

LAC MAI NDOMBE REDD PROJECT

DEMOCRATIC REPUBLIC OF THE CONGO (DRC)



Project Title	The Mai Ndombe REDD+ Project	
Version	v1.34	
Report ID		
Date of Issue	14 September 2012	
Project ID		
Monitoring Period	M ₁ – (March 14, 2011 to October 31, 2012)	
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Table of Contents

1	Project Details	4
1.1	Summary Description of Project	4
1.2	Sectoral Scope and Project Type.....	5
1.3	Project Proponent.....	5
1.4	Other Entities Involved in the Project.....	6
1.5	Project Start Date.....	6
1.6	Project Crediting Period	6
1.7	Project Location	6
1.8	Title and Reference of Methodology	7
2	Implementation Status.....	7
2.1	Implementation Status of the Project Activity	7
2.2	Project Description Deviations.....	10
2.3	Grouped Project.....	10
3	Data and Parameters	11
3.1	Data and Parameters Available at Validation	11
3.2	Description of the Monitoring Plan	15
4	Quantification of GHG Emission Reductions and Removals	20
4.1	Baseline Emissions	20
4.2	Project Emissions	21
4.3	Leakage	21
4.4	Summary of GHG Emission Reductions and Removals	22
5	Additional Information.....	23
5.1	Allometric Equations.....	23
5.1.1	Validating Previously Developed Allometric Equations.....	24

Annexes

Annex	Title and Description	Status
A	Monitoring Plan	Public
B	NER Worksheet 2.16_PRIVATE VERSION.xlsm	Confidential
B	NER Worksheet 2.16_PUBLIC VERSION.xlsx	Public
C	Data and Parameters Monitored	Public
D	Species Allometry	Confidential
E	Allometry Sampling Plot List	Confidential
F	Allometry Sampling Protocol - Field	Confidential
G	Allometry Sampling Protocol - Laboratory	Confidential
H	Forest Measurement Protocol	Confidential
J	Inventory	Confidential
K	Standard Operating Procedure - Soil	Confidential
L	Proxy Inventory	Confidential
M	Map of Project Area	Confidential
N	Allometry Sampling Map	Confidential
O	BEM Export Grid	Public
P	Soil Analysis Results	Public
Q	Quality Control Procedure	Confidential

1 PROJECT DETAILS

1.1 Summary Description of Project

Provide a summary description of the project.

The Mai Ndombe REDD+ Project, located in western DRC, is an ecologically rich and diverse area previously zoned for commercial timber extraction. It is home to Chimpanzees, Bonobos and forest elephants, and includes some of the most important wetlands in the world. It is also home to some 50,000 people, most of whom live on the shores of Lake Mai Ndombe, and along the main roadway leading from the coastal city of Selenge towards the northwest project area boundary.

In 2008, following a governmental revision of the DRC National Forest Code, 91 of 156 logging contracts were suspended in an effort to address corruption in the sector. Minimum legal and environmental standards were not being met, which resulted in severe environmental damage. Furthermore, communities in these areas were largely ignored by the logging companies, and received little or no economic benefit. Two timber concessions extending along the western shore of Lake Mai Ndombe, were among those suspended for review. In February 2010, ERA submitted a formal request to the DRC government to manage these concessions for the purpose of protecting the area from destructive logging practices, legal and illegal - using carbon revenues to promote sustainable development. In March 2011, a Memorandum of Understanding was signed between the Ministry of Environment, Conservation of Nature, and Tourism (MECNT) and ERA, in which any carbon rights resulting from the development of the project would be assigned to ERA. In August 2011, the two concession contracts were reassigned to ERA via a Forest Conservation Contract.

The concessions contain over 3.5 million cubic meters of merchantable hardwood which is highly valued by logging companies. The project aims to address logging and the other leading drivers of deforestation - subsistence agricultural practices and aggressive fuel wood/charcoal use. Project activities will consist largely of participatory community-based conservation initiatives which will reduce local incentives toward unsustainable land use, with emphasis on agricultural improvements.

The project will be developed as a REDD+ project with validation planned to both the Climate, Community and Biodiversity Alliance (CCB) Standard, and the Verified Carbon Standard (VCS). The VCS methodology used will be Wildlife Works' VM0009 'Methodology for Avoided Deforestation', originally validated with VCS in January, 2011 and a revised version (version 2.0), currently in the final stages of validation, will be used for this project.

ERA has been working closely with the villages and communities in the project area to educate, inform, listen, learn and most importantly, to understand and respect their local customs. Both ERA and Wildlife Works feel that their responsibility is to ensure all parties to this project are willing, freely and gainfully participating and benefiting from its development. The project proponents are thus engaged with each major village and/or seat of traditional authority, and initial consent to develop the project in a

participatory manner has been given by all traditional authorities. The community engagement process will continue throughout the life of the project.

1.2 Sectoral Scope and Project Type

Indicate the sectoral scope(s) applicable to the project, the AFOLU project category and activity type (if applicable) and whether the project is a grouped project.

The Mai Ndombe REDD+ Project (hereafter referred to as "the project") falls under VCS sectoral scope 14 - Agriculture, Forestry and Other Land Uses (AFOLU), under project category Reduced Emissions from Deforestation and Degradation (REDD) and most specifically under the activity Avoiding Planned Deforestation (APD). The project falls into this category by the definition provided in the VCS AFOLU Requirements Document Version 3 published 1 February, 2012, by virtue of the fact that it prevents emissions that otherwise would have taken place under a legally commissioned logging concession.

1.3 Project Proponent

Provide contact information and roles/responsibilities for the project proponent(s).

The Mai Ndombe Project is jointly operated by Wildlife Works and ERA Ecosystems.

ERA is a Canadian-based pioneer in forest restoration and conservation-based carbon offset projects. ERA specializes in both domestic and international Afforestation, Reforestation, Avoided Conversion, IFM, and REDD+ style projects. In 2005, ERA began restoring degraded old growth rainforest ecosystems in British Columbia's lower mainland. To date, ERA's Community Ecosystem Restoration Program (CERP) has generated over 1,000,000 tonnes of validated and verified Voluntary Emission Reductions (VERs) which have been supplied to the domestic and international offset markets. Today, ERA works around the world with forward-looking communities, ethical companies, and indigenous groups to restore and protect forest ecosystems, building local capacity to play a role in climate change mitigation and adaptation.

Wildlife Works is the world's leading REDD project development and management company with an effective approach to applying innovative market-based solutions to the conservation of biodiversity. Over a 15 year history, Wildlife Works established a successful model that uses the emerging marketplace for REDD carbon offsets to protect threatened forests, wildlife and communities. The company helps local landowners in the developing world monetize their forest and biodiversity assets, whether they are governments, communities, ownership groups or private individuals. Wildlife Works is actively leveraging its experience to future REDD projects around the globe, with a goal to protect 5 million hectares from deforestation. Wildlife Works is committed to protecting wildlife, forests and biodiversity, with a direct, hands-on approach to creating alternative livelihoods.

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1.4 Other Entities Involved in the Project

Provide contact information and roles/responsibilities for any other project participant(s).

There are no other entities involved in the development or implementation of the Mai Ndombe REDD+ Project.

1.5 Project Start Date

Indicate the project start date, specifying the day, month and year.

MRR.2 The project start date.

The Project start date is **March 14, 2011**, as this is the date that the Carbon Rights Agreement was signed between ERA and the GoC, and REDD+ monitoring activities began according to the VCS methodology VM0009.

1.6 Project Crediting Period

Indicate the project crediting period, specifying the day, month and year for the start and end dates and the total number of years.

MRR.3 The project crediting period start date, end date and length.

The project crediting period begins at the project start date **March 14, 2011**, and the length of the crediting period will be 30 years. Therefore, the crediting end date will be March 13, 2041.

Monitoring Period for this Report

This document describes MRV activity for the Mai Ndombe REDD+ Project's first monitoring period, m_1 , beginning on the project start date, March 14th, 2011 and ending on October 31, 2012.

1.7 Project Location

Indicate the project location and geographic boundaries (if applicable).

The Mai Ndombe REDD+ Project area is situated in the Inongo Territory in the Mai-Ndombe Lake District in the Bandundu Province. The project is located on the West shore (to the East) of Lake Mai Ndombe,

between the lake itself and the Bolipa Mpe (Boruampe) River to the West, and between the Lokeke River to the South and the Bolog'o Lule River to the North.

MRR.1 A digital (GIS-based) map of the project area with at least the above minimum requirements for delineation of the geographic boundaries.

See Project Monitoring Plan – Map of Project Area

MRR.6 A digital (GIS-based) map of the accounting area with at least the above minimum requirements for delineation of the geographic boundaries.

See Appendix A – Map of Project Area

1.8 Title and Reference of Methodology

Provide the title, reference and version number of the methodology(s) applied to the project.

The project employs version 2.0 of the VM0009 Methodology for Avoided Deforestation. This methodology quantifies greenhouse gas removals generated from avoiding both planned and unplanned deforestation initiated by a variety of drivers.

2 IMPLEMENTATION STATUS

2.1 Implementation Status of the Project Activity

- *Describe the implementation status of the project activity(s).*
- *Provide information regarding the operation of the project activity(s) during this monitoring period, including any information on events that may impact the GHG emission reductions or removals and monitoring.*
- *For AFOLU projects, describe how leakage and non-permanence risk factors are being monitored and managed.*

Project activities are described in section 1.8 (Description of the Project Activity) of the Project Document. The project activities are designed to mitigate deforestation by developing economic alternatives for local communities, in addition to ensuring that the monetary and other benefits of this project are realized largely by local communities.

Project Activities	Start Date	Implementation Status	Details
Stopping planned legal and reducing unplanned illegal logging			
Conservation management of concession and Environmental Education / Awareness activities	March 14, 2011	Currently Active	0 Former timber concession / proposed legal logging extraction has been halted. Concessions have been successfully converted to type conservation and will

Project Activities	Start Date	Implementation Status	Details
			be maintained as such throughout the lifetime of the project. Wood extraction will be greatly reduced with the allocation of the timber concession to ERA Congo, as increased access to forests that would have occurred through large scale logging practices (e.g., road building, logging trails) will not be occurring under conservation concession. - o Workshops have been held in 7 project area communities and 2 project zone communities. Workshops are held on the village level, in primary and secondary schools, with women's and men's workshops and within CLD meetings. Workshops are conducted by animateurs and local animateurs and are conducted with the use of posters on topics such as 'climate change' and 'the importance of forests'. - o Biodiversity data collection on local plant and animal species has been commenced by MBG and the Wildlife Conservation Society respectively, and will continue throughout the project.
Forest monitoring	January, 2009	Currently Active	- o A comprehensive Forest Monitoring plan has been drafted and implemented. As this monitoring plan is a central to the project's success and efficacy, a monitoring plan is maintained under revision control. Please refer to MR 'Annex A – Lac Mai Ndombe REDD+ Monitoring Plan' - o The monitoring plan includes monitoring of Carbon Stocks in the Project and Proxy Areas using Wildlife Works Forest Monitoring Protocols (please see MR 'Annex H – Standard Operating Procedure – Forest Inventory' and MR Annex K – Standard Operating Procedure – Soil'. - o The plan includes Forest Patrolling and Perimeter Monitoring to identify any unauthorized activity within the Project Area (please see MR Annex A - Lac Mai

Project Activities	Start Date	Implementation Status	Details
			Ndombe REDD+ Monitoring Plan' - o The Project Area will be monitored for any disturbances, whose significance will be determined using a standard protocol (please see MR Annex A - Lac Mai Ndombe REDD+ Monitoring Plan') - o In the first monitoring period (M₁) the forest monitoring duties in the project area were held by the forestry/monitoring team. This team has systematically covered the Mai Ndombe Project forest area according to the location of the 471 forest inventory plots, the location of which are detailed in the plot map on page 5 of the Monitoring Plan (Annex A). These biomass plots were placed so as to sufficiently represent the project area, not only to aggregate carbon within each stratum, but also to identify disturbances. The foresters and their plot sampling team colleagues observe and record disturbances during their normal plot-sampling activities.
Agricultural improvement			
Agroforestry nursery and demonstration plots	September 2012	Commencing this Sept. – Oct. (as season progresses from Dry to Wet).	o Demonstration of agroforestry techniques for use by communities in the project area. Nursery will be located in Selenge; demonstration plots will be located in the villages of Inunu, Selenge, Bosongo, and Mbale.
Agricultural diversification	September 2012	Currently Active	- o A demonstration garden, including new crop varieties has been installed at ERA headquarters in Inongo. There has been great interest in the garden from Local community members who are interested in growing (and preparing) cucumbers and peppers. - o Animal enclosures have been constructed in the villages of Selenge and Mbale. There are at least 10 enclosures in each of the villages and over 100 animals are enclosed (likely more but I am getting the solid numbers tomorrow morning). Natural vaccinations are being prepared.

Project Activities	Start Date	Implementation Status	Details
Social service infrastructure			
School construction	October 2011	Currently Active	0 Construction of 20 schools is planned. The schools will be built with locally sourced bricks, including two 8-room classrooms in the villages of Lokanga and Kesenge. Thus far, 2 Schools are nearing completion. Another 2 sites are in the process of making bricks.
Mobile Medical Clinics	September, 2012	Currently Active	0 It is expected that at least 3 villages will be visited on each trip and that at least 30 patients will be treated in each village under full operation.

Project activities were designed to mitigate risk as described in section 3.4.2 (Determining Reversals) of the Project Document. These activities emphasize increasing the socio-economic well-being of the community while reducing internal, external and natural non-permanence risk. External risks are anticipated to be mitigated through extensive community outreach and consultation with all levels of local governance. The non-permanence risk analysis determined that the project proponent has adequately addressed internal and external risks, including project management, project longevity, land and resource tenure, community engagement and political risk. Other natural risk (e.g., fire, disease, etc) were deemed to be low and no further project activities are necessary.

2.2 Project Description Deviations

There were no Project Description (PD) deviations for this project for the current monitoring period (m1). Therefore, this section is not applicable.

2.3 Grouped Project

For a grouped project, provide relevant information about new instances of the project activity(s) and demonstrate that each new instance of the project activity(s) meets the eligibility criteria set out in the project description.

This project is not a grouped project.

3 DATA AND PARAMETERS

3.1 Data and Parameters Available at Validation

Describe data and parameters available at validation using the following table (copy table for each data unit/parameter).

MRR.78 List of parameters from Appendix H, their values and the time last measured.

MRR.79 Quality assurance and quality control measures employed for each.

MRR.80 Description of the accuracy of each.

Data / Parameter	Unit	Description	Source of Data	Value Applied	QA / QC	Purpose of Data / Justification
α	unitless	Combined effects of β and θ at the start of the historic reference period	Reference area and historic reference period	0.9488756	Independent check of point interpretation	Time and place in which the logistic model is fit
β	unitless	Effect of time on the cumulative proportion of deforestation over time	Reference area and historic reference period	0.0006167	Independent check of point interpretation	Time and place in which the logistic model is fit
γ	days	Time shift from beginning of historic reference period to project start date	Historic reference period	-8720	Review of monitoring records	Time in which the logistic model is fit
θ	unitless	Effect of certain covariates on the cumulative proportion of deforestation over time	Reference area and historic reference period	N/A	N/A	Time and place in which the logistic model is fit
λ_{SOC}	proportion (unitless)	Exponential soil carbon decay parameter	Value from the literature. Davidson, E., and Ackerman, I. 1993. Changes in soil carbon inventories following cultivation of previously untilled soils. Biogeochemistry, 20(3), 161-193.	0.2	N/A (default value)	Default value
$\hat{\sigma}_{EM}$	standard deviation (unitless)	The estimated standard deviation of the state observations used to fit the logistic function	Remote sensing image interpretation	0.00892887	Independent check of point interpretation	-
$\mathcal{B}$	set	The set of all selected	PDD	N/A	N/A	-

Data / Parameter	Unit	Description	Source of Data	Value Applied	QA / QC	Purpose of Data / Justification
		carbon pools in biomass. Is a subset of $\mathcal{C}$				
$\mathcal{C}$	set	The set of all selected carbon pools	Monitoring records	N/A	N/A	-
$\mathcal{J}$	set	The set of all observations of deforestation. When superscripted with a monitoring period, the deforestation observations are taken for leakage analysis.	Remote sensing image interpretation or field observations in the leakage area.	N/A	N/A	-
$\mathcal{M}$	set	The set of all monitoring periods	Monitoring records	N/A	N/A	-
A_{PAA}	ha	Area of project accounting area	GIS analysis prior to sampling	248,956	Cross-check of GIS analysis	-
A_{PX}	ha	Area of proxy area	GIS analysis prior to sampling	29,361.2	Cross-check of GIS analysis	-
A_{AS}	ha	Area of activity-shifting leakage area	GIS analysis prior to sampling	N/A	Cross-check of GIS analysis	-
c_{Lp}	tCO ₂ e/ha	Carbon stocks in project leakage	Leakage area sampling	N/A	N/A	Direct measurement
m	tCO ₂ e/ha/yr	Average carbon in merchantable trees cut each year as a result of legally-sanctioned commercial logging	Timber harvest plans or measurement of carbon stocks in merchantable trees in the project accounting area	1,288,795.4	N/A	Should use the most accurate of the two data sources if both are available
n_d		Number of spatial points in the reference area	Remote sensing image interpretation	1,572	Cross-check of sample size determination	-
o_i	binary	State observation for the i^{th} sample point in the reference area	Remote sensing image interpretation	See Annex O - BEM Export Grid	N/A	-
p_{LME}	proportion (unitless)	Portion of leakage related to market effects	VM0009 methodology section 8.3.3	N/A	N/A	-
q	days	Lag between start of degradation and deforestation	Expert knowledge, results from the PRA or reports from peer-reviewed literature	N/A	N/A	Commonly accepted methods in the social sciences, choice determined and justified by project proponent
r_{CFb}	unitless	Carbon fraction of biomass	Literature estimates or direct measurement	N/A	N/A	-

Data / Parameter	Unit	Description	Source of Data	Value Applied	QA / QC	Purpose of Data / Justification
		for burned wood b				
r_{RS}	unitless	Expansion factor for above-ground biomass to below-ground biomass (root/shoot ratio)	IPCC Guidelines for National Greenhouse Gas Inventories, 2006, Volume 4: Agriculture, Forestry and Other Land Use, Chapter 4: Forest Land, Table 4.4	0.37	N/A (default value)	IPCC default value for wet tropical forest ecosystems
r_U	unitless	Onset proportion of deforestation immediately adjacent to project area	GIS analysis and image interpretation	N/A	Cross-check of GIS analysis and image interpretation	Positions the baseline emissions models relative to the instantaneous rate of deforestation
t	days	Time since project start date	Monitoring records	N/A	Review of monitoring records	-
t_i	days	The point in time of the observation made at point i	Remote sensing image interpretation	N/A	N/A	-
t_{PA}	days	Time prior to the project start date when the primary agent began commercial logging in the project accounting area	Harvest plans prepared for the project accounting area, or by public record	-2,901	N/A	Should use the most accurate of the two data sources if both are available
t_m	days	Length of project or logging in baseline scenario	PD	9,125	N/A	-
t_{PL}	days	Length of project crediting period	PD	10,957	Review of monitoring records	-
t_{PAI}	days	Number of days after the project start date for the start of a project activity instance in a grouped project	PD	N/A	N/A	-
t_{SA}	days	Arrival time of secondary agents after start of commercial logging	Participatory rural appraisal, or expert knowledge	1,825	N/A	Should use the most accurate of the two data sources if both are available
w_i	unitless	weight applied to the i th sample point in the reference area	Remote sensing image interpretation	See Annex O - BEM Export Grid	Cross-check of image interpretation and analysis	-
x	unitless	Covariate values	Participatory Rural Appraisal, analysis of public	N/A	N/A	Should use the most accurate of the data sources if both are available

Data / Parameter	Unit	Description	Source of Data	Value Applied	QA / QC	Purpose of Data / Justification
			records, and/or expert interpretation of inventory data or remotely sensed imagery			
x_i	geographic coordinates	Latitude of the i^{th} sample point	Remote sensing image interpretation	N/A	Empirical evidence that imagery is registered to within 10 % RMSE	-
x_o	unitless	Covariate values as of the project start date	Participatory Rural Appraisal, analysis of public records, and/or expert interpretation of inventory data or remotely sensed imagery	N/A	N/A	Should use the most accurate of the data sources if both are available
x_{PAI}	unitless	Covariate values as of a project activity instance start date	Participatory Rural Appraisal, analysis of public records, and/or expert interpretation of inventory data or remotely sensed imagery	N/A	N/A	
x_{SA}	unitless	Covariate values of secondary agents	Participatory Rural Appraisal, analysis of public records, and/or expert interpretation of inventory data or remotely sensed imagery	N/A	N/A	Should use the most accurate of the data sources if both are available
y_i	geographic coordinates	Longitude of the i^{th} sample point	Remote sensing image interpretation	N/A	Empirical evidence that imagery is registered to within 10 % RMSE	-

3.2 Description of the Monitoring Plan

- *Describe the monitoring plan.*
- *Identify organizational structure, responsibilities and competencies.*
- *Describe methods for generating, recording, storing, aggregating, collating and reporting data on monitored parameters.*
- *Describe procedures for handling internal auditing and non-conformities.*

Line diagrams may be used to display the GHG collection and management system.

The objective of The Mai Ndombe REDD+ Monitoring Plan, 'Annex A - Lac Mai Ndombe REDD+ Monitoring Plan v1.8.docx' and hereafter referred to as "The Monitoring Plan" - is to achieve accurate, regular estimates of carbon stocks and emissions reductions by the project. The monitoring plan includes three continual monitoring activities:

Activity	Frequency	Method
Forest Patrols and Perimeter Observation	Twice per year	Patrol team inspects perimeter of project area
Plot Measurements	Once per year	Sampling teams visit a portion of plots in project, proxy, and leakage areas
Identification of Significant Disturbance	Once every 2 years or after major disturbance event	Periodic inspection of remote sensing products or aerial videography, with ground inspection when necessary
Recordation of log production	When biomass harvest occurs in project area	Data recordation and reporting at time of verification

Descriptions and frequencies of these monitoring activities are fully described in the Monitoring Plan. The monitoring plan also maintains the organizational structure of the people responsible for the implementation of project MRV. Finally, the monitoring plan includes training and internal audit procedures for quality control and assurance.

[MRR.81 Documentation of training for field crews.](#)

The sourcing and developing of local skills and knowledge is a key consideration in deciding on and implementing project activities. ERA – WWC Congo is legally registered with the National Institute for Professional Preparation that organizes training for employees, and will follow the INPP training schedules for employees. Project activities will be constructed in ways such that skills developed will be retained by the communities. The Mai Ndombe project recognizes hiring local employees as a priority. Additionally, since local people are most familiar with the local geography, climate, and culture, their involvement ensures greater project sustainability. The Mai Ndombe project currently employs a significant number of staff from local communities, including members from the local indigenous minority, and will continue with plans to hire and train people from this minority group.

Community and employee education and capacity building related to payment for ecosystem services, climate change, the carbon offset industry, measurements, and monitoring is on-going and will continue

in the form of meetings, workshops, and open discussion. Local foresters, for example, have been trained in methods for taking carbon measurements and field inventory for wildlife species. Specifically, the foresters received initial carbon inventory training in August of 2011 from Vice President of Carbon Development Jeremy Freund from Wildlife Works and Project General Manager Jean-Robert B. Bwangoy-Bankanza. Carbon Development Associate Simon Bird from Wildlife Works, and Field Forestry Manager Tristan Jordon of ERA-WWC Congo provided additional training on forest inventory methods and tree allometry determination in July and August of 2012. The Mai Ndombe REDD Project is collaborating with universities with regard to opportunities for forester training. Training will be provided to staff in Kinshasa in the areas of accounting, bookkeeping and general office procedures. Animateurs receive substantial training on processes for community engagement. One training event included project-funded travel to other areas of the DRC for workshops on alternative livelihood strategies. The types of training mentioned here will be on-going and will therefore continue to benefit existing and future employees. Training for animateurs and foresters hired in the future as a result of staff turnover will be provided training and orientation to their work by current animateurs and foresters and will be partnered with experienced animateurs and foresters during the initial period of their employment.

The Mai Ndombe REDD Project will prepare Standard Operating Procedures or work plans for all project activities. Work plans are available for all current project activities and they will be used to implement activities, guide training for new employees and be modified as management practices and activities are adapted. In a number of cases, particularly for activities that will be implemented in multiple locations or have detailed procedures to follow, detailed SOPs will be developed. Every new employee is provided with orientation and training according to these work plans and training SOPs.

MRR.83 Documentation of data quality assessment such as a check cruise and plots of the data such as diameter distributions by strata or plot.

Please refer to 'Annex Q – Quality Control Procedure v1.6' for a thorough description of the official procedure to assess data measurement quality and thoroughness. QC training was carried out by the VP Carbon Development, Jeremy Freund and Project General Manager, JR Bwangoy to ensure absolute strict adherence to QC Procedure. The Carbon Development team generated random plot coordinates in accordance with the QC SOP to cover 5% of the originally collected inventory plots in the Project and Proxy Areas. These QC plots were evaluated as close in time to the original plots as possible to avoid any errors due to natural regeneration/growth, although it is widely understood that some regrowth will occur between these two measurement events. Allowances for such inevitable deltas are built in to the QC evaluation techniques (Annex Q – Quality Control Procedure v1.6). The plots cover all strata present in the Project Area as well as in the Proxy Area. Separate QC evaluation is performed in the Project and Proxy Areas to ensure thorough and robust appraisal or measurement techniques.

The following table lists QC results for this monitoring event (m1) for both the project and proxy areas:

QC Evaluation	Project Area	Proxy Area
QC plots:	12-Mar	ZT04B
	06B	ZT12B
	09C	ZT17B
	103E	ZT20B
	106E	ZT33B
	12A	ZT36B
	145E	ZT41B
	167E	ZT43B
	168E	ZT44B
	169E	ZT46B
	170E	ZT47B
	173E	ZT48B
	175E	
	176E	
	188E	
	189E	
	18D	
	18G	
	193E	
	196E	
	1F	
	21G	
	24E	
	28G	
	29E	
	34G	
	35G	
	40E	
	44G	
	46G	
	48E	
	58G	
	61E	
	61G	
	66G	
	72E	
	81K	
	82K	
QC Basis		
1% of Estimated Mean (tCO ₂ e)	9.609751266	0.845819405
Estimated Mean of Paired Differences (tCO ₂ e)	75.20421476	9.678623843
Standard Error of Paired Differences (tCO ₂ e)	86.02348701	15.72533121

QC Evaluation	Project Area	Proxy Area
Difference between 1% and Paired Difference (tCO ₂ e)	65.5944635	8.832804438
t Statistic	0.762518072	0.561692744
Degrees of Freedom	37	11
p Value (1 - alpha)	0.225292464	0.292793805
H0: No difference between 1% and Paired Difference at 90% Level	TRUE	TRUE
H1: Difference greater than or equal to 1% and Paired Difference at 90% Level	FALSE	FALSE
Inventory Basis		
1% of Estimated Mean (tCO ₂ e)	8.857709118	0.749033166
Estimated Mean of Paired Differences (tCO ₂ e)	75.20421476	9.678623843
Standard Error of Paired Differences (tCO ₂ e)	86.02348701	15.72533121
Difference between 1% and Paired Difference (tCO ₂ e)	66.34650564	8.929590676
t Statistic	0.771260361	0.567847542
Degrees of Freedom	37	11
p Value (1 - alpha)	0.22272519	0.290771799
H0: No difference between 1% and Paired Difference at 90% Level	TRUE	TRUE
H1: Difference greater than or equal to 1% and Paired Difference at 90% Level	FALSE	FALSE

[MRR.84 Maps of a stratification \(if any\) and references to plot allocation.](#)

Please refer to Annex A – Monitoring Plan.

[MRR.85 List of plot GPS coordinates.](#)

Please refer to Annex A – Monitoring Plan.

[MRR.86 Description of plot sizes and layout \(such as the use of nests and their sizes\) for each carbon pool.](#)

Please refer to Annex A – Monitoring Plan.

[MRR.87 If applicable, a detailed description of the process used to develop allometric equations, to include:](#)

- a) Sample size
- b) Distribution (e.g. diameter) of the sample
- c) Model fitting procedure

d) Model selection

Please refer to Annex A – Monitoring Plan.

MRR.88 The estimated carbon stock, standard error of the total for each stock, and the sample size for each stratum in the area selected.

Please refer to Annex A – Monitoring Plan.

MRR.89 Log export monitoring records and standard operating procedure in the project area, if there is commercial harvest in the project scenario.

Please refer to Annex A – Monitoring Plan.

MRR.90 Deviations from the measurement methods set out in Appendix B or the monitoring plan, per current VCS requirement.

Please refer to Annex A – Monitoring Plan.

MRR.91 The frequency of monitoring for each plot for all plots – all plots should be measured for the first verification. All leakage plots should be measured every verification, and all proxy and project accounting area plots at least every five years, or after a significant event that changes stocks.

Please refer to Annex A – Monitoring Plan.

4 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

Quantify the baseline emissions and/or removals.

Baseline emissions were determined by a linear component for emissions from planned commercial harvest and a logistic component for subsequent degradation.

Component	First Monitoring Period (m_1)	Total
Gross NERs	3,398,286	3,398,286
25% buffer tonnes to VCS	(849,572)	(849,572)
Net NERs	2,548,714	2,548,714

MRR.10 Calculation of current baseline emissions $E_{B\Delta}^{[m]}$ as of the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.11 Calculations of baseline emissions $E_{B\Delta}^{[m-1]}$ from prior monitoring periods.

Please refer to Annex B – NER Worksheet.

MRR.12 Calculations of current baseline emissions for each selected pool ($E_{B\Delta BM}^{[m]}$ and $E_{B\Delta SOC}^{[m]}$) and undecayed carbon $C_{B\Delta BGB}^{[m]}$, $C_{B\Delta DW}^{[m]}$, $C_{B\Delta SOC}^{[m]}$, and $C_{B\Delta WP}^{[m]}$, as of the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.13 Calculations of cumulative baseline emissions from biomass $E_{B BM}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.18 An estimate of current baseline emissions from SOC $E_{B\Delta SOC}^{[m]}$ as of the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.19 An estimate of cumulative baseline emissions from SOC $E_{B\Delta SOC}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.27 An estimate of carbon stored in non-decayed DW $C_{B DW}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.28 An estimate of cumulative baseline emissions from DW $E_{B\ DW}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.29 An estimate of cumulative baseline emissions from AGMT $E_{B\ AGMT}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.32 An estimate of carbon stored in non-decayed BGB $C_{B\ BGB}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.33 An estimate of cumulative baseline emissions from BGB $E_{B\ BGB}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.35 An estimate of carbon stored in non-decayed SOC $C_{B\ SOC}^{[m]}$ for the current monitoring period.

Please refer to Annex B – NER Worksheet.

MRR.36 Carbon stored in long-lived wood products $C_{B\ WP}^{[m]}$ after 100 years.

Please refer to Annex B – NER Worksheet.

MRR.37 Calculations to determine $C_{B\ WP}^{[m]}$.

Please refer to Annex B – NER Worksheet and Annex C – Data and Parameters Monitored.

4.2 Project Emissions

Quantify project emissions and/or removals.

Project emissions during this monitoring period were zero. There were no disturbance events (e.g., fire, logging, burning) in the project area. The project proponent made this determination after having regularly observed the project area in the course of conducting the forest inventory and implementing forest patrols.

4.3 Leakage

Quantify leakage emissions.

There are no leakage emissions to quantify because neither activity-shifting leakage nor market-effects leakage is applicable to this project. Refer to sections 3.3.1 and 3.3.2 of the Project Document.

4.4 Summary of GHG Emission Reductions and Removals

Quantify the net GHG emission reductions and removals. For AFOLU projects, include net change in carbon stocks.

Component	Value (tonnes CO ₂ e)
Estimated Baseline Emissions, m ₁	3,398,286
Uncertainty Deduction	0
Project Emissions, m ₁	0
Leakage Emissions, m ₁	0
Gross NERs, m ₁	3,398,286
NERs to VCS Buffer Pool (25%)	(849,572)
Net NERs, m ₁	2,548,714

MRR.58 Quantified GERs for the current monitoring period including references to calculations.

MRR.60A graph of GERs by monitoring period for all monitoring periods to date.

MRR.61 The confidence deduction $E_U^{[m]}$ and estimated standard errors used to determine the confidence deduction.

MRR.62 Reference to calculations used to determine the confidence deduction.

Please refer to Annex B – NER Worksheet.

MRR.67 Quantified NERs for the current monitoring period including references to calculations.

Please refer to Annex B – NER Worksheet.

MRR.69 A graph of NERs by monitoring period for all monitoring periods to date.

Please refer to Annex B – NER Worksheet.

MRR.70 Reference to the VCS requirements used to determine the buffer account allocation.

The VCS Non-Permanence Risk Tool (version 3.1) was used to determine the buffer account allocation. Please refer to PD Annex R – VCS Non-permanence Risk Worksheet v1.1.

MRR.71 Reference to calculations used to determine the buffer account allocation.

Please refer to section 3.4.2.2 (Determining the Buffer Account Allocation) of the Project Document.

MRR.75 Quantified NERs by vintage year for the current monitoring period including references to calculations.

Year	NERs (tCO ₂ c) Monitoring Period 1
2011	1,252,975
2012	1,295,739

5 ADDITIONAL INFORMATION

May include any raw data from monitoring, additional information used in the monitoring plan, documentation of activities conducted from the monitoring plan, diagrams, etc.

5.1 Allometric Equations

MRR.92A list of all selected allometric equations used to estimate biomass for trees and non-trees.

Please refer to Annex D - Development of Allometry.

MRR.93 For each selected allometric equation, a list of species to which it being applied and the proportion of the total carbon stocks predicted by the equation.

Please refer to Annex D - Development of Allometry.

MRR.94 For each selected allometric equation, indication of when it was first employed to estimate carbon stocks in the project area (monitoring period number and year of monitoring event).

All allometric equations were first employed in the first monitoring period

MRR.95 For each selected allometric equation, indication of whether was validated per sections 9.3.1.1 or 9.3.1.2.

Please refer to Annex D - Development of Allometry.

MRR.96 Documentation of the source of each selected allometric equation and justification for their applicability to the project area considering climatic, edaphic, geographical and taxonomic similarities between the project location and the location in which the equation was derived.

Please refer to Annex D - Development of Allometry, which includes the source in the literature as well as the region and ecosystem type in which the respective allometric equations were developed.

Specific gravities were determined primarily using data available from Simpson (1996)¹ and the Global Wood Density Database.² Species-specific values for specific gravity or wood density were identified from these two sources, with priority given to values given in Simpson (1996). An average wood density value (weighted by basal area) was derived from the project inventory was applied to all other species.

¹ Simpson, William T. 1996. Method to estimate dry-kiln schedules and species groupings: Tropical and temperate hardwoods. Res. Pap. FPL–RP–548. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory.

² Global Wood Density Database: <http://datadryad.org/repo/handle/10255/dryad.235>.

MRR.97 A list of allometric equations validated by destructive sampling.

We chose to validate the allometric equation from Chave et al. (2005):

$$AGB = e^{-1.602 + (2.266 \ln(DBH)) + (0.136 \ln(DBH)^2) + (-0.0206 \ln(DBH)^3) + (0.809 \ln(\rho))}$$

Where *AGB* is aboveground biomass in kg, *DBH* is diameter at breast height in cm, and *ρ* is wood density in gm/cm³. Please see MR Annex D – Development of Allometry for detailed information on Allometry validation.

MRR.98 For each, the number of trees (or non-trees) destructively sampled and the location where the measurement were made relative to the project area.

Although 30 trees at minimum are required by VM0009 to validate an existing allometric equation, 86 trees were measured to validate allometry for this project. A list of the trees and their locations can be found in 'MR Annex D – Development of Allometry', Table 2.

MRR.99 A field protocol used to measure destructively sampled trees (or non-trees).

Please refer to Annex F - Standard Operating Procedure - Measuring Trees for Biomass Estimation in the Field

MRR.100 Justification that the field protocol for the destructive measurement method is conservatively estimates biomass.

MRR.101 For each allometric equation in the list, a figure showing all the descriptive measurements of biomass compared to predicted values from its selected allometric equation.

5.1.1 Validating Previously Developed Allometric Equations

MRR.102 A list of allometric equations cross validated.

Please refer to Annex F - Standard Operating Procedure - Measuring Trees for Biomass Estimation in the Field

MRR.103 For each, the number of trees (or non-trees) destructively sampled and the location where the measurements were made relative to the project area.

Please refer to Annex F - Standard Operating Procedure - Measuring Trees for Biomass Estimation in the Field

MRR.104 A field protocol used to measure trees (or non-trees) when developing the equation.

Please refer to Annex F - Standard Operating Procedure - Measuring Trees for Biomass Estimation in the Field

MRR.105 Justification that the field protocol for the destructive measurement method conservatively estimates biomass.

Please refer to Annex F - Standard Operating Procedure - Measuring Trees for Biomass Estimation in the Field

MRR.106 For each allometric equation in the list, the value of $\bar{E}$.

Please refer to Annex F - Standard Operating Procedure - Measuring Trees for Biomass Estimation in the Field

Table of Monitoring Report Requirements

MRR	Requirement	Applicability
MRR.1	A digital (GIS-based) map of the project area with at least the above minimum requirements for delineation of the geographic boundaries.	Applicable
MRR.2	The project start date.	Applicable
MRR.3	The <i>project crediting period start date</i> , end date and length.	Applicable
MRR.4	A list and descriptions of all instances in the group.	Not applicable. Not a group project.
MRR.5	A map of the locations or boundaries of all instances in the group indicating that all instances are in the same region.	Not applicable. Not a group project.
MRR.6	A digital (GIS-based) map of the accounting areas with at least the above minimum requirements for delineation of the geographic boundaries.	Applicable
MRR.7	For each project activity instance in the group, its project activity instance start date.	Not applicable. Not a group project.
MRR.8	For each project accounting area, the value of $\hat{t}_{PAI}$.	Not applicable. Not a group project.
MRR.9	A table of covariate values as of the project activity instance start dates and a description of how the values were determined including any interpolation or extrapolation methods.	Not applicable. No covariates were used.
MRR.10	Calculations of current baseline emissions $E_{B\Delta}^{[m]}$ as of the current monitoring period.	Applicable
MRR.11	Calculations of baseline emissions $E_{B\Delta}^{[m-1]}$ from prior monitoring periods.	Not applicable. First monitoring period.
MRR.12	Calculations of cumulative baseline emissions for each selected pool ($E_{B\Delta}^{[m]}$ and $E_{B\Delta}^{[m]}$) and undecayed carbon ($C_{B\Delta}^{[m]}$, $C_{B\Delta}^{[m]}$, $C_{B\Delta}^{[m]}$ and $C_{B\Delta}^{[m]}$), as of the current monitoring period.	Applicable
MRR.13	Calculations of cumulative baseline emissions from biomass $E_{B\Delta}^{[m]}$ for the current monitoring period.	Applicable

MRR	Requirement	Applicability
MRR.14	Calculations of cumulative baseline emissions from biomass $E_{B\ BM}^{[m]}$ for all prior monitoring periods.	Not applicable. First monitoring period.
MRR.15	The order of strata from lowest carbon stocks to highest carbon stocks based on the average across all pools.	Not applicable. Not Type U3.
MRR.16	Calculations for each step which are carried through from monitoring period to monitoring period.	Not applicable. Not Type U3.
MRR.17	Calculations of cumulative baseline emissions from biomass $E_{B\ BM}^{[m]}$ for prior monitoring periods.	Not applicable. Not Type U3.
MRR.18	An estimate of current baseline emissions from SOC $E_{B\ \Delta\ SOC}^{[m]}$ as of the current monitoring period.	Applicable
MRR.19	An estimate of cumulative baseline emissions from SOC $E_{B\ SOC}^{[m]}$ for the current monitoring period.	Applicable
MRR.20	Calculations of cumulative baseline emissions from SOC $E_{B\ SOC}^{[m]}$ for all prior monitoring periods.	Not applicable. First monitoring period.
MRR.21	An estimate of current baseline emissions from SOC $E_{B\ \Delta\ SOC}^{[m]}$ as of the current monitoring period.	Not applicable. Not Type U1.
MRR.22	An estimate of cumulative baseline emissions from SOC $E_{B\ SOC}^{[m]}$ for the current monitoring period.	Not applicable. Not Type U1.
MRR.23	Calculations of cumulative baseline emissions from SOC $E_{B\ SOC}^{[m]}$ for all prior monitoring periods.	Not applicable. Not Type U1.
MRR.24	An estimate of current baseline emissions from SOC $E_{B\ \Delta\ SOC}^{[m]}$ as of the current monitoring period.	Not applicable. Not Type U2 or U3.
MRR.25	An estimate of cumulative baseline emissions from SOC $E_{B\ SOC}^{[m]}$ for the current monitoring period.	Not applicable. Not Type U2 or U3.
MRR.26	Calculations of cumulative baseline emissions from SOC $E_{B\ SOC}^{[m]}$ for all prior monitoring periods.	Not applicable. Not Type U2 or U3.
MRR.27	An estimate of carbon stored in non-decayed DW $C_{B\ DW}^{[m]}$ for the current monitoring period.	Applicable
MRR.28	An estimate of cumulative baseline emissions from DW $E_{B\ DW}^{[m]}$ for the current monitoring period.	Applicable
MRR.29	An estimate of cumulative baseline emissions from AGMT $E_{B\ AGMT}^{[m]}$ for the current monitoring period.	Applicable

MRR	Requirement	Applicability
MRR.30	Calculations of cumulative baseline emissions from DW $E_{B\ DW}^{[m]}$ for all prior monitoring periods.	Not applicable. First monitoring period.
MRR.31	Calculations of cumulative baseline emissions from AGMT $E_{B\ AGMT}^{[m]}$ for all prior monitoring periods.	Not applicable. First monitoring period.
MRR.32	An estimate of carbon stored in non-decayed BGB $C_{B\ BGB}^{[m]}$ for the current monitoring period.	Applicable
MRR.33	An estimate of cumulative baseline emissions from BGB $E_{B\ BGB}^{[m]}$ for the current monitoring period.	Applicable
MRR.34	Calculations of cumulative baseline emissions from BGB $E_{B\ BGB}^{[m]}$ for all prior monitoring periods.	Not applicable. First monitoring period.
MRR.35	An estimate of carbon stored in non-decayed SOC $C_{B\ SOC}^{[m]}$ for the current monitoring period.	Applicable
MRR.36	Carbon stored in long-lived wood products $C_{B\ WP}^{[m]}$ after 100 years.	Applicable
MRR.37	Calculations to determine $C_{B\ WP}^{[m]}$.	Applicable
MRR.38	A map of the boundaries of any significant disturbance in the project accounting areas during the monitoring period.	Not applicable. No emissions events during monitoring period.
MRR.39	Evidence that plots were installed into these disturbed areas and were measured per section 9.	Not applicable. No emissions events during monitoring period.
MRR.40	A table of events when woody biomass was burned during the monitoring period, showing the weight of woody biomass in tonnes and the date consumed.	Not applicable. No biomass burning or charcoal production in project activities.
MRR.41	Carbon stored in long-lived wood products $C_{P\ \Delta\ WP}^{[m]}$ after 100 years.	Not applicable. No harvesting of wood products in project

MRR	Requirement	Applicability
		activities.
MRR.42	Scale reports or records of carbon in log production by wood product type $C_{P\ ty}^{[m]}$.	Not applicable. No harvesting of wood products in project activities.
MRR.43	Calculations to determine $C_{P\ \Delta WP}^{[m]}$.	Not applicable. No harvesting of wood products in project activities.
MRR.44	A description of project activities that have been implemented since the project start date and the estimated effects of these activities on <i>leakage</i> mitigation.	Not applicable. No leakage.
MRR.45	Calculated cumulative emissions from activity-shifting leakage for the current monitoring period $E_{L\ AS}^{[m]}$ and supporting calculations.	Not applicable. No leakage.
MRR.46	Calculated cumulative emissions from activity-shifting leakage for the prior monitoring periods $E_{L\ AS}^{[m]}$.	Not applicable. No leakage.
MRR.47	A description and justification of the change to the activity-shifting leakage area.	Not applicable. No leakage.
MRR.48	A map of the delineated boundaries.	Not applicable. No leakage.
MRR.49	Maps of the landscape configuration, including: a. Topography (elevation, slope, aspect); b. Recent land use and land cover (either a thematic map created by the project proponent or publicly available map); c. Access points; d. Soil class maps (if available); e. Locations of important markets; f. Locations of important resources like waterways or roads; and g. Land ownership/tenure boundaries.	Not applicable. No leakage.
MRR.50	A narrative describing the rationale for selection of activity-shifting leakage area boundaries. If the activity-shifting	Not applicable. No

MRR	Requirement	Applicability
	leakage area is smaller than the project accounting area or cannot be defined, justification for the size of the area.	leakage.
MRR.51	Results of a spatial analysis to demonstrate the activity-shifting leakage area is entirely forested as of the project start date.	Not applicable. No leakage.
MRR.52	Results of a spatial analysis to demonstrate the activity-shifting leakage area is no larger than the project accounting area.	Not applicable. No leakage.
MRR.53	The estimated value $\hat{p}_{L\ DEG}^{[m]}$ for the current monitoring period and supporting calculations.	Not applicable. No leakage.
MRR.54	The calculated value $\hat{p}_{L\ DEG}^{[m=0]}$ calculated for the first monitoring period.	Not applicable. No leakage.
MRR.55	Estimated cumulative emissions from market-effects leakage for the current monitoring period $E_{L\ ME}^{[m]}$ and supporting calculations.	Not applicable. No leakage.
MRR.56	Calculated cumulative emissions from market-effects leakage for the prior monitoring periods $E_{L\ ME}^{[m]}$.	Not applicable. No leakage.
MRR.57	Provide evidence in the form of GIS imagery, PRA evidence, or the baseline operator's management plan that management plans or land-use designations have not changed in the baseline operator's other lands.	Not applicable. No leakage.
MRR.58	Quantified GERs for the current monitoring period including references to calculations.	Applicable
MRR.59	Quantified GERs for the prior monitoring period.	Not applicable. First monitoring period.
MRR.60	A graph of GERs by monitoring period for all monitoring periods to date	Applicable
MRR.61	The confidence deduction $E_U^{[m]}$ and estimated standard errors used to determine the confidence deduction.	Applicable
MRR.62	Reference to calculations used to determine the confidence deduction.	Applicable
MRR.63	The linear model used to generate GERs for the current monitoring period.	Not applicable. Linear

MRR	Requirement	Applicability
		model not selected.
MRR.64	A graph of GERs from the linear model by monitoring period for all monitoring periods to date that used a linear model.	Not applicable. Linear model not selected.
MRR.65	A description of the reversal including which pools contributed to the reversal and reasons for its occurrence.	Not applicable. No reversal.
MRR.66	A description of the reversal including a summary of new data obtained in the reference area.	Not applicable. No reversal.
MRR.67	Quantified NERs for the current monitoring period including references to calculations.	Applicable
MRR.68	Quantified NERs for the prior monitoring period.	Not applicable. First monitoring period.
MRR.69	A graph of NERs by monitoring period for all monitoring periods to date.	Applicable
MRR.70	Reference to the VCS requirements used to determine the buffer account allocation.	Applicable
MRR.71	Reference to calculations used to determine the buffer account allocation.	Applicable
MRR.72	Quantified NERs for the current monitoring period including references to calculations.	Not applicable. Only one project accounting area.
MRR.73	Quantified NERs for the prior monitoring period.	Not applicable. Only one project accounting area.
MRR.74	A graph of NERs by monitoring period for all monitoring periods to date.	Not applicable. Only one project accounting area.
MRR.75	Quantified NERs by vintage year for the current monitoring period including references to calculations.	Applicable
MRR.76	Comparison of NERs presented for verification relative to NERs from <i>ex-ante</i> estimates.	Not applicable. First monitoring period.

MRR	Requirement	Applicability
MRR.77	Description of the cause and effect of deviations from <i>ex-ante</i> estimates.	Not applicable. First monitoring period.
MRR.78	List of parameters from Appendix H, their values and the time last measured.	Applicable
MRR.79	Quality assurance and quality control measures employed for each.	Applicable
MRR.80	Description of the accuracy of each.	Applicable
MRR.81	Documentation of training for field crews.	Applicable
MRR.82	If included in project activities, a description of procedures used to estimate the rate of biomass burning and charcoal production and demonstration that these estimates are conservative.	Not applicable. No biomass burning or charcoal production in project activities.
MRR.83	Documentation of data quality assessment such as a check cruise and plots of the data such as diameter distributions by strata or plot.	Applicable
MRR.84	Maps of a stratification (if any) and references to plot allocation.	Applicable
MRR.85	List of plot GPS coordinates.	Applicable
MRR.86	Description of plot size and layout (such as the use of nests and their sizes) for each carbon pool.	Applicable
MRR.87	If applicable, a detailed description of the process used to develop allometric equations, to include: a) Sample size b) Distribution (e.g. diameter) of the sample c) Model fitting procedure d) Model selection	Applicable
MRR.88	The estimated carbon stock, standard error of the total for each stock, and the sample size for each stratum in the area selected.	Applicable
MRR.89	Log export monitoring records and standard operating procedure in the project area, if there is commercial harvest in the project scenario.	Not applicable

MRR	Requirement	Applicability
MRR.90	Deviations from the measurement methods set out in Appendix B, per current VCS requirement.	Applicable
MRR.91	The frequency of monitoring for each plot for all plots – all plots should be measured for the first verification. All leakage plots should be measured every verification, and all proxy and project accounting area plots at least every 5-10 years, or after a significant event that changes stocks.	Applicable
MRR.92	A list of all selected allometric equations used to estimate biomass for trees and non-trees.	Applicable
MRR.93	For each selected allometric equation, a list of species to which it being applied and the proportion of the total carbon stocks predicted by the equation.	Applicable
MRR.94	For each selected allometric equation, indication of when it was first employed to estimate carbon stocks in the project area (monitoring period number and year of monitoring event).	Applicable
MRR.95	For each selected allometric equation, indication of whether was validated per sections 9.3.1.1 or 9.3.1.2.	Applicable
MRR.97	Documentation of the source of each selected allometric equation and justification for their applicability to the project area considering climatic, edaphic, geographical and taxonomic similarities between the project location and the location in which the equation was derived.	Applicable
MRR.97	A list of allometric equations validated by destructive sampling.	Applicable
MRR.98	For each, the number of trees (or non-trees) destructively sampled and the location where the measurement were made relative to the project area.	Applicable
MRR.99	A field protocol used to measure destructively sampled trees (or non-trees).	Applicable
MRR.100	Justification that the field protocol for the destructive measurement method is conservatively estimates biomass.	Applicable
MRR.101	For each allometric equation in the list, a figure showing all the descriptive measurements of biomass compared to predicted values from its selected allometric equation.	Applicable
MRR.102	A list of allometric equations cross validated.	Applicable

MRR	Requirement	Applicability
MRR.103	For each, the number of trees (or non-trees) destructively sampled to build the equation and the location where the measurement were made relative to the project area.	Applicable
MRR.104	A field protocol used to measure trees (or non-trees) when developing the equation.	Applicable
MRR.105	Justification that the field protocol for the measurement method to build the equation conservatively estimates biomass.	Applicable
MRR.106	For each allometric equation in the list, the value of $\bar{E}$.	Applicable