



# Verification Report

**Version 2.5**

**7 April 2025**

Document Prepared by Alexa Dugan & Erynn Maynard Bean



<b>Forest Carbon Partnership Facility (FCPF)</b> <b>Carbon Fund</b>  <b>Verification Report (VER)</b>	
<b>ER Program Name and Country</b>	Mai-Ndombe ER-Program, Democratic Republic of Congo
<b>Reporting Period Covered In this Report</b>	01-01-2019 to 31-12-2020
<b>Number of FCPF ERs</b>	5,565,432
<b>Number of ERs allocated to the Uncertainty Buffer</b>	948,652
<b>Number of ERs allocated to the Pooled Reversal Buffer</b>	1,391,356
<b>Number of FCPF ERs from enhanced removals through afforestation/ reforestation</b>	N/A
<b>Number of FCPF ER from High Forest Low Deforestation (HFLD)</b>	2,205,863
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<b>Date of the Verification Report</b>	7 April 2025
<b>Report Approved by</b>	Christie Pollet-Young

## 1. VERIFICATION STATEMENT

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The review and cross-check of explanations and justifications included in the Monitoring Report dated 21-10-2024 (Version 3.1.2) and supporting documents have provided Scientific Certification Systems Global Services (herein referred to as SCS) 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 Mai Ndombe Emission Reduction Program's crediting period 01-01-2019 to 31-12-2024, the reporting period 01-01-2019 to 31-12-2020, the accounting area 12,848,321 hectares, the REDD Country Participant's Forest Monitoring System, the national REDD+ Programs and Projects Data Management System and the following GHG sources, sinks, and carbon pools:

- The following GHG sources, sinks and/or reservoirs:
  - Emissions from deforestation
  - Emissions from forest degradation
  - Removals from carbon stock enhancements
- The following Carbon pools:
  - Above Ground Biomass (AGB)
  - Below Ground Biomass (BGB)
- The following types of GHGs:
  - CO<sub>2</sub>

A total of 36 MCAR, 2 mCAR and 2 Observation findings were raised as part of the Verification process. All MCARs have been successfully addressed by the ER program. One mCAR remains open (mCAR 39) and is required to be addressed at the next verification. These findings are described in Appendix 1 of this report.

SCS is able to verify with a reasonable level of assurance that the Emission Reductions generated by the Mai Ndombe ER Program, were quantified in accordance with the FCPF verification criteria, amount to 16,349,884 tonnes of CO<sub>2</sub> equivalent. SCS verified that the uncertainty buffer ERs amount to 948,652 tonnes of CO<sub>2</sub> equivalent, that the quantity of ERs allocated to the pooled reversal buffer amount to 1,391,356 tCO<sub>2</sub>e. The amount of FCPF Units to be issued would be 5,565,432 tCO<sub>2</sub>e. The amount of units to be labelled as HFLD is 2,205,863 tCO<sub>2</sub>e. There are no uncertainties associated with the verification conclusion.

Statement Issuing Date: 7 April 2025

Intended User: World Bank Group, FCPF Carbon Fund Participants



TEAM LEADER: Dr. Erynn Maynard-Bean



LEGAL REPRESENTATIVE: Christie Pollet-Young

## 2. AGREEMENT

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### 2.1 Level of Assurance

The audit assessment was conducted to provide a reasonable level of assurance concerning material misstatements, errors, or omissions in conformance with the FCPF program verification criteria and scope stated in the FCPF Validation and Verification Guidelines. The provisions undertaken to ensure such a reasonable level of assurance included:

- Perform a risk-based assessment of the program area and program activities to ensure that the program, and the measuring, monitoring and quantification of GHG emissions and removals for the verification period conforms to the FCPF verification criteria.
- Assess and select samples of data and information from the program area and program activities in order to confirm they meet a reasonable level of assurance and the materiality requirements of the program, as required by the FCPF.
- Independent recalculation of the quantification of GHG emissions and removals and the recalculation of the ER program estimates for the reporting period (2019 and 2020).
- Assessment of the data collection, the selection of categories, the measuring, monitoring and reporting methods, standard operating procedures, the Monitoring Report, the parameters, equations, calculations and supporting documentation are correct and in conformance with the FCPF program requirements.

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

The assessment team conducted a verification of the Mai Ndombe Emissions Reductions Program (ERP) based on the following objectives:

- Review of the ER Monitoring Report and supporting information to confirm the correctness and completeness of the presented information
- Identify if the methodological steps and data are publicly available in accordance with applicable criteria
- Assess the extent to which the ERs have been reported with a transparent and coherent step-by-step process that enables reconstruction, have met the requirements of applicable criteria and are free of material errors and misstatements.
- Identify source(s) of uncertainty due to both random and systematic errors 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 ensure that they include control measures in place to address areas of risk of future non-compliance
- Verify that the data, methods and approach used to estimate GHG emissions and removals are consistent with the Reference Level and with the Monitoring Plan.
- Ensure that the Monitoring Report is accurate and complete with regard to the strategies undertaken to mitigate significant risks and/or minimize potential displacements and the changes in major drivers in the ER Accounting Area.

- Confirm that the Monitoring Report is complete and accurate on the mitigation of significant risks of reversals and contains strategies to address the sustainability of ERs.
- Verify that the ERs allocated to the Uncertainty, Reversal, and Pooled Reversal Buffer are estimated in compliance with the MF and other applicable criteria.
- Confirm the extent to which the ERs generated under the ER Program have not been counted or compensated for more than once.
- Assess the national or centralized REDD+ Program Data and Management System and verify that it is implemented and operated in compliance with the MF and other applicable criteria.

## 2.3 Criteria

The criteria applicable for the verification included:

- FCPF Process Guidelines, Version 6.1
- Validation and Verification Guidelines, Version 2.6
- FCPF Methodological Framework, Version 3.0
- FCPF Glossary of Terms, Version 2.2
- FCPF Buffer Guidelines, Version 4.2
- FCPF Guideline on the application of the Methodological Framework Number 1, On the use of interpolation of data in relation to the Reference Period of an ER program, Version 1.0
- FCPF Guidelines on the application of the MF Number 2, Guideline on the application of the Methodological Framework Number 1 On the use of interpolation of data in relation to the Reference Period of an ER program, Version 2.0
- FCPF Guidelines on the application of the MF Number 3, On the definition of reporting periods of Emission Reduction Programs, Version 1.0
- FCPF Guidelines on the application of the MF Number 4, On Uncertainty Analysis of Emission Reductions, Version 1.0
- ER Monitoring Report Template, Version 3.1.2
- FCPF Verification Report Template, Version 1.4
- ISO 14064-3:2006
- ISO 14065:2013
- ISO 14066: 2011
- IAF MD 6:2014
- Any formal clarification provided by the FMT

The following guidance documents (or collections of documents) were considered to contain good practice in undertaking the assessment, though said documents were not formally considered to be part of the assessment criteria.

- 2006 IPCC Guidelines for GHG Inventories
- 2013 IPCC Wetlands Supplement
- 2019 refinement to the 2006 IPCC Guidelines
- GFOI 2020 Methods and Guidance Document
- FCPF Guidance Notes

## 2.4 Scope

The scope of the verification of the Mai-Ndombe Emissions Reduction Program (ERP), which was the subject of the audit engagement described above, included the following:

- The following time period:
  - Crediting period: 01-January-2019 to 31-December-2024
  - Reporting period: 01-January-2019 to 31-December-2020
  - Monitoring period: 01-January-2019 to 31-December-2020
- The ER Program Accounting Area
- The GHG sources, sinks and reservoirs associated with any of the REDD+ Activities accounted for as required by the Methodological Framework:
  - Emissions from deforestation
  - Emissions from forest degradation
  - Removals from carbon stock enhancements
- The following Carbon pools:
  - Above Ground Biomass (AGB)
  - Below Ground Biomass (BGB)
- The following types of GHGs:
  - CO<sub>2</sub>
- The ER-Program's Forest Monitoring System comprised the following data collection components:
  - Activity data derived from probability-based sample of time-series imagery based on Landsat composite time-series data supplemented by Google Earth Data and interpreted by a team of expert image interpreters and developed in partnership with the University of Maryland/GLAD lab.
  - Field inventory data based on the compilation of three datasets: the national forest pre-inventory (PRE-IFN), inventory carried out by the Direction des Inventaires et Aménagements Forestiers / Forest Inventory and Management Directorate (DIAF) within the framework of the DIAF-JICA Forests project (DIAF-JICA data), and the inventory carried out by the DIAF within the framework of the biomass mapping project supported by the WWF-DRC (WWF data) which were used to develop the emission factors for aboveground and belowground carbon pools.
- The national REDD+ Programs and Projects Data Management System as described in the Monitoring Report.

## 2.5 Materiality

The verification process based on the desk review 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:

Where one or more discrepancies were identified during the course of assessment activities, the following criteria was applied in order to determine whether said discrepancies were material:

The term "discrepancy", as implicitly defined in Section 2.30 of ISO 14064-3:2006, encompasses the terms "error", "omission" and "misrepresentation" (i.e., these three types of distortion are different

categories of discrepancies). Any discrepancies which also presented clear divergence from stated requirements of the assessment criteria were treated as non-conformities in the assessment process. Any other discrepancies identified during the course of the assessment were subject to the following materiality assessment.

- Qualitative and quantitative materiality refers to “errors”, “omission” and “misrepresentation” that either individually or in the aggregate form affect the GHG assertion.
- Where the methodology used in production of the ER Monitoring Report (ER-MR) does not follow the FCPF Methodological Framework and applicable guidelines assessed by the verification team, a discrepancy between the output produced by the assessment team and the information reported in the ER-MR resulted, and in that case such discrepancies were evaluated for materiality according to the following criteria:
  - The threshold for quantitative materiality concerning the aggregate of misstatements, errors or omissions relative to the total reported GHG emissions and removals or emission reductions shall be 1%.
  - 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 the reporting of factual information in the ER Monitoring Report will be considered material if the incorrectly reported information is directly or indirectly required to be reported by the FCPF Methodological Framework.
  - A 1% materiality threshold applies to any over-estimation of Reference Level and ER.<sup>1</sup> Under-estimation of the Reference Level or Emission Reductions will not be considered a material discrepancy.

Any discrepancies identified as material through application of the above criteria were treated as non-conformities in the assessment process. Any discrepancies not identified as material through application of the above criteria were inherently considered immaterial. In the event that discrepancies were identified that do not required immediate correction but that required corrective action or mitigation later in time were stated as Observation.

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<sup>1</sup> The materiality analysis will be carried out by first calculating the difference between the reported ERs and the assessment team’s calculation of the same quantity, and then dividing by the reported ERs. If the resulting quantity is greater than 1.00%, the discrepancy is considered material. Otherwise, the discrepancy is not considered material. Under-estimation of the ERs will not be considered a material discrepancy.

### 3. METHODOLOGY AND PLANNING

#### 3.1 Verification team

The verification team was conformed as follows:

Name	Role	Activities				
		Desk review	Site visit	Reporting	Supervision	Technical review
Dr. Erynn Maynard-Bean	<ul style="list-style-type: none"> <li>Lead auditor, Verification Forester</li> </ul>	X		X	X	
Alexa Dugan	<ul style="list-style-type: none"> <li>Auditor, GHG Program Technical Manager</li> </ul>	X		X		
Dr. Raleigh Ricart	<ul style="list-style-type: none"> <li>Auditor, Verification Forester</li> </ul>	X				
Andre Hessini	<ul style="list-style-type: none"> <li>Translator, SCS Global</li> </ul>	X				
Vanessa Mascorro	<ul style="list-style-type: none"> <li>Technical reviewer, Verification Forester</li> </ul>					X
Christian Kalinde Riziki	<ul style="list-style-type: none"> <li>In-country Technical Expert</li> </ul>	X				

#### 3.2 Verification schedule

An indicative schedule developed for the assessment of the milestones and activities planned, is included below. The table includes details of the start and end date of each of the milestones undertaken for the assessment.

Milestone	Start Date	End Date
Kick Off Call	Thursday, June 15, 2023	Thursday, June 15, 2023
Initial GHG Documents Received	Thursday, June 15, 2023	Tuesday, August 22, 2023
SCS sends Sampling plan & data request	Tuesday, August 22, 2023	Tuesday, August 22, 2023
Internet based meeting "Quantification call"	Friday, September 8, 2023	Friday, September 8, 2023
SCS Data and Document Review of GHG components	Thursday, June 15, 2023	Friday, September 22, 2023
SCS issuance of Findings round #1	Friday, September 22, 2023	Friday, September 22, 2023
Client Response to Findings #1	Monday, September 25, 2023	Friday, November 10, 2023
SCS review findings #1,	Monday, December 11, 2023	Monday, January 22, 2024



SCS Issuance of Findings round #2	Tuesday, January 23, 2024	Tuesday, January 23, 2024
Client Response to Findings #2	Wednesday, January 24, 2024	Friday, April 5, 2024
SCS review findings #2	Monday, April 8, 2024	Thursday, April 25, 2024
SCS Issuance of Findings Round #3	Thursday, April 25, 2024	Thursday, April 25, 2024
Client Response to findings #3	Thursday, April 25, 2024	Thursday, May 16, 2024
SCS Review of Remaining open Findings	Friday, May 17, 2024	Thursday, May 23, 2024
Closure of all Findings	Thursday, May 23, 2024	Friday, May 24, 2024
SCS Val/Ver Report Writing	Friday, May 24, 2024	Monday, June 10, 2024
SCS Technical Review	Monday, June 10, 2024	Friday, June 28, 2024
SCS Issuance of Draft Validation and Verification Reports	Friday, June 28, 2024	Friday, June 28, 2024
FMT Review and Response to Draft Reports	Friday, June 28, 2024	Friday, August 28, 2024
Program updates ER-MR, Calculation workbook to reflect HFLD	Monday, March 17, 2025	Friday, March 21, 2025
SCS Issuance of Updated, Final Validation and Verification Reports	Friday, March 21, 2025	Friday, March 21, 2025

### 3.3 Methodology description

The assessment was performed through a combination of document review and interviews with relevant personnel, as discussed in Sections 3.4 and 3.5 of this report. At all times, the MR and the ER Program described therein were assessed for conformance to the criteria described in Section 2.3 of this report. As a result of this verification process, findings were issued to identify any actual or potential areas of risk or concern.

A risk assessment was conducted, and a sampling plan produced, in accordance with Sections 4.4.1 and 4.4.3 of ISO 14064-3:2006, respectively, following a proprietary approach developed by SCS. The process involved identification of key areas of “residual risk” (areas where there exists risk of a material discrepancy that is not prevented or detected by the QA/QC processes of the ER Program). Sampling and data testing activities were planned to address any risk where the likelihood of an area of nonconformance or material discrepancy going undetected by the assessment team was judged to be unacceptably high. A verification plan was created that took the sampling plan into account.

The assessment team took the following steps to assess whether the best available data sets, methods, models and assumptions have been used with transparency, consistency, completeness and accuracy, and are in conformity with the FCPF’s Methodological Framework requirements:

- Held meetings with the program’s technical team to gain a clear understanding of the process in determining the best available data sets, methods and models employed by the program.

- Independently reviewed available literature regarding the availability of datasets pertaining to forest inventory and land cover change in the DRC to confirm that the best available data sets have been utilized by the program.
- Independently reviewed the Program’s Forest Reference Level quantification to assess whether the data, methods, and assumptions used to quantify the GHG emissions and removals are in conformity and represent the best available data in the country.
- If no country specific or region-specific information was available, the assessment team confirmed that the most relevant and accurate default values from the IPCC Guidelines were applied in conformance with Criterion 5 of the FCPF Methodological Framework requirements.

### 3.4 Review of documentation

The Monitoring Report (DRC fcpf\_1st\_ER-MR\_template\_v3.1.2\_Track\_FMT\_HFLD\_032125\_clean), was carefully reviewed for conformance to the FCPF assessment criteria. The following additional documents, provided by ER Program personnel in support of the MR, were also reviewed by the assessment team for consistency, accuracy, and appropriateness with regard to the FCPF Methodological Framework and associated requirements:

Document	File Name (If Applicable)	Ref.
ER-MR	DRC fcpf_1st_ER-MR_template_v3.1.2_Track_FMT_HFLD_032125_clean	1
ER-PD	20161108 Revised ERPD_DRC; 20161108 Revised ERPD after CF-14_clean version_FR	2
Activity Data Calculation Workbooks	AD_calculationTool_MP_rev.xlsx AD_calculationTool_RP_rev.xlsx	3
Emission reductions Calculation Workbook	DRC_ER_Calculations rev3	4
Uncertainty Assessment Calculation workbooks	DRC ER MC Analysis Rev2.xlsx, DRC_ER_SensitivityAnalysisRev2.xlsx; Readme	5
Workbook on potential cultivated areas	DRC Household ShiftCult Rotation_AL	6
DIAF Emission Factor Scripts and Raw Data	[Various files]	7
Activity data spatial data	UMD-WB_final_2000_samples.kml; WB-UMD_strata_map.tif; UMD-WB_final_sampling_design.tif	8
University of Maryland Report on DRC Activity Data	UMD-WB_final_report_EN-last	9
DRC Forest Reference Emission Level (FREL)	FREL_rdc_documentnerf_soumissionfinale_29112018	10
Letter from Wildlife Works on Mai Ndombe REDD+ Project	WWC WorldBank Mai Ndombe Tonnes 2023 11 29	11
Country Progress Report	DRC FCPF Country Progress Report FY 16	12
Benefit Sharing Plan	Final-Benefit-Sharing-Plan-June-2022-DRC	13

Investment report for the DRC Forest Inventory Program	RAPPORT ANNUEL DU PIF-RDC 2022	14
Verra Correspondence	VERRA official communication.pdf	15

### 3.5 REDD Country Visit

Due to safety concerns over traveling in the Democratic Republic of Congo as well as the risk assessment conducted by the assessment team, no site visit occurred during this assessment. In lieu of a site visit, the assessment team performed web-based meetings with program personnel and program partners and made email-based inquiries as needed. For additional information on this, please refer to section 2.1 and section 4 on the assessment and validation of the program design.

The following remote interviews listed in the table below were performed:

Date(s)	Attendees	Purpose
15 June 2023	World Bank Group, World Bank FMT, Program Participants	Kick-off call
8 September 2023	World Bank Group, World Bank FMT, Program Participants	Quantification & Data management

## 4. SUMMARY OF FINDINGS

### 4.1 Implementation status of the ER Program and update on drivers

The SCS assessment team reviewed the Monitoring Report, calculation workbooks, standard operating procedures and supporting documentation provided by the REDD Country Participant (detailed above in section 3.4) and concludes that sufficient information has been included to explain any changes in major drivers in the ER Accounting Area and the status of the implementation of the strategy 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

The assessment team performed a comprehensive assessment of the Monitoring System in place of the ER Program. The primary component of the monitoring system is the satellite land monitoring system to track land cover change from deforestation, forest degradation, and enhancements. This activity data is consistent with the IPCC Approach 3 and is derived from probability-based sample of time-series imagery based off Landsat composite time-series data supplemented by Google Earth Data and interpreted by a team of expert image interpreters and developed in partnership with the University of Maryland/GLAD

- Through independent checks on land cover classification maps using ancillary high-resolution imagery covering the reporting period, the auditors confirmed that the activity data component of the Forest Monitoring System is functioning and able high-quality data.
- Through review of the monitoring report and supporting documentation and interviews with the Program Management Unit, the auditors confirmed that the program has in place the necessary controls to address relevant sources of potential errors, omissions, and misstatements in place.

The auditors do not propose opportunities for future technical improvements of areas identified as presenting a high risk of future non-compliance.

#### **4.2.2 Forest Monitoring Approach**

The Forest Monitoring Approach has not been updated since validation, as validation occurred concurrently with verification. Additionally, Section 2.2 of the ER-MR correctly indicates that, “The monitoring approach has not been updated.”

#### **4.2.3 Measurement, monitoring and reporting approach**

The assessment team conducted the following activities to evaluate the measurement, monitoring and reporting approach:

- Expert review of the Monitoring Report, calculation workbooks, procedures and supporting documentation, to confirm that the equations and methods used for the quantification and monitoring are consistent with the Reference Level.
- Independent review of the activity data using ancillary satellite imagery to confirm the accuracy of the land cover classification and the consistency with the approach applied for the Reference Level.
- Independent recalculation of the equations used to calculate the emissions and removals during the monitoring period and the subsequent emissions reductions as compared to the Reference Level.
- Additionally, the SCS assessment team confirms that the link between the equation parameters, the parameters under fixed data, the monitored parameters and data used for the measurement, monitoring and reporting are correct and free of errors and misstatements.

### **4.3 Fixed Data and Parameters**

The assessment team reviewed the Monitoring Report, procedures, quantification workbooks and supporting documentation. After the assessment of the data and parameters used in the measuring, monitoring and reporting, the assessment team confirmed that all fixed data and parameters have been reported and are consistent with the guidelines provided by the FCPF Methodological Framework requirements and the IPCC best practice guideline as stated in Criterion 5. Additionally, SCS confirms that the data and information are available publicly in accordance with Criterion 6 of the FCPF Methodological Framework requirements. The assessment of the fixed parameters is detailed in SCS’s Validation Report of the Program.

### **4.4 Monitored Data and Parameters**

After the review of the Monitoring Report, calculation workbooks, procedures and supporting documentation, SCS confirms that all data and parameters subject to monitoring have been reported in conformance with the FCPF program requirements and the guidelines provided in the ER Monitoring Report template. The assessment of the monitored parameters is described as follows:

<b>Monitored Data and Parameter(s):</b>	Area of deforestation (forest to nonforest) Area of degradation (primary to secondary forest) Area of enhancement (nonforest to forest)
<b>Free of error and material misstatement:</b>	Yes
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>■ The assessment team conducted interviews with the ER program team to confirm the procedures and processes used to generate the activity data.</li> <li>■ The assessment team performed independent data checks and recalculation of the following to assess the correctness of each step of monitoring from measurement to data transfer and calculation: the program area boundaries, the land-use and land-use change (LULUC) classification and transitions from forest to non-forest areas, the number of sample points within the program boundary, the stratum boundaries, and the area expansion factors.</li> <li>■ A sample of the activity data sample points was independently selected and assessed with high resolutely remote sensing imagery to confirm the correct classification of the plot.</li> <li>■ Moreover, a spatial analysis was conducted with ARCGIS to confirm the boundaries of the program area, the boundaries of the stratum and the number of plots per stratum.</li> <li>■ Additionally, the assessment team performed a literature review of the methodology applied from Olofsson et al. (2014) for the quantification and estimation of the areas and corresponding uncertainties and therefore confirmed that methodological steps and data are publicly available in accordance with applicable criteria.</li> <li>■ As part of the extended scope, we cross-checked the methodological approaches applied to generate the activity data with the IPCC Guidance and Guidelines to conform compliant with the methodological framework and consistency with the IPCC approach 3 for the use of spatially explicit activity data (Criterion 14)</li> </ul> <p>The assessment teams confirms that the quantification of the activity data estimates of deforestation and forest degradation occurring during the reporting period is correct and free of errors and material misstatements.</p>

SCS concludes that the data and evidence provided about the identification, quantification, and monitoring of the parameters proposed Area of Deforestation, Forest Degradation and enhancement is sufficient, complete and free of error and misstatements. Moreover, SCS reviewed the Monitoring

Report and confirmed that publicly available links are provided to the monitored data, parameters, and methodological steps in accordance with Criterion 6 of the FCPF Methodological Framework.

## 5. VERIFICATION OF GHG ASSERTION

### 5.1 ER Program Reference level for the Reporting Period

The reference period for the construction of the reference level is from 2005-2014. Average annual historical emissions over this reference period were derived from the forest inventory-based emission factors and from the remote-sensing based activity data to quantify GHG emissions and removals from deforestation, forest degradation, and enhancements.

The assessment team took the following steps to verify the correctness and completeness of the data, methods and procedures used on the estimation of the Reference Level for this reporting period:

- Independently reviewed the ER program’s Forest Reference Level quantification to assess whether the data, methods, and assumptions used to quantify the GHG emissions and removals are in conformity and represent the best available data in the country.
- Selected a random sample of interpretation data points from the land cover change analysis and independently assessed the LULC classification with other sources of remote sensing data to ensure the accuracy of the classification.
- Independently recalculated and quantified the Reference Level emissions for deforestation, degradation and enhancement to check the absence of errors in the quantification of net emissions and removals per land class as well as the relative contribution to total GHG emissions and removals associated with land conversions.
- The replication of the quantification included recalculation of the following: activity data, the number of sample points within the program boundary, program area stratification, area calculated for each stratum, area of conversions within each stratum, and the quantification of GHG emissions and removals resulted from deforestation, forest degradation and carbon enhancements.

Based on the aforementioned assessment, SCS confirms that the Reference Level for this reporting period is accurate and free of material error.

The numbers in the table below correspond to the portion of the Reference Level that was assessed during this Reporting Period. The Reporting Period aligns with complete calendar years vintage.

Year of monitoring/ reporting period <i>t</i>	Average annual historical emissions from deforestation over the Reference Period (tCO <sub>2-e</sub> /yr)	If applicable, average annual historical emissions from forest degradation over the Reference Period (tCO <sub>2-e</sub> /yr)	If applicable, average annual historical removals by sinks over the Reference Period (tCO <sub>2-e</sub> /yr)	Adjustment, if applicable (tCO <sub>2-e</sub> /yr)	Reference level (tCO <sub>2-e</sub> /yr)
2019	24,038,150	4,879,243	-420,133	5,788,887	34,286,146

<b>2020</b>	24,038,150	4,879,242	-840,267	5,788,886	33,866,012
<b>Total</b>	48,076,300	9,758,485	-1,260,400	11,577,773	68,152,158

The ER Program labelled Emission Reductions from High Forest Low Deforestation (HFLD). The Reference Level without the HFLD adjustment is shown below.

<b>Year of monitoring/ reporting period t</b>	<b>Average annual historical emissions from deforestation over the Reference Period (tCO<sub>2-e</sub>/yr)</b>	<b>If applicable, average annual historical emissions from forest degradation over the Reference Period (tCO<sub>2-e</sub>/yr)</b>	<b>If applicable, average annual historical removals by sinks over the Reference Period (tCO<sub>2-e</sub>/yr)</b>	<b>Adjustment, if applicable (tCO<sub>2-e</sub>/yr)</b>	<b>Reference level (tCO<sub>2-e</sub>/yr)</b>	<b>Reference level without adjustment (tCO<sub>2-e</sub>/yr)</b>
<b>2019</b>	24,038,150	4,879,243	-420,133	5,788,887	34,286,146	28,497,260
<b>2020</b>	24,038,150	4,879,242	-840,267	5,788,886	33,866,012	28,077,126
<b>Total</b>	48,076,300	9,758,485	-1,260,400	11,577,773	68,152,158	56,574,386

## 5.2 ER program emissions by sources and removals by sinks

The assessment team took the following steps to verify the correctness and completeness of the data, methods and procedures used to estimate the ER program emissions by sources and removals by sinks for this reporting period.

- Independently reviewed the ER program’s reporting period quantification to assess whether the data, methods, and assumptions used to quantify the GHG emissions and removals are in conformity and in alignment with the Reference Level quantification.
- Selected a random sample of interpretation data points from the land cover change analysis and independently assessed the LULC classification with other sources of remote sensing data to ensure the accuracy of the classification.
- Independently recalculated and quantified the ER program emission reductions and removals emission for this reporting period. This included recalculation of activity data, the number of sample points within the program boundary, program area stratification, area calculated for each stratum, area of conversions within each stratum, and the quantification of GHG emissions and removals resulted from deforestation, forest degradation and carbon enhancements.
- Conducted an independent review of the Monitoring report, calculation spreadsheets and supporting documentation to evaluate the consistency, completeness, and transparency of the monitoring activities.

The assessment team concludes that the data, methods, and equations used for the quantification, monitoring and reporting of the ERs are correct and have been reported with a transparent and

coherent step-by-step process that enabled the reconstruction of the estimates and are consistent with the Reference Level. SCS confirms that the reported ERs are materially accurate and comply with the requirements of the FCPF program.

The numbers in the table below correspond to the portion of the Monitoring Period that was assessed during this Reporting Period. The Reporting Period aligns with complete calendar years vintage.

Year of reporting period <i>t</i>	Emissions from deforestation (tCO <sub>2-e</sub> /yr)	If applicable, emissions from forest degradation (tCO <sub>2-e</sub> /yr)*	If applicable, removals by sinks (tCO <sub>2-e</sub> /yr)	Net emissions and removals (tCO <sub>2-e</sub> /yr)
2019	25,392,536	2,327,159	-1,212,372x	26,507,323
2020	25,392,535	2,327,158	-2,424,742	25,294,951
<b>Total</b>	50,785,071	4,654,317	-3,637,114	51,802,274

## 5.3 Uncertainty of Emission Reductions

### 5.3.1 Uncertainty analysis

The assessment team took the following steps to assess whether the uncertainty in the quantification of GHG emissions and removals has been correctly identified and assessed in conformance with Criterion 7, 8 and 9 from the FCPF Methodological Framework:

- Reviewed the Monitoring Report, data, calculation workbooks and supporting documentation to verify that all potential sources of uncertainty from the activity data, the reference level, and emission factors have been identified and assessed in conformance with the FCPF program requirements.
- Applied expert judgement and best practices as outlined in the IPCC guidance to confirm that a comprehensive approach to mitigate and reduce key areas of uncertainty have been addressed to minimize systematic errors (bias) through the implementation of consistent and comprehensive Quality Assurance / Quality Control (QA/QC) procedures.
- Applied expert judgement to assess whether all assumptions and sources of uncertainty associated with activity data, emission factors, the equations and calculation methods that contribute to the uncertainty of the estimates of emissions and removals were assessed with a stepwise approach and are correct.
- Applied expert judgement to conclude that the assessment of sources of uncertainty in quantification of the Emissions Reductions is justifiable.

Based on the aforementioned assessment, SCS confirms that a stepwise approach has been applied correctly for the identification of sources of random and systematic errors related to the activity data and emission factors for the estimation of total ERs and is in compliance with the FCPF program requirements.

### 5.3.2 Uncertainty of the estimate of Emission Reductions

The assessment team took the following steps to evaluate the application of Monte Carlo simulation for the quantification of uncertainty of the estimate of Emissions Reductions and to confirm its accuracy:

- Performed an independent review of the selection of sources of (residual) uncertainty included in the analysis, including the recalculation of their standard error and confidence intervals.
- Independently reviewed the steps, assumptions, and parameter values stated in the Monitoring Report and compared them to those in the calculation workbooks to ensure consistency and completeness.
- Conducted an independent run of the Monte Carlo analysis using the FCPF template to ensure that the simulation was carried out accurately and in accordance with the IPCC guidelines and the MF.
- Through replication of the Monte Carlo analysis, we confirmed that all underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements have been combined into a single combined uncertainty estimate and have been reported at the two-tailed 90% confidence level (Criterion 9).
- The assessment team reviewed Criterion 22 of the MF regarding the conservativeness factor and confirmed that the appropriate conservativeness factor of 12% was identified and correctly applied to the Reporting Period emissions reductions.

Based on the aforementioned review, SCS confirms that the Emission Reductions uncertainty estimation was done in conformance with the Methodological Framework Criterion 7, 9, and 22 and the Guidelines on the application of the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions. SCS concludes that the assessment of the application of the Monte Carlo simulation and the quantification of the Uncertainty of the Emission Reductions were performed correctly.

### **5.3.3 Sensitivity analysis and identification of areas of improvement of the MRV system**

The assessment team took the following steps to assess the sensitive analysis conducted to estimate the relative contribution of each parameter to the overall uncertainty:

- Performed an independent review of the selection of sources of (residual) uncertainty included in the analysis, including the recalculation of their standard error and confidence intervals.
- Independently reviewed the steps, assumptions, and parameter values stated in the Monitoring Report and compared them to those in the calculation workbooks to ensure consistency and completeness.
- Conducted an independent run of the sensitivity analysis using the FCPF template to ensure that the simulation was carried out accurately and in accordance with the IPCC guidelines and the MF.
- Reviewed the sensitivity analysis outputs to ensure that the ER program has identified the highest sources of uncertainty (activity data associated with deforestation) and has reported so transparently and completely in the Monitoring Report and the calculation workbooks.

Based on the above steps, the assessment team concludes that the sensitivity analysis was conducted correctly and in alignment with Criterion 7 and 9 and the Methodological Framework Number 4 On Uncertainty Analysis of Emission Reductions.

## **5.4 Transfer of Title to ERs**

### **5.4.1 Ability to transfer title**

The assessment team has confirmation from the FMT that the ER Program has the clear and uncontested ability to transfer title of 100% of ERs. The VVB is not required to assess the correctness of this information.

## 5.4.2 Program and Projects Data Management System

The assessment team took the following steps to confirm the ER Program's Data Management System is in conformance with the ER Program Requirements:

- Through discussions with the program team and review of the Monitoring Report, SCS confirmed that the ER Program's Data Monitoring System is in the process of being fully transferred to the updated country portal (<https://imagis-group.com/rdc/>).
- This draft version of the data hub includes information on the program including details on the geographical boundaries of the ER program, scope of the REDD+ activities, the carbon pools, the reference level, the amount of ERs produced, including links to the Monitoring Report and standard operation procedures, to ensure transparency and avoid multiple claims of ER Title. Moreover, SCS confirms that the developed standard operation procedures of the Data Management System comply with the FCPF Methodological Framework criteria.
- However, this data hub has not been fully launched, thus the auditors have issued an mCAR (see Section 6.0) requiring that the Program and Project Data Management System be fully operational by the next verification. At this point, SCS nor the FMT have deemed that the Data Management System requires an audit of operations.

## 5.4.3 Double counted ERs

The assessment team took the following steps to confirm the ER Program has not double counted ERs during this monitoring period:

- Given that the data management system is still in draft form and not fully operational, the assessment team first performed an independent search in numerous registries to check if other emission reduction projects are located within the ER Program area.
- We found that the Mai Ndombe REDD+ project (<https://registry.verra.org/app/projectDetail/VCS/934>) exists within the ER program area.
- The assessment team has confirmed through independent review of the Verra registry and email correspondence with Verra of the number of emission reduction credits issued to the project by the Verra registry during the 2019 and 2020 monitoring periods was 8,444,444 and confirmed through independent recalculation that this number of credits has been deducted from the Mai-Ndombe ER-Program. Therefore, the number of ERs that have been double counted is zero.

## 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)

This section is not applicable, as this is the first verification.

### 5.5.2 Quantification of Reversals during the Reporting Period

This section is not applicable, as this is the first verification.

### 5.5.3 Reversal Risk Assessment and Buffer ERs

Risk Factor	Risk indicators – Assessment by VVB	Resulting reversal risk set-aside percentage
Default risk	N/A	10%
<b>Lack of broad and sustained stakeholder support</b>	The assessment team assessed the stakeholder support of the ER Program. The assessment team determined that a medium risk rating was appropriate through a complete review of the ER Program documentation and supporting evidence provided on the implementation of safeguards, the benefit sharing plan, grievance redress mechanisms, the consultation and engagements shown with the rural communities, the private sector, and other stakeholders.	5%
<b>Lack of institutional capacities and/or ineffective vertical/cross sectorial coordination</b>	The assessment team assessed the risk associated with institutional capacity and cross sectorial coordination of the ER Program. The assessment team concluded that a medium risk rating was correctly used, through the review of the ER Program documentation and supporting evidence provided, given the scale and complexity of the DRC program and arrangements in place for multi-sectorial coordination and strong institutional support ultimately mitigate this risk.	5%
<b>Lack of long term effectiveness in addressing underlying drivers</b>	The assessment team assessed the program interventions and actions taken to reduce the risks from the main drivers and agents of deforestation and degradation and to ensure avoidance of reversal. The assessment team reviewed the ER program documentation and supporting evidence confirming the agreements between the DRC and the World Bank, and the coordination between the national government and provincial governments for program implementation. The assessment team confirmed that appropriate mitigation plans are in place to address mitigate risk of reversal due to the main drivers of deforestation such as shifting cultivation and illegal logging. The program also has strategies in place support sustainable agroforestry systems, creating revenues through rehabilitating non-timber forest products, and supporting natural regeneration The assessment team concludes that a low rating risk has been correctly used to mitigate this risk.	0%
<b>Exposure and vulnerability to natural disturbances</b>	The assessment team assessed the documentation and supporting evidence that natural risks due to fire, pests, and extreme weather are of low risk in the ER Program area. The assessment team reviewed ancillary literature and confirms that these	0%

	conclusions are well supported. presented to mitigate the risk of forest fires, which are the main natural risk associated with natural disturbances over the program area. The assessment team concludes that a low rating risk has been adequately used to mitigate this risk.	
	<b>Total reversal risk set-aside percentage</b>	20%
	<b>Total reversal risk set-aside percentage from ER-PD or previous monitoring report (whichever is more recent)</b>	20%

### 5.6 Calculation of emission reductions

		2019	2020	Total
<b>A</b>	<b>Reference Level (tCO<sub>2</sub>-e) (Section 5.1)</b>	34,286,145	33,866,012	68,152,157
<b>B</b>	<b>Net emissions and removals under the ER Program (tCO<sub>2</sub>-e) (Section 5.2)</b>	26,507,322	25,294,951	51,802,273
<b>C</b>	<b>Emission Reductions during Reporting Period (tCO<sub>2</sub>-e) (A-B)</b>	7,778,823	8,571,061	16,349,884
<b>D</b>	<b>If applicable, number of Emission Reductions from reducing forest degradation that have been estimated using proxy-based estimation approaches (use zero if not applicable)</b>	0	0	
<b>E</b>	<b>Number of Emission Reductions estimated using measurement approaches (C-D)</b>	7,778,823	8,571,061	16,349,884
<b>F</b>	<b>Percentage of ERs (A) for which the ability to transfer Title to ERs is clear or uncontested (Section 5.4.1)</b>	100%	100%	
<b>G</b>	<b>ERs for which the ability to transfer Title to ERs is unclear or contested because they are sold, assigned or otherwise used</b>	4,222,222	4,222,222	8,444,444

		2019	2020	Total
	by any other entity for sale, public relations, compliance or any other purpose (Section 5.4.3)			
	If applicable, any buffer replenishments	NA	NA	
H	Total ERs (D+E)*F-G minus, if applicable, any replenishments	3,556,601	4,348,839	7,905,440
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)	12%	12%	
J	Emission Reductions allocated to the Uncertainty Buffer $(0.15 * D / C * H) + (I * E / C * H)$	426,792	521,860	948,652
K	Total reversal risk set-aside percentage applied to the ER program (Section 5.5)	20%	20%	
L	Emission Reductions allocated to the Pooled Reversal Buffer $(H - J) * K$	625,961	765,395	1,391,356
M	Number of FCPF ERs (H-J-L)	2,503,848	3,061,584	5,565,432
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]	NA	NA	
O	Number of FCPF ERs from enhanced removals from afforestation/reforestation $(M * N)$ [Optional if the country wishes to generate enhanced removals]	NA	NA	NA

		2019	2020	Total
<b>P</b>	<b>Percentage of Emission reductions from HFLD [Optional if the country wishes to label HFLD units]</b>	39.6350865970823%*		
<b>Q</b>	<b>Number of FCPF ERs from HFLD (M * P) [Optional if the country wishes to label HFLD units]</b>	992,402	1,213,461	2,205,863

\* This the actual estimate. The Monitoring report indicates 39.64 due to decimal number limit.

## 6. NON-COMPLIANCES AND OBSERVATIONS

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As part of the verification process, any potential or actual discrepancies and non-compliances with the FCPF program requirements were identified and resolved through the issuance of findings. Findings are the formal mechanism used by SCS to identify any actual or potential areas of risk or concern.

This verification was comprised of two main formal rounds of findings with three additional rounds to clarify and/or request corrective actions to the findings submitted. Note: This audit engagement – and thus findings presented herein – were combined with validation. The findings were issued to the ER Program personnel using a proprietary approach tailored for this engagement, termed the Findings Presentation Document. This gave the ER Program personnel the opportunity to respond to the findings and allowed for efficient and transparent tracking of the current status of each finding. The following discusses the types of findings that were issued during the assessment process.

A Minor Corrective Action Request (mCAR) was issued when the assessment team determined that there was not enough information to make a decision regarding conformance:

- 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

A Major Corrective Action Request (MCAR) was issued when the assessment team has identified that:

- 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<sup>26</sup> are not supported by data
- Material errors, omissions or misstatements have been made in applying assumptions, in data or calculations
- Non-compliance with Validation and Verification criteria
- The REDD+ Country Participant has failed to implement or made inadequate progress with the mCARs from the previous verification

An observation (OBS) was issued when:

- There was no objective evidence to prove that there was a non-conformity, but the VVB observed practices and/or methods that could result in future MCAR and mCAR
- The VVB identified an area of the Forest Monitoring System that requires attention and/or adjustment in future monitoring and reporting
- An area where immaterial discrepancies exist between the observations, data testing results or professional judgment of the assessment team and the information reported or utilized (or the methods used to acquire such information) within the ER Monitoring Report.
- An area where the expert judgement of the assessment team suggests that there are opportunities for improvement in the areas falling within the assessment scope.

As part of the audit process, 36 MCARs, 2 mCARs and 2 OBS were issued. All MCAR findings issued by the audit team during the audit process were satisfactorily addressed by the ER Program personnel and were closed. One mCAR remains open (mCAR 39) and is required to be addressed at the next

verification. All findings issued during the audit process, and the impetus for the closure of each such finding, are described in Appendix 1 of this report.

*APPENDIX 1: OVERVIEW OF NON-COMPLIANCES & OBSERVATIONS ISSUED DURING THE VALIDATION BY THE VALIDATION*

## MCAR 1 – Land cover-based definition versus land USE – CLOSED

Dated 22 Sep 2023

**Standard Reference:** FCPF Carbon Fund Methodological Framework v3, 2006 IPCC Guidelines for National Greenhouse Gas

**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of transparency signifies to “disclose sufficient and appropriate ER Program-related information truthfully to allow intended users to make decisions with reasonable confidence.” Furthermore, Criterion 5 of the FCPF Framework states, “The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks.”

The 2006 IPCC Guidelines is based on the designation of land-use categories. Section 3.2 states “The definitions of land-use categories may incorporate land cover type, land use based, or a combination of the two. Care needs to be taken in inferring land use from the land cover characteristics and vice versa. For example, in some countries, significant areas of the Forest Land category may be grazed, and firewood may be collected from scattered trees in the Grassland category. These areas with different use may be significant enough for countries to consider them separately as additional sub-categories. Countries should ensure that land is not accounted for in more than one category or sub-category, in order to avoid double-counting of land areas.” It then provides the IPCC land USE based definitions. For instance, forest is defined as “all land with woody vegetation consistent with thresholds used to define Forest Land in the national greenhouse gas inventory. It also includes systems with a vegetation structure that currently fall below, but in situ could potentially reach the threshold values used by a country to define the Forest Land category.”

In contrast to land-use based definitions, the Mai Ndombe FCFP program has specified land COVER based definitions as described in section 8.2 of the ER-MR which considers land area, canopy cover, and tree height. *However, it remains unclear whether secondary forest land that is harvested for timber and goes below these forest land cover thresholds, but technically remains secondary forest, because the forest will regrow is quantified in the program’s methodology and whether these assumptions are conservative.* More specifically, it is not transparent whether secondary forest land that is harvested (but remains in a forest land use) is quantified as deforestation (permanent conversion of forest to other land uses) **or whether it is considered to be degradation.** In order to be in conformance with the transparency principle and to ensure that the program is not overestimating deforestation emissions, more information is required regarding the consideration of harvested secondary forest.

**Project Personnel Response:** The ERP defines secondary forests as open canopy forests or forest that have grown back from a non-forest condition during either the FREL period, the interim period, or the reporting period. The estimated carbon content is different for open canopy forest (based on NFI data). Timber extraction in DRC is selective. As such, it does not result in total cover loss as e.g. in the US Pacific Northwest and therefore, in deforestation under a Land Cover change definition as is the case here. As such, it is not reported as a land cover change (nor as land use change). However, if the case described by the auditors occurred, it would first be reported as deforestation and then the subsequent removals would be considered as to report the NET emissions estimates at the time of the reporting period. In the case secondary forests are cleared this results in deforestation and not on degradation. In the case secondary forest grow back, the removals are estimated following the MF guidance.

**Auditor Response:** Thank you for the response and clarification regarding the timber harvest regimes in the DRC. The auditors confirmed with ancillary information that the harvest regimes are generally low supply, informal, small-scale and much of which is illegal which aligns with this explanation. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C

**MCAR 2 – VCS Mai Ndombe ERs – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 23 of the FCPF Methodology Framework states: “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.” Section 6.4 of the ER-MR states “The ER Program assigned 6,075,515 ERS to Wildlife Works (WWC) for the 2019-2020 vintages to be so old under a different GHG standard, in this case, VCS of Verra.” The calculation workbook DRC\_ER\_Calculations.xlsx, sheet ER-MR\_Tables indicates that this deduction of ERs from the program was calculated assuming total VCUs from the Mai Ndombe VCS (WWC) project of 4,600,000 VCUs in 2019 and 2020 combined. However, in reviewing the Mai Ndombe VCS on the Verra Registry, from the published Monitoring Report, it indicates that in 2019 the project generated gross emissions reductions of 6,994,486 tCO<sub>2</sub>e and in 2020 gross emission reductions of 7,760,663 tCO<sub>2</sub>e. Given that the Program is not accurately deducting the emissions reductions generated by the Mai Ndombe VCS project within the FCPF program area, this represents a non-conformity with Criterion 23.

**Project Personnel Response:** The template indicates the ERs to be deducted are “ **ERs sold, assigned or otherwise used by any other entity for sale, public relations, compliance or any other purpose including ERs accounted separately under other GHG accounting schemes or ERs that have been set-aside to meet Reversal management requirements under other GHG accounting schemes**” This means only the ERS resulting in VCUs sold and used towards the VERRA buffer ought to be discounted. At the time of elaboration of this report the number of VCUs sold and the buffer ERs corresponded to the amount discounted in the MR. However, since The MR was presented, the project has issued an additional 3 million VCUs resulting in a new total VCUs and as such the discounted volumes need be updated. A detail the auditors need to be aware of is that the initial issuance of 4.6 million VCUs as in compliance of the BSP agreement of making use of a 3.8 million tCO<sub>2</sub>eq baseline for the project as opposed to its VCS baseline as an agreed way forward with the nesting of the project. However, upon issuing an additional 3 million VCUs the project moved from using the 3.8 million as a baseline to using it as a CAP, hence the 7.6 (=3.8 x2) VCUs issued in total. This is a violation of the terms under the BSP.

**Auditor Response:** Thank you for the clarification. The auditors confirmed that all credits generated by the Mai Ndombe VCS project during the monitoring period have been capped by the VCS project and are accurately deducted from the program credits. This finding has been addressed. However, please see MCAR 40 related to this topic.

**Bearing on Material Misstatement or Conformance (M/C/NA): M**

**MCAR 3 – Section 6.4 – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3, FCPF ER Monitoring Report Template v2.5**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 6.4 ‘ERs transferred to other entities or other schemes’ of the template states that “In the case the REDD Country is planning to separately account Emission Reductions from the ER Program under a different GHG Program or Standard, resulting in a percentage of units generated in the applicable Reporting Period not being issued as FCPF ERs, this shall be described in this section so that the FMT ensures that no FCPF ERs are generated to avoid double counting or claiming. The REDD Country shall provide enough information regarding the other GHG program: • Name of the GHG Program • Status of registration and validation under the GHG Program • Vintages that will be affected • Reference level used under the alternative GHG Program or Standard • Amount of Emission Reductions that are planned to be generated under the alternative GHG Program or Standard... Refer to Criterion 23 [prevention double counting] and Criterion 38 [ensure that any ERs from REDD+ activities under the ER Program are not generated more than once] of the Methodological Framework.” However, Section 6.4 of the ER-MR does not contain this required information. Furthermore, the link provided to an ‘implementation report’ takes one to the VCS page for ‘THE MAI NDOMBE REDD+ PROJECT’ which does not appear to contain a document with that title. The information provided does not meet the requirements of the template and MF and thus constitutes a nonconformity.

**Project Personnel Response:** The response to this request requires consultation with the project developer to reach a consensus and avoid double counting.

The following text has been added to section 6.4 for additional clarity. We expect it to also clarify the fact that that WWC project is The REDD+ MaiNdombe REDD+ Project. : “The MaiNdombe REDD+ project managed by Wildlife Works (WWC) is a VCS-VERRA registered project actively issuing VCUs. So far, the project has issued a total of 7,600,000 tCO<sub>2</sub>eq VCUs under the VCS-VERRA Standard, out of a total ERs of 14 755 149 tCO<sub>2</sub>eq ER reported for 2019-2021. From these, a buffer discount of 10% has been applied resulting in 1,475,515 tCO<sub>2</sub>eq ER being applied to it. This makes it so The MaiNdombe REDD+ project has transferred a total of 9,075,515 tCO<sub>2</sub>eq Vintage ER (7,600,000 tCO<sub>2</sub>eq VCU + 1,475,515 tCO<sub>2</sub>eq buffer ER) to the VCS-VERRA Scheme. This volume has been discounted from the ERP performance reported in the monitoring report (see section 8) in order to comply with requirements under Criteria 23 and 38 and avoid double counting and double issuance. The MaiNdombe REDD+ Project has, according to [the project description](#), a baseline of 8,524,210 tCO<sub>2</sub>eq for 2019 and of 9,642,568 tCO<sub>2</sub>eq for 2020. The verification for the period 2017-2020 was conducted in March 2022 and the implementation report is available in the VCS-VERRA project page [here, as well as all the project relevant information under that standard](#). The project reported 1,248,955 tCO<sub>2</sub>eq for 2019 and 1,778,581 tCO<sub>2</sub>eq 2020 emissions for a total of tCO<sub>2</sub>ed 3,027,536 emissions for the reporting period 2019-2020.”

**Auditor Response:** The auditors confirmed that the level of detail provided in the ER-MR now meets the template reporting requirements. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): M/C**

**MCAR 4 – Spatial Information – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** UMD-WB\_final\_2000\_samples.kml; DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023

**Finding:** Indicator 6.2 of the MF states, “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: – Accounting Area, – Activity data (e.g., forest-cover change or transitions between forest categories), – Emission factors, – Average annual emissions over the Reference Period, – Adjusted emissions, – Any spatial data used to adjust emissions, if applicable.” The spatial file provided (.kml) contains only point data and does not include any information regarding the stratification or the classification of each point. Spatial data (e.g., polygons) for the program area and its stratification during the relevant mapping periods used in the analyses (e.g., 2005-2009, 2010-2014, 2019-2020) need to be provided for conformity to the requirements.

**Project Personnel Response:** The Stratification map for 2005-2009 and 2010-2014 can be accessed at the following link:

[https://www.dropbox.com/scl/fo/fnfqupbc5cvm07ksyoezp/h?dl=0&preview=UMD-WB\\_final\\_sampling\\_design.tif&rlkey=0cb794w54jout87exbraba8f8](https://www.dropbox.com/scl/fo/fnfqupbc5cvm07ksyoezp/h?dl=0&preview=UMD-WB_final_sampling_design.tif&rlkey=0cb794w54jout87exbraba8f8)

Stratification map for 2019-2020 can be accessed at the following link:

[https://www.dropbox.com/scl/fi/t2wllbveh3ln3m9hifbqa/WB-UMD\\_strata\\_map.tif?rlkey=ilon2vrkdo3dia5e7q614qwj6&dl=0](https://www.dropbox.com/scl/fi/t2wllbveh3ln3m9hifbqa/WB-UMD_strata_map.tif?rlkey=ilon2vrkdo3dia5e7q614qwj6&dl=0)

**Auditor Response:** The auditor team has confirmed that the two stratification maps have been provided in these links. This finding has been addressed and closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 5 – Monitoring period – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, UMD-WB\_final\_report, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of transparency signifies “disclose sufficient and appropriate ER Program-related information truthfully to allow intended users to make decisions with reasonable confidence.” Page 77 of the ER-MR references and provides a link to “the final report for Quantifying the forest Reference Level of the emissions reduction program of Mai-Ndombe Province, Democratic Republic of Congo - University of Maryland / GLAD Lab.” Table 8 in the Report UMD-WB\_final\_report.docx shows that the first monitoring period is from 2018 to 2019. However, multiple sections of the ER-MR (e.g., 4.1-4.3, 5.2, etc.) indicate that the monitoring period is from 2019 to 2020. The conflicting monitoring periods display a lack of transparency.

**Project Personnel Response:** Please note that the UMD report is only a preliminary estimate of emission reduction and should not be considered as the source of data for the monitoring period activity data estimate. However, the ER-MR document does reference the UMD report to provide additional information on the methods used for estimating Activity Data. A clarification has been added in the footnotes with links to access the UMD report in ER-MR section 3.2, as well as Annex 4 sections 8.3 and 12.

Please also note that only the MR is subject to auditing. In case of inconsistencies between referenced documents and the MR, the information contained in the MR is the one that needs to be assessed. Estimates in reference documents should be ignored. The ER-Program process is a lengthy one. Earlier decisions on data and time periods may be later revised and such revisions would not be reflected in referenced documents, as the latter do not get updated. In this particular case, the initial reporting period was set from 21.09.2018 to 31.07.2019 (see schedule 2 on page 15 of the ERPA: [https://www.forestcarbonpartnership.org/system/files/documents/FCPF%20Carbon%20Fund%20Emission%20Reductions%20Payment%20Agreement%20-%20Tranche%20A%20and%20Tranche%20B\\_%20DRC\\_Signed\\_1.pdf](https://www.forestcarbonpartnership.org/system/files/documents/FCPF%20Carbon%20Fund%20Emission%20Reductions%20Payment%20Agreement%20-%20Tranche%20A%20and%20Tranche%20B_%20DRC_Signed_1.pdf)). The reporting period was later changed from 01.01.2019 to 31.12.2020 as is described in the MR.

**Auditor Response:** Please note that the onus is on the auditors to determine what documentation are relevant to assessment. Such relevant documentation often includes ancillary reports depending on how they are cited and used. For example, if a referenced report, link, map, or calculation file is referenced in the ER-MR to provide more information about the process applied for this program, these are also considered to be part of the audited documents. More specifically, if the UMD evaluated data for a different time period (e.g., 2018-2019), but the ER-MR uses those values for 2019-2020, it could indicate a discrepancy between the timeframes and an incorrect application of the values. Given the nature of how the UMD is referenced and used, and that the auditors are assessing against principles of transparency and consistency, such discrepancies between the UMD report and the ER-MR are considered to be relevant to this audit.

Thus, while the auditors have confirmed that additional information regarding this UMD report has been added to the footnotes with the UMD report links, there is no specific information provided about the discrepancy between the monitoring periods listed in the UMD report versus the ER-MR. As a result, this lack of transparency remains relevant, and this finding is open.

**Project Personnel Response 2:**

The following text has been added to footnotes in pages 28 to provide information about the discrepancy between the monitoring periods listed in the UMD report versus the ER-MR:

Please take note that the UMD report is not the official data source for monitoring period activity data estimate, and it's just a preliminary estimate of emission reduction for 2018-2019. The ER-Program process is a lengthy one, and earlier decisions on data and periods were later revised and approved by the FMT, but such revisions are not reflected in the referenced document. The initial reporting period was set from 21.09.2018 to 31.07.2019 (see schedule 2 on page 15 of the [ERPA](#)). However, the reporting period was later changed from 01.01.2019 to 31.12.2020, as described in the MR. The ER-MR document references the UMD report to provide additional information on the methods used to estimate Activity Data.

**Auditor Response 2:** The auditors confirmed that this information is contained in the ER-MR and that it resolves the lack of transparency. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

#### **MCAR 6 – Reference period – CLOSED**

**Dated 22 Sep 2023**

**Standard Reference:** FCPF Carbon Fund Methodological Framework v3

**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, UMD-WB\_final\_report, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 11 of the MF states, “A Reference Period is defined.” Further, Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of consistency is to “enable meaningful comparisons in ER Program-related information.” Section 8.1 of the ER-MR refers to two different reference periods (i.e., 2004 – 2014 and 2000 – 2014). Section 8.3 of the ER-MR refers to a reference period of 2005 – 2014. The conflicting reference periods display a lack of consistency and result in a non-conformity to the requirements.

**Project Personnel Response:** The reference period indicated in section 8.1 of Annex 4 has been corrected to match the correct reference period in section 8.3 (2005-2014).

**Auditor Response:** The auditors could not confirm such updates were made. For instance section 8.1 of the ER-MR states “**Considering the above guidance and national / local circumstances, DRC will apply a reference period from 2004 to 2014 for its Mai-Ndombe ER-Program.**” And then later section 8.1 indicates “Consistent with this, DRC decided in April 2014 to use a historic reference period from 2004 to 2014 in order to align the end-date of the reference period with the national FREL/FRL.” As a result, this nonconformity has not been addressed.

**Project Personnel Response 2:** We have corrected the text on section 8.1 Annex 4 to reflect a unique reference period of 2005-2014.

**Auditor Response 2:** The auditors confirmed that section 8.1 has been updated to reflect the correct reference period which is consistent with the other sections of the ER-MR and the calculation workbook. However, after World Bank input, this finding was reopened via email (30 Sept 2024) for the Program to add the specific date, and not just the year for the start and end of reference period.

**Project Personnel Response 3:**

**Auditor Response 3:** This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 7 – Citations absent – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** As described in the MF the FCPF program is guided by general principles. The principle of transparency signifies to “disclose sufficient and appropriate ER Program-related information truthfully to allow intended users to make decisions with reasonable confidence.” Related to the justification for the upward adjustment of the reference level, Section 8.5 of the ER-MR states, “If one looks at the following results of two studies in the districts of Plateau and Mai-Ndombe (the latter involving 400 households alone), the link between population growth and deforestation becomes clear: The average household uses an area of 1 hectare for farming, applying a fallow-slash and burn system on forest land, whereas savanna lands are only marginally cultivated or not at all.” It is not clear what two studies are being referenced, and without providing the full citation (i.e., authors, title, journal, etc.), the cited work cannot be located and referenced. This lack of transparency results in a non-conformity.

**Project Personnel Response:** The references from which this paragraph is taken are given below:

- Program Document REDD+ (PIREDD Mai-Ndombe) page 8 first paragraph :  
([https://www.cafi.org/sites/default/files/2021-02/DRC-WorldBank-Mai%20Ndombe-Prod%20Final\\_Novembre%202016.pdf](https://www.cafi.org/sites/default/files/2021-02/DRC-WorldBank-Mai%20Ndombe-Prod%20Final_Novembre%202016.pdf))
- Mesure De L'évolution De L'indicateur Sur Les Revenus Monétaires Et Non Monétaires Des Ménages Dans La Zone D'intervention Du Piredd/Mai-Ndombe « Rapport Final De L'étude » page 50, last paragraph.  
([http://www.ucpif.cd/images/medias/Etude\\_de\\_levolution\\_indicateur\\_RMNM\\_des%20menages.pdf](http://www.ucpif.cd/images/medias/Etude_de_levolution_indicateur_RMNM_des%20menages.pdf)).
- 2018\_frel\_submission\_drc page 91 point 2.2. paragraph 7 :  
([https://redd.unfccc.int/media/rdc\\_documentnerf\\_soumissionfinale\\_29112018.pdf](https://redd.unfccc.int/media/rdc_documentnerf_soumissionfinale_29112018.pdf))

**Auditor Response:** Thank you for providing more detailed information about the citations used in this section of the ER-MR. From our review of the citations, the audit team was able to extract the following language from each source:

In Program Document REDD+ (PIREDD Mai-Ndombe, page 8, paragraph 1), “Slash-and-burn agriculture is the main cause of deforestation and forest degradation. According to the survey carried out by the BioCFplus mission in Mai-Ndombe, each “median” family exploits **5 ha of forests**, knowing that the savannahs are only marginally cultivated, if at all. Of these 5 ha, each household cultivates some **0.6 ha annually**, before abandoning them to fallow for 5 years.”

In Mesure De L’évolution De L’indicateur Sur Les Revenus Monétaires Et Non Monétaires Des Ménages Dans La Zone D’intervention Du Piredd/Mai-Ndombe « Rapport Final De L’étude » page 50, last paragraph, “Usually, the areas planted by agricultural households across the Mai-Ndombe Province are around **0.5 ha per household**.”

In 2018\_frel\_submission\_drc **page 109** point 2.2. paragraph 7, ‘The production (t) of cassava, corn and peanuts in the former province of Bandundu is respectively: 5,158,950 t, 234,919 t and 110,549 t (2002) (Ministry of Agriculture/Bandundu ) [3]. The average household area of cassava, maize and peanuts is **0.8 ha, 0.5 ha and 0.2 ha** [Ministry of Agriculture/Bandundu]. The cultivation area per household per agricultural season is **0.5 to 1 ha**. The area of fields is approximately **2 ha per year** (Ministry of Agriculture/Bandundu)[3].”

Section 8.5 of the ER-MR states, “If one looks at the following results of two studies in the districts of Plateau and Mai-Ndombe (the latter involving 400 households alone), the link between population growth and deforestation becomes clear: The average household uses an area of **1 hectare for farming**, applying a fallow-slash and burn system on forest land, whereas savanna lands are only marginally cultivated or not at all<sup>33b</sup>. This system requires an area of 5 hectares per household based on a 5-year rotation. With an annual population growth rate of 3%, every year means an additional 6,500 agricultural households, each needing 5 hectares of primary forest (or mature secondary forest) to achieve a stable agricultural production system, equivalent to 32,500 hectares per year.”

This paragraph cites the second citation listed, which lists the “areas planted by agricultural households across the Mai-Ndombe Province are around **0.5 ha per household**.” Please clarify as to how these citations are being used and provide a justification for which values are applied to this section. This finding remains open.

**Project Personnel Response 2:**

Calculation of the total area cleared per year, taking into account new clearings by households arriving each year and ongoing clearings by households that have not yet reached the end of their rotation period. Here is a structured presentation:

Number of new farm households per year: 6,500 (3% of 216,667, the total number of households).

Area cleared per household per year: 1 hectare.

Area required for cropping method: Fallow and slash-and-burn cropping on forest land requires an area of 5 hectares per household, based on a 5-year rotation.

Calculation of total area cleared by new households each year: 6,500 farming households per year \* 1 hectare per household = 6,500 hectares.

Calculation of the area cleared by households already present, but not having reached the end of the rotation period: 6,500 households \* 4 remaining years = 26,000 hectares.

Total number of households (new households + households already present but not having reached the end of the rotation cycle): 6,500 + 26,000 = 32,500 households.

Total area cleared per year: Total number of households \* 1 hectare per household = 32500 hectares.

Thus, the total area cleared each year would be 32,500 hectares, taking into account both new clearings by households arriving each year and ongoing clearings by households present but not yet at the end of their rotation period.

The table below provides the details. ERPA year

	1	2	3	4	5
New household	6,500	6,500	6,500	6,500	6,500
Existing households		6,500	13,000	19,500	26,000
Total superficie planted (ha)	6,500	13,000	19,500	26,000	32,500

**Auditor Response 2:** Thank you for providing this demonstration and justification. The auditors can see that the assumption of 1 ha cultivated per household with a 3% increase in population per year is demonstrated in the text and results in this increase in deforestation rate overtime. While the selection of 1 ha versus 0.5 ha is less conservative, the increase in the number of ha planted would be demonstrated regardless. As a result, this finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 8 – Strata consistency– CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** AD\_calculationTool\_RP, AD\_calculationTool\_MP, UMD-WB\_final\_report, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of consistency is to “enable meaningful comparisons in ER Program-related information.” The principle of transparency signifies to “disclose sufficient and appropriate ER Program-related information truthfully to allow intended users to make decisions with reasonable confidence.” The Report UMD-WB\_final\_report.docx indicates that there are 9 strata, which are listed in Table 6 as 1 - Stable dense humid forest; 2 - Stable secondary forest; 3 - Stable non-forest; 4 - Dense humid forest to non-forest; 5 - Dense humid forest to loss/gain; 6 - Secondary forest to non-forest, 7 - Secondary forest to loss/gain; 8 - Non-forest to secondary forest; 9 - Buffered change (strata 4-8). These are also shown in legend of Figure 7 in that same report. However, in the calculation workbook ‘AD\_calculationTool\_RP’, sheet ‘Area calculation’ 9 strata are listed but with different transition/classifications. For instance, 3 – secondary forest to non-forest, 4 – secondary forest to forest loss/gain, 5 – non-forest to secondary forest, and so on. Second, in the Monitoring Period quantification workbook ‘AD\_calculationTool\_MP’, sheet ‘Area calculation’, cells K16-O25 show the stratum area for the MP, but there are only 8 stratum without labeling/descriptions. Third, the stratum FS (secondary forest) exists in the ‘AD\_calculationTool\_RP’ workbook, while the stratum FSEC appears in the ‘AD\_calculationTool\_MP’ workbook. Ultimately the lack of transparency and consistency in the stratum labels and numbering results in a nonconformity.

**Project Personnel Response:**

“AD\_calculationTool\_RP” workbook: There is a discrepancy between the sampling strata ID codes of the reference data dataset and UMD report Table 6. This discrepancy does not affect the AD calculation. Sample sizes are consistent despite the discrepancy. Please, see UMD Report table 7 and the table with sample size in the Area Calculation sheet - W17..AA26 of the revised version of the AD calculation tool is accessible at the following link

[https://www.dropbox.com/scl/fi/019tahcl700u1ajkwcvly/AD\\_calculationTool\\_RP\\_rev.xlsx?rlkey=k8zfmsx5zm24t6k50tqkkrkm&dl=0](https://www.dropbox.com/scl/fi/019tahcl700u1ajkwcvly/AD_calculationTool_RP_rev.xlsx?rlkey=k8zfmsx5zm24t6k50tqkkrkm&dl=0) ).

“AD\_calculationTool\_MP” workbook: The strata label has been added in the spreadsheets for the sake of transparency. The table in cells K16..O25 has been updated including Strata Labels. These are sampling strata to assign area proportions but by no means represent the reported strata as per sample interpretation, which is fully consistent between FREL and MR. The revised version of the AD calculation tool for MP can be accessed at the following link:

[https://www.dropbox.com/scl/fi/h6615h2u925o8bnxccpqz/AD\\_calculationTool\\_MP\\_rev.xlsx?rlkey=upfaombllqng9eumnlt4p4j6i&dl=0](https://www.dropbox.com/scl/fi/h6615h2u925o8bnxccpqz/AD_calculationTool_MP_rev.xlsx?rlkey=upfaombllqng9eumnlt4p4j6i&dl=0)

FS and FSEC: Both "FS" and "FSEC" refer to Secondary Forests. The reference to Secondary Forest in the RP activity data calculation tool has been corrected to use the code "FSEC" consistently in both workbooks.

**Auditor Response:** Thank you for the clarification. The auditors confirmed that the above updates have been made. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): NA**

**MCAR 9 – Dense humid wetland deforestation – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** AD\_CalculationTool\_MP.xlsx

**Finding:** Criterion 3 of the MF states, "The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER Programs must account for emissions from deforestation. Emissions from forest degradation also shall be accounted for where such emissions are significant." The AD\_CalculationTool\_MP.xlsx, sheet 'AreaCalculation', cell M7 indicates that during the 2019-2020 monitoring period, 759 ha of deforestation occurred in the dense humid wetland forest strata. However, in the workbook DRC\_ER\_Calculations, sheet ER\_Calculation this 759 ha of deforestation and its emissions are not accounted for in the monitoring period emissions from deforestation. Rather only the deforestation from the Dense humid terra firma are accounted for. This results in greater ERs in the Monitoring Period and is therefore not conservative nor in conformance with Criterion 3.

**Project Personnel Response:** Thank you for the observation. Effectively these hectares emissions had been omitted. The calculation for reducing emissions has been updated to include the deforestation of 759 hectares in the dense humid wetland forest layer. As a result, the estimated number of gross ERs has decreased from 7,585,37416,850,194 to 16,327,888 tCO<sub>2</sub>e. You can access the updated version of the Emission Reductions calculation through the following link:

[https://www.dropbox.com/scl/fo/fnfqubc5cvm07ksyoezp/h?dl=0&preview=DRC\\_ER\\_Calculations+rev.xlsx&rlkey=0cb794w54jout87exbraba8f8](https://www.dropbox.com/scl/fo/fnfqubc5cvm07ksyoezp/h?dl=0&preview=DRC_ER_Calculations+rev.xlsx&rlkey=0cb794w54jout87exbraba8f8)

**Auditor Response:** The auditors have confirmed that the 759 ha of deforestation in the dense humid wetland forest has now been included in the ER quantification. However, we have noted that the emission factor associated with deforestation from the Primary terra firme to nonforest was applied to this 759 ha and not the Emission factor for dense humid wetland forest to nonforest. This results in a conservative estimate of ERs. However, the emission factor for dense humid forest to nonforest is shown in the calculation workbook and the land cover class 'dense humid wetland forest' and its associated biomass value is listed throughout several sections in the ER-MR. However, the biomass value is ultimately not used, resulting in a lack of transparency and ultimately a nonconformity, thus while this finding has been addressed a new MCAR has been opened.

**Bearing on Material Misstatement or Conformance (M/C/NA): M/C**

**MCAR 10 – Stratification versus land cover transitions – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** AD\_calculationTool\_RP, UMD-WB\_final\_report, DRC\_2st\_ER-MR\_GHG\_accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of consistency is to “enable meaningful comparisons in ER Program-related information.” The principle of transparency signifies to “disclose sufficient and appropriate ER Program-related information truthfully to allow intended users to make decisions with reasonable confidence.” The strata and land cover transitions have very similar names in the AD workbook for the RP. However, Section 3.1 of the ER-MR cites the UMD report for details on AD quantification. The UMD report states that, “The land cover transitions of interest, or activity data, were defined by the ER-PD, and consisted of (1) dense humid forest to non-forest, (2) secondary forest to non-forest, (3) dense humid forest to secondary forest, and (4) non-forest to secondary forest.” However, there are 8 land cover transitions in the AD\_calculationTool\_RP.xlsx and 9 strata. The lack of clarity between stratification/strata and land cover transitions represents a nonconformity to the requirements.

**Project Personnel Response:** In the UMD report, AD refers to the Degradation and Deforestation relevant classes includes the 4 actual transition classes as well as 4 stable classes (1) dense humid forest to non-forest, (2) secondary forest to non-forest, (3) dense humid forest to secondary forest, and (4) non-forest to secondary forest. However, the LC analysis needs sampling strata depicting the areas potentially depicting such transitions as well as for the 4 stable classes also. MCAR 8 response explains the sampling strata used.

**Auditor Response:** Thank you for this additional explanation. However, it remains unclear why there are different number of sampling strata between the monitoring period (8 strata) and the reference level period (9 strata). It appears that strata ‘9 - Buffered change (strata 4-8)’ is not included in the “AD\_calculationTool\_MP” workbook. In reviewing the ER-MR, with the UMD report, and the calculation workbooks, the auditors cannot determine why such discrepancies between the stratification exist, suggesting a continued lack of clarity and transparency existing within the ER-MR.

**Project Personnel Response 2:**

The table in the "AreaCalculation" sheet (cells L27..P37) of the AD\_calculationTool\_MP\_rev workbook shows the difference in the number of sampling strata between the monitoring and reference periods. The reference period includes buffered change (strata 4-8) to minimize the uncertainty associated with omission errors, as suggested by Olofsson et al. in 2020<sup>[1]</sup>. However, for the monitoring period, including the buffered change strata was unnecessary because the uncertainty was already at the desired levels.

Label	Id Monitoring Period dataset	Id Reference Period dataset	2005-2015 (ha)	2019-2020 (ha0)
Dense humid forest to non-forest	1	1	181,658	56,099
Dense humid forest to forest loss/gain	2	2	190,596	60,652
Secondary forest to non-forest	3	3	246,865	841,483
Secondary forest to forest loss/gain	4	4	291,862	128,959
Non-forest to secondary forest	5	5	28,164	241,195
Buffered change (strata 4-8)		6	761,287	
Stable dense humid forest	6	7	7,886,443	8,114,314
Stable secondary forest	7	8	361,430	595,593
Stable non-forest	8	9	2,900,017	2,810,027
		Accounting Area	12,848,321	12,848,321

[1] Pontus Olofsson, Paulo Arévalo, Andres B. Espejo, Carly Green, Erik Lindquist, Ronald E. McRoberts, María J. Sanz. Mitigating the effects of omission errors on area and area change estimates. Remote Sensing of Environment. Volume 236. 2020. 111492. ISSN 0034-4257. <https://doi.org/10.1016/j.rse.2019.111492> .

**Auditor Response 2:** Thank you for this clarification. The auditors have confirmed via an additional review of Olofsson et al. that the exclusion of this strata is in alignment. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 11 – List of acronyms – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF ER Monitoring Report Template v2.5**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change**Finding:** The template requires the inclusion of a ‘List of Acronyms’ at the end of the ‘Table of Contents.’ This component is missing from the ER-MR and constitutes a nonconformity to the template requirements.**Project Personnel Response:** The list has been included in the report.**Auditor Response:** The audit team verified compliance with the requirement.**Bearing on Material Misstatement or Conformance (M/C/NA): C****MCAR 12 – Instructions – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF ER Monitoring Report Template v2.5**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change**Finding:** The template states, “All instructions, including this section, should be deleted when submitting the ER-MR to the Facility Management Team of the FCPF.” In the ER-MR, there are various points where the template instructions remain (e.g., page 3, Sections 4.1, 5.2, 8.3, 8.4, 9.2, 12.2, etc.). These constitute nonconformities to the template requirements.**Project Personnel Response:** The instructions have been removed from MR submission.**Auditor Response:** The instructions in section 12.2 have not been removed. This finding remains open.**Project Personnel Response 2:** The instructions in section 12.2 have been removed.**Auditor Response 2:** The auditors confirmed that the instructions in section 12.2 of the ERM have been removed and this finding is therefore closed.**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 13 – Line diagram – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF ER Monitoring Report Template v2.5**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Regarding section 2.2, the template states: “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.” The associated line diagram, Figure 2-2 of the ER-MR, contains data that are difficult to associate with ‘parameters that are monitored’ as required by the template. Furthermore, Equation 5 is found in Section 2.2.2 of the ER-MR and falls under the sub-heading ‘Reference Level (RLt)’ yet, it is shown in Figure 2-2 to be used to estimate ‘monitored emissions.’ In contrast, in Section 2.2.2 under the sub-heading ‘Monitored emissions (GHGt)’ is defined as ‘Annual gross GHG emissions over the monitoring period in the Accounting Area (GHGt)’ and a different Equation is used in its estimation. As another example, Figure 2-2 of the ER-MR shows Equation 14, which does not exist in Section 2.2.2. Please ensure accuracy and conformance of the line diagram to the ER-MR contents and to the template requirements.

**Project Personnel Response:** The line diagram has been updated to correct issues with equation numbers. Equation 11 is now used to estimate monitored emissions, and Equation 14 has been clearly identified in section 2.2.2. Additionally, calculation tools have been referenced to help identify monitored parameters when integrating data.

**Auditor Response:** The auditors have confirmed that these updates were made and that the diagram (in section 2.2.2 and in 9.1) is now consistent and clear. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 14 – Equation 11 – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” In section 2.2 of the ER-MR, there are two equations labelled as ‘Equation 11.’ This prevents a meaningful reconstruction and thus represents a nonconformity to the requirements.

**Project Personnel Response:** See response to MCAR 13. The document has been modified to solve this matter.

**Auditor Response:** Auditors confirmed that there is now only one equation labelled as “Equation 11.” This finding has been resolved.

**Bearing on Material Misstatement or Conformance (M/C/NA): C****MCAR 15 – Section 3.1, multiple parameters – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” Additionally, Section 3.1 ‘Fixed Data and Parameters’ of the template states: “These parameters should link to the equations provided in section 2.2.2... Use the table provided and copy table for each parameter, not for each value (multiple values may be reported per parameter, for instance ... the estimates of the different forest types obtained with a same inventory)...” Under Section 3.1 of the ER-MR, one parameter box is provided for 4 parameters from 6 equations. Furthermore, the row labelled ‘Value applied’ does not correspond to the ‘Parameter’ row shown, nor to the ‘Data unit’ row shown. These issues constitute nonconformities to the ER-MR template and to the MF requirement of enabling reconstruction.

**Project Personnel Response:** Information in section 3.1 has been included in 3 tables: i. Initial and final total biomass, ii. Degradation emission factor and iii. Removal factor.

**Auditor Response:** The auditors confirmed that the table have been updated accordingly. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 16 – Section 3.1, missing parameter – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” Additionally, Section 3.1 ‘Fixed Data and Parameters’ of the template states: “These parameters should link to the equations provided in section 2.2.2.” Under Section 3.1 of the ER-MR, the parameter EF<sub>j</sub> (Eq 9) is absent. This constitutes a nonconformity to the ER-MR template and to the MF requirement of enabling reconstruction.

**Project Personnel Response:** The term EF<sub>j</sub> has been corrected to EF<sub>DEG</sub> in Equation 9, so there is no need to include the EF<sub>j</sub> parameter in section 3.1.

**Auditor Response:** The auditors confirmed that equation 9 now references the parameter EF<sub>deg</sub>. However, there is still a discrepancy with section 3.1 which lists the parameter EF<sub>j</sub>. The auditors do not agree that there is no need for inclusion the degradation emission factor in 3.1 as it’s inclusion is required by the template. Thus, this finding remains open.

**Project Personnel Response 2:**

EF<sub>j</sub> parameter in Section 3.1 has been corrected to EF<sub>DEG</sub> in Section 3.1 and the Emission Factor table in Section 8.3 of Annex 4.

**Auditor Response 2:** The auditors confirmed that this parameter has been corrected in section 3.1 and section 8.3 of Annex 4 resolving the nonconformity. This finding is closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 17 – Section 3.2, specific to MP – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF ER Monitoring Report Template v2.5**Document Reference:** UMD-WB\_final\_report, DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 3.2 of the template states, ‘Please provide an overview of all data and parameters that are monitored during the Crediting Period and their values for this Monitoring/Reporting Period.’ Section 3.2 of the ER-MR contains a parameter table with a row labeled ‘Source of data and description of measurement/calculation methods and procedures applied<sup>14</sup>.’ The footnote cites the UMD Report, which does not contain information on the data ‘monitored during the Crediting Period and their values for this Monitoring/Reporting Period.’ Further, the parameter table in section 3.2 of the ER-MR contains information which appears to be specific to the reference period and not the monitoring period (e.g., “...16-day Landsat composite time-series data from 2000 through 2019, supplemented by Google Earth imagery...” and “2,000 sampling points”). Information specific to the monitoring period is required in Section 3.2 for conformance to the template requirements.

**Project Personnel Response:** The methods to estimate activity data are the same for the reference period and the 1<sup>st</sup> monitoring and reporting period. As already explained, these were elaborated following methods described in the UMD report. The UMD report is not the source of the data. As such, all information provided on methods used to estimate the activity data for the reference period are also applicable to the monitoring period. Information specific to the monitoring period has been included in Section 3.2, and the link to MP 1169 sampling point has been added.

**Auditor Response:** Thank you for this clarification. The auditors confirmed that section 3.2 now indicates that 1169 sample points were used for monitoring. However, we found the following related issues remain in this section:

- (1) Number of strata: Under the section ‘Source of data and description of measurement/calculation methods and procedures applied’ it states states “For a stratified random sample of pixels within nine strata...” but for the monitoring period, only 8 strata were used. Furthermore this section also lists out 10 strata “1) dense humid forest (terra firma), 2) dense humid forest (wetland), 3) secondary forest, 4) non-forest, 5) dense humid forest (terra firma) to secondary forest, 6) dense humid forest (wetland) to secondary forest, 7) dense humid forest (terra firma) to non-forest, 8) dense humid forest (wetland) to non-forest, 9) secondary forest to non-forest, 10) non-forest to secondary forest” despite only 8 strata being used for the monitoring period.
- (2) References to reference period uncertainty - Under the section “uncertainty for this parameter” it states “Our goal of <20% uncertainty at the 90<sup>th</sup> percentile confidence interval for activity data from 2005-2014 was achieved using 2,000 samples.” This information is not relevant to the Monitoring Period.
- (3) Continued reference to 2000 plots - Likewise, the Comment section of the table in section 3.2 of the ER-MR states “Initial FREL was estimated using *systematic grids* (37,184 samples) with variable spacing between sampling locations (5,000 to 1,600) depending on the stratum. Updated activity data are calculated using *pixel-based stratified random* sampling with 2,000 sampling points.”

As a result, this nonconformity has not been resolved.

**Project Personnel Response 2:**

The table in section 3.2's Monitored Data and Parameters has been updated to address outstanding issues. A clarification text has been added to explain and rectify the strata included in the reference period and monitoring period.

**Auditor Response 2:** The auditors confirmed that these updates were made to the ER-MR, thus resolving this finding.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 18 – Section 3.2, multiple parameters – CLOSED**

**Dated 22 Sep 2023**

**Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3

**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” Additionally, Section 3.2 ‘Monitored Data and Parameters’ of the template states: “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).” Under Section 3.2 of the ER-MR, one parameter box is provided for 2 parameters, while 3 parameters are described in the row ‘Description’. Furthermore, the row labelled ‘Value applied’ does not correspond to the ‘Parameter’ row shown. These issues constitute nonconformities to the ER-MR template and to the MF requirement of enabling reconstruction.

**Project Personnel Response:** The table in section 3.2 has been updated to ensure consistency between monitored parameters and values from 2019 to 2020.

**Auditor Response:** While multiple parameters are still listed for the area parameters, the auditors have concluded that separating them would result in considerable redundancy. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 19 – Community involvement – CLOSED****Dated 22 Sep 2023****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC\_2st\_ER-MR\_GHG accounting\_Jul 17-2023, DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 16 of the MF states, “Community participation in Monitoring and reporting is encouraged and used where appropriate. Indicator 16.1: The ER Program demonstrates that it has explored opportunities for community participation in Monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate.” Section 2.1 and 2.2 of the template each instruct for the content of this section, “Refer to criterion...16 of the Methodological Framework.” However, the ER-MR does not address community participation in monitoring and reporting, constituting a nonconformity to the requirements.

**Project Personnel Response:** The information on community participation presented below has been included in the Report.

*The participation of local communities in Mai Ndombe has been effective during all phases of development of the present program, notably through consultations launched the Environmental Civil Society (GTCR) under the operational lead of the NGO Ocean, which deployed its teams in the 8 territories of Mai Ndombe province in 2015*

*These consultations resulted in the appointment of three delegates per territory, made up of two members of local communities and/or indigenous peoples as well as a territory CARG coordinator.*

*In all, 24 people were designated to participate directly their representatives by the delegates.*

*Since then, these delegates have participated as stakeholders in ERP activities, including in the process of finalizing the Benefit Sharing Plan (BSP). To this end, consultations were held at all levels: national, provincial and local. Prior to the signing of the ERPA, there were several consultations, notably in the context of the BPP between 2014 and 2016, with a consultation workshop on the principles of the BPP in 2017. After the ERPA was signed, 13 consultation workshops with colos and PAs between September and November 2019 were conducted by REPALF, GTCR R and GTCR.*

*(See the report on the consultations held with indigenous peoples and local communities in the jurisdictional area of the emission reduction program in the Maindombe in the Democratic Republic of Congo on key aspects of the benefit-sharing plan as part of its finalization, April 2020).*

*The BSP was presented to the COPIL on April 21, 2022. It is also important to note that the ERP is part of the capitalization of the achievements of the PIREDD, which succeeded in setting up a CLD at the level of each terroir.*

*As far as the monitoring report itself is concerned, it is important to stress that local communities were not directly involved in the process of drawing it up. However, they did take part in the last meeting of the PIREDD Mai Ndombe Steering Committee (COPIL) held in Nioki, where the first draft was presented.*

**Auditor Response:** The audit team confirms the addition of this material to the ER-MR. This finding is closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 20 – Section 3.1, additional missing parameters – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” Additionally, Section 3.1 ‘Fixed Data and Parameters’ of the template states: “These parameters should link to the equations provided in section 2.2.2.” Under Section 3.1 of the ER-MR, the following relevant parameters are missing:

- A(j,i)\_RP (equation 6)
- A(a,b)\_RP (equation 9)
- A(j,i)\_RP (equation 10)
- CF (carbon fraction)

These omissions constitute a nonconformity to the ER-MR template and to the MF requirement of enabling reconstruction. To enable sufficient reconstruction, the related land cover transitions for the reference period must be listed in section 3.1 (and Annex 4 section 8.3) with the area parameters. Please note that some of the above area parameters are listed in Annex 4, section 8.3 of the ER-MR, though incompletely.

**Project Personnel Response:**

Section 3.1 now includes the Activity Data Table for the Reference Period. The tables in sections 3.1 and Annex 4 section 8.3 have been updated to include missing parameters.

**Auditor Response:** The audit team confirmed that the baseline tables in section 3.1 and section 8.3 of annex 4 of the ER-MR have been updated to include these missing parameters. However, table 8-4 in section 3.1 and in Annex 4 section 8.3, lists the stable nonforest area from 2005-2009 as Stable 3,543,68 ha which does not match the area in the calculation workbook AD\_calculationTool\_RP\_rev, sheet AreaCalculation, cell Z5. This appears to be a typo and thus this finding remains open.

**Project Personnel Response 2:** Table 8-4 of section 3.1 and Annex 4 section 8.3 have been updated to reflect the corrected stable nonforest area from 2005-2009, which is 3,546,685 hectares.

**Auditor Response 2:** The auditors confirmed that the ER-MR has been updated accordingly. This finding has been resolved.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 21 – Emission factors – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Regarding section 2.2, the template states: “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.” The auditors have found that there is no indication of how the Emission Factors are actually calculation. For instance, in equation 9 and equation 13, one of the parameters in the equations is Emission factor for degradation of forest type a to forest type b, tones CO<sub>2</sub> ha<sup>-1</sup>. Likewise, for equations 10 and 14, one key parameter is the ‘enhancement of carbon stocks in new forests [tCO<sub>2</sub>\*ha\*year<sup>-1</sup>’]. However, there is no demonstration (via equation) or details on how these emission factor and enhancement factor parameters are calculated, and whether there are additional conversion factors applied, etc.

Additionally, Section 3.1 ‘Fixed Data and Parameters’ of the template states: “These parameters should link to the equations provided in section 2.2.2.” For the parameter EF<sub>j</sub> and parameter RFSREG there are no demonstrations regarding how these emission factors are actually calculated. In the FREL and the calculation workbooks, it is clear that additional calculation steps are conducted to arrive at the emission factors.

The exclusion of this information in section 2.2.2 and section 3.1 results in a nonconformity to the requirements.

**Project Personnel Response:** Equations 9.1, 10.1, 13.1 and 14.1 were included to demonstrate how the emission factors and enhancement factors parameters are calculated. Also, the Line Diagram in Figure 2-2 has been updated.

**Auditor Response:** The auditors confirmed that additional equations have been added to demonstrate how the emission factors and enhancement factors have been calculated. We also confirmed that the line diagram has been updated to reference these additional equations. The nonconformity has been resolved.

**Bearing on Material Misstatement or Conformance (M/C/NA): C****MCAR 22 – Terminology & use of ‘primary swamp forest’ – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Glossary of Terms v2.2**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of consistency is to “enable meaningful comparisons in ER Program-related information.” The principle of transparency signifies to “disclose sufficient and appropriate ER Program-related information truthfully to allow intended users to make decisions with reasonable confidence.” The auditors have found the following inconsistencies and lack of transparency pertaining to the primary swamp forest:

- (1) Terminology – Throughout the ER-MR multiple terms refer to this land use including ‘primary swamp forest’ or ‘FDHSH’ as listed in table 3-2 and ‘dense humid wetland forest’ or ‘FHS’ as listed in table 8-4. Overall, this results in confusion and a lack of consistency.
- (2) Use – As indicated above in the response to MCAR9, the emission factor for dense humid forest to nonforest is shown in the calculation workbook and the land cover class ‘dense humid wetland forest’ and its associated biomass value is listed throughout several sections in the ER-MR. However, the biomass value is ultimately not used in the calculation of emissions, resulting in a lack of transparency in the quantification of ERs. If the biomass value listed is not used, this is not justified or made clear in the ER-MR.

These identified inconsistencies and areas lacking transparency result in a nonconformity.

**Project Personnel Response:**

- (1) FDHSH, “dense humid wetland forest,” is the unique term used in the Monitoring Report and Activity Data and Integration Tools.
- (2) Emissions from deforestation of “dense humid wetland forest” have been included in the DRC ER Calculation tool  
[https://www.dropbox.com/scl/fi/c0rojo6uio26sbua7jvd/DRC\\_ER\\_Calculations-rev2.xlsx?rlkey=sqhpnmj0thdxyd4k6dpddbjd&dl=0](https://www.dropbox.com/scl/fi/c0rojo6uio26sbua7jvd/DRC_ER_Calculations-rev2.xlsx?rlkey=sqhpnmj0thdxyd4k6dpddbjd&dl=0) ).

**Auditor Response:** The auditors confirmed that the terminology for the forest type has been mostly corrected in the MR and calculation files resolving the inconsistency. However, the following references to swamp forest remain: (1) footnote #2 of table 4-1, (2) Table in section 5.2 references Primary Swamp Forest throughout, (3) the table in section 8.5 (on Cap Adjustment) references Swamp forest, and (4) The table in section 12.2 references swamp forest.

**Project Personnel Response 2:** The text has been modified to refer to Dense Humid Wetland Forest instead of Swamp Forest. The changes have been made in (1) footnote #2 of table 4-1, (2) Table in section 5.2 which now references Primary Swamp Forest throughout, (3) the table in section 8.5 (on Cap Adjustment), and (4) the table in section 12.2.

**Auditor Response 2:** The auditors confirmed that all references to swamp forest have been removed and replaced with Dense Humid Wetland Forest. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**OBS 23 – Root to shoot ratio – CLOSED****Dated 22 Jan 2024****Standard Reference:** NA**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 5.1 of the ER-MR as well as the first parameter table in section 3.1 (under ‘Source of data...’) states that “the RSR used is 0.3720, corresponding to the rainforest ecological zone (Mokany et al. cited in IPCC 2006).” In the IPCC 2006 table, a different citation for this value is listed, not Mokany et al.

**Project Personnel Response:**

The correct citation is Fittkau and Klinge (1973), as cited in IPCC (2006). Throughout the document, the reference has been updated accordingly.

**Auditor Response:** The auditors confirmed that this citation has been updated through the ER-MR.

**Bearing on Material Misstatement or Conformance (M/C/NA):** N/A

**MCAR 24 – Start Date – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Glossary of Terms v2.2**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Annex 4 of the ER-MR template under section ‘Start Date of the Crediting Period’ states, “Please indicate the proposed Start of the Crediting Period together with a justification and evidence to demonstrate compliance with the definition of the Start Date of the Crediting Period provided in the FCPF Glossary of Terms.” The Glossary states that start date must comply with 5 conditions: “1. It is not earlier than the date the first ER Program Measure(s) (including any Sub-Project(s)) begins generating ERs, i.e. first implementation<sup>2</sup>. 2. It is justified with objective evidence by the ER Program Entity and it is independently assessed by a Validation Verification Body during Validation. 3. It is not earlier than January 1st 2016<sup>3</sup>. 4. It does not fall within the Reference period. 5. It is demonstrated that the ER Program complies with requirements since the start date on safeguards<sup>4</sup>, carbon accounting and double-counting as specified in the MF.” Annex 4 of the ER-MR for section ‘Start Date of the Crediting Period’ there are 2 conditions provided. Please demonstrate compliance with the 5 conditions of the Glossary definition for the start date (with the understanding that validation and verification are ongoing).

**Project Personnel Response:**

The following text has been added to the section 'Start Date of the Crediting Period':

The start date of the crediting period is January 1<sup>st</sup>, 2019. This date corresponds to the definition of the start date of the crediting period provided in the FCPF Glossary, i.e. follows:

**1.** The Start Date of the Crediting Period is set after the first ER Program Measures begin generating ERs. The following ERP activities were implemented before 2019 (see Table 1 in Section 1):

- April 2015 – June 2020. Improved Forest Landscape Management Project (IFLMP, P128887), Component 1, Integrated Project REDD+ Plateau (PIREDD Plateau).
- May 2018 – Dec 2022. Improved Forest Landscape Management Project (IFLMP, P128887), Additional funding for Mai-Ndombe REDD+ project (P162837, PIREDD Mai-Ndombe).
- April 2016 – July 2021. DGM, Support to forest dependent communities (P149049).
- Since 2011. Wildlife Works Mai Ndombe project.

**2.** The Start Date is justified with evidence by the ER Program Entity (see items 1, 3, 4, and 5), and it is independently assessed by a Validation Verification Body during Validation.

**3.** The Start Date is not earlier than January 1st, 2016.

**4.** The Start Date does not fall under the reference period 2000-2015.

**5a.** The Start Date demonstrates that the ER Program complies with requirements since the start date on safeguards. DRC has conducted a Strategic Environmental and Social Assessment (SESA) of the national REDD+ strategy and has put in place the following six REDD+ safeguards instruments: ESMF, Indigenous Peoples Planning Framework, Resettlement Policy Framework (RPF), Pest and Pesticide Management Framework, Cultural Heritage Management Framework (CHMF), and Process Framework (PF). All six safeguards' instruments produced under the FCPF Readiness Project have been reviewed and cleared by the World Bank and found to meet its operational policy requirements.

**5b.** The Start Date is demonstrated that the ER Program complies with requirements since the start date on Carbon accounting and double counting as specified in the MF. In order to comply with requirements under Criteria 23 and 38 and avoid double counting and double issuance. The MaiNdombe REDD+ Project has, according to [the project description](#), a baseline of 8,524,210 tCO<sub>2</sub>e for 2019 and of 9,642,568 tCO<sub>2</sub>e for 2020. The verification for the period 2017-2020 was conducted in March 2022 and the implementation report is available [here](#), as well as [all the project relevant information under that standard](#). The project reported 1,248,955 tCO<sub>2</sub>e for 2019 and 1,778,581 tCO<sub>2</sub>e 2020 emissions for a total of tCO<sub>2</sub>e 3,027,536 emissions for the reporting period 2019-2020.

In addition the revision and operationalization of the Program's Data Management System will be carried out with the support of the OPERPA project. The revision of the registry system will demonstrate that Emission Reduction will be issued exclusively through the National REDD+ Registry. Registry accounts will be created for all authorized project holders and the government (with specific sub-accounts for regional/jurisdictional programs). Once the Emission Reductions have been reported and verified, the respective ERs will be issued directly to the relevant accounts, with a separate allowance paid to one or more relevant (government) buffer accounts (so as to account for uncertainties and reversals). The issuance of ERs is subject to verification of carbon and other relevant social and environmental thresholds, which are defined in national standards. Project owners are free to transfer their issued ERs through sales contracts, conversion (from national ERs to Verified Carbon Units (VCUs)) or any other means. Thus, the DRC government has decided to use a centralized registry of ER transactions (CATS) managed by the FCPF until the operationalization of its own registry.

**Auditor Response:** The auditors confirmed that the ER-MR has been updated to include a clear justification regarding how the start date meets the ER Program requirements. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 25 – Displacement – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change**Finding:** Indicator 17.3 of the FCPF Methodological Requirements states “By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement.” Also, section 1.1 of the ER-MR template states “Provide a short description of the implementation of the ER Program, including:...

Update on the strategy to mitigate and/or minimize potential Displacement.” Section 1.1.2 of the ER-MR states “All strategies described in the emissions reduction program are being implemented to avoid displacement of emissions. The risk of displacement is always assessed and classified as medium for slash-and-burn agriculture, medium for fuelwood production, high for artisanal logging and low for industrial logging. The emissions reduction program has made every effort to minimize displacement of emissions to an area outside the program boundaries and, if it exists, it will be minimal, as most of the measures proposed to address drivers of deforestation and forest degradation are primarily based on incentives and valuation of non-carbon benefits rather than coercive measures that will result in displacement of drivers of deforestation.” It remains unclear exactly what activities have been implemented to mitigate or minimize potential Displacement. In order to evaluate the conformance of this indicator, the auditors request more information including documentation and evidence demonstrating how exactly “the program has implemented its strategy to mitigate and/or minimize potential Displacement.”

**Project Personnel Response:** The emission reduction program sets out a strategy for preventing and limiting potential displacements. This approach is manifested through the description of a series of functionalities, sectoral activities and enabling activities, as outlined in the document entitled 20161108 Revised ERP after CF-14\_clean version\_EN" (pages 183-186) ([https://www.dropbox.com/scl/fi/9v8vklN0387zntdo1yaoa/20161108-Revised-ERP-after-CF-14\\_clean-version\\_FR.pdf?rlkey=gw3cd9uouqozrjdbtim04zvm&dl=0](https://www.dropbox.com/scl/fi/9v8vklN0387zntdo1yaoa/20161108-Revised-ERP-after-CF-14_clean-version_FR.pdf?rlkey=gw3cd9uouqozrjdbtim04zvm&dl=0)). Some of these elements have been implemented by projects under the Emissions Reduction Program (ERP), notably the Projet de Gestion Améliorée des Paysages Forestiers (PGAPF) and the Projet Intégré REDD+ dans le Mai-Ndombe, as detailed in the Rapport 2022 du Programme d'Investissement pour la Forêt de la RDC (pages 14-20) (<https://www.dropbox.com/scl/fi/xv5dzpkvyhshqx3ssf10b/RAPPORT-ANNUEL-DU-PIF-RDC-2022.pdf?rlkey=lyadb8byhjrg3z36k20woqg6d&dl=0>).**Auditor Response:** Thank you for providing these documents. The auditors confirmed that they provide clarity in the approach to prevent displacement and we have confirmed these are cited and linked in the ER-MR. This finding has been addressed.**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 26 – Discrepancies in ER-MR monitoring sections – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of consistency is to “enable meaningful comparisons in ER Program-related information.” Several sections in the ER-MR contain inconsistencies in the information presented. For example, the monitoring table presented in table 3.2 does not match the monitoring table presented in Annex 4 section 9.1. Likewise, an Activity Data table that is listed in Annex 4 section 8.3, is not listed in section 3.1. This activity data table in 8.3 only lists parameters A(j,l) and A(a,b) but then a description for 3 parameters is listed. Furthermore, equation 9 in section 2.2.2 references the parameter EFdeg, but section 3.1 and 8.3 reference the parameter EFj. Ultimately there are several discrepancies between the information and values presented throughout various sections in the ER-MR resulting in a lack of consistency.

**Project Personnel Response:**

- Table 3.2 does not match the monitoring table presented in Annex 4 section 9.1: The consistency between Table 3.2 and the Table included in Annex 4 section 9.1 has been ensured.
- Activity Data table that is listed in Annex 4 section 8.3, is not listed in section 3.1: Activity Data table for the Reference Period has been added in section 3.1.
- Equation 9 in section 2.2.2 references the parameter EFdeg, but section 3.1 and 8.3 reference the parameter EFj: Equation 9 in section 2.2.2, section 3.1 and Annex 4 section 8.3 all reference EFdeg.
- Discrepancies between the information and values presented throughout various sections in the ER-MR: Consistency has been ensured between sections and Activity data in the ER-MR report through revised values, Monte Carlo analysis, and Sensitivity analysis tools.

**Auditor Response:** The table in section 9.1 of Annex 4 (Table 9.3) is blank. There are no values presented in the table. Also see finding #36 below which details discrepancies in the numbering and naming of tables across the ER-MR.

**Project Personnel Response 2:** The activity data for the 2019-2020 Monitoring Period has been added to Table 9.3 in section 9.1 of Annex 4.

**Auditor Response 2:** Confirmed that the activity data values for the 2019-2020 MP have been added to section 9.1 of Annex 4, resolving this finding.

**Bearing on Material Misstatement or Conformance (M/C/NA): C****MCAR 27 – Data Management System link – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Section 6.2 of the ER-MR template states, "Please describe the design and operation by the ER Program and/or the host country of an appropriate arrangement to avoid having multiple claims to an ER Title. Discuss the design and provide evidence of the implementation and operation of a Program and

Projects Data Management System in accordance with the requirements of the Methodological Framework... Refer to criterion 37 of the Methodological Framework." However, section 6.2 of the ER-MR states that "The current Ministry web platform is the most important tool used in the monitoring of field activities. The platform is publicly accessible [here](#) and includes the following systems..." However, the link destination does not appear to contain any information accessible by the public. Please demonstrate compliance with all components of FCPF MF Criterion 37 as per the template requirements.

**Project Personnel Response:** All data is currently available and accessible to the general public in the DIAF

Dropbox(<https://www.dropbox.com/scl/fo/fnfqubc5cvm07ksyoezp/h?rlkey=0cb794w54jout87exbraba8f8&dl=0>). However, please note that this information will be transferred to the new National Forest Monitoring System portal as soon as the hosting is renewed, and the portal domain name is changed. At that time, all data will be made available.

**Auditor Response:** The auditors confirmed that the ER-MR has been updated with a link to this publicly available dropbox containing the project data, partially resolving this finding. (Please see a related finding issued (OBS 38) regarding the inclusion of out of date data on this dropbox.) However, not all indicators of criterion 37 have been addressed: "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." In Section 6.2 of the ER-MR, compliance with the indicators of criterion 37 are not provided. Please demonstrate compliance with all indicators of criterion 37 in Section 6.2 as per the ER-MR template.

**Project Personnel Response 2:** Section 6.2 has been updated to include how Criterion 37 and its indicators will be taken into account through the operationalization of the National REDD+ Register, which is currently under development. The version under development can be accessed at <https://imagis-group.com/rdc/>. All data from REDD+ projects and programs will be centralized there, including those from the Mai-Ndombe province emissions reduction program once it has been deployed on the National Forest Monitoring System server in around two weeks' time. Currently, the ERP data is stored in a Dropbox account accessible to the public at the following address: [<https://www.dropbox.com/scl/fo/fnfqubc5cvm07ksyoezp/h?rlkey=0cb794w54jout87exbraba8f8&dl=0>]. The registry's connection to this data is currently being established. We expect connectivity to be established within the next 2 weeks.

**Auditor Response 2:** The auditors confirmed that section 6.2 of the ERMR has been revised to indicate compliance with Criterion 37. The auditors confirmed through discussion with the Carbon Fund that "an audit of the operations is carried out by an independent third party" has not been deemed necessary. However, the auditors found that this Data Management System is not fully operational and therefore we will be issuing a separate mCAR to require that the system be operational by the time of Verification.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 28 – GHG emission from burning – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** The ER-MR template for Annex 4, Section 7 states that “Explain whether any Carbon Pools and greenhouse gases have been excluded, and if so, justify their exclusion by making conservative assumptions for example on the magnitude of the Carbon Pools and greenhouse gases omitted... Refer to criterion 4 of the Methodological Framework.” Table 7-0-3 of the ER-MR in Section 7 of Annex 4 states for CH<sub>4</sub> and N<sub>2</sub>O that “The ER Program’s mitigation activities will result in a less areas burnt. The emissions related to burning are conservatively neglected.” Please provide additional justification/demonstration on the conservativeness of this exclusion in alignment with the FCPF requirements.

**Project Personnel Response:** The following text has been added in Annex 4 Table 7-0-3:

According to the DRC Biennial Update Report (BUR1)-National Inventory Report (NIR),<sup>2</sup> CH<sub>4</sub> and N<sub>2</sub>O emissions represent 0.73% of Agriculture, Forestry, and other Land Uses (AFOLU) Sector total emissions (CH<sub>4</sub> 0.47% and N<sub>2</sub>O 0.26%)<sup>[1]</sup>.

- *CH<sub>4</sub> emissions estimate includes the following sources:* 3A1 Livestock-Enteric Fermentation; 3A2 Livestock-Manure Management; 3C1 Biomass Burning and 3C7 Rice Cultivation.
- *N<sub>2</sub>O emissions estimate includes the following sources:* 3A2 Livestock-Manure Management; 3C1 Biomass Burning; 3C4 Direct N<sub>2</sub>O Emissions from Managed; 3C5 Indirect N<sub>2</sub>O Emissions from Managed soils and 3C6 Indirect N<sub>2</sub>O Emissions from Manure Management.

Furthermore, the ER Program’s mitigation activities will result in fewer areas burnt. The non-CO<sub>2</sub> emissions related to burning are conservatively neglected.

<sup>[1]</sup> Calculation of the proportion of CH<sub>4</sub> and N<sub>2</sub>O emissions are included in NonCO<sub>2</sub>\_gases sheet of DRC-ER\_Calculitons rev2 worksheet. ER calculation tool can be accessed at the following link: [https://www.dropbox.com/scl/fi/c0rojo6uio26sbfua7jvd/DRC\\_ER\\_Calculations-rev2.xlsx?rlkey=sqhpnmj0thdxyd4k6dpddbjd&dl=0](https://www.dropbox.com/scl/fi/c0rojo6uio26sbfua7jvd/DRC_ER_Calculations-rev2.xlsx?rlkey=sqhpnmj0thdxyd4k6dpddbjd&dl=0)

**Auditor Response:** The auditors confirmed that the exclusion of emissions due to burning is conservative given the assumption that burning under the project scenario would be lower than the baseline due to forest fire reduction activities and education, which is adequately explained. We confirmed that the ER-MR has been updated and closed this finding.

**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C

<sup>2</sup> DRC-BUR National Inventory Report <https://unfccc.int/documents/629121>

**MCAR 29 – Parameter values – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change, AD\_calculationTool\_MP\_rev.xlsx, AD\_calculationTool\_RP\_rev.xlsx, DRC ER MC Analysis Rev.xlsx

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” There are parameter values provided in the ER-MR that do not align between sections (e.g., Section 3.1 and 3.2 versus Table 4.2 versus Section 5.2 versus Annex 4 content). As one example, ‘Secondary regeneration-2019-2020 [ha]’ is listed as 138,070 (CI 35,773) Section 3.2 and in Section 5.2 is listed as 138,055 ± 35,769. Additionally, parameter values often do not align with the calculation workbooks provided. These issues constitute nonconformities to the MF requirement of enabling reconstruction. Please ensure that parameters are reported correctly and consistently throughout the program documentation to enable reconstruction.

**Project Personnel Response:**

Consistency has been ensured between sections and Activity data, Monte Carlo analysis, and Sensitivity analysis tools in the ER-MR report through revised values.

**Auditor Response:** The auditors have reviewed the updated ER-MR and calculation workbooks and we continue to see differences in the reported values. For instance, DRC\_ER\_calculations rev2.xlsx, sheet ER\_Calculation cell E4 lists a value of 112,734 ha (Secondary regeneration-2005-2009 [ha]) with a CI of 21,780. However, the table in section 5.2 of the ER-MR lists a value 112,723 ha with a CI of 21,770. While some of the values in section 5.2 of the ER-MR match the calculation workbook, others do not.

The auditors also found that the values presented in Table 4-2 (Activity data per transition, initial vs. updated FREL, do not always match the areas reported in the workbook AD\_calculationTool\_RP\_rev.xlsx. For instance, the ER-MR lists area of enhancement as 23,921 ha per year, but the workbook shows 23,923 ha per year. Likewise, there are differences in the deforestation areas presented in table 4-2 versus those that can be calculated by the areas within the calculation workbook.

**Project Personnel Response 2:** To ensure consistency between the DRC\_ER\_calculations rev2.xlsx worksheet and the table in section 5.2, values and CI have been revised. Additionally, consistency between the initial and updated FREL activity data table and the AD\_calculationTool\_RP\_rev.xlsx has been ensured by revising AD values.

**Auditor Response 2:** The auditors have confirmed the consistency between the values reported in the ER calculation workbook and the tables in the ERMR related to the area of activity data. This finding has been resolved.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 30 – Uncertainty values – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change, AD\_calculationTool\_MP\_rev.xlsx, AD\_calculationTool\_RP\_rev.xlsx, DRC ER MC Analysis Rev.xlsx

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” In the workbook, DRC ER MC Analysis Rev.xlsx, sheet ‘Monte Carlo Analysis’, column F ‘Conf90’, values are pulled from sheets ‘AreaCalculation’ of the workbooks: AD\_calculationTool\_RP\_rev.xlsx (columns AA and AE, named ‘Error Standard...’) and AD\_calculationTool\_MP\_rev.xlsx (column O, named ‘Conf 19 -20’). Therefore, the standard error is being used in place of the confidence interval for the reporting period. Please explain this discrepancy to enable reconstruction of the calculations.

**Project Personnel Response:**

Updated tools for Monte Carlo and sensitivity analysis now consider confidence interval values for all variables. Access them at the following link:

Monte Carlo analysis:

<https://www.dropbox.com/scl/fi/myoh98k7y7z0o6z3bdc40/DRC-ER-MC-Analysis-Rev2.xlsx?rlkey=8ifprt508uaddrt0qo0pu9ih&dl=0>

Sensitivity analysis:

[https://www.dropbox.com/scl/fi/4gkfjreza762wbqz45zth/DRC\\_ER\\_SensitivityAnalysisRev.xlsx?rlkey=4kkg006xofl7xckivcc26a5wf&dl=0](https://www.dropbox.com/scl/fi/4gkfjreza762wbqz45zth/DRC_ER_SensitivityAnalysisRev.xlsx?rlkey=4kkg006xofl7xckivcc26a5wf&dl=0)

**Auditor Response:** The auditors confirmed that the Monte Carlo analysis workbooks now pulls in the confidence interval values instead of the standard error. However, in the ER\_Calculation sheet of the Sensitivity Analysis WB, column F continues to show the standard error values and not the confidence interval values. This nonconformity has not been resolved.

**Project Personnel Response 2:** Sensitivity analysis has been rerun using Confidence Interval values instead of Standard Error. Section 5.3 has also been updated. The updated sensitivity analysis worksheet can be accessed at the following

link:[https://www.dropbox.com/scl/fi/4ty77mzopcm43nxhql309/DRC\\_ER\\_SensitivityAnalysisRev2.xlsx?rlkey=qbshol89ggyapbjf7bs7c8cn&dl=0](https://www.dropbox.com/scl/fi/4ty77mzopcm43nxhql309/DRC_ER_SensitivityAnalysisRev2.xlsx?rlkey=qbshol89ggyapbjf7bs7c8cn&dl=0)

**Auditor Response 2:** The auditors confirmed that the sensitivity analysis was updated to pull in the Cis and not the standard errors. We confirmed that the sensitivity analysis has been re-run and that the results have been updated in section 5.3 of the ERM. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): M/C**

**mCAR 31 – Section 5.2 – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” The table in Section 5.2 of the ER-MR lists ‘Secondary forest 2005-2009 [ha]’ twice, while the value for 2010 to 2014 is absent. Additionally, it is unclear what the ‘±’ values are within the table (e.g., standard error, 90% confidence interval, etc.). Please provide information that allows reconstruction of the calculations.

**Project Personnel Response:**

The label for the value of Secondary Forest from 2010-2014 has been fixed in the table located in Section 5.2 of ER-MR. Additionally, the column title of Parameter Value now states that the values contain the 90% Confidence Intervals.

**Auditor Response:** The auditors confirmed that the label has been corrected to 2010-2014 and that the column has been updated to indicate this is a confidence interval. This finding has been addressed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C****MCAR 32 – Technical corrections – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Guidelines to MF 2 Technical Corrections GHG Emissions Removals v2.0**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change, AD\_calculationTool\_MP\_rev.xlsx, AD\_calculationTool\_RP\_rev.xlsx, DRC ER MC Analysis Rev.xlsx

**Finding:** Annex 4 of the ER-MR Template under ‘Technical corrections’ states “Provide a summary of the technical corrections applied clearly indicating where parameters have changed compared to the original Reference Level. Please indicate the changes applied and whether these are included in paragraph 3 of Guideline on the application of the Methodological Framework Number 2 – Technical corrections.” Paragraph 3 of Guideline 2 includes four categories of technical correction (i.e., ‘Improvement of emission factors,’ ‘Improvement to activity data,’ ‘Corrections of material errors, omissions and misstatements,’ and ‘Corrections required or authorized by Carbon Fund Participants’). However, these categories are not applied to the 3 technical corrections listed in Annex 4 of the ER-MR which constitutes a non-conformity to the requirements.

**Project Personnel Response:** Technical Corrections section in Annex 4 has been edited to reflect that two categories of technical corrections have been applied: i. Improvement of emission factors and ii. Improvement of activity data.

**Auditor Response:** The auditors confirmed that the technical corrections now clarify the two categories of corrections applied, resolving this nonconformity.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 33 – Project activity acronyms – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5,**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change,

**Finding:** The ER-MR template requirements states “Provide definitions of key terms that are used and use these key terms, as well as variables etc, consistently using the same abbreviations, formats, subscripts, etc.”

The auditors found that project activities are referenced by a shorthand name in the ER-MR. For instance, section 7.3 states “(Please refer to activities ES1 , ES2 and EH1, Section 4.3)) while reinforcing governmental control on compliance with the national forest regulation.” And later it states “The mitigation activity FS4 aims at increasing timber supply on 6,000 ha over five years.” However, these acronyms are not described elsewhere in the ER-MR. Given that the key terms ES1, ES2, EH1, and FS4 have not been defined in the ER-MR it results in nonconformity with template requirements.

**Project Personnel Response:** Updates include :

ES1. (Assisted natural regeneration for charcoal production)

ES2 (Afforestation/Reforestation for charcoal production)

EH1 (Enabling Activity: Formalization and strengthening of the wood-energy sector)

FS4. (Afforestation / Reforestation activity for timber production)

**Auditor Response:** The auditors confirmed that section 7.3 has been updated to define the project activity acronyms resolving the non-conformity.

**Bearing on Material Misstatement or Conformance (M/C/NA): C****MCAR 34 – Intentionally Left Blank – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5,**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change,

**Finding:** The ER-MR template requirements states “All sections of the ER-MR shall be completed. If sections of the ER-MR are not applicable, explicitly state that the section is “Intentionally left blank” and provide an explanation why this section is not applicable.” Section 7.3 of the ER-MR states “Intentionally left blank” but there is relevant information provided in this section. The inclusion of the phrase “Intentionally left blank” results in a nonconformity with template the requirements.

**Project Personnel Response:**

Phrase “intentionally left blank” have deleted in section 7.3.

**Auditor Response:** Confirmed that this text has been delated. This finding is closed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 35 – Parameter values – CLOSED****Dated 22 Jan 2024****Standard Reference:** FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_OCT 20-2023\_FMT2.0\_change; DRC\_ER\_Calculations rev.xlsx

**Finding:** Criterion 6 of the Methodological Framework states: “Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions)...” Similar to MCAR 29 above, there are values reported in the ER-MR that do not match the calculation workbooks provided, resulting in an inconsistency and inability to reconstruct reported emissions and removals. For instance, in Annex 4, Section 8.5 of the ER-MR it states “As specified in the Methodological Framework, the adjustment is limited to 0.1% of total forest carbon stocks in the program area. The calculation is presented in the table below and the total maximum adjustment is consequently determined at 5.789 million tCO<sub>2</sub> per annum.” Below it then shows a table of the maximum adjustment values. In the calculation workbook, DRC\_ER\_Calculations rev.xlsx, sheet ER\_Calculation different values are reported. These issues constitute nonconformities to the MF requirement of enabling reconstruction. Please ensure that parameters are reported correctly and consistently throughout the program documentation to enable reconstruction.

**Project Personnel Response:**

The values reported in Annex 4, section 8.5 for Cap to adjustment have been corrected to match the ER calculation workbook.

**Auditor Response:** The auditors confirmed that the values in section 8.5 of Annex 4 now match the Cap to Adjustment calculation in the ER workbook. This finding has been addressed.

**Bearing on Material Misstatement or Conformance (M/C/NA): C****MCAR 36 – Table numbering – CLOSED****Dated 25 April 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_04042024\_clean

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of consistency is to “enable meaningful comparisons in ER Program-related information.” The table numbering throughout the ER-MR is inconsistent, not in order, and there are often multiple tables with the same table name. For example, in section 3.1 of the ER-MR Table 3-3 is titled as “Estimation of Degradation Emission Factor.” However, in section 3.2 of the ER-MR there is another Table 3-3 that is labelled as “Value monitored during 2019-2020 Monitoring Period.” In section 3.1 of the ER-MR there is a table listed as Table 8-4 which comes after Table 2-3 and before Table 3-1 indicating that there is not a logical order to the table numbers. Ultimately there are several discrepancies between the table labels, table numbers and table orders, throughout various sections in the ER-MR resulting in a lack of consistency.

**Project Personnel Response:** Table numbering in ER-MR and Annex 4 is now consecutive.

**Auditor Response:** The auditors confirmed the table numbering has been updated and is not consistent and consecutive. This finding has been closed.

**Bearing on Material Misstatement or Conformance (M/C/NA):** C

**MCAR 37 – Calculation file naming conventions – CLOSED**

**Dated 25 April 2024**

**Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3

**Document Reference:** DRC fcpf\_1st\_ER-MR\_04042024\_clean

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” The principle of consistency is to “enable meaningful comparisons in ER Program-related information.” Table 2-3 of the section 2.2 of the ER-MR lists the calculation workbooks by filename. However, several of the filenames appear to be out of date. For instance, the table lists “DRC\_ER\_Calculation.xlsx” but the file provided to the auditors and available on the Dropbox is “DRC\_ER\_Calculations rev2.xlsx.” Likewise, the table lists the activity data workbooks as “AD\_calculationTool\_RP.xlsx” and AD\_calculationTool\_MP.xlsx.” However, the new file names are “AD\_calculationTool\_RP\_rev.xlsx” and AD\_calculationTool\_MP\_rev.xlsx.” There are several other discrepancies between the file names listed and the names of the actual files in this table and throughout the ER-MR resulting in a lack of consistency.

**Project Personnel Response:** Calculation file names have been updated to the final version in ER-MR and Annex 4.

**Auditor Response:** The auditors confirmed that the file names have been updated to the latest versions. This finding has been resolved.

**Bearing on Material Misstatement or Conformance (M/C/NA):** C

**OBS 38 – Data Management System link – OPENED****Dated 25 April 2024****Standard Reference:** FCPF ER Monitoring Report Template v2.5, FCPF Carbon Fund Methodological Framework v3**Document Reference:** DRC fcpf\_1st\_ER-MR\_04042024\_clean**Finding: Indicator 6.1 of the MF states** “The following methodological steps are made publicly available:

- Forest definition;
- Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable;
- Choice of activity data, and pre-processing and processing methods;
- Choice of emission factors and description of their development;
- Estimation of emissions and removals, including accounting approach;
- Disaggregation of emissions by sources and removal by sinks;
- Estimation of accuracy, precision, and/or confidence level, as applicable;
- Discussion of key uncertainties;
- Rationale for adjusting emissions, if applicable;
- Methods and assumptions associated with adjusting emissions, if applicable.” The auditors confirmed that the data and methodological steps have been made publicly available via Dropbox(<https://www.dropbox.com/scl/fo/fnfgupbc5cvm07ksyoezp/h?rlkey=0cb794w54jout87exbraba8f8&dl=0>). However, the link still contains outdated files which could be confusing for viewers.

**Project Personnel Response:** Obsolete files that could lead to confusion have been removed from dropbox.**Auditor Response:** Despite what the finding response states, the auditors could not confirm that outdated files have been removed from the dropbox. However, is an observational finding and need not be addressed.**Bearing on Material Misstatement or Conformance (M/C/NA): NA****mCAR 39 – Criterion 37 - OPENED****Dated 28 May 2024****Standard Reference:** FCPF Carbon Fund Methodological Framework v3;  
[https://www.forestcarbonpartnership.org/system/files/documents/indicator\\_37.4\\_aug\\_2021.pdf](https://www.forestcarbonpartnership.org/system/files/documents/indicator_37.4_aug_2021.pdf)**Document Reference:** DRC fcpf\_1st\_ER-MR\_04282024\_clean\_round3**Finding:** This finding relates to MCAR 27. Criterion 37 states “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.” This criterion contains 4 indicators with specific requirements of this data management system such as what attributes the system must contain about projects and programs (Indicator 37.2), that the system be publicly available (indicator 37.3) and that the system define operational procedures (Indicator 37.4), among other details.Section 6.2 of the ER-MR “However, this information will be transferred to the new National Forest Monitoring System portal as soon as hosting is renewed, and to the National REDD+ Register once it has been deployed. The developing version of the register can be accessed at <https://imagis-group.com/rdc/>. At that point, all data will be made transparently available.” The auditors were able to confirm that this draft Data Management System has been established. However, given that it is not fully functional, we have been unable to confirm that it meets the requirements of Criterion 37, particularly: (1) the data and

attributes served on this website, (2) the REDD activities and carbon pools selected, (3) the administrative procedures for the operations of the Data Management System. The auditors are issuing this mCAR to require that the project he Program have a fully functional Data Management System in place (including all the details required by the MF) during the next verification event.

**Project Personnel Response:** [To be addressed at the next Verification]

**Bearing on Material Misstatement or Conformance (M/C/NA): C**

**MCAR 40 – VCS Mai Ndombe ERs – CLOSED****Dated 22 Sep 2023**

**Standard Reference:** FCPF Carbon Fund Methodological Framework v3;  
FCPF\_emission\_reductions\_monitoring\_report\_template\_v3.1.docx

**Document Reference:** DRC fcpf\_1st\_ER-  
MR\_04282024\_round3\_template\_v3.1\_VERRA\_Fixed\_clean.docx

**Finding:** Section 3.1 of the MF states, “The Emission Reduction Program (ER Program) strives to be consistent with evolving UNFCCC decisions on REDD+... Relevant principles include those on transparency, consistency, completeness, and accuracy.” Section 6.4 of the ER-MR template indicates to, “Please identify the quantity and use of any ERs from the ER Program sold, assigned or otherwise used by any other entity for sale, public relations, compliance or any other purpose including ERs that have been set-aside to meet Reversal management requirements under other GHG accounting schemes.” As indicated in the ‘Project Personnel Response’ to MCAR 2, “This means only the ERS resulting in VCU sold and used towards the VERRA buffer ought to be discounted.” Underlining added for emphasis. However, edits have been made to Section 6.4 of the ER-MR which appear to calculate a downward adjustment to the ‘ERs that have been set-aside to meet Reversal management requirements under other GHG accounting schemes’ (i.e., the buffer allocated via the Verra program and project). Therefore the buffer adjustments are not in conformance to the template requirements, and do not meet the FCPF principles of ‘accuracy’ and ‘transparency’ as the edits made to this section include incorrect grammar and unclear math. As examples:

- It is stated that, ‘...out of a total ERs of [ ] tCO<sub>2</sub>eq ER reported for 2019-2021.’ The value for this time period is missing.
- Given incorrect grammar, it is not easy to follow this sentence: “These, are the net ER after applying a buffer discount of 10% has been applied resulting in 844,444 tCO<sub>2</sub>eq\* ER being applied to it.”
- The math in the following sentence does not add up: “This makes it so The MaiNdombe REDD+ project has transferred a total of 8,444,444 tCO<sub>2</sub>eq Vintage ER (7,600,000 tCO<sub>2</sub>eq VCU + 8,444,444 tCO<sub>2</sub>eq buffer ER) to the VCS-VERRA Scheme.”
- The math demonstration in the following sentences is not clear or correct: “\*This number had to be estimated using:  $VCU = grossER(1 - \%)$ . In this case  $grossER = 3800 / (1 - 10\%)$ ” It is unclear where the value 3800 comes from. When subtracting a percent, it is likely that a decimal is intended for this math to work (i.e., 10% = 0.10).

**Project Personnel Response:**

We corrected the language in the formula. The estimated value is the *bufferdiscount* and not the *gross ERs*. The *grossER* are estimated on the sequence by adding the estimated ER buffers as described in the text.

The value in the VERRA registry is not the correct value. The VERRA agreed with the FMT that the correct buffer value is 844.444. They indicated that the registry will be corrected accordingly. Therefore, the report incorporates the value given and not the value commonly reported in the VERRA register. We are copying the members of the FMT team to inform you about this.

We added language to this in the report to inform this agreement.

We clarified that we are talking about “The MaiNdombe REDD+ project”

The following language has been added:

« As part of the [benefit sharing plan](#), The MaiNdombe REDD+ project the government of DRC and the FCPF have agreed to apply to The MaiNdombe REDD+ project, a baseline of 3,800,000 tCO<sub>2</sub>eq for the project for the duration of the ERPA.”

**Auditor Response:** Thank you for the clarification. The auditors confirmed that all credits generated by the Mai Ndombe VCS project during the monitoring period have been capped by the VCS project and are accurately deducted from the program credits. This finding has been addressed.

**Bearing on Material Misstatement or Conformance (M/C/NA): M**