				
Caitlin Sellers	<ul style="list-style-type: none"> Independent Peer Reviewer (Technical Reviewer) 					X
Natalie Hammer	<ul style="list-style-type: none"> Executive Services Administrator / Resource Manager 				X	
Mansfield ² Fisher	<ul style="list-style-type: none"> Team Member / Virtual Site Visit 	X	X		X	

3.2 Verification schedule

The schedule of the Verification is described below:

Verification Activity/Milestone	Content (Explanation)	Proposed Delivery Date
Kick Off Meeting	Kick-off the ZILMP Verification	03 July 2024
VVB Initial Desk Review	Initial desk review to include preliminary review of documentation provided to inform our risk assessment and inputs into the Sampling Plan. If preliminary findings are discovered or documents are missing, Aster Global will notify FMT and ER Program Entity.	August 2024
Draft Sampling Plan and Submit to FMT	Sampling Plan submitted for review and approval – note that based on ISO 14064 and 14065 the final sampling plan must be signed by the ER Program Entity	Week of 12 August 2024

² Please note that Mansfield Fisher is no longer an employee of Aster Global; however, he will remain on the Verification Report as he previously worked on the Verification.

Finalize Sampling Plan Submitted to FMT	Final Sampling Plan submitted	Week of 19 August 2024
Draft Audit Plan and Submit to FMT and ER Program	Draft Audit Plan submitted for review and approval – note that based on ISO 14064 and 14065 the final audit plan must be signed by the ER Program Entity	Week of 12 August 2024
Draft Audit Plan returned to Aster Global with Comments from FMT and ER Program	Draft Audit Plan submitted for review and approval – note that based on ISO 14064 and 14065 the final audit plan must be signed by the ER Program Entity	Week of 19 August 2024
Finalize Audit Plan and Submit to ER Program for Signature	Final Audit Plan submitted for review and approval – note that based on ISO 14064 and 14065 the final audit plan must be signed by the ER Program Entity	Week of 26 August 2024
Aster Global conducts desktop review	VVB conducts desktop review and generates Findings as they proceed	Week of 16 September 2024
Aster Global holds a series of “calculation walkthrough” meetings with the ER Program	The calculation walkthrough meetings will be used to discuss different aspects of the ER quantification including but not limited to: ER quantification, uncertainty estimates, remote sensing analysis	Week of 25 November and 2 December 2024
Logistics Meeting to discuss site visit if able to travel or virtual logistics	Meeting to discuss travel logistics or alternative plans for conducting a virtual site visit	A virtual site visit was carried out through interviews and walkthrough calls with ER team and agency personnel.
Aster Global conducts in-country verification review or virtual site visit depending on travel restrictions	Implementation of in-country site visit, virtual site visit or hybrid -actions required are dependent upon completion of risk assessment and initial desktop review	A virtual site visit was carried out through interviews and walkthrough calls with ER team and agency personnel.
Aster Global Issues Round 1 Findings	After completion of the site visit or if no site visit is required after the completion of the virtual meetings, the desktop findings and site visit findings will be combined and submitted to ER Program Entity	14 December 2024
Round 1 Findings Meeting	After Mozambique ER Program representatives and FMT have a chance to review the findings, Aster Global will hold a meeting to clarify any questions	N/A
Mozambique ER Program representatives provide responses to Round 1 Findings and updated documents	Updated documentation, evidence and Findings responses provided to Aster Global	18 February 2025
Aster Global Reviews Round 1 Findings Responses	Round 2 Findings are sent	25 July 2025

Aster Global Reviews Round 1 Findings Responses	Revised Round 2 Findings (based upon FMT guidance) are sent	31 July 2025
Mozambique ER Program representatives provide responses to Round 2 Findings and updated documents	Updated documentation, evidence and Findings responses provided to Aster Global	2 September 2025
Aster Global Reviews Round 2 Findings Responses	All Findings are closed or Round 3 Findings are sent	25 September 2025
Aster Global drafts verification report	Aster Global prepares draft verification plans using FCPF templates (if available and ready to be used)	Week of 6 October 2025
Aster Global conducts Independent Peer Review (technical review)	Aster Global' s Independent Peer Reviewer (technical reviewer) will assess the verification work performed by Aster Global.	Week of 20 October 2025
Draft verification reports are updated as needed and provided to the FMT and Mozambique ER Program representatives for review	Aster Global makes updates to reports as needed after the Technical Reviewer is finished and then drafts are submitted to FMT and ER Program representatives	Week of 20 October 2025
Aster Global holds verification closing meeting	After all representatives have had a chance to review, Aster Global will hold the closing meeting to review comments/suggestions about the draft reports and discuss feedback about the overall process.	Week of 27 October 2025
Aster Global issues final verification report and statement (opinion)	Project is complete	Week of 05 January 2026

3.3 Methodology description

Desktop Review:

The desktop verification component included a full, risk-based review of all ER Program documentation/calculations received from the ER Program against the requirements and criteria of FCPF Carbon Program. The desktop review included a full walkthrough meeting with the ER Program team to provide clarification to the VVB team as needed to understand the process followed and where to find key information in the documents provided. A complete list of documents and files provided to the VVB for review as part of the verification desktop assessment is presented in Appendix 2. The review focused on the ER Program Documents relative to the highest risk elements and complemented by interviews with ER program staff. ER Program details, implementation status, data and parameters, and quantification of GHG emission reductions and removals were thoroughly examined. Key supporting documents were also reviewed. These included, but were not limited to, monitoring data [i.e., remote sensing/Geographic Information System (GIS) data], Standard Operating Procedures (SOPs), geospatial boundaries, maps and aerial images, biomass and carbon calculations for emission sources/sinks, and the overall results of the MRV (Monitoring, Reporting, and Verification) system. Review of the ER Program documentation and elements as part of the desktop review included, but was not limited to, assessment of the following aspects of the ER Program:

- Current conditions, for example the presence of deforestation, emissions factor adjustments, forest characteristics and reported biomass volume (above- and/or below-ground)
- Implemented in accordance with the SOPs as they are written
- Confirmed that operational, data collection procedures and monitoring methods were applied
- Reviewed all program and strata boundaries (where applied)
- Interviewed management team, including a series of interviews with in-country staff that support the mission of the ER Program
- Confirmed organizational structure and operation
- Confirmed data management, compilation, and storage
- Confirmed the quality control and quality assurance procedures are in place

Remote Sensing:

ER Program utilized remote sensing tools, including a satellite and land monitoring system, to produce estimates of reference level and to generate the activity data. Geospatial data forms the basis for biomass and deforestation accounting estimates across landscapes, and therefore program integrity depends on a robust remote sensing assessment. The scope of the remote sensing review included, inter alia the following:

- Expert judgement evaluation of remote sensing methods and implementation results
- Data selection suitability review: assessed the quality of acquired satellite data including review of minimum standards for remotely sensed analysis
- Reviewed classification results from Collect Earth including independent ground reference points as an indicator for accuracy
- Assessed the monitoring approach including data and methods
- Reviewed monitoring assumptions for inferences made using remotely sensed data and completeness checks on the analysis of drivers of emissions and removals
- Review of uncertainty propagation
- Selected independent data checks on analysis including, for example, accuracy assessment generation, classification results, etc.

Aster Global follows ISO 14064-3 and our management systems manual to apply a risk-based approach to the remote sensing review, concentrating on the likely sources of material misstatements. Aster Global performed the assessment of ER Program compliance against the FCPF Methodological Framework requirements and associated guidelines (as applicable) with respect to remote sensing.

Based upon the information and documentation received from ER Program to-date, the verification team completed our Strategic Analysis and Risk Assessment (SARA). SARA is a risk assessment that includes strategic analysis to make sure the V/V Team have considered:

- Regulatory requirements
- GHG program requirements
- Industry factors
- And other non-technical risks (i.e., health and security issues)

An ER Program-specific Validation/Verification Sampling Plan and Audit Plan were developed to guide the auditing process to ensure efficiency and effectiveness. The purpose of these documents was to present a risk assessment for determining the nature and extent of validation procedures necessary to ensure the risk of auditing error was reduced to a reasonable level. The plan methodologies were derived from all items in our validation process stated above. Specifically, these documents utilized the FCPF normative documents and ISO 14064-3. Any modifications applied to the plans were made based upon the conditions observed for monitoring to detect the processes with highest risk of material discrepancy.

Throughout the review process, the VVB team issued both MCARs and mCARs to the ER Program to ensure compliance with the FCPF Carbon Fund requirements and normative documents. The ER Program subsequently responded with written responses, generally after an online meeting to discuss the CARs that were submitted, updated/corrected documentation, and/or provided additional supporting evidence. During the review process there were 33 formal sets of CARs submitted to the ER Program.

3.4 Review of documentation

A detailed review of all documentation was conducted to ensure consistency with and identify any deviation from FCPF program requirements.

Initial review focused on the Monitoring Report (MR), and included an examination of the details, implementation status, data and parameters, and quantification of GHG emission reductions and removals. Along with a review of the MR, selected documentation was requested, provided, and subsequently reviewed for consistency, accuracy, and appropriateness with regard to FCPF Methodological Framework and associated requirements. Documents reviewed included, but were not limited to, program boundaries and aerial images, data from monitoring, biomass and carbon calculation spreadsheets, Non-Permanence Risk Analysis, and responses to Major and/or Minor CARs. The process of verification involved two formal rounds of assessment by the verification team and resulted in a MR that was in conformance with FCPF rules.

Please see Appendix 2 for a complete list of documents received and reviewed by Aster Global.

3.5 REDD Country Visit

No country visit was made during the audit of this reporting period. The FCPF Validation/Verification Guidelines states “Most ER programs, reported Emission Reductions will rely on activity data estimates through Earth Observation data obtained in a centralized Forest Monitoring System with few field data.” The VVB understands that field data is not a source of activity data nor associated information and therefore the VVB believes that reasonable assurance can be reached through virtual meetings with the ER Program in combination with the evidence gathering activities that will be conducted by the VVB during the desktop review. After the initial review, the VVB determined that a Country visit was not required for the audit of this verification period. However, the VVB conducted several calculation walkthrough calls/interviews with the ER Program staff. The details of these calls can be found below.

Aster Global developed Virtual Site Visit Procedures that allowed the verification team to reach a reasonable level of assurance regarding the ZILMP’s compliance with FCPF program documents (as described in Section 2.3 of this report). Our Virtual Site Visit Procedures have been prepared in consideration of IAF Informative Document for Management of Extraordinary Events or Circumstances Affecting ABs, CABs and Certification Organizations (Issue 1, IAF ID 3: 2011, 08 November 2011), IAF Mandatory Document For The Use of Information and Communication Technology (ICT) For Auditing/Assessment Purposes (Issue 2, IAF MD 4:2018, 04 July 2018), and ANAB Accreditation Rule 9 (Issue Date 01 January 2014). This procedure is not implemented in the sole discretion of Aster Global but in coordination with each protocol/registry/program/standard and the guidance (if provided) they have provided during an extraordinary events or circumstances.

Definitions are provided to assist the reader.

Extraordinary Events or Circumstances: As defined by IAF ID 3:2011, a circumstance beyond the control of Aster Global or the clients, commonly referred to as an “act of God”. Examples include, but are not limited to, hurricanes, flooding, tsunamis, earthquakes, volcanoes, threats of terrorism, malicious computer hacking, geopolitical tension, pandemic diseases, and crippling labor strikes, or other man-made / natural disasters.

Examples of the use of ICT during audits/assessments may include but are not limited to:

- Meetings by means of teleconference facilities, including audio, video, and data sharing
- Audit/assessment of documents and records by means of remote access, either synchronously (in real time) or asynchronously (when applicable)
- Recording of information and evidence by means of still video, video, or audio recordings
- Providing visual/audio access to remote or potentially hazardous locations



Information and Communication Technology (ICT): As defined by IAF MD 4:2018, ICT is the use of technology for gathering, storing, retrieving, processing, analyzing, and transmitting information. It includes software and hardware such as smartphones, handheld devices, laptop computers, desktop computers, drones, video cameras, wearable technology, artificial intelligence, and others. The use of ICT may be appropriate for auditing/assessment both locally and remotely.

Virtual Site Visit: Conducting the virtual site visit using ICT without physically going onsite and still being able to reach a *reasonable* level of assurance. As defined by IAF MD 4:2018, virtual location where a client organization performs work or provides a service using an on-line environment allowing persons irrespective of physical locations to execute processes.

The procedures of the ICT document were followed to determine a normalized verification process. The audit team determined that multiple audit activities can be conducted in a remote manner as the evidence needed to reach *reasonable* assurance is primarily digital in nature for this specific review. Regular coordination is handled via email and MS Teams, Skype or similar internet-enabled calling with the appropriate parties. An assessment of risk (on a ER Program basis) as to whether a virtual site visit can be conducted or if local subcontractors can be added to the verification team is captured by the SARA table embedded within the Audit Plan. The following subset of topics are assessed for Virtual Site Visit:

What is being assessed	Type of ICT used	Techniques Required to Reach Reasonable Assurance
Monitored Data and Parameters	Hard copy and screen-share of calculation worksheets, remotely sensed data, live stream video teleconferencing (MS Teams, WebEx, Zoom, related) walkthroughs, conference calls	Confirm appropriate default factors, parameters, formulas, and related inputs for calculations through independent data checks and professional judgement.
Quantification of Emission Reductions	Hard copy and screen-share calculation worksheets, live stream video teleconferencing (MS Teams, WebEx, Zoom, related) walkthroughs, conference calls	Confirm appropriate default factors, parameters, formulas, and related inputs for calculations through independent data checks, professional judgement.
Uncertainty	Calculation worksheets, remotely sensed data, live stream video teleconferencing (MS Teams, WebEx, Zoom, related) walkthroughs, conference calls	Confirm appropriate default factors, parameters, formulas, and related inputs for calculations through independent data checks, professional judgement.
Remote Sensing	Calculation worksheets, remotely sensed data, live stream video teleconferencing (MS Teams, WebEx, Zoom, related) walkthroughs, conference calls	A walk-through may or may not be necessary, as this review is primarily desktop based and is a combination of qualitative/quantitative data.
Process for QA/QC and Standard Operating Procedures (SOPs)	Live stream video teleconferencing (MS Teams, WebEx, Zoom, related) walkthroughs	Aster Global met with the ZILMP ER Program on February 23, 2022 and March 3, 2022 to discuss many different aspects of the ZILMP program. Throughout these meetings the validation team was able to see the process for the QA/QC of data and see if SOPs relating to data collection etc., were followed.

The VVB conducted calculation walkthrough meetings and interviews virtually as necessary to assess various criteria referenced in the Validation and Verification Guidelines.

Meeting Date	General Meeting Description	Criterion and Underlying Topics Specified for Meetings	Additional Information
Tuesday November 26, 2024 8-9:30 AM EST (3-4:30 PM in Maputo)	Review of Activity Data Collected and used during the Reporting Period	Criterion 6 (item 1 and 3) Criterion 14	VVB met with the ZILMP ER Program for a walkthrough of Activity Points from both 2021 and 2022. ER team shared screen and provided a walkthrough of the AD collection process and determination of the classification for each of these points. Additionally, a walkthrough of pre-and-post processing methods were also provided.
Tuesday December 3, 2024 8-9:30 AM EST (3-4:30 PM in Maputo)	Review and walkthrough of calculation procedure	Criterion 6 (item 2), 7, 8, 9.1-9.3,18.2, 19, 22	ER Program provided a detailed walkthrough of the quantification workbooks, input/output data files, etc.
Tuesday December 4, 2024 8-9 AM EST (3-4 PM in Maputo)	General discussion of topics not covered in other meetings	Criterion 23, 37, 17.3, 17.4	General discussion of the related topics with a specific focus on updates that have occurred during this Reporting Period.

4. SUMMARY OF FINDINGS

4.1 Implementation status of the ER Program and update on drivers

After review of all ER Program information, procedures, calculations, and supporting documentation, Aster Global is reasonably assured that the Monitoring Report and supporting documents are accurate and consistent with all aforementioned FCPF program documentation. Furthermore, Aster Global has confirmed that the ER Program has appropriately reported on the different strategies employed to mitigate and/or minimize potential displacement.

4.2 System for measurement, monitoring and reporting emissions and removals occurring within the monitoring period

4.2.1 Forest Monitoring System

After review of all information, procedures, calculations, and supporting documentation, Aster Global confirms that the monitoring conducted by the ER Program is accurate and consistent with all FCPF Program requirements. Aster Global confirms that the Forest Monitoring System of the ER Program is functioning and is able to produce high quality data because it has in place the necessary controls to address relevant sources of potential errors, omissions, and misstatements in place.

4.2.2 Forest Monitoring Approach

This section is not applicable, since there are no updates in the validated Forest Monitoring Plan in this reporting period.

4.2.3 Measurement, monitoring and reporting approach

After review of all information, procedures, calculations, and supporting documentation, Aster Global confirms that the equations and methods used for measuring, monitoring, and reporting are correct and consistent with the Reference Level. Additionally, Aster Global confirms that all equation parameters, monitored parameters, and fixed data are appropriately linked to the equations used for quantification and monitoring.

4.3 Fixed Data and Parameters

After review of all information, procedures, calculations, and supporting documentation, Aster Global is reasonably assured that the fixed data and parameters as reported in Annex 4 of the previous MR are applied consistently and in line with the Monitoring Report for this Reporting Period. As specified by FCPF, the ER-PD has not been reviewed during the course of the verification. Aster Global is reasonably assured that fixed data and parameters are made publicly available according to the Criterion 6 of the FCPF Methodological Framework.

4.4 Monitored Data and Parameters

Aster Global confirms that all data and parameters subject to monitoring and described below have been reported in line with guidelines provided in the Monitoring Report template. Aster Global confirms the information for each parameter is complete, and that the stated parameters are free of error and material misstatements. Activity data are the data and parameters subject to monitoring. The source of activity data is from Collect Earth platform and activity data was exported as numerical data for analysis. Assessment details are as follows.

Monitored Data and Parameters	$A(j,i)_{MP}$
Free of Material Misstatement (Yes/No)	Yes
Reported Appropriately (Yes/No)	Yes



<p>Assessment Details</p>	<p>This parameter represents the area converted from forest j to non-forest type i during the monitoring period. Activity data that form the basis of this monitored parameter are based on annual wall-to-wall deforestation maps. The verification team conducted an independent analysis of similar remote sensed data to confirm that the appropriate source data was consistent and appropriate. Additionally, the audit team was able to ensure that LULC classification was appropriate and followed the pre-defined classification system.</p> <p>The verification team conducted independent data checks for each steps necessary for the quantification of this parameter. A sample of activity data were examined within the Collect Earth program using remotely sensed imagery to ensure accurate classification of LULC classification. Spatial analyses conducted in ESRI GIS confirmed the geographical boundary ensuring that all activity data fell within the Accounting Area, stratum weights were correctly estimated, and the Accounting Area was computed correctly. Independent data checks were used to ensure that the quantification of the parameter was performed correctly, this included an independent review of the literature cited in reference of the applied equations. The uncertainty associated with this parameter was independently calculated after a thorough review of the quantification code. The calculation of uncertainty applied the methodology from Olofsson et al. (2014), and the verification team reviewed and confirmed that the quantification code was correct and ran without any error.</p> <p>The verification team reviewed the Monitoring Report and associated links to ensure that all data related to this parameter are made public.</p>
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5. VERIFICATION OF GHG ASSERTION

5.1 ER Program Reference level for the Reporting Period

The Reference level for the Reporting Period, as reported in the ER Monitoring Report and as confirmed in the Validation report, is as follows:

Year of monitoring/ reporting period <i>t</i>	Average annual historical emissions from deforestation over the Reference Period (tCO _{2-e} /yr)	If applicable, average annual historical emissions from forest degradation over the Reference Period (tCO _{2-e} /yr)	If applicable, average annual historical removals by sinks over the Reference Period (tCO _{2-e} /yr)	Adjustment, if applicable (tCO _{2-e} /yr)	Reference level (tCO _{2-e} /yr)
2021	5,253,267	0	0	0	5,253,267
2022	5,253,267	0	0	0	5,253,267
Total	10,506,534	0	0	0	10,506,534

5.2 ER program emissions by sources and removals by sinks

After review of all ER Program information, procedures, calculations, and supporting documentation, Aster Global confirms that the equations and methods used for measuring, monitoring, and reporting are correct and consistent with the Reference Level. Aster Global reviewed the entire estimation process to confirm that is complied with the FCPF Methodological Framework and associated documents. Aster Global was able to reconstruct ER estimates with given Excel spreadsheets and R coding. The formulae applied were correct to re-produce the final estimate of ER. The reported ERs are materially accurate. Aster Global confirms that the ERs have been reported following a transparent and coherent step-by-step process that enabled the reconstruction of estimates.

Year of reporting period <i>t</i>	Emissions from deforestation (tCO _{2-e} /yr)	If applicable, emissions from forest degradation (tCO _{2-e} /yr)*	If applicable, removals by sinks (tCO _{2-e} /yr)	Net emissions and removals (tCO _{2-e} /yr)
2021	11,325,034	0	0	11,325,034
2022	6,645,702	0	0	6,645,702
Total	17,970,736	0	0	17,970,736

5.3 Uncertainty of Emission Reductions

5.3.1 Uncertainty analysis

Uncertainty was assessed as required by the FCPF Validation and Verification Guidelines. The verification team recalculated the random errors independently to confirm the accuracy of the reported precision, reviewed assumptions and sources associated with parameters used in the quantification, and reviewed uncertainty of the emission reductions. For systematic errors, the accuracy assessment depended on the

verification team's professional judgement which was primarily based on interviews and online meetings and a review of supporting documentation. The verification team is reasonably assured that activity data were collected with a *reasonable* level of accuracy in line with SOPs, and related systematic errors were appropriately minimized. Details regarding the uncertainty calculation process is provided below in Section 5.3.2 "Uncertainty of the estimate of Emission Reductions."

5.3.2 Uncertainty of the estimate of Emission Reductions

After completion of independent data checks, review of the script for the Monte Carlo simulation, and a systematic review of inputs and assumptions, Aster Global confirms that the aggregate uncertainty of emissions reductions is 40%. Additionally, Aster Global confirms that the uncertainty discount, 8%, is applied correctly. The following steps were reviewed and confirmed, and the verification also confirmed that the quantification code ran without any error and that the results matched the Emission Reductions included in the monitoring report.

The uncertainty estimate for the Emission Reductions strictly follows the guidelines of Approach 2: Monte Carlo simulation from 2006 IPCC Volume 1 General Guidance and Reporting Chapter 3, except for the activity data of which the distribution is based on re-sampling, i.e., non-parametric bootstrapping. Non-parametric bootstrapping for the activity data is applied to relax the limitations stemming from Monte Carlo simulation. Only one datum is linked to two of the land use change categories of the activity data generating negative values if Monte Carlo simulation is used to determine the distribution. While non-parametric bootstrapping is applied to generate random samples from the activity data, random samples were generated from Monte Carlo simulation for the emission factors. The distributions of emission factors were assumed to be normal or t distributions. If calculation of degrees of freedom was available, t-distribution was assumed.

To ensure the accuracy uncertainty estimates for the Emission Reductions, non-parametric bootstrapping and Monte Carlo simulation were based on 10,000 random permutations. Additionally, generation of carbon fraction were based on 10,000 random permutations of triangular distribution, where Min = 0.44, Max = 0.49, Mode = 0.47, and sampling uncertainty was increased additionally by 10% for the emission factors. Finally, the distribution of Emission Reductions is determined by multiplying activity data, emission factors, and carbon fraction.

5.3.1 Sensitivity analysis and identification of areas of improvement of the MRV system

Sensitivity analysis was conducted by fixing the following parameters: activity data (Reference Level), activity data (monitoring), emission factors, and carbon fraction. These parameters were fixed to generate emission reductions, and the emission reductions were compared against the emission reductions from the Monte Carlo simulation. The widths of confidence intervals for each fixed parameter emission reduction and the emission reduction from Monte Carlo simulation were compared. Fixing activity data (monitoring period) appeared to have the highest reduction of confidential interval, meaning that a large portion of the emission reduction uncertainty is explained by the activity data (monitoring period) uncertainty.

The verification team reviewed and confirmed that above-mentioned elements related to the sensitivity analysis were all addressed in the quantification code provided. The verification also confirmed that the quantification code ran without any error and the results matched the sensitivity analysis included in the MR. Therefore, Aster Global is reasonably assured that the application of the sensitivity analysis was performed correctly.

5.4 Transfer of Title to ERs

5.4.1 Ability to transfer title

As stated in Section 6 of the Monitoring Report, the program has not identified the existence of unclear or contested title to the ERs during this reporting period.

5.4.2 Program and Projects Data Management System

After review of all information, procedures, calculations, and supporting documentation, Aster Global confirms that ZILMP has a well-documented Data Management System in place, which includes mechanisms to ensure transparency and avoid multiple claims of ER Title. Additionally, Aster Global confirms that Standard Operating Procedures are in place and comply with the FCPF Methodological Framework.

Aster Global confirms that operational guidelines exist and that they comply with the Methodological Framework, and the guidance provided by the FMT. An audit of the operations of the Data Management System was not deemed necessary as per the guidance provided by the FMT.

5.4.3 Double counted ERs

After a thorough review of the documentation and an independent search of numerous registries, Aster Global is reasonably assured that 0 ERs have been double-counted or compensated more than once.

5.5 Reversals

5.5.1 The occurrence of major events or changes in ER Program circumstances that might have led to Reversals during the Reporting Period compared to the previous Reporting Period(s)

As stated in section 7 of the Monitoring Report, reversals have occurred during this reporting period. Shifting cultivation has been identified as the main cause of deforestation, contributing to more than 80% of the total deforestation in the program area. The COVID-19 pandemic triggered a chain of socioeconomic impacts likely driving increased deforestation in the program area. Economic restrictions, lack of supervision, displacement of workers and the search for alternative sources of income led communities toward deforestation for subsistence practice. This contributed to rising deforestation during 2020, 2021, and 2022, although a slight decline appeared in 2022 as pandemic restrictions eased.

After review of all information, procedures, calculations, supporting documentation and interviews with ER Program team, Aster Global is reasonably assured that sufficient and accurate information has been provided to document the reversal events.

5.5.2 Quantification of Reversals during the Reporting Period

After review of all information, procedures, calculations, and supporting documentation, Aster Global is reasonably assured that the number of Reversals has been correctly calculated and reported in section 7.2 of ER-MR. A total of 4,146,257 FCPF ERs have been reversed and need to be cancelled from the Buffer ERs.

5.5.3 Reversal Risk Assessment and Buffer ERs

A total of 35% has been set aside as reversal risk percentage. After review of all information, procedures, calculations, supporting documentation and interviews with ER program team, Aster Global confirms that the Buffer Guidelines have been correctly used to determine the Total reversal risk set-aside percentage.

Risk Factor	Risk indicators – Assessment by VVB	Resulting reversal risk set-aside percentage
Default risk	N/A	10%
Lack of broad and sustained stakeholder support	<i>The maximum risk set-aside percentage is taken for this category in line with the principle of conservativeness.</i>	10%

Lack of institutional capacities and/or ineffective vertical/cross sectorial coordination	<i>The verification team assessed the institutional capacities and cross sectorial coordination of the ER Program. The verification team determined that a medium risk rating was appropriate through a review of the ER Program documentation and supporting documentation, interviews with agencies that coordinate with the ER Program, and interviews with the ER Program regarding institutional capacities and vertical/cross sectorial coordination.</i>	5%
Lack of long term effectiveness in addressing underlying drivers	<i>The maximum risk set-aside percentage is taken for this category in line with the principle of conservativeness.</i>	5%
Exposure and vulnerability to natural disturbances	<i>The maximum risk set-aside percentage is taken for this category in line with the principle of conservativeness.</i>	5%
Total reversal risk set-aside percentage		35%
Total reversal risk set-aside percentage from ER-PD or previous monitoring report (whichever is more recent)		35%

5.6 Calculation of emission reductions

Aster Global determines the ZILMP has quantified ERs in compliance with the Methodological Framework, the ER Monitoring Report template and other applicable criteria. Aster Global confirms that the evidence collected in the assessment is sufficient to support the GHG assertion made by the ER Program as affirms that the GHG assertion is without material discrepancy with a reasonable level of assurance. The table below shows emissions reductions available for the transfer to the carbon fund for the Reporting Period (01-01-2021 to 31-12-2022).

		2021	2022	Total
A	Reference Level (tCO₂-e) (Section 5.1)	5,253,267	5,253,267	10,506,534
B	Net emissions and removals under the ER Program (tCO₂-e) (Section 5.2)	11,325,034	6,645,702	17,970,736
C	Emission Reductions during Reporting Period (tCO₂-e) (A-B)	-6,071,767	-1,392,435	-7,464,202
D	If applicable, number of Emission Reductions from reducing forest degradation that have been estimated using proxy-based estimation	0	0	0

		2021	2022	Total
	approaches (use zero if not applicable)			
E	Number of Emission Reductions estimated using measurement approaches (C-D)	-6,071,767	-1,392,435	-7,464,202
F	Percentage of ERs (A) for which the ability to transfer Title to ERs is clear or uncontested (Section 5.4.1)	100%	100%	100%
G	ERs for which the ability to transfer Title to ERs is unclear or contested because they are sold, assigned or otherwise used by any other entity for sale, public relations, compliance or any other purpose (Section 5.4.3)	0	0	0
	If applicable, any buffer replenishments	0	0	0
H	Total ERs (D+E)*F-G minus, if applicable, any replenishments	-6,071,767	-1,392,435	-7,464,202
I	Conservativeness Factor to reflect the level of uncertainty from non-proxy based approaches associated with the estimation of ERs during the Crediting Period (Section 5.3.2)	8%	8%	
J	Emission Reductions allocated to the Uncertainty Buffer $(0.15 * D / C * H) + (I * E / C * H)$	-485,741	-111,394	0
K	Total reversal risk set-aside percentage applied to the ER program (Section 5.5)	35%	35%	
L	Emission Reductions allocated to the Pooled Reversal Buffer (H-J)*K	-1,955,109	-448,364	0
M	Number of FCPF ERs (H-J-L)	-3,630,917	-832,677	0

		2021	2022	Total
N	Percentage of Emission reductions from enhanced removals from afforestation/reforestation as a percentage of the total removals [Optional if the country wishes to generate enhanced removals]	0%	0 %	
O	Number of FCPF ERs from enhanced removals from afforestation/reforestation (M * N) [Optional if the country wishes to generate enhanced removals]	0	0	0

6. NON-COMPLIANCES AND OBSERVATIONS

During the verification process, there was a risk that potential errors, omissions, and misrepresentations would be found. The actions taken when errors, omissions, and misrepresentations were found included notifying the client of the issues identified and expanding our review/sample to the extent that satisfied the Team Leader's professional judgment.

This verification involved two (2) formal rounds of assessment by the verification team and resulted in a Monitoring Report that is in conformance with FCPF rules. Where findings were noted by the verification team, the ER Program Entity implemented corrective actions by amending the MR and supporting documentation/calculations and providing written clarification responses. Types of findings were characterized in the following manner:

Major Corrective Action Requests (MCARs) were, in general, issued as a response to material discrepancies when:

- the evidence provided to demonstrate conformity is insufficient, unclear or not transparent and may lead to a material error, omission or misstatement, and/or a breakdown in the systems delivery;
- underlying assumptions used to develop the reported estimates are not supported by data;
- material errors, omissions or misstatements have been made in applying assumptions, in data or calculations;
- non-compliance with Verification criteria;
- the REDD+ Country Participant has failed to implement or made inadequate progress with the mCARs from the previous verifications; (*not applicable, as this is the first verification*)

Minor Corrective Action Requests (mCARs) were, in general, issued when:

- the evidence provided to demonstrate conformity is insufficient, unclear or not transparent, but does not lead to a material error, omission or misstatement, and/or a breakdown in the systems delivery;
- non-material errors, omissions or misstatements have been made in applying assumptions, in data or calculations;

Observations (OBS) were issued when:

- there is no objective evidence to prove that there is a non-conformity, but the VVB observes practices and/or methods that could result in future MCAR and mCAR;
- the VVB wishes to identify an area of the Forest Monitoring System that requires attention and/or adjustment in future monitoring and reporting.

A total of 32 MCARs, 1 mCAR and 1 Observation were raised in two (2) rounds of review. All of the 32 MCARs were successfully addressed by the ER Program and closed by the VVB, and 2 Observations remained to be considered and/or addressed during the next verification event. These findings are described in Appendix 1 of this report.

APPENDIX 1: OVERVIEW OF NON-COMPLIANCES & OBSERVATIONS ISSUED DURING THE VERIFICATION BY THE VERIFICATION TEAM

Item Number	1
Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)	Indicator 6.2: For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available:
Carbon Methodological Framework Version 3, April 2020 (Requirement)	- Activity data (e.g., forest-cover change or transitions between forest categories)
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR, ZILMP_AD_Calculations_MR_(2021), ZILMP_AD_Calculations_MR_(2022)
Aster Global Findings - Round 1 (14 December 2024)	<p>1. Plot "503606" lulc_nivel1_level in "ZILMP_AD_Calculations_MR_(2021)" is categorized as "Forestas" even though it has 20-29 % "elementstrees_element_cover_label".</p> <p>2. Current date and former date appear to be same for plot 525030 in "ZILMP_AD_Calculations_MR_(2022)".</p>
Round 1 MCAR/mCAR/OBS	<p>1. MCAR: Please address in line with the finding and update downstream calculations as necessary.</p> <p>2. MCAR: Please clarify in line with the finding and update downstream calculations as necessary.</p>
Round 1 Response from Project Proponent (18 February 2025)	<p>1. We appreciate this observation. Upon detailed review, we identified that the percentage of tree cover associated with the "Forestas" class was mistakenly not updated. Fortunately, this plot was included in the quality control process, which ruled out deforestation and concluded that the plot had undergone forest degradation, thereby remaining classified as "Forestas." We emphasize that, as of early 2022, the plot had 36% tree cover, meeting the criteria for its classification as "Forestas." While the categorization is accurate, we acknowledge the need to correct and update the percent tree cover to ensure consistency in the records. And we confirm that the downstream calculations remain valid and consistent with the verified data. We remain available for any further clarification or additional analysis that may be required.</p> <p>2. Thank you for pointing out this observation. Upon review, we identified that this discrepancy was due to an error in the recording of the current image date. We confirm that the analysis for this plot was performed using the correct image, and the classification results remain valid. However, we acknowledge the need to update the current image date in the records to accurately reflect the data source.</p>
Aster Global Findings - Round 2 (25 July 2025)	1, 2. The VVB confirmed the correction has been applied, with no impact on downstream calculations. Item addressed and closed.
Round 2 MCAR/mCAR/OBS	

Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	2
Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)	Criterion 8: The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.
Carbon Methodological Framework Version 3, April 2020 (Requirement)	Indicator 8.1: Systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes that work within the local circumstances of the ER Program.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ERMR
Aster Global Findings - Round 1 (14 December 2024)	<p>During the previous verification the VVB issued 3 minorCARs, please see below for the mCARs that were issued.</p> <p>mCAR: The VVB requests that the ER Program further consider blind checks within the QA/QC procedure or provide clarification as to why they are not needed.</p> <p>mCAR: The VVB requests that the ER Program further consider the significance of omission bias within the QA/QC procedures and/or provide clarification as to why restructuring of the QA/QC procedures (specifically in the percentage allocation of AD reviewed by a senior team member) is not necessary.</p> <p>mCAR: We decided that 20% of samples interpreted as non-deforestation for each batch are reasonable enough to ensure that the activity data are generated within desired probability limits of accuracy and precision. The 20% are randomly selected from each stratum map. It is worth to emphasize that if 20% or more samples interpreted as non deforestation are misclassified, the operator must review the entire batch of samples.</p>
Round 1 MCAR/mCAR/OBS	MCAR: The VVB is requesting additional information from the ER Program on how these mCARs have been addressed.

<p>Round 1 Response from Project Proponent (18 February 2025)</p>	<p>1. Blind checks are an important tool to ensure impartiality and minimize systematic errors in the data review process. After years of experience and lessons learned, the team has concluded that, with the current controls and robust QA/QC approach in place, blind checks are not a critical requirement for the following reasons:</p> <ul style="list-style-type: none"> i. Several rounds of blind checks have been conducted at the national and subnational levels since the FREL national report and initial annual monitoring data, with consistently aligned results. ii. The data collection process has been repeatedly validated, and a system has been implemented to ensure precise and unbiased data collection, which has led to fewer blind checks without compromising data quality. iii. A Standard Operating Procedures (SOP) for data collection has been developed, and the QA process has been fully integrated into regular operations. iv. The monitoring system for deforestation is mature and effective, supported by a highly trained and continuously skilled team. <p>While the need for blind checks has reduced, we do not rule out occasional blind checks as part of audit or internal verification processes to maintain the system's integrity. Additionally, if there are significant changes in methodology, personnel, or tools (such as new satellite data sources), blind checks will be conducted to validate the new approach and ensure the ongoing quality and reliability of the monitoring system.</p> <p>We are open to reviewing this approach based on the feedback received to ensure that any potential bias or errors are properly minimized.</p> <p>2. Omission bias is a legitimate concern in the data verification process, especially in monitoring and reporting systems for emission reductions. We considered this when defining review criteria, including allocating a significant portion of activity data (AD) for review by senior team members. Based on preliminary analysis and the effectiveness of current QA/QC processes, there is no need for a complete restructuring of the procedure, as the quality controls in place already minimize potential biases. However, we are continuously strengthening the QA process and will keep reviewing these procedures to ensure the highest accuracy and reliability of the data as monitoring progresses.</p> <p>3. The allocation of 20% of activity data (AD) samples interpreted as non-deforestation for each batch was adopted after careful analysis of the precision and accuracy of the data. This percentage has proven effective in ensuring that the subsequent data analysis, after cleaning, falls within expected accuracy limits. As you noted, if more than 20% of these samples are misclassified, a full review of the batch will be required, ensuring that errors are not overlooked. This approach ensures the integrity and reliability of the data before it is used in calculating the reduced emissions. The QA/QC team will continue to monitor these processes and make adjustments as needed to ensure data quality.</p>
<p>Aster Global Findings - Round 2 (25 July 2025)</p>	<p>Given the original rationale for the issuance of these mCARs during the Program's 2nd Verification, the Program's responsiveness towards improvements in QA/QC procedures during the 3rd period have mitigated the concerns originally raised by the VVB. The VVB appreciates the willingness of the Program to implement SOPs and improve QA/QC procedures to mitigate the original concerns. Closed.</p>

Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	3
Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)	Criterion 9: Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs ³ .
Carbon Methodological Framework Version 3, April 2020 (Requirement)	Indicator 9.1: Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) shall be used to estimate uncertainty ⁴ .
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR, R-script, output tables
Aster Global Findings - Round 1 (14 December 2024)	<p>Uncertainty estimation of emission factors was confirmed during the validation and 1st verification. The same values have been carried over to current monitoring period.</p> <p>The VVB noted uncertainties in activity data were derived using non-parametric bootstrapping.</p> <p>1. The VVB reviewed the R-script and was able to match the values with values found in the output table of uncertainty folder provided. However, in output table and in section 3.1, uncertainty estimate values for reference period appear to be similar to 2nd reporting period (01-01-2019 to 31-12-2020). It is unclear whether uncertainty estimates were appropriately updated.</p> <p>2. Table in section 3.2 does not appear to include uncertainty estimates for following category change type noted in this reporting period: FSD>(A O U) FF>C</p> <p>3. The VVB reviewed the R-script and noted in output table and in table 8, values for parameter (activity data) used in Monte Carlo method appear to be similar to 2nd reporting period (01-01-2019 to 31-12-2020). It is unclear whether parameter values were appropriately updated.</p>

<p>Round 1 MCAR/mCAR/OBS</p>	<p>1. MCAR: Please clarify why values are similar to the previous reporting period. Please update the R-script and values in ER-MR as necessary.</p> <p>2.MCAR: Please clarify in line with the findings. Please update the R-script and values in ER-MR as necessary.</p> <p>3. MCAR: Please clarify why values are similar to the previous reporting period. Please update downstream estimations and values in ER-MR as necessary. Please provide the revised R-script as necessary.</p>
<p>Round 1 Response from Project Proponent (18 February 2025)</p>	<p>1. Uncertainty estimates for the reference period are not subject to changes, as the underlying data does not change for each MR.</p> <p>2. We have identified the sources of the errors: FSD>(A O U): The "area_estimation.R" subscript was not correctly codifying changes of F>U and F>A to F > (A O U), only F>O was being changed. The code in line 33 of that script was changed to include those transitions. FF>C: There was an issue with the input data, specifically the table "strata_lulc_relation.csv" (.data\model_parameters), which had the forest stratum of mangrove labelled "Mangrove" as opposed to the correct label, which is "FF".</p> <p>3. Thank you for the observation, It was a mistake we made. Values for parameter of activity data were already updated in table 8 (specifically: Area of FSD>C in monitoring period, Area of FSD>P in monitoring period, Area of FSSV>C in monitoring period, Area of FSD>(A O U) in monitoring period and FF (Mangrove)>P in monitoring period. The R script was updated and all files of output table: https://www.dropbox.com/scl/fo/sgqp0g1zml65rugaf1dab/ANpo6pVXLxDj051VNpX0Vyo?rlkey=kzxpqr4sndvf8uvfb70r9kal&dl=0</p>
<p>Aster Global Findings - Round 2 (25 July 2025)</p>	<p>1. Thank you for the clarification. The VVB agrees with the project proponent on fixed uncertainty estimates for the reference period. Item closed.</p> <p>2. The VVB notes corrections have been made. Section 3.2 table now includes uncertainty estimates for change categories noted: FSD>(A O U), FF>C. The VVB re-ran the updated R script and were able to confirm the values reported. Item closed.</p> <p>3. The VVB acknowledges corrections to Table 1, but notes that "FF>P" is incorrect and should be "FF>C".</p>
<p>Round 2 MCAR/mCAR/OBS</p>	<p>3. mCAR: Please correctly report the change category.</p>
<p>Round 2 Response from Project Proponent (02 September 2025)</p>	<p>We acknowledge the errata and have fixed the entry in the Table in the updated document.</p>
<p>Aster Global Findings - Final (25 September 2025)</p>	<p>The VVB confirms the correction has been made. Item closed.</p>
<p>Item Number</p>	<p>4</p>
<p>Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)</p>	<p>Criterion 9: Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs3.</p>

Carbon Methodological Framework Version 3, April 2020 (Requirement)	Indicator 9.2: Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR, R-script, output tables
Aster Global Findings - Round 1 (14 December 2024)	<p>Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods.</p> <p>The VVB noted output table of uncertainty estimation of emission reductions for this reporting period is provided as a workbook and reported in ER-MR. R-script is also provided. However, the VVB notes the values are going to be updated based on the findings issued on activity data uncertainty estimation.</p>
Round 1 MCAR/mCAR/OBS	MCAR: Please address in line with the findings.
Round 1 Response from Project Proponent (18 February 2025)	The values of uncertainties regarding activity data, emission reductions and sensitivity analysis were updated in ER-MR
Aster Global Findings - Round 2 (25 July 2025)	The VVB notes uncertainty estimates of emission reductions for crediting period have not been updated appropriately in line with output folder "2018-2022".
Round 2 MCAR/mCAR/OBS	MCAR: Please ensure that all reported values reflect the latest and correct version.
Round 2 Response from Project Proponent (02 September 2025)	We acknowledge that the the uncertainty results for the crediting period were not updated in the table from section 5.2. We have updated this table with the output from the uncertainty script.
Aster Global Findings - Final (25 September 2025)	VVB notes uncertainty estimates of emission reductions for crediting period have been updated appropriately in the revised MR. Item closed.

Item Number	5
Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)	Criterion 17: The ER Program is designed and implemented to prevent and minimize potential Displacement.
Carbon Methodological Framework Version 3, April 2020 (Requirement)	Indicator 17.4: ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ERMR
Aster Global Findings - Round 1 (14 December 2024)	During the virtual site visit interviews with the ER Program Team, the increase in deforestation was discussed in detail. The ER Program Team informed the VVB that there is currently a study that is close to

	completion that investigates the increase. The VVB is requesting a copy of the report, even if it is in draft form.
Round 1 MCAR/mCAR/OBS	MCAR: Please provide a copy of the report for the VVB to review.
Round 1 Response from Project Proponent (18 February 2025)	Please find the draft here (not finalized yet): https://www.dropbox.com/scl/fi/1m4nyl7v02sjpqa4dhju/deforestation_driver_report_draft_17022025.docx?rlkey=1cdmguhziabfbhg1s9v3l0zo&e=1&dl=0
Aster Global Findings - Round 2 (25 July 2025)	The VVB acknowledges the receipt of draft report. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	6
Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)	Criterion 23:
Carbon Methodological Framework Version 3, April 2020 (Requirement)	To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred under an ERPA shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR, Independent review

<p>Aster Global Findings - Round 1 (14 December 2024)</p>	<p>The audit team reviewed multiple registries to determine if there are additional projects within the ZILMP ER Program area that could potentially result in double counting of ERs. The VVB noted following:</p> <ol style="list-style-type: none"> 1. As discussed in the MR there is a REDD project registered with VCS in the Gile National Park, but the project has not requested issuance of VCUs after 2016. 2. There is an ALM project registered with VCS titled “AGRI-SMART: SUSTAINING A RESILIENT AND INCLUSIVE DEVELOPMENT IN ZAMBEZIA” with project crediting period 20 years, from 10/12/2020 to 09/12/2039. The project has not requested issuance of VCUs yet. An OBS was issued in previous reporting period for ER Program to engage with a project to ensure that double counting will not happen for future verifications. It is unclear where this is addressed in the ER-MR. 3. There is an ARR/REDD+ project with VCS titled “MOZBLUE: BUILDING AFRICA’S LARGEST MANGROVE RESTORATION PROJECT”. The project is currently under development and has not requested issuance of VCUs. The VVB is issuing an OBS to the ER Program to engage this project to ensure that double counting will not happen for future verifications. 4. There is an afforestation project titled “Revegetation with fruit trees in North Manica Province, Mozambique within the North Manica Province in Mozambique” with VCS which is outside the ZILMP ER Program. 5. There is a REDD project under development with VCS titled “Yambone REDD+ Project” which is outside of the ZILMP ER Program. 6. There are following Energy demand projects with VCS however, there is no risk of double counting due to the nature of the project activities in these VCS projects. <ul style="list-style-type: none"> - IMPROVED COOKSTOVES DISTRIBUTION IN MOZAMBIQUE – MAPUTO (Status: Under validation) - IMPROVED COOKSTOVES DISTRIBUTION IN MOZAMBIQUE – SOFALA AND MANICA PROVINCES (Status: Registration requested) - Installation of high efficiency wood burning cookstoves in Mozambique (Status: Registered) - Installation of high efficiency wood burning cookstoves in Mozambique – Project 2 (Status: Registered) - Domestic Cooking Stoves substitution programme in Mozambique - CER Conversion (Status: Units Transferred from Approved GHG Program) <p>Additionally, the VVB assumes that the Carbon Fund has internal controls in place to ensure the ER Program does not transfer more credits than have been awarded during a given monitoring period and old ERs are not transferred more than once.</p>
<p>Round 1 MCAR/mCAR/OBS</p>	<ol style="list-style-type: none"> 1. mCAR: Please address in line with the finding. 2. OBS: The VVB is issuing an OBS that the ER Program engage “MOZBLUE: BUILDING AFRICA’S LARGEST MANGROVE RESTORATION PROJECT” to ensure both entities are aware that the carbon project falls within the ER Program boundary and potential for double counting in the future is prevented.

<p>Round 1 Response from Project Proponent (18 February 2025)</p>	<p>1. The “AGRI-SMART: SUSTAINING A RESILIENT AND INCLUSIVE DEVELOPMENT IN ZAMBEZIA” project has indeed received an approval to conduct feasibility studies, as part of the process to receive a REDD+ licence in the ZILMP districts of Gurué, Mocuba and Alto Molócué. However, the approval specifies which REDD+ activities are authorized for the project. In this case only increase in carbon stocks (restoration and Agro-forestry systems) was authorized. This means that the project will not be able to generate VCUs from deforestation reduction/avoidance. Therefore, there is not risk of double-counting of VCUs with the ZILMP project.</p> <p>2. The “MOZBLUE: BUILDING AFRICA’S LARGEST MANGROVE RESTORATION PROJECT” has already received a REDD+ licence. This status has not been updated in the REDD+ Registry for procedural reasons. Similar to the Agri-smart project, this project has only been authorized to generate VCUs from mangrove restoration, and not from deforestation reduction/avoidance. Therefore, there is not risk of double-counting of VCUs with the ZILMP project.</p>
<p>Aster Global Findings - Round 2 (25 July 2025)</p>	<p>1,2. Thank you for the response with additional information. The VVB is issuing an OBS to the ER Program to engage these projects to ensure that double counting will not happen for future verifications.</p>
<p>Round 2 MCAR/mCAR/OBS</p>	<p>1,2. OBS: The VVB is issuing an OBS to the ER Program to engage this project to ensure that double counting will not happen for future verifications. The OBS is not required to be addressed in this assessment and will instead be evaluated in the next verification.</p>
<p>Round 2 Response from Project Proponent (02 September 2025)</p>	
<p>Aster Global Findings - Final (25 September 2025)</p>	

<p>Item Number</p>	<p>7</p>
<p>Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)</p>	<p>Criterion 37: Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.</p>
<p>Carbon Methodological Framework Version 3, April 2020 (Requirement)</p>	<p>Indicator 37.1: Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf. In either case of a country’s use of a third party centralized REDD+ Programs and Projects Data Management System, or a country’s own national REDD+ Programs and Projects Data Management System, the indicators below apply.</p>
<p>Requirement Met (Y/N/Pending)</p>	<p>Y</p>
<p>Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)</p>	<p>ERMR Section 6.2, Virtual Site Visit Interviews</p>

Aster Global Findings - Round 1 (14 December 2024)	The VVB reviewed Section 6.2 of the ERMR and found that the ER Program provides a description of the Program and Projects Data Management System; however, much of this information seems to be outdated or incorrect based on the information collected during the virtual site visit interviews. For example, the ERMR states "the FNDS is confirmed as the entity in charge of approving all REDD+ programs and projects in Mozambique and in charge of managing REDD+ resources."
Round 1 MCAR/mCAR/OBS	MCAR: Please update the ERMR to ensure that all information within the ERMR is accurate.
Round 1 Response from Project Proponent (18 February 2025)	We have updated Section 6.2 to accurately describe the current institutional arrangement for management of REDD+ projects and licenses. With the creation of the Directorate of Climate Change in 2019, this institution has assumed many of the responsibilities of FNDS, especially related to approvals/authorizations and official communications with REDD+ proponents. FNDS still manages the REDD+ Registry, as well as providing technical support to the DMC.
Aster Global Findings - Round 2 (25 July 2025)	The VVB notes revised ER-MR states "However, since the creation of the Directorate of Climate Change in (DMC) the MTA in 2019, most of the duties of FNDS are not performed by the DMC." However, in response it is stated that "With the creation of the Directorate of Climate Change in 2019, this institution has assumed many of the responsibilities of FNDS....." There seems to be a discrepancy between the response provided and the corresponding text in the revised ER-MR.
Round 2 MCAR/mCAR/OBS	mCAR: Please address the discrepancy noted and update the ERMR to ensure that all information within the ERMR is accurate.
Round 2 Response from Project Proponent (02 September 2025)	This was a spelling error, as the text should state "...most of the duties of FNDS are now performed by the DMC.". The text has been revised in the latest version of the document.
Aster Global Findings - Final (25 September 2025)	Thank you for the clarification. The VVB confirmed that the text has been revised in the updated ER-MR. Item closed.

Item Number	8
Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)	Criterion 37: Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.
Carbon Methodological Framework Version 3, April 2020 (Requirement)	Indicator 37.2: A national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including: <ul style="list-style-type: none"> i. The entity that has Title to ERs produced; ii. Geographical boundaries of the ER Program or project; iii. Scope of REDD+ activities and Carbon Pools; and iv. The Reference Level used.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER MR Section 6.2, https://app.powerbi.com/view?r=eyJrljoiODYzMjMxMGUtNzQZS00YjQ4LWlwN2ltZjg4ZGY4YjZTA2liwidCI6IjQwNTRkZDM4LWVmMzktNDQxYi04MjFkLWUyOThkOWIxZGQ1NCJ9

<p>Aster Global Findings - Round 1 (14 December 2024)</p>	<p>1.The VVB reviewed the link provided during a virtual site visit interview (https://app.powerbi.com/viewr=eyJrIjoiODYzMjMxMGUtNzQ2ZS00YjQ4LWlwN2ItZjgxZGY4YjIzZTA2IiwidCI6IjQwNTRkZDM4LWFmMzktNDQxYi04MjFkLWUyOTlkOWIxZGQ1NCJ9) and was unable to locate on the necessary information required by Indicator 37.2, specifically items i, ii, iii.</p> <p>2. Additionally, the VVB reviewed Section 6.2 of ERMR which states "Mozambique is developing and implementing its own comprehensive national REDD+ Program and Projects Data Management System. The system is hosted and managed by FNDS as per de REDD+ decree "the FNDS is responsible for (vi) managing the national REDD+ Programs and Projects Data Management System and for (vii) communicating to the entity in charge of the ER Transactions Registry all information related to ERs generated by REDD+ projects". Currently the system is implemented through a WebGIS platform (https://bit.ly/srppmozfnfs) alongside with the NFMS and the projects M&E Web portal." The VVB was unable to access the WebGIS Platform. It is unclear to the VVB why this occurs.</p> <p>3. The VVB also notes that this link is different than the link to the platform provided by FNDS during the virtual site visit interviews and therefore it is unclear if the correct link has been specified in the ERMR.</p>
<p>Round 1 MCAR/mCAR/OBS</p>	<p>MCAR: Please clarify in line with the findings, updated the MR, and provided supporting evidence as necessary.</p>
<p>Round 1 Response from Project Proponent (18 February 2025)</p>	<p>1. We understand that indicator 37.2 states that the REDD+ Registry must include the following attributes:</p> <ul style="list-style-type: none"> i. The entity that has Title to ERs produced; ii. Geographical boundaries of the ER Program or project; iii. Scope of REDD+ activities and Carbon Pools; and iv. The Reference Level used <p>Items i. and ii. are fully described in the publically available registry, as the proponent of each project is the entity that has the title to ERs produced and the geographical boundaries of the project correspond to the district where it is being implemented.</p> <p>For iii. the REDD+ activities are stated in the "Actividades REDD+" Tab. However, Carbon Pool for each project are not able to be visualized in the platform. However, they are part of the geospatial database which feeds the platform.</p> <p>For iv. The reference level used is not able to be visualized in the platform, but it is part of the geospatial database which feeds the platform.</p> <p>2. The link to the REDD+ Registry was outdated and has been updated to the correct one (http://bit.ly/registryredd).</p> <p>3. See 2. above</p>
<p>Aster Global Findings - Round 2 (25 July 2025)</p>	<p>1. Thank you for the clarification and updated link to REDD+ registry. Upon review of the response and the updated link provided the VVB is reasonably assured that this requirement is satisfied. Item closed.</p> <p>2, 3. Thank you for the clarification. The updated link to REDD+ registry is accessible. Item closed.</p>
<p>Round 2 MCAR/mCAR/OBS</p>	
<p>Round 2 Response from Project Proponent (02 September 2025)</p>	

Aster Global Findings - Final (25 September 2025)	
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Item Number	9
Carbon Methodological Framework Version 3, April 2020 (Section/Criterion)	Criterion 37: Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.
Carbon Methodological Framework Version 3, April 2020 (Requirement)	Indicator 37.4: Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	<p>During the previous verification, the VVB issued an mCAR related to this criterion. Specifically, the Verification Report reads "During the course of the verification, the ZILMP provided two documents in draft form titled Terms of Reference for the REDD+ Programs and Projects Registry and Manual of Procedures for the Licensing of REDD+ Projects. Because the documents have not been finalized and are only drafts, the audit team reached out to the FCPF Secretariat to determine whether draft documents are sufficient to demonstrate compliance with Criterion 37.4. Guidance from FCPF indicated that these draft documents are sufficient to meet criteria 37.4, and no independent audit is necessary but indicated an mCAR should be raised to highlight this issue for future verifications. Specifically, finalized administrative procedures should be defined for the operations of the national REDD+ Program and Projects Data Management System prior to the next verification."</p> <p>The VVB notes that the FCPF Validation/Verification Guidelines state "all mCARs issued at Verification shall be suitably closed out by the REDD Country Participant at the time of the next Verification;" therefore the VVB is issuing an MCAR related to this item.</p> <p>Based on the remote site visit interviews conducted as part of this verification, the VVB understands that these documents have not been finalized. The VVB will seek clarification from FMT on the required next steps.</p>
Round 1 MCAR/mCAR/OBS	MCAR: Please provide verifiable evidence that the Administrative Procedures related to the national REDD+ Programs and Projects Data Management System have been finalized and as necessary update the ERMR.
Round 1 Response from Project Proponent (18 February 2025)	We confirm that the two documents in questions are still being utilized, and have not been subjected to any updates since the last Verification.
Aster Global Findings - Round 2 (25 July 2025)	Thank you for confirming that two documents are still being utilized and have not changed. However, it is unclear whether these documents have been finalized. Furthermore, it is unclear whether administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System.

Round 2 MCAR/mCAR/OBS	MCAR: Please clarify in line with the findings. Please provide the finalized documents as necessary.
Round 2 Response from Project Proponent (02 September 2025)	<p>Please find the new version of National REDD+ Program & Project Data Management System Manual (link: https://www.fnds.gov.mz/mrv/index.php/documentos/guioes)</p> <p>Aster note: Additional clarification was asked by the VVB and the ER team responded via email (2025-09-23) stating that the National REDD+ Program & Project Data Management System Manual has been finalized having gone through a consultation process with relevant stakeholders. The finalized version is the one currently available on the MRV platform at the link previously shared https://www.fnds.gov.mz/mrv/index.php/documentos/guioes Further ER team noted that, while the Manual has been finalized, may be updated or improved over time to incorporate lessons learned and new developments in the operation of the REDD+ Program & Projects Data Management System.</p>
Aster Global Findings - Final (25 September 2025)	Thank you for confirming that the National REDD+ Program & Project Data Management System Manual has been finalized. VVB reviewed the document provided and notes that document provides sufficient assurance that Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System. This item is closed.

Item Number	10
Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Section/Criterion)	1.2 Identification, assessment and addressing source(s) of uncertainty
Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Requirement)	8. As part of the first step of the Uncertainty Analysis, REDD Country Participants shall identify and discuss in qualitative terms the main source(s) of uncertainty, systematic or random, and shall conclude whether the contribution of each individual source to total uncertainty of Emission Reductions ² is high or low ³ . Table 2 provides a list of the main source(s) of uncertainty that, at minimum, shall be evaluated qualitatively by REDD Country Participants, together with an indication on whether their contribution to overall uncertainty is typically high or low and whether they are systematic or random in nature ⁴ . If a REDD Country Participant decides to deviate from the indication, this shall be duly justified.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERM or Supporting Documents)	ER-MR/table 7

<p>Aster Global Findings - Round 1 (14 December 2024)</p>	<p>1. Main sources of uncertainty are identified and discussed in table 7 of ER-MR. However, the VVB noted following under “Contribution to overall uncertainty (High / Low)” for following:</p> <p>Activity data >> Representativeness: Marked Low and bias is missing. Approach 3: Marked “H/L” which appears to be incorrect.</p> <p>Emission factor>> Other parameters (e.g. Carbon fraction, root-to-shoot ratio): Marked L (random) which appears to be incorrect. Representativeness: Listed as “Representativeness error” which does not appear to be a correct term. Also, marked H/L (bias) which appears to be incorrect.</p>
<p>Round 1 MCAR/mCAR/OBS</p>	<p>MCAR: Please make sure the guideline template is appropriately followed, and all required information is included appropriately.</p>
<p>Round 1 Response from Project Proponent (18 February 2025)</p>	<p>This table and the corresponding problematic rows have been corrected, to comply with the template.</p>
<p>Aster Global Findings - Round 2 (25 July 2025)</p>	<p>Table 7 has been updated appropriately in line with table template outlined in “Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions”. Item closed.</p>
<p>Round 2 MCAR/mCAR/OBS</p>	
<p>Round 2 Response from Project Proponent (02 September 2025)</p>	
<p>Aster Global Findings - Final (25 September 2025)</p>	

<p>Item Number</p>	<p>11</p>
<p>Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Section/Criterion)</p>	<p>1.3 Uncertainty of the estimate of Emission Reductions</p>
<p>Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Requirement)</p>	<p>12. ER Programs shall report transparently the parameters that are subject to the Monte Carlo simulation, the type of Probability Distribution Function (PDF) including its parameters, the source of assumptions made, as shown in the applicable table of the ER-MR template. The PDF shall be well justified and shall adhere to the guidance provided in Section 3.2.2.4 of Chapter 3, Volume 1 of the 2006 IPCC Guidelines (and its 2019 refinement). When the parameter is based on sample data, Bootstrap methods may be applied in substitution of the PDF definition. The following decision tree shall be used to define the PDF.</p>
<p>Requirement Met (Y/N/Pending)</p>	<p>Y</p>

Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	There reference to monitoring period in following sentence is incorrect: "The parameter values for AD in the monitoring period are an average of the activity data for 2019 and 2020, as they are calculated in the same way as the reference level AD (sum of area divided by number of years)."
Round 1 MCAR/mCAR/OBS	MCAR: Please address in line with the finding.
Round 1 Response from Project Proponent (18 February 2025)	Thank you for pointing out the inconsistency in the statement. There was indeed a typo. The correct monitoring period is from 2021 to 2022, as reflected in the spreadsheets and the results presented in the report. We appreciate your attention to detail and have corrected the text to accurately represent the monitoring period. Please let us know if further clarification is needed.
Aster Global Findings - Round 2 (25 July 2025)	The appropriate monitoring period has been referenced. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	12
Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Section/Criterion)	1.4 Sensitivity analysis and identification of areas of improvement of MRV system
Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Requirement)	15. ER Programs shall carry out a sensitivity analysis to identify the relative contribution of each parameter to the overall uncertainty of Emission Reductions. Relative contributions refer only to uncertainty estimates rather than contributions of systematic errors. Sensitivity analysis is conducting by switching off each source of uncertainty (listed in Table 1) at a time and assessing the impact to overall uncertainty of Emission Reductions.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR, R-script, workbooks

Aster Global Findings - Round 1 (14 December 2024)	<p>1. The values reported in table 9 appear to contradict with the statement in section 5.3: “The major contributor to uncertainty of ERs was Activity data for the reference period, followed by activity data for the monitoring period.”</p> <p>2. The VVB noted output table of sensitivity analysis is provided as a table and reported in ER-MR table 9. Additionally, an R-script is also provided. However, the VVB notes the values are going to be updated based on the findings issued on activity data uncertainty estimation in criterion 9.</p>
Round 1 MCAR/mCAR/OBS	<p>1. MCAR: Please address in line with the finding.</p> <p>2. MCAR: Please update downstream estimations and values in ER-MR as necessary. Please provide the revised R-script as necessary.</p>
Round 1 Response from Project Proponent (18 February 2025)	<p>1. The section 5.3 was updated to reflect the values reported in table 9.</p> <p>2. Sensitivity analysis for the monitoring period in table 9 is now up to date and the RScript was also updated</p>
Aster Global Findings - Round 2 (25 July 2025)	<p>1. The appropriate monitoring period has been referenced. Item closed.</p> <p>2. The VVB notes Sensitivity analysis for the monitoring period in table 9 has been updated. The VVB re-ran the updated R script and were able to confirm the values reported. Item closed.</p>
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	13
Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Section/Criterion)	1.4 Sensitivity analysis and identification of areas of improvement of MRV system
Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions Version 1.0 November 2020 (Requirement)	16. Where individual source(s) of uncertainty are found to contribute significantly to a high overall uncertainty of the ER, ER Programs should consider reducing the uncertainty by improving methods, collecting additional or new data, etc. in the next monitoring event.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR

Aster Global Findings - Round 1 (14 December 2024)	It is unclear what information is included in the ER-MR to confirm this requirement.
Round 1 MCAR/mCAR/OBS	MCAR: Please clarify and add information as necessary.
Round 1 Response from Project Proponent (18 February 2025)	The most significant sources of uncertainty of emissions comes from the activity data of the monitoring period and reference period. Unlike previous MR, the activity data for the monitoring period has become the most significant contributor to uncertainty, due to its much greater magnitude, when compared to the 2 previous MRs. However, considering that no emission reductions have been generated and the magnitude of the emissions, the country does not consider it necessary to expend significant additional resources to reducing this uncertainty (i.e. by collecting additional reference data). The explanatory text of section 5.3 has been updated to better reflect the numbers of the table.
Aster Global Findings - Round 2 (25 July 2025)	Thank you for the response. Upon reviewing the additional information included in the revised ER-MR, the VVB is reasonably assured that this requirement is satisfied. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	14
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	ER-MR
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	Forest Carbon Partnership Facility (FCPF) Carbon Fund ER Monitoring Report (ER-MR)
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	The VVB notes that there are several grammatical and typographical errors and broken links in ER-MR.
Round 1 MCAR/mCAR/OBS	MCAR: Please ensure that all grammatical and typographical errors are corrected and broken links are updated appropriately.
Round 1 Response from Project Proponent (18 February 2025)	Done
Aster Global Findings - Round 2 (25 July 2025)	The VVB notes that there are still several broken links in ER-MR. Example: footnotes 1, 2, 3,4 etc
Round 2 MCAR/mCAR/OBS	MCAR: Please ensure that all broken links are updated appropriately.

Round 2 Response from Project Proponent (02 September 2025)	"The official FNDS website (https://www.fnds.gov.mz) was down, which may caused some links to be temporarily unavailable. Now the website is online. Additionally, for Dropbox-hosted links, if direct access via click does not work, we suggest copying and pasting the link directly into your browser — this should allow the content to open without any issues. We appreciate your understanding. "
Aster Global Findings - Final (25 September 2025)	Identified broken links have been fixed. Item closed.

Item Number	15
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	ER-MR (cover page)
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	Number of FCPF ERs from enhanced removals through afforestation/ reforestation
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	Not included since ER-MR template v2.5 was used.
Round 1 MCAR/mCAR/OBS	MCAR: Please use the updated ER-MR template version.
Round 1 Response from Project Proponent (18 February 2025)	The template and cover page were updated. Please see the new version of the ER-MR
Aster Global Findings - Round 2 (25 July 2025)	Included in updated ER-MR. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	16
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	ER-MR (cover page)
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	Version
Requirement Met (Y/N/Pending)	Y

Evidence Used to Assess (Location in ERP, ERM or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	Not included.
Round 1 MCAR/mCAR/OBS	MCAR: Please include version in the ER-MR cover page.
Round 1 Response from Project Proponent (18 February 2025)	ER-MR was updated to include the version in cover page
Aster Global Findings - Round 2 (25 July 2025)	Included in updated ER-MR. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	17
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	1.1 Implementation status of the ER Program and changes compared to the ER-PD
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	<p>Provide a short description of the implementation of the ER Program, including:</p> <ul style="list-style-type: none"> • Progress on the actions and interventions under the ER Program (including key dates and milestones); • Update on the strategy to mitigate and/or minimize potential Displacement. • Effectiveness of the organizational arrangements and involvement of partner agencies • Updates on the assumptions in the financial plan and any changes in circumstances that positively or negatively affect the financial plan and the implementation of the ER Program. <p>Highlight any key changes or deviations in the ER Program’s design and key assumptions compared to the description of the ER Program in the ER-PD.</p> <p>Refer to criterion 17.3 and 27 of the Methodological Framework</p>
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERM or Supporting Documents)	ER-MR

Aster Global Findings - Round 1 (14 December 2024)	<p>This section of ER-MR does not include description of the implementation of the following:</p> <ul style="list-style-type: none"> - Progress on the actions and interventions under the ER Program (including key dates and milestones); - Updates on the assumptions in the financial plan and any changes in circumstances that positively or negatively affect the financial plan and the implementation of the ER Program. <p>Additionally, this section does not highlight any key changes in the ER Program’s design and key assumptions compared to the description of the ER Program in the ER-PD.</p>
Round 1 MCAR/mCAR/OBS	MCAR: Please address in line with the findings.
Round 1 Response from Project Proponent (18 February 2025)	<p>Progress on the actions and interventions under the ER Program in monitoring period were describe in project activity report provided in table 1 (MOZFIP, MOZDGM and Sustenta).</p> <p>We also added section 1.1.3. about the Financial Plan and Any Changes in Circumstances Affecting the ER Program Implementation.</p>
Aster Global Findings - Round 2 (25 July 2025)	Missing information included in updated ER-MR. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	18
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	2.1 Forest Monitoring System
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	<p>Describe the Forest Monitoring System including:</p> <ul style="list-style-type: none"> • Organizational structure, responsibilities and competencies, linking these to the diagram shown in the next section; • The selection and management of GHG related data and information; • Processes for collecting, processing, consolidating and reporting GHG data and information; • Systems and processes that ensure the accuracy of the data and information; • Design and maintenance of the Forest Monitoring System; • Systems and processes that support the Forest Monitoring System, including Standard Operating Procedures and QA/QC procedures; • Role of communities in the forest monitoring system; • Use of and consistency with standard technical procedures in the country and the National Forest Monitoring System. <p>Highlight any changes compared to the description that was provided in the ER-PD.</p> <p>Refer to criterion 15 and 16 of the Methodological Framework</p>

Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	Forest monitoring system is described in section 2.1 with three additional sub-systems. However, the forest monitoring system does not appear to be described in accordance with the ER-MR template, with each item listed as outlined in the template.
Round 1 MCAR/mCAR/OBS	MCAR: Please make sure all sections are described as listed in the ER-MR template section 2.1.
Round 1 Response from Project Proponent (18 February 2025)	The section 2.1 was updated, where we describe: Organizational Structure, Responsibilities, and Competencies Selection and Management of GHG-related Data and Information Systems and Processes Ensuring Data Accuracy Role of Communities in the Forest Monitoring System Updates to the monitoring approach
Aster Global Findings - Round 2 (25 July 2025)	All sections are described in updated ER-MR in accordance with ER-MR template section 2.1. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	19
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	2.3 Measurement, monitoring and reporting approach
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	<p>Provide a systematic and step-by-step description of the measurement and monitoring approach applied for establishment of the Reference Level and estimating Emissions and Emissions reductions during the Monitoring / Reporting Period for estimating the emissions and removals from the Sources/Sinks, Carbon Pools and greenhouse gases selected in the ER-PD. Provide line diagrams showing all relevant monitoring points, parameters that are monitored and the integration of data until reporting in a schematic way.</p> <p>Include equations that show the calculation steps of GHG emissions and removals and that show the parameters that will be listed in Section 3 following the example below. These equations shall show all steps from the input of measured and default parameters to the aggregation into final reported values. Discuss the choice and the source of all the equations used. Highlight any changes compared to the description that was provided in the ER-PD.</p> <p>Refer to criterion 5, 6, 7, 8, 9, 14 and 16 of the Methodological Framework</p>
Requirement Met (Y/N/Pending)	Y

Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	This section of ER-MR does not include a systematic and step-by-step description of the measurement and monitoring approach applied.
Round 1 MCAR/mCAR/OBS	MCAR: Please include a step by step description of the measurement and monitoring approach applied as required by the template.
Round 1 Response from Project Proponent (18 February 2025)	Thank you for the request and for the opportunity to review our methodological approach. After careful consideration, we believe the request has been adequately addressed in section "2.2.1. Line Diagram", where we detail the monitoring and measurement approach, including the line diagram that shows the relevant monitoring points, the parameters being monitored, and how the data is integrated throughout the process. The diagram in the report is meant to clearly and systematically illustrate the flow of data, from collection to the reporting of emissions and removals. We believe this section provides a comprehensive view of how the monitoring system is structured, in line with the requirements of the request. We are happy to provide any further clarifications or adjustments if needed.
Aster Global Findings - Round 2 (25 July 2025)	Thank you for the response and providing the clarification. The VVB notes that Line Diagram is included in section 2.2.1 however, the finding was issued pursuant to the criteria which requires a step-by-step description of monitoring and measurement approach presented in the Line Diagram.
Round 2 MCAR/mCAR/OBS	mCAR: Please include a step-by-step description of monitoring and measurement approach presented in the Line Diagram.
Round 2 Response from Project Proponent (02 September 2025)	Done. Step-by-step description of monitoring and measurement approach presented in the Line Diagram was included in the latest version of the document.
Aster Global Findings - Final (25 September 2025)	Step-by-step description of monitoring and measurement approach has been provided in the updated MR section 2.3.1. Item closed.

Item Number	20
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	3.2 Monitored Data and Parameters
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	<p>Please provide an overview of all data and parameters that are monitored during the Crediting Period and their values for this Monitoring/Reporting Period. Use the table provided and copy table for each parameter, not for each value (multiple values may be reported per parameter, for instance A(j,i) may include the estimates of the different forest types obtained with a same survey).</p> <p>Include all the relevant information within the boxes, not outside. Where relevant, attach any spreadsheets, spatial information, maps and/or synthesized data used to derive the parameter. These parameters should link to the equations that are presented in section 2.2.2.</p> <p>Refer to criterion 5, 6, 7, 8, 9, 14 and 16 of the Methodological Framework</p>
Requirement Met (Y/N/Pending)	Y

Evidence Used to Assess (Location in ERP, ERM or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	Overview of all monitored data and parameters is appropriately included in this section of ER-MR. However, the VVB noted the following link in page 41 (section vi) is broken: https://www.reddcompass.org/download-the-mgd
Round 1 MCAR/mCAR/OBS	MCAR: Please correct the broken link.
Round 1 Response from Project Proponent (18 February 2025)	Thank you for this observation. We would like to inform you that there has been a recent update in the configuration of the REDD Compass website, which led to a change in the link originally provided. As a result, the link provided in the report is no longer active. However, the updated, correct, and accessible link for the GFOI MGD is: [https://www.reddcompass.org/mgd].
Aster Global Findings - Round 2 (25 July 2025)	The broken link has been fixed and is now accessible. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	21
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	5.1 Identification, assessment and addressing sources of uncertainty

<p>FCPF Monitoring Report Template v3.1, July 2024 (Requirement)</p>	<p>As part of the first step of the Uncertainty Analysis, REDD Country Participants shall identify and discuss in qualitative terms the main source(s) of uncertainty and shall conclude whether its contribution to total uncertainty of Emission Reductions is high or low. Table 1 of the Guideline on uncertainty analysis of emission reductions provides a list of the main source(s) of uncertainty that shall be discussed by REDD Country Participants together with an indication on whether their contribution to overall uncertainty is high or low and whether they are systematic or random in nature. This analysis should reflect the situation at the beginning of the Monitoring Cycle.</p> <p>This discussion on the main source(s) of uncertainty the REDD Country Participant shall discuss the measures that have been implemented to address these sources of uncertainty as part of the Monitoring Cycle. Source(s) of uncertainty that are deemed high should be addressed by the REDD Country Participant. The strategy to address these varies depending on the type of error as explained below . Table 1 of the Guideline on uncertainty analysis of emission reductions provides the proposed strategy to address the different sources of uncertainty.</p> <p>It is important to note that the importance is the contribution of sources of error to total uncertainty of ERs, which is not necessarily the same as emissions. Since Emission Factors are the same for RL setting and GHG monitoring, Emission Reductions can be expressed as the difference in the activity data in the Reference Period and the Monitoring Period multiplied by the Emission Factor (i.e. $\propto(AD_{RL} - AD_{Monitoring})$). This is important to keep in mind.</p> <p>Systematic errors shall be reduced as far as practical. Although systematic errors (bias) should be removed, in the FCPF accounting framework these are allowed if it leads to the underestimation of Emission Reductions. REDD Country Participants may use conservative approaches in order to address systematic errors that are not practical to be solved. Systematic Errors that may cause an overestimation of Emission Reductions shall be addressed by the REDD Country Participant.</p> <p>The text within the table of the guidance shall be replaced by the assessment of the country.</p> <p>Refer to criterion 7 of the Methodological Framework and the Guideline on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions</p>
<p>Requirement Met (Y/N/Pending)</p>	<p>Y</p>
<p>Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)</p>	<p>ER-MR</p>
<p>Aster Global Findings - Round 1 (14 December 2024)</p>	<p>Main sources of uncertainty are identified and discussed in table 7 of ER-MR. However, table 7 in ER-MR does not adhere to the table template outlined in the “Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions” as it fails to specify the nature of the uncertainty (systematic or random), as required.</p>
<p>Round 1 MCAR/mCAR/OBS</p>	<p>MCAR: Please make sure the guideline template is appropriately followed, and all required information is included appropriately.</p>

Round 1 Response from Project Proponent (18 February 2025)	In table 7 were added two columns of types of uncertainty (systematic or random) as describe in Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions. Please see new version of ER-MR (version 3)
Aster Global Findings - Round 2 (25 July 2025)	Table 7 has been updated appropriately in line with table template outlined in “Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions”. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	22
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	5.2 Uncertainty of the estimate of Emission Reductions/Quantification of the uncertainty of the estimate of Emission Reductions
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	<p>All ER Programs shall report the uncertainty of aggregated Emission Reductions at the 90% confidence level, except for those that use proxies to estimate GHG emissions from forest degradation. In these cases, uncertainty of ERs shall be reported for forest degradation and for the aggregate of the other activities.</p> <p>Uncertainty will be reported for both the Reporting Period and for the period since the Crediting Period Start date. Uncertainty discount applicable is based on the highest of both uncertainties. The cumulative uncertainty during the crediting period may be estimated through propagation of errors approach using the values of the different reporting periods.</p> <p>Refer to criterion 7, indicators 9.2 and 9.3, and criterion 22 of the Methodological Framework</p>
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	The table contains uncertainty of the estimation of Emission Reductions for the Reporting Period and Crediting Period. It appears an incorrect Uncertainty discount is reported for the crediting period.
Round 1 MCAR/mCAR/OBS	MCAR: Please address the finding.
Round 1 Response from Project Proponent (18 February 2025)	We have corrected the uncertainty discount to 12%, since the Aggregate Uncertainty of Emissions Reductions is 95% which is between 60% and 100%.
Aster Global Findings - Round 2 (25 July 2025)	Uncertainty discount for the crediting period has been corrected. Item closed.
Round 2 MCAR/mCAR/OBS	

Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	23
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	6.1 Ability to transfer title
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	<p>Describe the arrangement in place to demonstrate the Program Entity’s ability to transfer title to ERs.</p> <p>If the ability to transfer Title to ERs is unclear or contested during the Reporting Period:</p> <ul style="list-style-type: none"> • identify the Contesting Party; • describe the nature of the challenge; • detail the area in the ER Program Accounting Area that is affected by such challenge, and • describe how and to which extent the Program Entity resolved such inability or Title Contest during the Reporting Period. • If applicable, add a statement indicating if the Program Entity has intentions of increasing the ability to transfer the title over ERs covered in this monitoring report, and indicate a proposed date for requesting such increase. <p>Refer to criterion 28, indicator 28.3 and criterion 36, indicator 36.2 and indicator 36.3 of the Methodological Framework</p>
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	Section 6.1 of the ER-MR contains information on the Program Entity's ability to transfer title to ERs. The VVB noted a broken link on page 57 of ER-MR.
Round 1 MCAR/mCAR/OBS	MCAR: Please update the link appropriately.
Round 1 Response from Project Proponent (18 February 2025)	We have replaced the broken link with the correct up to date link. http://bit.ly/registryredd
Aster Global Findings - Round 2 (25 July 2025)	The broken link has been fixed and is now accessible. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	
Aster Global Findings - Final (25 September 2025)	

Item Number	24
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FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	7.2 Quantification of Reversals during the Reporting Period
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	Complete table on template page 22-23
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	Reversals during this reporting period is quantified. However, the table needs to be updated based on the updated ER-MR template.
Round 1 MCAR/mCAR/OBS	MCAR: Please update the table as per the updated template.
Round 1 Response from Project Proponent (18 February 2025)	This section has been updated in the monitoring report (ERMR version 3) and in the respective calculation files.
Aster Global Findings - Round 2 (25 July 2025)	Section 7.2 has been revised in line with the updated ER-MR template. Item closed.
Round 2 MCAR/mCAR/OBS	
Round 2 Response from Project Proponent (02 September 2025)	

Item Number	25
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	7.3 Quantification of pooled reversal buffer replenishments
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	7.3 Quantification of pooled reversal buffer replenishments
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	This section should be included as per the updated template.
Round 1 MCAR/mCAR/OBS	MCAR: Please ensure the ER-MR is fully updated to comply with the requirements of the FCPF CF Program.
Round 1 Response from Project Proponent (18 February 2025)	This section has been updated in the Monitoring Report (ERMR Version 3) and the corresponding calculation files
Aster Global Findings - Round 2 (25 July 2025)	Section 7.3 has been added in revised ER-MR. Item closed.
Round 2 MCAR/mCAR/OBS	

Item Number	26
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	8 EMISSION REDUCTIONS AVAILABLE FOR TRANSFER TO THE CARBON FUND
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	Quantify the emission reductions available for transfer to the Carbon Fund by completing the white cells in the table below. Additional columns may be added if the country wishes to report in separate calendar years. If it does not wish to report per calendar years, the FCPF units will be distributed per calendar years pro-rata to the number of years at the time of issuance. Separation in calendar years is only applicable if the Emission Reductions in all the years of the Reporting Period are positive.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	This section is included in the ER-MR. However, this section needs to be updated based on the updated ER-MR template.
Round 1 MCAR/mCAR/OBS	MCAR: Please update this section per the updated template.
Round 1 Response from Project Proponent (18 February 2025)	This section has been updated in the Monitoring Report (ERMR Version 3) and the corresponding calculation files
Aster Global Findings - Round 2 (25 July 2025)	Section 8 has been revised in line with the updated ER-MR template. Item closed.

Item Number	27
FCPF Monitoring Report Template v3.1, July 2024 (Section/Criterion)	ANNEX 5: DETAILED DESCRIPTION OF THE APPLICATION OF THE REVERSAL RISK ASSESSMENT TOOL
FCPF Monitoring Report Template v3.1, July 2024 (Requirement)	Please include here the detailed description of the assessment conducted to estimate the reversal risk reported in section 7.3 of the Monitoring Report. ER Programs shall follow the guideline on the application of the Reversal Risk Assessment Tool and the validation and verification of its outcomes and present the background information and results in this annex. Refer to criterion 19 of the Methodological Framework and the FCPF ER Program Buffer Guidelines
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERP, ERMR or Supporting Documents)	ER-MR
Aster Global Findings - Round 1 (14 December 2024)	This section should be included as per the updated ER-MR template.
Round 1 MCAR/mCAR/OBS	MCAR: Please include this section in ER-MR.

Round 1 Response from Project Proponent (18 February 2025)	ANNEX 5: DETAILED DESCRIPTION OF THE APPLICATION OF THE REVERSAL RISK ASSESSMENT TOOL) has been included in Monitoring Report (ERMR Version 3)
Aster Global Findings - Round 2 (25 July 2025)	The VVB acknowledges that this section has been added in the revised ER-MR. However, it appears that instruction references incorrect section (7.3) in ER-MR template v3.1. The correct reference should have been section 7.4 “Reversal Risk Assessment”.
Round 2 MCAR/mCAR/OBS	mCAR: Please revise Annex 5 in ER-MR in line with the finding.
Round 2 Response from Project Proponent (02 September 2025)	Done. The ER-MR was updated in line with the finding
Aster Global Findings - Final (25 September 2025)	Thank you for the response and revision made in the ER-MR. This item is closed.

Item Number	28
FCPF Buffer Guidelines Version 4.2, June 2024 (Section/Criterion)	10. Compensating for Reversals Using the Pooled Reversal Buffer
FCPF Buffer Guidelines Version 4.2, June 2024 (Requirement)	10.4 If a Reversal occurs, then Buffer ERs shall be canceled from the ER Program’s cumulative contribution to the Pooled Reversal Buffer account to compensate for the Reversal. Where the reversal exceeds the amount of cumulative buffer ERs that the ER Program has contributed to the Pooled Reversal Buffer, ERs from the ER Program’s Uncertainty Buffer shall be cancelled to compensate for the remaining reversal. If the number of ERs in the Uncertainty Buffer does not suffice to fully address the reversal, then any Excess ERs held by the ER Program shall be cancelled, and finally, if the reversal amount is still not met, Pooled Reversal Buffer ERs shall be cancelled until the reversal is fully compensated.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERMR or Supporting Documents)	Section 7 ERMR, Emissions reductions calculations.xlsx
Aster Global Findings - Round 1 (14 December 2024)	<p>1. The VVB reviewed Section 7.2 of the ERMR and notes that the table used by the ER Program does not match that of the example_sections_7.2_7.3_and_8_mr_template_july2024.xlsx available on the FCPF CF website. The VVB understands that the latest quantification of reversals applies to the ER Program during this Reporting Period.</p> <p>2. Additionally, the VVB reviewed the Emissions reductions calculations.xlsx and noted that the reversal tab of this workbook contains incorrect calculations that also do not match the ERMR.</p>
Round 1 MCAR/mCAR/OBS	MCAR: Please update the Emissions reductions calculations.xlsx and ERMR to apply the latest updates as published by FCPF and ensure that the quantification is correct.
Round 1 Response from Project Proponent (18 February 2025)	This section has been updated in the Monitoring Report (ERMR Version 3) and the corresponding calculation files
Aster Global Findings - Round 2 (25 July 2025)	1,2. The VVB notes sections 7.2 in ER-MR has been updated in line with example_sections_7.2_7.3_and_8_mr_template_july2024.xlsx. Item closed.

Item Number	29
FCPF Buffer Guidelines Version 4.2, June 2024 (Section/Criterion)	12. Disposal of Pooled Reversal Buffer ERs at the End of the Term of the CF ERPA
FCPF Buffer Guidelines Version 4.2, June 2024 (Requirement)	<p>12.0 At the latest one (1) year before the end of the Term of the CF ERPA, the ER Program shall have in place a robust Reversal Management Mechanism that addresses the risk of Reversals beyond the Term of the CF ERPA and is equivalent to the Pooled Reversal Buffer. A Reversal Management Mechanism is considered to be equivalent to the Pooled Reversal Buffer if:</p> <ul style="list-style-type: none"> a) It is a pooled buffer; b) It covers potential reversals of the units generated under the ER Program during the Crediting Period; c) It allows the transfer of the Buffer ERs contributed by the ER Program to the Pooled Reversal Buffer; d) The reversal risk set-aside percentage calculated under the Reversal Management Mechanism is equal to or higher than the actual reversal risk set-aside percentage of the ER Program⁸; e) It has in place a periodic monitoring and third-party Verification mechanism for a period from the end of the Term of the CF ERPA to 31 December 2037 to confirm if there have been reversals and makes monitoring and verification reports publicly available; and f) The Reversal Management Mechanism is operational and able to address identified Reversals.
Requirement Met (Y/N/Pending)	Y
Evidence Used to Assess (Location in ERPD, ERM or Supporting Documents)	ERM
Aster Global Findings - Round 1 (14 December 2024)	The VVB reviewed the ERM and the Signed ERPAs which appear to show that the term of the ERPA ends on 12/31/2024. The VVB is requesting additional information on the status of the ER Program's Reversal Management Mechanism.
Round 1 MCAR/mCAR/OBS	MCAR: Please provide additional information to the VVB and update the ER MR as necessary/appropriate to provide an update on the ER Program's Reversal Management Mechanism.
Round 1 Response from Project Proponent (18 February 2025)	The ER Program has not developed a robust Reversal Management Mechanism according to the FCPF Buffer Guidelines Version 4.2.
Aster Global Findings - Round 2 (25 July 2025)	Based on guidance provided by FMT this is outside the scope of the VVB's review. Item closed.

APPENDIX 1: LIST OF DOCUMENTS RECEIVED

File Name	Date Received
MR Responsibilities.xlsx	July 8, 2024
ReadMe - Folder Structure.docx	July 8, 2024
ZILMP_AD_Calculations_MR_(2021).xlsx	July 8, 2024
QGIS_style_LULUCF.qml	July 8, 2024
ZILMP_lulucf_2021.tif	July 8, 2024
ZILMP_lulucf_2021.tif.aux.xml	July 8, 2024
ZILMP_AD_Calculations_MR_(2022).xlsx	July 8, 2024
QGIS_style_LULUCF.qml	July 8, 2024
ZILMP_lulucf_2022.tif	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607.dbf	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607.prj	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607.shp	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607.shx	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607_lambert.dbf	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607_lambert.prj	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607_lambert.shp	July 8, 2024
ZILMP_limits_moz_admin_2_ine_20190607_lambert.shx	July 8, 2024
2021_Project Forms.cep	July 8, 2024
2021_Reference Points.xlsx	July 8, 2024
2022_Reference Points.xlsx	July 8, 2024
Reference Level_Project Forms.cep	July 8, 2024
Software.txt	July 8, 2024
ZILMP_2021_QAQC_AD.xlsx	July 8, 2024
ZILMP_2022_QAQC_AD.xlsx	July 8, 2024
List of all codes.xlsx	July 8, 2024
ZILMP_AD_Calculations_RL_(2005_2015).xlsx	July 8, 2024
degradation_v0.html	July 8, 2024
Bechtold, Patterson - 2005 - The Enhanced Forest Inventory and Analysis Program — National Sampling Design and Estimation Procedures.pdf	July 8, 2024
Kalaba et al. - 2013 - Floristic composition, species diversity and carbon storage in charcoal and agriculture fallows and management im.pdf	July 8, 2024
Lisboa et al. - 2018 - Biomass allometric equation and expansion factor for a mountain moist evergreen forest in Mozambique.pdf	July 8, 2024
Mate, Johansson, Siteo - 2014 - Biomass equations for tropical forest tree species in mozambique.pdf	July 8, 2024
McNicol, Ryan, Williams - 2015 - How resilient are African woodlands to disturbance from shifting cultivation.pdf	July 8, 2024
Mokany, Raison, Prokushkin - 2006 - Critical analysis of root Shoot ratios in terrestrial biomes.pdf	July 8, 2024
Mugasha et al. - 2013 - Allometric models for prediction of above- and belowground biomass of trees in the miombo woodlands of Tanzania.pdf	July 8, 2024
Olofsson et al. - 2014 - Good practices for estimating area and assessing accuracy of land change.pdf	July 8, 2024

Stringer et al. - 2015 - Carbon stocks of mangroves within the Zambezi River Delta, Mozambique.pdf	July 8, 2024
Williams et al. - 2008 - Carbon sequestration and biodiversity of re-growing miombo woodlands in Mozambique.pdf	July 8, 2024
BSP FINAL_JAN 2020.pdf	July 8, 2024
final_benefit_sharing_plan_of_the_zambezia_emission_reduction_program.pdf	July 8, 2024
Inventario Florestal Nacional.pdf	July 8, 2024
Manual do Inventario Florestal.pdf	July 8, 2024
moz_frel_report_final.v03_03102018.pdf	July 8, 2024
Mozambique_Revised ERPD_16April2018_CLEAN.pdf	July 8, 2024
NFMS Document_Mozambique_Ver1_(En)_Final.pdf	July 8, 2024
Relatório_Inventário_Zambezia_atualização_09_02_2021.pdf	July 8, 2024
Relatório_Inventário_Zambezia_atualização_24_08_2020.pdf	July 8, 2024
Several types of PDFs are used as part of the Monte Carlo simulation.docx	July 8, 2024
Stehman_Mozambique_Sampling_Est_MRVR_Responses_3_20_2020.docx	July 8, 2024
TdR Procurement Assistencia Tecnica_BSP.docx	July 8, 2024
MozDGM_semiAnnual Report_Final_Report-2021.pdf	July 8, 2024
Report_MozDGM_July2022.pdf	July 8, 2024
AM_MozDGM_Nov 2021_FINAL (002).pdf	July 8, 2024
Apresentação MozFIP - 19052022.ppt	July 8, 2024
MOZAMBIQUE FIP INVESTMENT PLAN MR REPORT_YEAR 2022_HO_21_4_2023.docx	July 8, 2024
Relatório Anual 2021_WB_02.docx	July 8, 2024
IP-Primeiro pagamento por redução de emissões.pdf	July 8, 2024
Boudreaux e recibo - Produção de brochuras sobre avaliação de operadores florestais e governança florestal2.pdf	July 8, 2024
Factura - Produção de brochuras sobre avaliação de operadores florestais e governança florestal.pdf	July 8, 2024
IP -Produção de brochuras sobre avaliação de operadores florestais e governança florestal 1.pdf	July 8, 2024
MozBIO.pdf	July 8, 2024
MozDGM.pdf	July 8, 2024
MozFIP.pdf	July 8, 2024
Sustenta.pdf	July 8, 2024
Relatório Anual 2021_Integrado. Versao 21 Abril.docx	July 8, 2024
Relatório Anual 2022_Integrado. Versao FINAL (2).docx	July 8, 2024
Boudreaux - Manutenção da rede de extensão.pdf	July 8, 2024
Factura e Boudreaux - Construção de ponte em Mocuba.pdf	July 8, 2024
Pagamento - Manutenção da rede de extensão.pdf	July 8, 2024
Pedido de pagamento - Construção de ponte em Mocuba.pdf	July 8, 2024
Pedido de pagamento - Manutenção da rede de extensão.pdf	July 8, 2024
Documento de gestao de informacao do sistema de Programas e projectos.docx	July 8, 2024
Manual de Procedimentos_Licenciamento.docx	July 8, 2024
Manual_REDD_V1.1.docx	July 8, 2024



Manual_REDD_V1.docx	July 8, 2024
ToR Sistema de Registo de projectos REDD+.doc	July 8, 2024
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Document information

Version	Date	Description
1.4	August 2024	<p>Page 1, section 2.2 and section 5.6 were updated to reflect the changes incorporated in the most recent version of the Buffer Guidelines (V4.2). This adjustment includes the removal of the reversal buffer. Now, only the pooled reversal buffer should be accounted for.</p> <p>Section 4.2.2 Forest Monitoring Approach has been included to allow the VVB report the assessment of any updates made to the monitoring plan (if any, and if applicable).</p> <p>Page 1 and section 5.6 were updated to allow for the separate reporting/labelling of removals coming from afforestation and reforestation.</p>
1.3	May 2022	Page 1 and sections 5.4.1 and 5.6 have been adjusted to reflect the definition of Total ERs
1.2	September 2020	Minor adjustments have been made to show consistency with the last version of the Validation and Verification guidelines.
1.1	November 2020	Reference to the guidelines on uncertainty analysis of emission reductions was included.
1.0	August 2020	Initial version adopted.