Validation Report of "Global Carbon Standard and Methodology for Assessment of Carbon Capture"

Document Prepared by Earthood Services Private Limited

Standard title	Global Carbon Standard
Version of the document	1.0
Scope of assessment	Assessment of Standard & Methodology
Sectoral scope(s)	14 (Afforestation and Reforestation)
Client	Carbify
Authors of GCS	Jaap Harmsma: Co-Founder Toby Wagenaar: Co-Founder William ten Zijthof: Co-Founder Michael Beers: Carbify Ecologist Pierre Trinh: Carbify Ecologist
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Work carried out by	Team Leader: Shreya Garg Technical Reviewer: Ashok Gautam Trainee: Waris Hooda
Name, position and signature of the approver of the validation report	 Dr. Kaviraj Singh Managing Director

Disclaimer

This report has been produced exclusively for the use of the Carbify and should not be relied on by other parties/entities to inform a potential investment decision in this. All information provided by Carbify for the validation assessment are assumed to be copies of official company documentation that conform to the originals.

The following report is a validation assessment of the “Global Carbon Standard and Methodology for Assessment of Carbon Capture” and not an assessment of the company Carbify or any of its subsidiaries. Information contained in this message is made available without any express or implied representation or warranty. Furthermore, Earthood Services Private Limited (ESPL) disclaim liability for any expense incurred, or any damage or loss sustained which may or could arise from direct, indirect, special, incidental, consequential or punitive damages and which may be attributable, directly or indirectly to the use of or reliance upon any information in this report.

Earthood completed this report based on review of information given in Global Carbon Standard document, virtual meetings, direct observations and finding clarifications and shall not be held liable for any miss re-presentation of the information whatsoever. Wherever possible, information gathered was cross-referenced with secondary sources.

Executive Summary

Carbify has contracted Earthood Services Private Limited to conduct a validation assessment of the Global Carbon Standard and Methodology for Assessment of Carbon Capture. The proposed Global Carbon Standard would serve as Carbify's standard and methodology, outlining how to calculate CO2 sequestration and convert it to Carbify Carbon tokens. The proposed standard falls under sectoral scope 14 Afforestation and Reforestation.

The purpose of the validation was to conduct an independent assessment of the proposed Global Carbon Standard and Methodology for Assessment of Carbon Capture. The information provided in the Global Carbon Standard document was found to be clear and appropriate. Validation was performed using a combination of document review, virtual meetings, and cross-checking with available literature.

Throughout the validation process, nine clarification requests (CLs) were raised as findings, but no corrective action requests (CARs) were needed. The Earthood Services Private Limited audit team's conclusions from the validation process have been closed. This is the first version of the Global Carbon Standard, and it will be further revised as necessary, provided that there is no deviation from the requirements of fundamental principles and materiality set in the current version of the Global Carbon Standard.

The validation team can confirm that:

- the proposed methodology correctly identifies the scope of the standard.
- the document includes all the required information of the standard.
- the document correctly includes a method for calculating CO2 sequestration.
- any uncertainties identified during the assessment of the methodology were satisfactorily addressed.
- all relevant information has been consistently applied within the applicable sections in the GCS document.

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Objective

Carbify contracted Earthood Services Private Limited to conduct an independent assessment of the proposed standard & methodology “Global Carbon Standard”. Independent Third-Party Validation of Methodology against the requirements set out in the Global Carbon Standard (GCS) document, Carbify Methodology Requirements, any other applicable requirements set out under the GCS Program and applicable GCS Standards / Procedures / Decisions / Guidance established. The purpose of the validation was to conduct an independent assessment of the proposed Global Carbon Standard and Methodology for Assessment of Carbon Capture. The information given in the Global Carbon Standard document was found to be clear, and appropriate.

Background

About Carbify

Global Carbon Standard (GCS) is being developed by Carbify. The standard document also serves as methodology for the quantification of CO2 sequestration. The standard introduces Carbify tree tokens (proof of carbon compensation certificates (PoCC), Carbify’s Tree tokens (“NFTrees") and $CO2 Tokens) and the standard formulation is based on blockchain technology. Carbify also provide other services under its carbon compensation options such as NFTrees and DApp. The GCS document provides information of development team.

About ESPL

Earthood Services Private Limited is accredited by Executive Board (EB) of Clean Development Mechanism (CDM) as a Designated Operational Entity (DOE). The accreditation has been granted for 11 different sectoral scopes including sectoral scope 14. Afforestation and Reforestation. The information about Earthood Services Private Limited’s accreditation and sectoral scope is available at the following UNFCCC interface https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0066. The personal worked on the methodology has sufficient knowledge and experience of working on the projects in sectoral scope 14 Afforestation and Reforestation. /10/

Standard assessment process and methodology

The assessment was undertaken by a competent team of Earthood and involved the following:

- the desk review of documents and evidence submitted by the client in context of the reference of standard, methodology, and other evidence.
- interactions with the client
- reporting assessment findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate.
- preparing a draft assessment opinion based on the raised findings and conclusions.
- technical review of the draft assessment opinion along with other documents as appropriate by an independent competent technical review team
- finalization of the third-party assessment opinion (this report)

Validation team, Technical Reviewer and Approver

Validation Team Members

#	Role	Last Name	First Name	Involvement in	
				Desk review	Findings
1.	Team Leader	Garg	Shreya	YES	YES
2.	Trainee	Hooda	Waris	YES	YES

Technical Reviewer and Approver

#	Role	Last Name	First Name
1.	Technical Reviewer	Gautam	Ashok
2.	Approval	Singh	Kaviraj

The Team Leader, Shreya Garg is qualified by ESPL in Validation and Verification of Clean Development Mechanism Requirements (CDM projects) and other voluntary schemes as VCS, CCB and GS. She has experience of working in carbon projects, including but not limited to CDM, VCS, GS and GCC projects of more than 10 years for various sectors and methodologies. She attained her master's degree in Climate Science & Policy. She has been qualified as per the evaluation process of ESPL for competency for CDM/VCS/GS/GCC. Thus, she has the relevant competence and work experience.

Waris Hooda is a Trainee (Validator) in this project. He has been working on carbon projects under CDM/VCS/GS/GCC programs at ESPL. He holds a master's degree in Geo-Information Science and Earth Observation and has worked on forest restoration projects and nature-based solutions projects. He has the relevant competence and work experience and has been qualified according to ESPL's evaluation process for competency in programs CDM/VCS/GS/GCC.

Technical Review of the project is done by Ashok Gautam. He is the Director of the Earthood Services Private Limited. He has done his M.Sc. in Environmental Science. He has an experience of more than 16 years working in the field of Climate Change and carbon market. He has been qualified as per the evaluation process of ESPL for competency for CDM/VCS/GS/GCC. Thus, he has the relevant competence and work experience.

Validation assessment

Method and criteria

The proposed information given in standard & methodology document was checked taking reference of requirements of other carbon registries to form a validation opinion which is complete and correct. The validation assessment was conducted using Earthood's internal procedures. The methods and criteria have been given in this report in above section "standard assessment process and methodology".

No sampling was required during the methodology validation.

Resolution of findings

The findings may be of following types:

CAR – Corrective Action Request, it is raised when issues are identified that require further elaboration, research or expansion and modification in the document.

CL – Clarification Request, it is raised if information is insufficient or not clear enough to form an opinion.

FAR – Forward Action Request, it is raised to identify issues that will be addressed and resolves in further revisions of the document. Since this is the validation of the Standard as well as methodology document and all the information were required to be validated completely, no FARs were raised.

During the present validation, 09 CLs, 01 FAR and no CARs were raised and successfully closed. The list of findings and their resolution are presented at Appendix IV of this report.

Definitions

- Carbon Debits: Carbify provides tokenized carbon debit tokens, which only account for the CO2 that has been offset. This means that there is no distribution or assignment of carbon in advance. According to Carbify, this is the most accurate and fair way to calculate and award projects that offset CO2 emissions. Carbify provides carbon debit tokens in the form of digital tokens that represent the amount of CO2 that has been reduced or eliminated through offsetting measures.
- Additionality: Additionality is the concept of evaluating whether a proposed action or activity will bring about an additional positive outcome in comparison to a predetermined reference point, known as the baseline. Essentially, it is a way to determine if a proposed activity is superior to the baseline scenario.
- Baseline Scenario: A baseline scenario for CO2 measurements is a reference point or starting point used to measure the amount of CO2 emissions from a particular source or activity. It's a prediction of the emissions that would occur in the absence of any interventions, such as new technologies, policies, or regulations. The baseline is used as a comparison point to measure the effectiveness of different strategies or projects that are implemented to reduce CO2 emissions.
- Carbon Emissions: To understand the carbon emissions of a company, carbon accounting is employed. This involves using various techniques to calculate the amount of carbon dioxide equivalents emitted by a business. These calculations are being used to create our tokenized carbon debits. The demand for these debits is high due to the importance of reducing carbon emissions for businesses and consumers.
- Carbon Offset: A carbon offset, also known as a tokenized asset representing the actual CO2 already done in the past, is a type of asset for reducing or eliminating greenhouse gas emissions from the atmosphere. Governments, businesses, or individuals can use this token to offset the emissions they produce in other areas. The carbon offset is earned through emission reduction projects.
- Compliance Market: The compliance market operates in a way where government regulations require states and industries to follow specific carbon regulations. This approach is known as a top-down approach.
- Voluntary Carbon Market: In voluntary carbon markets, organizations and industries can choose to offset their carbon emissions by investing in projects that remove carbon from the atmosphere. This approach is based on grassroots efforts. In voluntary carbon markets, organizations and industries can choose to offset their carbon emissions by investing in projects that remove carbon from the atmosphere. This approach is based on grassroots efforts.
- Project Boundaries: A project's boundaries determine the scopes, limits, and parameters of the project. It defines what is included in the project and sets clear expectations for what is accomplished within the specified timeframe and budget. Project boundaries also establish the project's objectives, deliverables, and milestones, and outline the roles and responsibilities of all team members involved. This helps to ensure that everyone involved in the project has a clear understanding of what is expected of them and what the project aims to achieve.

The Standard document applies all the generic terms and definitions. Terms are correctly defined in the standard. The definitions were found to be consistently included in the methodology text, along with the reference. The definitions are concise and would aid in providing context of the standard and methodology and enhance the readability.

Generation of carbon tokens

The proposed Global Carbon Standard aims to provide Carbify carbon tokens to afforestation and reforestation project. As per the GCS's CO2 sequestration methods, sequestered CO2 is converted into Carbify Carbon $CO2 tokens in a ratio of one (1) $CO2 Token for every one (1) kilogram of CO2 absorbed by a tree which is calculated using from tree density. $CO2 tokens are issued in proportion to the average yearly CO2 sequestration of a given tree.

Global Carbon Standard & methodology document

The assessment of the proposed standard & methodology has been completed by reviewing GCS standard, GCS other document and through independent literature review. Clarification and corrective actions raised during finding rounds were satisfactorily addressed by Carbify. Please refer appendix IV for details.

Some of the characteristics of the proposed Global Carbon Standard (GCS) are mentioned below:

- The GCS document is drafted with a concise and logical approach, bearing all the relevant sections applicable clear to understand for readers.
- Fundamental principles of baseline, additionality have been included in the standard.
- Standard has also considered non-permanence risks associated with A/R project.
- All the technical terms have been defined in the standard and readers and project owners.
- Calculations of total CO2 sequestration and conversion to carbon tokens have been transparently described in the Carbify CO2 sequestration calculation method excel sheet /6/.
- All the steps in calculations have been correctly included and readers and trace the calculation through CFSD.
- Carbon pools and GHG sources are given in the standard.
- Illustrative examples have been given in the additionality section of the GCS document that will help readers and project owners to correctly identify additionality in their projects.

Upon completion of the assessment of the GCS document, Earthood concludes that:

- the GCS document serves as both Global Carbon Standard and methodology for calculation of CO2 sequestration,
- the scope and applicability are correctly identified,
- the terminologies used in the GCS document are appropriately defined and used consistently throughout the document,
- the criteria and procedures are drafted in an easy-to-understand manner, and can be applied readily and consistently by readers,
- the structure of GCS document is well defined and include all standard rules and requirements.

Scope and applicability conditions

GCS provides standard and methodological guidance for sectoral scope 14. Afforestation and Reforestation. The sectoral scope aligns with UNFCCC sectoral scope identification. The GCS is a document that serves as both standard and methodology and is applicable quantification of carbon tokens within voluntary carbon market.

Projects under voluntary market with location all over the world are applicable under GCS. The GCS proposes quantification of CO2 over time by different tree species, using parameters such as age, height and diameter of trees, and soil characteristics. GCS is applicable to both small-scale and large-scale project. However, it is to be noted that the project scale itself is not strictly defined by the Carbify. The main principle of GCS is additionality. The standard highlights correct identification of additionality in all project types such as reforestation, orchards, and agroforestry.

The allocation of CO2 tokens to the project owners will be given for 20 years. The start date of the crediting of the CO2 tokens is the date of onboarding, which is identified through signing onboarding agreement, in case the project has already started. The start date will be determined from the date of commencement the additional activities for projects in which such activities have not commenced at the date of onboarding. The amount of CO2 tokens that will be credited will correspond to how much CO2 has been absorbed since the plants were planted.

The applicability conditions provided in the proposed GCS document are assessed, and listed below:

As per the project requirements, the project developer who wish to achieve Carbify tokens will first requires submitting information through a google onboarding form available on Carbify website. The form request for preliminary information such as name, e-mail, ID Number, and address of the applicant, contact details. Project information such as project description, land area, geo-coordinates, and number, species, and age of the trees or plants. Other important information asked in onboarding form is proof of long-term rights over the land by project owner, proof of tree purchase.

Carbify has also other specific onboarding requirements. It is also mentioned that projects with a plant lifespan below 20 years from the date the project is onboarded will not be considered.

Carbify will analyse deforestation rate in the project area using the historic satellite data. Prior to the start of the project and/or the Additional Activities, the project site did not experience any deliberate deforestation for 5 (five) years.

The project area shall only plant native species to the area, especially agroforestry and orchards projects. Plantation of exotic species in reforestation project are also allowed, having demonstrated that they are non-invasive species.

Carbify also address avoidance of double counting by checking project information in various carbon registries for carbon credits. This requirement does not prevent the projects from engaging with such registries for purposes other than CO2 compensation.

The project owner shall sign onboarding agreement with Carbify which covers all project requirements, and project owner’s and Carbify’s obligations towards the project as well as the consequences of any potential mismanagement of the project.

Consideration of non-permanence risk

It is stated in the GCS that onboarded projects are required to plant an additional 10% of each plant species, or to leave 10% of each plant species without tokenization. In the next level, in case the above non-permanence criterion is not met, the Carbify carbon tokens issued to project owner will not be functional and will be “black-listed” by Carbify.

Earthood concludes that the scope and applicability criteria defined by the Carbify are clear and appropriate.

Project boundary

The demarcation of the project boundary in GCS is done through GIS mapping, for which Carbify has developed a basic manual. The manual provides a step-by-step approach to identifying and mapping the project boundary. The GCS document also highlights the importance of identifying the vegetation type and the number of trees. Information on the GIS coordinate system, project area ownership information, and the collection of spatial data has been provided in the GCS document.

In Earthood’s opinion, sufficient procedures have been provided in the GCS for the identification of the project boundary. The spatial extent of the project boundary includes the demarcated land area where plantation activities will occur. This will be validated using recent technologies like Remote Sensing & GIS; however, these technologies will not be used in monitoring and measurements. Project owners and readers would be able to demarcate the project boundary with the help of the basic manual.

The carbon pools considered in GCS are above and below-ground biomass, dry weight of the tree, and soil organic carbon stock (SOCS). The GHG gas applicable is CO2.

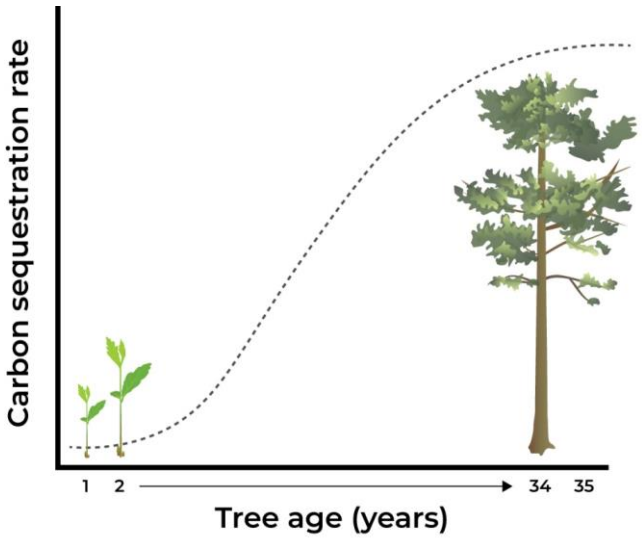

Figure 1 Showing carbon pools.

Baseline scenario

The baseline scenario in GCS consists of the current rate of sequestration; and the current amount of carbon that is stored in the existing vegetation. It is stated in the GCS document that “in the event project activities have started prior to calculating the baseline, the project needs to estimate the above-ground biomass using historical information about vegetation

type and satellite imagery for estimating vegetation density". Carbify has developed Carbify Sequestration Factor database (CSFD) for the calculation of baseline carbon sequestration. The database requires input of diameter at breast height, height of tree values.

In Earthood's opinion, the identification of baseline scenario is well-defined and appropriate. The procedure of data collection and analysis depicted is also transparent and non-complex.

Additionality demonstration

Additionality has been deeply focused principle in the GCS. The project wishes to get registered in GCS must demonstrate additionality component of additional sequestration or emission reduction through implementation of project activities. The eligible project activities under GCS are:

- tree planting,
- improving soil characteristics,
- enhancing biodiversity through agroforestry methods,
- avoiding monoculture by positively affecting biodiversity,
- and others.

The GCS requires the project owner to confirm additional activities planned in the project area that would benefit the project. These activities should not be mandatory in the project location, and no land use change or deforestation should have taken place in the past. Carbify will analyze, on a case-by-case basis and in accordance with the specific circumstances of every single project, whether each project complies with the additionality requirement or not.

It is concluded that the concept of additionality proposed in the GCS is appropriate and complete. Furthermore, the illustrative example given in the GCS will help readers and project owners to present the additionality argument correctly.

Project scenario

The planned vegetation type requires estimation of future tree densities, age, and area size to calculate carbon dioxide sequestration. As stated in the GCS, these values will provide an initial estimate of the annual carbon yield over the next 20 years. If the project activities have already commenced before the application, the data can be based on randomly distributed sample plots.

Leakage

The VVB acknowledges that given the methodology scope in terms of geographical extent and application the possible leakages are not sufficiently explained. it was explained by Carbify that they will include reasonable leakage possibilities and explanation for leakages as the program matures. The methodology would need to update the leakage component in future, for which FAR 01 is raised.

Carbon benefit

Carbon pools and gases will be considered same for baseline, project and leakage scenarios. The total carbon stock calculated is called carbon benefit and estimated as follows:

$C_B = C_{project} - C_{base} - C_{leak}$

Where,
C_B = Carbon Benefits
C_{proj} = carbon stock or sequestration rate in the project scenario
C_{base} = carbon stock or sequestration rate in the baseline scenario
C_{leak} = carbon emission caused by leakage

Estimation of CO2 Tokens

CO2 tokens will be estimated after accounting the carbon benefit, which is net carbon absorbed/sequestered over the time. CSFD will be used to calculate the CO2 tokens. The unit that Carbify pegs to the carbon tokens is in kilograms per year (kg/year).

Carbify formula

Fruit tree species

Fruit trees are becoming increasingly important in the development of forest landscape restoration (FLR) and the socio-economic growth of agroforestry communities worldwide. Equations have been provided for a few species, and new species will be added over time.

Cocoa

Cacao (*Theobroma cacao*) is a native fruit bearing species in Latin America…

Beer et al. [2] formulated an allometric equation for calculation of AGB of cacao trees.

$$AGB = -0.019 + (0.0349 * BA)$$

With:

BA: Tree Basal Area [m^2] = $3.142 * (\frac{DBH}{200})^2$ (according to FarmForest Australia [3]), with DBH is in turn tree stem diameter/ diameter at breast height. The incremental DBH is 0.62 cm/year.

$$BGB = exp\,(-1.0587 + 0.8836 * ln\ ln\,(AGB)\,)$$

Cordia

$$AGB = exp\,(2.557 + 0.94 * ln\ \ (\rho * D^2 * H)\,)$$

With:

AGB: aboveground biomass [t/ha]

ρ: wood density [kg/cm3]

D: stem diameter/ diameter at breast height [cm]. The incremental

diameter is 2.38 cm/year

H: height [m]. The incremental height is 1.29 m/year

It is to be noted that at the time of assessment the formulae provided (for two tree species stated above) would result in conservative estimates. It is recommended that the methodology developer keep in mind the conservativeness aspect while expanding the calculations for other tree species.

Monitoring

The monitoring of the project area will be done using an allometric equation. In the case of a project activity involving avoided deforestation, monitoring will be conducted at least once a year from the date of onboarding until the end of the 20-year contract period.

Coaching and support Educational Pillar

The VVB confirms that Carbify will provide access to key concepts such as additionality, carbon sequestration, and GHG mitigation measures. In the development of the project, participants will have access to relevant reading materials and expert support. Furthermore, Carbify aims to foster a better understanding of sustainability and low-carbon economic development, and will be able to address any concerns related to its work and vision.

Assessment conclusion

Earthood Services Private Limited (Earthood) has performed a validation of the proposed Global Carbon Standard document /1/. The document serves as both the Global Carbon Standard and the Methodology document for Assessment of Carbon Capture. The validation was performed based on ESPL's internal procedures and the fundamental requirements set for any carbon registry standard. Principles such as baseline, additionality, non-permanence, and monitoring parameters were assessed to review the methodology presented in the Global Carbon Standard document. Supporting documents such as the CO2 sequestration calculation method document, tree tokenisation agreement, and other documents listed in appendix II were checked to form an opinion on the correctness and consistency of the information throughout all Carbify documents.

The methodology falls within Sectoral Scope 14 Afforestation and Reforestation. This is the first version of the Global Carbon Standard, and it will be further subjected to revisions as and when required, provided that there are no deviations from the requirements of fundamental principles and materiality set in the current version of the Global Carbon Standard.

Earthood Services Private Limited has informed Carbify of the validation findings and outcome through both the draft validation report and the final validation report. The final validation report contains the information regarding the fulfillment of the requirements for validation, as appropriate.

Earthood Services Private Limited applied the following validation process for the Carbify standard and methodology, using a competent validation team:

- the desk review of documents and evidence submitted by Carbify,
- follow-up virtual interview, whenever required,
- reporting audit findings with respect to clarifications and non-conformities and the
- closure of the findings, as appropriate and
- preparing a draft validation opinion based on the auditing findings and conclusions
- technical review of the draft validation opinion along with other documents as
- appropriate by an independent competent technical review team
- finalization of the validation opinion (this report)

The review of the Global Carbon Standard, supporting documentation and subsequent follow-up actions (virtual interactions) have provided Earthood Services Private Limited with sufficient evidence to determine the fulfilment of stated criteria.

Internal Quality Control

The validation report prepared by the assessment team was reviewed by an independent technical review team to confirm if the internal procedures established and implemented by Earthood were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of the technical review team were independent of the due diligence team.

The technical review process may accept or reject the validation opinion or raise additional findings in which case these must be resolved before submitting the final report. The technical review process is recorded in the internal documents of Earthood, and the additional findings gets included in the report.

The final report approved by the technical reviewer is authorized by the Managing Director and issued to Carbify.

Validation Opinion

Carbify contracted Earthood to perform a validation assessment of the Global Carbon Standard and Methodology for Assessment of Carbon Capture. The scope of the assessment was to independently assess the proposed standard and methodology. The information provided in the Global Carbon Standard document was found to be clear and appropriate.

The validation conclusion was based on the review of documents submitted by Carbify and independent desk review. The methodology falls within Sectoral Scope 14 Afforestation and Reforestation. Earthood informed Carbify of the validation outcome through the draft and final validation reports. The final validation report contains information on the fulfillment of validation requirements, as appropriate.

Earthood is of the opinion that the proposed document, consisting of the Global Carbon Standard and Methodology for Assessment of Carbon Capture, provides clear and complete information on the calculation of carbon sequestration. The method for achieving carbon tokens is accurately described. Therefore, the proposed Global Carbon Standard document is recommended for use in the calculation of carbon sequestration and claiming of carbon tokens.

Dr. Kaviraj Singh

Managing Director

Earthood Services Private Limited

Date: 02/05/2023

Place: Gurgaon, Haryana

Appendix I: List of abbreviations

ABG	Above Ground Biomass
BGB	Below Ground Biomass
CAR	Corrective Action Request
GCS	Global Carbon Standard
CDM	Clean Development Mechanism
CL	Clarification Request
CO2	Carbon dioxide
CSFD	Carbify CO2 Sequestration Factor Database
DOE	Designated Operational Entity
EB	Executive Board
ESPL	Earthood Services Private Limited
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Greenhouse Gases
GS	Gold Standard
RS	Remote Sensing
SOC	Soil Organic Carbon
VCS	Verified Carbon Standard
UNFCCC	United Nations Framework Convention on Climate Change

Appendix II: List of documents referred

#	Title	Reference of the document	Source
1.	Global Carbon Standard & Methodology	Version 1.0 Dated 01/05/2023	Carbify
2.	Carbify Formula	-	Carbify
3.	FINAL GCS Questionnaire for projects	-	Carbify
4.	FINAL Carbify research report template	-	Carbify
5.	FINAL Carbify Legal Agreement	-	Carbify
6.	GCS CSFD	-	Carbify
7.	GCS basic mapping instruction document	-	Carbify
8.	UNFCCC CDM Validation and Verification Body Standard for project activities https://cdm.unfccc.int/Reference/Standards/index.html	Version 3.0	UNFCCC website
9.	https://Carbify.io/	Last accessed on 01/05/2023	Carbify website
10.	List of CDM DOEs https://cdm.unfccc.int/DOE/list/index.html	Last accessed on 01/05/2023	UNFCCC website

Appendix III: Competence of team members and technical reviewers

Competence Statement			
Name	Shreya Garg		
Country	India		
Education	M.Sc. (Climate Science & Policy), TERI University		
Experience	9 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS.I.A., AMS.I.C., AMS.I.D., AMS.I.F., AMS.II.D., AMS.II.G., AMS.II.J., AMS.III.AV., AMS.III.BL, ACM0002, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.1, TA 1.2, TA 3.1, TA 13.1)		
Reviewed by	Shifali Guleria	**Date**	21/12/2022
Approved by	Deepika Mahala	**Date**	21/12/2022

Competence Statement			
Name	Ashok Gautam		
Country	India		
Education	M. Sc. (Environmental Sciences) M. Tech. (Energy & Environmental Management)		
Experience	16 Years +		
Field	Energy, Climate Change & Environment		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS-I.A., AMS-I.C., AMS-I.E, AMS-II.D., AMS-II.G., AMS-III.E., AMS-III.H., AMS-III.Q, AMS-III.Z., AMS-III.AV., AMS III.AR, AM0029, AM0025, AM0056, ACM0001, ACM0002, ACM0004, ACM0012, ACM0006, AM0018, ACM0017, ACM0009, AM0034, AMS.I.B, ACM0016, AMS-III.BL, AMS-II.L, AMS-I.I., AMS-III.A.O., ACM0010		
Local expert	YES (India)		
Financial Expert	YES		
Technical Reviewer	YES		
TA Expert	YES (TA 1.1, TA 1.2, TA 3.1, TA 13.1)		
Reviewed by	Shifali Guleria	**Date**	14/12/2022
Approved by	Deepika Mahala	**Date**	14/12/2022

Competence Statement			
Name	Waris Hooda		
Education	Master of Science (Geo-Information Science and Earth Observation) Bachelor of Engineering (Computer Engineering)		
Experience	9 months		
Field	Geo-Information Science and Earth Observation (Specialization: Geo-informatics)		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Methodology Expert	NO		
Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Trainee	Yes		
Reviewed by	Shifali Guleria (Quality Manager)	**Date**	08/12/2022
Approved by	Deepika Mahala (Technical Manager)	**Date**	15/12/2022

Appendix IV: Validation findings

CAR: Corrective Action Request
CL: Clarification Request
FAR: Forward Action Request

Table 1. FAR from this assessment

FAR ID	01	**Section no.**	GSC	**Date :** 05/04/2023
Description of FAR				
1. At the time the validation, estimating methods were available for Cordia, Cocoa, Dedalerio, Guapuruvu, Inga, Pau Formiga, Pau-D'alho, Banana, Chestnut, Cupaucu, and Peroba. It is anticipated that in the future, the other species will be mapped using peer-reviewed and reliable sources, given the sources used for calculation and mapping of these two native species were carefully examined. 2. Leakages within the project boundaries are not sufficiently addressed, and this must be taken into account as the technique develops.				
Project participant response				**Date :** DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				**Date:** DD/MM/YYYY

Table 2. CL from this verification

CL ID	01	**Section no.**	GCS	**Date :** 07/02/2023
Description of CL				
The folder contains a variety of documents, including the Final Global Carbon Standard v3, methodology, and a guidebook. Please guide on which documents the project developer should start with. Also, if the Final Global Carbon Standard v3 is the main document, providing specific methodology could make it more user-friendly.				
Project participant response				**Date :** 11/02/2023
GCS is a set of codes of conduct. in which Carbify will evaluate whether the project developer can meet sufficient requirements. So we will apply GCS first, then proceeding to Methodology to get further details, and then read the guidebooks to know the procedure of operation. Our methodology is already more detailed than the GCS.				
Documentation provided by project participant				
DOE assessment				**Date:** 17/02/2023
First document to be referred is the Final Global Carbon Standard v3 and then if project fulfils basic criteria given in document, then the methodology is checked. CL 01 closed based on clarification provided by project participant.				

CL ID	02	Section no.	GCS	Date : 07/02/2023

Description of CL

It is requested to submit following documents/ information for the assessment:

1. Excel sheet & templates as mentioned in methodology.
2. Carbon Dioxide Sequestration calculation method.
3. Equations and references used to calculate the sequestration rate for AGB and BGB. (Mentioned in Step 2 measurement of baseline scenario)
4. Carbify Sequestration Factor Database (CSFD).
5. Carbify DApp

Project participant response | **Date :** 11/02/2023

1 – 3 can be found in the google file we shared with you. They are part of the documents.

4. we also added CSFD in the folder.
5. Pictures of the dApp are also uploaded in the folder.

Documentation provided by project participant

1. CSFD
2. Picture of dApp

DOE assessment | **Date:** 17/02/2023

1. Only one excel template for CSFD is received however multiple other templates are discussed in methodology but not provided. Eg. Project activities to carbon in Step 4 (Project scenario), also in Step 6 (Carbon Benefit) specific equation is used to calculate the Carbon Benefit in excel sheet.

   It is still not clear which parameters are used in leakages. An excel template with those parameters would help to check the same.

2. CSFD received.
3. Pictures of dApp are received. Is the app available in public domain at present.

Hence, CL#02 open.

Project participant response | **Date:** 21/02/2023

1. The leakage is mostly from the impacts of agricultural activities. So in our excel sheet, the carbon leakage of a tree can be estimated as below:

   C-leakage (kgC/tree) = **[kg of fruit per tree]** x **[kgC/kg fruit]**

   Currently, we do not calculate any leakages other than the one above

2. No, the dApp is in internal testing right now. But will be publicly available at carbidash.carbify.io in the near future

Documentation provided by project participant

DOE assessment | **Date:** 24/02/2023

1. Following are few of the queries related to CSFD:
    a. CSFD is very well designed however it is not clear from the columns if the equation of individual tree species is mapped or not. Also, the references shared for these individual species are only for Above Ground Biomass (AGB). Similarly, if the multiplication factor is applied for Below Ground Biomass (BGB), Soil Organic Carbon (SOC), Emissions, Leakages, etc. in CSFD or not?
2. Noted, the app will be available at carbidash.carbify.io once internally tested.

Hence, CL#02 open.

Project participant response	**Date:** 11/04/2023
We have updated our Main document with appropriate response and explanation.	
Documentation provided by project participant	
DOE assessment	**Date:** 13/04/2023
Noted. The main document is updated. CL 02 closed based on clarification provided by project participant.	

CL ID	03	**Section no.**	GCS	**Date :** 07/02/2023

Description of CL

File Name: Final methodology description

In Methodology Introduction section (Certain requirements for the project):

1. Please provide some explanation how the term of 5 years is decided to check if the site is deforested or not? Also, how the historical records will be checked for the site is checked?
2. Although the native vegetation varies from region to region but please provide reference/database as to how native species are mapped for the area of interest.
3. This is the case of achieving carbon tokens from emission removals achieved by the project. However, what if project developer wants to target SDGs under Gold Standard or VERRA for his/ her project and simultaneously registering the project under Carbify for carbon tokens only. Does the Carbify Carbon Standard have a scope of qualifying project simultaneously in two standard?

Project participant response	**Date :** 11/02/2023

1. The 5 years have been decided to avoid deforestation and replanting for CO2 and will always be checked via the historical data with open-source satellite data. There are various sources that we can access for example: USGS, Sentinel, or plantet labs.
2. https://restoration.elti.yale.edu/resource-search one of many sources for localization of native species specific to Brazil, we then isolate it down by region Para, matta grosso, amazonia,etc. once that area is isolated we look at elevation and climate data to see which species, within that region, with those specific parameters are conducive to native habitat, we then use this data and compare it to the local company we have planting. if all of this data agrees. We compiled this list of trees to establish our planting group.
3. It is forbidden to register the project under different standards. We believe that our GCS is superior to verra/gold standard and we hate carbon credits. What we will do is we will check the public registries from verra/gold standard once per year to make sure the project has not broken the agreement, if so there will be a fine and we will stop the issuing of carbon debits. As we only issue them afterwards, the damages will be limited.

Documentation provided by project participant

No Documents required for CL 03
DOE assessment **Date:** 17/02/2023
1. Although the project participant provided clarification as to how the historical records will be check for the project site however, explanation to the term 5 years is still not provided. Why the term cannot be greater than 5 years or less than 5 years is not considered. 2. Multiple data sources will be used for localization of native species. Elevation and climate data will also be used to check is if the environment is conducive or not. 3. The projects will be checked if they are registered with other registries once a year. Hence, CL#03 open.
Project participant response **Date :** 21/02/2023
1. We specified 5 years as the sufficient period, within which any massive disturbance to the local environment, whether through mining or logging, would be neutralized, thus allowing to stabilize soils and diminish any potential contamination. When the land is normalized, we will get the optimal growth and minimal risk of mortality with our trees.
Documentation provided by project participant
DOE assessment **Date :** 24/02/2023
1. Based on the clarification provided and a similar time period of 7-10 years taken by other registries, the term of 5 years is a sufficient period. CL 03 closed based on clarification provided by project participant.

CL ID	04	**Section no.**	GCS	**Date :** 07/02/2023
Description of CL				
File Name: Final methodology description Step 1: Project Boundaries 1. Please provide an explanation how Carbify will deal with Geometry inconsistencies in the mapped boundaries? 2. Please provide detailed information on stratification of project site where there is a combination of cash crops and/or trees that form a homogeneous area on a larger scale.				
Project participant respo0nse				**Date :** 11/02/2023

1. Quality control checks: Carbify will conduct regular quality control checks of the mapped boundaries to ensure that they are accurate and up-to-date. We might also use satellite imagery or aerial photography (drones) to verify the boundaries and identify any discrepancies. Correction of errors: If any errors are identified in the mapped boundaries, Carbify will work with the project developers or other stakeholders to correct them. This could involve adjusting the boundaries in the mapping software or updating the records used for carbon offset calculation. Regular monitoring and updates: Carbify will also conduct regular monitoring of the mapped boundaries to ensure that they remain accurate over time and that any changes are captured and incorporated into the carbon offset calculation.
2. Stratifying a project site with cash crops and trees involves defining the study area and relevant criteria, conducting a field survey, analyzing data, finalizing the stratification, and mapping the boundaries of each stratum with unique identifiers.

Documentation provided by project participant	
No Documents required for CL 04	
DOE assessment	**Date:** 17/02/2023

1. Carbify will use satellite imagery or aerial photography (drones) to accurately map the geometric boundaries and remove inconsistencies.
2. The stratification will be done using field survey and then analysing the data.

CL 04 closed based on clarification provided by project participant.

CL ID	05	**Section no.**	GCS	**Date :** 07/02/2023
Description of CL				

File Name: Final methodology description

Step 2: Baseline Scenario

1. Please provide references to the published literature for calculating carbon sequestration rate that vary for different forest and vegetation types and agricultural uses. Also, how this is measured over temporal scale along with uncertainty in estimates.
2. Please provide equations and reference to historical data for total biomass and dry weight.

Project participant response	**Date :** 11/02/2023

1. https://www.researchgate.net/publication/341978163_Soil_organic_carbon_sequestration_potential_of_reforesting_riparian_areas_in_an_agricultural_watershed_in_the_state_of_Sao_Paulo_Brazil?_iepl%5BgeneralViewId%5D=1NOOq98RFNqzoDPKvrnyekRjeZgG91Rmb2pm&_iepl%5Bcontexts%5D%5B0%5D=searchReact&_iepl%5BviewId%5D=CjFHX0m8I4g0bZ7AOmGqtgXXxSxZZMyJo4uA&_iepl%5BsearchType%5D=publication&_iepl%5Bdata%5D%5BcountLessEqual20%5D=1&_iepl%5Bdata%5D%5BinteractedWithPosition20%5D=1&_iepl%5Bdata%5D%5BwithEnrichment%5D=1&_iepl%5Bposition%5D=20&_iepl%5BrgKey%5D=PB%3A341978163&_iepl%5BtargetEntityId%5D=PB%3A341978163&_iepl%5BinteractionType%5D=publicationTitle

2. In our approach, each species has unique equation for total biomass and dry weight. This is a equation for acai...

For palm trees (Acai and American oil palm),

$$\hat{B}_{tree}\ (kg) = 0.001 * \left(\exp\left(0.9285 * \ln\left(DBH^2\right) + 5.7236\right) * 1.05001\right)$$

For other trees:

$$\hat{B}_{tree}\ (kg) = 0.0704 * (\rho * DBH^2 * H)^{0.9701}$$

where DBH is in cm, ρ is wood density in g/cm^3, H is total plant height in meter.

https://pdfs.semanticscholar.org/c73e/880f1395d7b36a966cae8b770dfc10f38d43.pdf

Documentation provided by project participant

DOE assessment	**Date:** 17/02/2023

1. We request you to kindly provide the digital copy of the document for reference. Multiple attempts were made to download the same, but documents seem to have limited access.
2. Does Carbify uses only the allometric equations to estimate carbon as the provided reference literature uses remote sensing technique to remove the uncertainties and improving upon accuracy.

Hence, CL#05 open.

Project participant response	**Date:** 21/02/2023

1. Here is the list of some typical equations. The list would be updated further when Carbify conduct new species' research.
2. Allometric equations are utilized as primary methods. But in fact, these models are not always available. In that case, we would thus use other approaches such as documented remote sensing technique or look up reliable appendices/ databases, as the alternatives.

Documentation provided by project participant

DOE assessment	**Date:** 24/02/2023

1. Noted. Research is an ongoing process and the equations are noted CSFD however, it would be best if the same is mapped to cell values in CSFD and proper references/ citation are added in the document.
2. In current scenario of tech world, the agroforestry is well assisted by remote sensing based on spatial and temporal availability of data however, even in remote sensing based on method opted i.e. NPP based or biomass estimation data uncertaininty and error propagation is biggest challenge. Also, cloud cover has always been big challenge to remote sensing. A few of the techniques like SAR data fusion may help in dealing with the issue but require high end computation machines and data availability. In addition to that SAR/ LiDAR data from most the satellite is not publicly available. How would carbify deal with remote sensing aspect? The issue came from one of the references which follows NPP method and other reference which uses biomass based approach which uses LiDAR data.

Hence, CL#05 open.

Project participant response	**Date:** 11/04/2023
Remote Sensing and GIS data shall only be used for initial site assessment and identification of boundaries to site. appropriate areas in CSFD have been updated to reflect this.	
Documentation provided by project participant	
DOE assessment	**Date:** 13/04/2023
Noted. Remote Sensing and GIS will only be used for initial assessment and boundary mapping of the sites. CL 05 closed based on clarification provided by project participant.	

CL ID	06	**Section no.**	GCS	**Date :** 07/02/2023
Description of CL				

File Name: Final methodology description

Step 4: Project Scenario

“Carbify provides a standardized, affordable, and case-specific model applied and adopted by large or small scale projects with limited funding. In this model, carbon sequestration for reforestation, agroforestry, and related projects is estimated by considering above-ground (AGB) and below-ground (BGB) biomasses of a specific plant species, which meet Carbify's requirements as already mentioned. By providing a more conservative estimate of the carbon yields, Carbify's model is able to ensure the stable amount of carbon sequestered and thus accurately represent the total quantity of tokens that the projects gain in fact.”

Please provide clarifications for:

1. Although one single model cannot fulfill all requirements and the mentioning of case-specific model is valid but please provide some examples of case specific methods for clarity.
2. Does Carbify uses single model/method of calculation for reforestation, agroforestory, or other projects?
3. Please provide explanation to conservative estimate of carbon yields. How does Carbify account for uncertainty in estimates.

Further in the same section a few more points require clarification:

1. How is data archived and its archiving frequency?
2. When the lease contract is for 10 years then why 20-year carbon yield is estimated?
3. Please explain how random sampling will help in the achieving the objective. Also, why other sampling techniques are not tested?

Project participant response	**Date :** 11/02/2023

1. We rely on allometric growth modeling, so regular measurements of DBH and height of tree is used to test the model, and refine its accuracy. It is required that they sample and record several times per year, this data is then plugged into a model database for tracking to accurately assess and test the projected value.

2. I believe the 10 year vs. 20 year was a typo. we will acquire a 20 year contract for a 20 year yield, and we will encourage the landowners to continue with this method in the event of natural tree die off, by renewing this agreement by exhibiting proven historical success, in a now optimal microbial and supportive biome, and will seek to renew the contract for an additional 20 years.

3. I believe this question is answered above as the 2 questions are linked. as part of our due diligence, we can sample changes in soil pH etc, but it is not built into the model specifically due to the variable nature and inconsistencies that it introduces, for this same reason we do not include SOC specifically, any additional testing of that kind would be purely conformational of balance or anecdotal due to regional or introduced variables. With the rapidly changing environment acidification of rain and deforestation practices of burning and soil disturbance, and our desire for accuracy, it seemed counterproductive to include them in the calculation. as we are striving for a stable and healthy natural state. In our situation, sampling of that kind is only useful as an anecdote. Conservative estimates of carbon yield are initially based on our source material data and the various methods, historical data, and different studies from different regions based on a shared tree species. We want to be accurate, however precision is not possible until we acquire actual data from actual trees in our project. In this way we can precisely define a specific tree species, in a specific region, with specific variables endemic to that region and achieve a level of precision not found in other projects. So we feel it is prudent to be more conservative with initial estimates, to account for any variances that may arise from our future "real world specific" data. We feel that conservative estimates at the outset protects the data, the company, and the investor.

So in the case of this image, due to density of wood between a palm variety and a hardwood, it is necessary to have a specialized calculation for both types, also in the case of fruit bearing trees such as coconut or here with acai there is a necessary special calculation for the dense nuts which the hardwoods do not possess.

Documentation provided by project participant

DOE assessment	**Date:** 17/02/2023

1. Carbify uses field-based method for calculating carbon sequestration, although this could be more accurate in terms of plot based as this uses allometric equation however the method is prone to human errors. How are those human errors accounted? Also, how the error propagation in terms of calculation is reduced?
2. The contract term for 20 years is noted however it is not reflected in the document.
3. Case-based estimates are explained in the response however the conservative approach needs to be checked based on data availability.

Hence, CL#06 open.

Project participant response	**Date:** 21/02/2023

1. The errors by humans are inevitable. That is why in our methodology, the allometric equation would be the primary approaches, while the other alternatives could be applied to minimize errors, including: remote sensing techniques, or look up the reliable, available databases
2. If this detail is missing in the GCS doc, we would like to review and add it. But if you want us to explain further why we chose this number, it is because most crops will survive and bear fruit within 20 years. But since we also promote the long term biodiversity, this contract could be extended after 20 years, encouraging the landowners to keep the long-live shade trees on site.

Documentation provided by project participant

DOE assessment	**Date:** 24/02/2023

1. The primary approach is viable for small land holdings however when the plot size increases, the calculated biomass for plots is interpolated and resampled. Errors in tree parameters measurement in small land holding will also be then propagated to overall calculation. Also, the remote sensing approach shall need to be added to the document.
2. Noted. The term for 20 years is sufficiently explained.

Hence, CL#06 open.

Project participant response	**Date:** 11/04/2023
Correct, there is no minimum or maximum size for our sites. Through redundancies in calculation and measurements, training, and specific instruments, as listed in the main document, we are confident these methods will overcome any margin of error and remediate/minimize any human error. Remote sensing will only be used for initial site assessment and mapping of boundaries.	
Documentation provided by project participant	
DOE assessment	**Date:** 13/04/2023
There is no ceiling for land size and the error propagation & uncertainties shall be minimized using specific instruments, trainings, and documents. CL 06 closed based on clarification provided by project participant.	

CAR ID	07	**Section no.**	GCS	**Date :** 07/02/2023
Description of CL				
File Name: Final methodology description Step 8: Monitoring 1. Please provide the spatial resolution of landcover for evaluation/comparison.				
Project participant response				**Date :** 11/02/2023
We will use all available means to acquire data, starting with the mapping parameters within the methodology, the use of a handheld GPS which will provide exact location of waypoint within a few feet, we measure each waypoint at a set distances and each point generates its own distance and location., depending on the device it will at least provide, location, and elevation. Once we have this information mapped out we can use other informational sources like the links provided to compile necessary data. We are fortunate to be living in a time where there is so much available resources to GIS, Climate, and elevation mapping tools (to pair with handheld on-site devices and drone on site photos), are freely available online.				
Documentation provided by project participant				
DOE assessment				**Date:** 17/02/2023
1. GPS and usage of other dataset is discussed; however, the minimum spatial resolution that Carbify will use is still not addressed. Spatial resolution plays a crucial role in mapping the Land Use Land Cover (LULC) on ground and LULC at coarser resolution is often bound for misclassification of Land Use. Global LULC at higher resolution often not available for many regions and needs to be derived using satellite data. Hence, CL#07 open.				
Project participant response				**Date:** 21/02/2023

1. The minimum spatial resolution that Carbify will use will depend on the specific goals of the project and the features or objects that need to be identified and mapped. For example, if the goal of the project is to map large-scale (50 ha+) land cover patterns such as forest, agriculture then a spatial resolution of 30 meters will be sufficient. However, if the project aims to map smaller-scale features such as individual crops or small land use changes, then a finer spatial resolution, such as 10 meters (10-50ha) or even 5 meter (1-10ha), will be used.

Documentation provided by project participant

DOE assessment	**Date:** 24/02/2023

1. Noted. The resolution for different land parcel/ area is sufficiently explained.

CL 07 closed based on clarification provided by project participant.

CL ID	08	**Section no.**	GCS	**Date :** 07/02/2023

Description of CL

File Name: Final Global Carbon Standard v3

Section 4: Methodology description (Step-5)

1. Does Carbify methodology foresee emissions from nearby sources.

Project participant response	**Date :** 11/02/2023

Yes, Carbify's methodology considers the emissions from nearby sources as part of our initial site evaluation. We continually evaluate their methodology to ensure that it is comprehensive and accurate, taking into account various factors such as the location and type of project. In the case of rainforest planting projects, Carbify likely focuses on the sequestration potential of the trees and the potential reduction in emissions from deforestation. However, if we expand to different regions in the future, they will take into account emissions from nearby sources as part of their calculation.

Documentation provided by project participant

DOE assessment	**Date:** 17/02/2023

1. The explanation considers emissions from nearby sources however parameters and equation to calculate leakages is not clear and not provided as well.

Hence, CL#08 open.

Project participant response	**Date :** 21/02/2023

1. Negative leakage has been addressed through methodology and requirements for site and initial site assessment, including forbidding use of artificial fertilizers, chemicals or lack of soil tilling, The leakage is mostly from the impacts of agricultural activities (harvesting), which have been addressed through sources cited in main document So in our excel sheet, the carbon leakage of a tree can be estimated as below:

   C-leakage (kgC/tree) = **[kg of fruit per tree]** x **[kgC/kg fruit]**

   Currently, we do not calculate any leakages other than the one above.

Documents provided by project participants

DOE Assessment	**Date :** 13/04/2023

Noted. Although impact due to agricultural activities is considered however the leakages are primarily calculated using the equation. Use of artificial fertilizers, chemicals, and lack of soil tilling is prohibited. CL 08 closed based on clarification provided by project participant.

CL ID	09	**Section no.**	GCS	**Date :** 07/02/2023
Description of CL				
File Name: Final Global Carbon Standard v3 Section 7: Methodology associated projects. 1. What would be the minimum size of the project? Does it based on ER to be claimed (tCO2e) or per hectare basis? 2. References do not exist [11][12].				
Project participant response				**Date :** 11/02/2023
1. At Carbify, we do not regulate the minimum area of land, because the project developers are various, from ordinary farmers to large enterprises. Also, we account for the amount of CO2 absorbed per tree (in kgCO2e, so we will not transform the results into tCO2e. However, we also calculate the amount of CO2 obtained in each ha of land. 2. Done. There are some irrelevant citations which were mistakenly made. So, they are removed from our list of references.				
Documentation provided by project participant				
Not Applicable				
DOE assessment				**Date:** 17/02/2023
1 The explanation provided confirms that the minimum size of land wouldn't be regulated by carbify. However, the amount of tCo2e will be claimed on a per hectare basis. 2 The reference mentioned (11,12) has been removed. CL 09 closed based on clarification provided by project participant.				

Table 3. CAR from this verification

CAR ID	01	**Section No.**		**Date :** DD/MM/YYYY
Description of FAR				
Not Applicable				
Project participant response				**Date :** DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				**Date:** DD/MM/YYYY