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New Area Certification Report

NEW AREA CERTIFICATION OF THE A/R GOLDSTANDARD PROJECT: ”BAUMINVEST REFORESTATION PROJECT”

REPORT NO. 10218SH

25 February 2015

Report No.	Date of first issue	Revision No.	Revision Date	Certificate No.
10218SH	11 December 2014	03	25 February 2015	
Validity of the Report until: 25 February 2020				

Subject: New Area Certification of a A/R GoldStandard Project version 0.9 (Road-Test)

Accredited TÜV SÜD Unit:

TÜV SÜD South Asia Pvt. Ltd., Certification Body “Environment and Energy”,
Environmental Technology, Carbon Management Service
Solitaire, I.T.I. Road, Aundh, Pune- 411007, INDIA

Project Participant (PP):

BaumInvest GmbH & Co KG
Goethestr. 20
79100 Freiburg
Germany

Project Site(s):

The project area consists of two separate reforestation sites in the remote Northern Zone of Costa Rica.

1) The project area La Virgen-2 consists of 8 properties covering a total area of 224 ha in the Province of Heredia (Canton Sarapiqui, Distrito La Virgen). The planting area of 156 ha is split into several small- and medium sized modelling units.

2) The Project Area Las Delicias with three contiguous properties covering a total area of 248 ha is located in the Province of Alajuela (Canton Upala, Distrito Delicias) and comprises a planting area of 181 ha.

Project Title: BaumInvest Reforestation Project

GoldStandard Project ID: GS 2913

Applied Methodology / Version: A/R GoldStandard road version 0.9

First PDD Version:	**Final PDD version:**
Date of issuance: 20 Aug 2014	Date of issuance: 12 Dec 2014
Ex-ante estimated total Emission Reduction over a 30 year crediting period:	**62,977 t CO_2-e**
Ex-ante estimated total Emission Reduction excluding the 20% Project Buffer over a 30 year crediting period:	**50,381 CO_2-e**
Estimated Total Project Buffer (20%):	**12,594 t CO_2-e**

The amount of Emission Reductions stated in the GoldStandards internal “Climate Projects” system is not the same as the ones calculated in an Excel Sheet by the PP and checked by TÜV SÜD. Considering that the figures and calculations in “Climate Projects” are not traceable, the audit team cannot confirm the figures that are provided by Climate projects (in particular the document “Management-Units_BRP_GS-LUF.pdf” for this project). Differences are likely to be due to rounding of numbers in the “Climate Projects” system.

Figures in Climate Projects, which cannot be confirmed by TÜV SÜD are:

Ex-ante estimated total Emission Reduction excluding the 20% GoldStandard risk buffer over a 30 year crediting period: 50,472 t CO_2-e

Estimated Total GoldStandard risk buffer (20%): 12,618 t CO2-e

Assessment Team Leader: Sebastian Hetsch **Assessment Team Members:** Martin Opitz, Auditor Juan Luis Fallas Zuniga, Country Expert	**Technical Reviewer:** Martin Seitz **Certification Body responsible:** Eswar Murty

Summary of the Certification Opinion:

☒ The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant requirements for the GoldStandard Standard. Hence TÜV SÜD is recommending the project for registration by the GoldStandard Standard organisation.

☐ The review of the project design documentation and the subsequent follow-up interviews did not provide TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the GoldStandard standard organisation and will inform the project participants and the GoldStandard organisation on this decision

Abbreviations

A/R	Afforestation / Reforestation
CAR	Corrective Action Request
CB	Certification Body
CDM	Clean Development Mechanism
CR	Clarification Request
DOE	Designated Operational Entity
EIA	Environmental Impact Assessment
FAR	Forward Action Request
FSC	Forest Stewardship Council
GHG	Greenhouse Gas(es)
GIS	Geographic Information System
GPG	Good Practice Guidance
GPS	Global Positioning System
GS	GoldStandard
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
IRR	Internal Rate of Return
LULUCF	Land-Use, Land-Use Change and Forestry
MP	Monitoring Plan
NGO	Non Governmental Organisation
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD South Asia Pvt. Ltd
UNFCCC	United Nations Framework Convention on Climate Change

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1. Introduction

1.1 Objective

The certification objective is an independent assessment by a third party, of a proposed project activity against all defined criteria set forth by the Afforestation/Reforestation Requirements of the GoldStandard. In line with the GoldStandard, the certification shall be carried out by an organization appointed by the GoldStandard, based on an accreditation from other standards. TÜV SÜD is accredited by UNFCCC to validate CDM projects. The GoldStandard recognizes this accreditation. The certification is part of the project cycle, will finally result in a conclusion by the executing Certification Body whether a project activity is valid, and should be submitted for registration to the GoldStandard Organisation. The ultimate decision on the registration of a proposed project activity rests at the GoldStandard Organisation.

The project activity covered by this certification report was submitted under the project title: “BaumInvest Reforestation Project”.

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of a GoldStandard project the scope is set by

- the GoldStandard A/R Requirements version 0.9,
- guidance documents provided by the GoldStandard,
- the AR-CDM additionality tool for afforestation / reforestation projects.
- Management systems and auditing methods
- Environmental issues relevant to the applicable sectoral scope
- Applicable environmental and social impacts and aspects of GoldStandard project activity
- Sector specific technologies and their applications
- Current technical and operational knowledge of the specific sectoral scope and information on best practice.

The certification is not meant to provide any consulting towards the client. However, stated Requests for Clarification and/or Requests for Corrective Actions may provide input for improvement of the project design.

The only purpose of a certification is its use during the registration process as part of the GoldStandard project cycle. Hence, TÜV SÜD cannot be held liable by any party for decisions made or not made based on the certification opinion, which will go beyond that purpose.

The purpose of the certification is to demonstrate compliance or non-compliance of the project with all stated and valid GoldStandard A/R requirements. Additionally, the purpose of the certification is to enable the registration of GoldStandard project, which is only a part of the total GoldStandard project cycle.

1.3 Level of assurance and Materiality

The certification report expresses a conclusion with a limited level of assurance about whether the reported net anthropogenic GHG removals data is free from material misstatements. TÜV SÜD applied a materiality threshold with respect to omission or misstatements concerning reported quantities.

The audit team points out that based on the process and procedures conducted as part of this certification; there was no evidence that indicates that this GHG assertion

- is not materially correct and is not a fair representation of the GHG data and information presented, and
- was not prepared in accordance with the GoldStandard.

2. Methodology

The project assessment applies standard auditing techniques to assess the correctness of the information provided by the project participants. The work starts with the appointment of the team covering the technical scope, technical area and relevant host country experience for evaluating the project activity. Members of the audit team carry out the desk review, follow-up actions, resolution of issues identified, and finally preparation of the certification report. The prepared certification report and other supporting documents then undergo an internal quality control by the CB “Environment and Energy” before submission to the GoldStandard Organisation.

In order to ensure transparency in the certification process, assumptions are clearly and explicitly stated and background material is clearly referenced. TÜV SÜD developed a methodology-specific checklist and protocol customised for the project (see Annex 1). The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team, and the results from validating each relevant criterion.

The certification protocol serves the following purposes:

- To list the details of requirements which a GoldStandard project is expected to meet and provide of clarifications on the requirements if needed;
- To elucidate how a particular requirement has been validated as well as to document the results of the certification and any adjustments made to the project design document.

The completed certification protocol is enclosed in Annex 1.

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment, TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “Environment and Energy”.

The composition of an assessment team has to be approved by the Certification Body (CB) to assure that the required skills are covered by the team. The CB TÜV SÜD operates the following qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL);
- Validator / Verifier (V);
- Trainee (T);
- Technical Experts (TE).
- Country Experts (CE)

It is required that the sectoral scope(s) and the technical area(s) linked to the methodology and project have to be covered by the assessment team.

Assessment Team:

Name	Qualification	Coverage of scope	Coverage of technical area	Coverage of financial aspect	Host country experience
Sebastian Hetsch	ATL	☑	☑ (14.1)	☑	
Martin Opitz	V	☑	☑ (14.1)		☑
Juan Luis Fallas Zuniga	CE				☑

Technical Reviewer:

- Martin Seitz (coverage of respective TA 14.1)

2.2 Review of Documents

The first PDD was submitted to the audit team in August 2014. This PDD version and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility, and interpretation of the presented information. As a further step of the certification process, information provided by the PP was cross-checked with information from other sources (if available). A complete list of all documents and proofs reviewed is attached as Annex 2 to this report.

2.3 Follow-up Interviews

Between 29 September and 2 October 2014, TÜV SÜD performed interviews, telephone conferences and physical site inspections with project stakeholders to confirm relevant information and to resolve issues identified in the first document review. The following table provides a list of all persons interviewed in this process.

Persons Interviewed:

Name	Organisation
Stefan Pröstler	Gerente
Guillermo Alvarado C.	Regente Forestal
Michael Metz	Project Manager
Workers at the plantation	During the onsite visits interviews were conducted with workers at the plantation.

2.4 Cross-check

During the certification process, the team has made reference to available information related to similar projects or technologies as the GoldStandard project activity. Project documentation has also been reviewed against the approved methodology applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the certification is to resolve the requests for corrective actions, clarifications, and any other outstanding issues which need to be clarified for TÜV SÜD`s conclusion on the project design. The CARs and CRs raised by TÜV SÜD are resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the certification process, the concerns raised and responses that have been given are documented in detail in the certification protocol in Annex 1.

The final PDD version dated 12 Dec 2014 submitted December 2014 serves as the basis for the final assessment presented.

2.6 Internal Quality Control

Internal quality control is the final step of the certification process and is conducted by the CB “Environment and Energy” who checks the final documentation, which includes the certification report and annexes. The completion of the quality control indicates that each report submitted has been approved either by the CB committee. In projects where either the Head of the CB or his/her deputy is part of the assessment team, the approval is given by the one not serving on the project team.

After confirmation by the PP, the certification opinion and relevant documents are submitted to GoldStandard through their web-platform.

3. Summary of Assessment

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant requirements for the GoldStandard. Hence, TÜV SÜD is recommending the project for registration by the GoldStandard organisation.

Detailed findings are listed in Annex 1 of the report

3.1 Dual Certification

With respect to potential dual certification, the GoldStandard recognises that FSC Certification can replace the requirements of section 3. “Sustainability” (except for Chapter 3.6 “Legal Rights”).

The GoldStandard Project “BaumInvest” is successfully certified against the FSC FM Standard under the Certificate Code GFA-FM/COC-002390. (http://info.fsc.org/details.php?id=a0240000008U6b0AAC&type=certificate&return=certificate.php).

4. Certification Conclusion & Opinion

TÜV SÜD performed a New Area Certification of the proposed GoldStandard project activity “BaumInvest Reforestation Project”.

Standard auditing techniques have been used for the certification of the project. A methodology-specific protocol for the project has been prepared to conduct the audit in a transparent and comprehensive manner.

The review of the project design documentation, subsequent follow-up interviews, and further verification of references have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In the opinion of TÜV SÜD, the project meets all relevant GoldStandard requirements if the underlying assumptions do not change. TÜV SÜD recommends the project for registration by the GoldStandard organisation.

An analysis, as provided by the applied methodology, demonstrates that the proposed project activity is not a likely baseline scenario. GHG removals attributable to the project are additional to any that would occur in the absence of the project activity. Considering that the project will be implemented as designed, the project is likely to achieve the total estimated amount of GHG removal of 62,977 tCO_2e over the 30 years crediting period, as specified within the final PDD version 12 Dec 2014. As per the GoldStandard 20% (12, 594 t CO_2e) will be included in the GoldStandard buffer.

The certification has been performed following the requirements of the GoldStandard and on the basis of the contractual agreement. The single purpose of this report is its use during the registration process as part of the GoldStandard project cycle. Based on the work described in this report, nothing has come to our attention that causes us to believe that any project component or issue has not been covered by the certification process.

Pune, 25 February 2015



Murty Eswar

Certification Body “Environment and Energy”
TÜV SÜD South Asia Pvt. Ltd.

Annex 1: Certification Findings

Key Project Information (2.1)

Key Project Information Project

A general description shall be provided which includes all of the following items: (a) Project activities (b) Organisations that are involved in the project (project participants) (c) Communities involved in the project (d) Location of the project area and the planting area (e) Size of the project area and the planting area (f) Risk of change to the project area (during the crediting period) (g) Risk of change to the project activities (during the crediting period) (h) Timeframe for the project activities (i) Number of (predicted) CO2-certificates (j) Land-use history and current situation of the project area (k) Socio-economic history and current situation (l) Forest management applied (past and future) (m) Forest characteristics (including main tree species planted) (n) Main social impacts (risks and benefits) (o) Main environmental impacts (risks and benefits) (p) Financial structure
Findings
(a) The Project activities are described in detail (IRL 6). The audit team sustained the implementation as described in the PDD (IRL2) during the onsite visit. (b) Project Participants including detailed addresses are listed, responsibilities and property are described. The audit team sustained PPs, responsibilities and properties as described in the PDD during the onsite visit. (c) Communities involved in the project are described. An audit team member sustained the involvement of the communities during the FSC-Surveillance onsite three weeks before the GS Audit (d) The Location of the project area respectively the planting area are provided (IRL 7, 8). The audit team sustained the location of the project area via GPS devices during the onsite visit. See also comments chapter “Shapefiles”. (e) The size of the project area as well as the size of the eligible planting are described (IRL 7, 8). The Size was assessed during the onsite visit. See also comments chapter “Shapefiles”. (f) Risks of change to the project area described as low as the PPs hold uncontested legal land titles for the areas. Based on local experience and the documentation provided the audit team is in agreement with the PPs. (g) Risks of change to the project are described as low the budget plan provides sufficient funding for the implementation of the project. The PPs are obliged by contract no to change the land use of the project area. (h) The timeframe is 30 years and thus in compliance with the standard. Nevertheless, start of planting is not specified respectively sustained. (i) Amount of predicted CO2-certificates is provided (j) The historical and the current situation of the project area is described. During the onsite visit, the audit team sustained the description provided in the PDD via interviews with neighbours as well as side inspection. (k) The socio-economic condition, changes in land-use and property rights are described. The new management units do not differ significantly from the socio-economic set-up then the initial project areas.

A general description shall be provided which includes all of the following items:

(a) Project activities
(b) Organisations that are involved in the project (project participants)
(c) Communities involved in the project
(d) Location of the project area and the planting area
(e) Size of the project area and the planting area
(f) Risk of change to the project area (during the crediting period)
(g) Risk of change to the project activities (during the crediting period)
(h) Timeframe for the project activities
(i) Number of (predicted) CO2-certificates
(j) Land-use history and current situation of the project area
(k) Socio-economic history and current situation
(l) Forest management applied (past and future)
(m) Forest characteristics (including main tree species planted)
(n) Main social impacts (risks and benefits)
(o) Main environmental impacts (risks and benefits)
(p) Financial structure

Findings

(l) The forest management applied is described, the project is successfully FSC certified (IRL 5, 6). The implementation of the forest management was sustained during the onsite visit by the audit team.
(m) Species composition planted is described in detail. The species composition as described was sustained during the onsite visit by the audit team.
(n) Long-term employment, social insurance and accident insurance as well as opportunities for agricultural production via agro-forestry systems are described. The description provided was sustained by the audit team via local experience, documents provided (IRL 12) and the results of the FSC audit.
(o) A list of environmental impacts, mainly positive, are listed. Amongst other the sustainable management of near-to-nature secondary forest, management of HCVF (rd. 30%) of the area, planting of Dipteryx panamensis (endangered species) and environmental education. Based on local experience and the onsite visit as well as result of the FSC Audit the audit team is in agreement with the PPs. Nonetheless, a management plan for the HCVF could not be provided.
(p) The financial structure is described. The project is funded through private small investors. Sufficient funding is secured over the first rotation period.

CR / CAR

Corrective Action Request 1.

- Provide information and sustain the start of planting
- Correct the unit for tCO2e expected
- Provide a management plan of the HCVFs

Respond by PP:

- Detailed information of the start of planting for each "Modelling Unit" is provided in the "MU Report" created in the Climate Projects system following requirements of "Chapter 5.3 calculation of CO2-certificates" and was submitted to the auditing team.
- The amount of predicted CO2-certificates was adjusted after corrections in the calculation of CO2-certificates.
- The classification of High Conservation Value Forests (HCVF) within the "BaumInvest Reforestation Project" has been completely revised in preparation of the annual FSC Audit 2014. As result of the revision, only one HCVF was identified, which is being managed accordingly (Ref. 2.1-05). The information in Chapter 2.1 (o) has been updated correspondingly.

Ref. 2.1-05 Bosques con Alto Valor de Conservación_2014

Conclusion Audit Team:

- As the new areas are added (new area certification) the already sustained start during the New Area

A general description shall be provided which includes all of the following items:
(a) Project activities
(b) Organisations that are involved in the project (project participants)
(c) Communities involved in the project
(d) Location of the project area and the planting area
(e) Size of the project area and the planting area
(f) Risk of change to the project area (during the crediting period)
(g) Risk of change to the project activities (during the crediting period)
(h) Timeframe for the project activities
(i) Number of (predicted) CO2-certificates
(j) Land-use history and current situation of the project area
(k) Socio-economic history and current situation
(l) Forest management applied (past and future)
(m) Forest characteristics (including main tree species planted)
(n) Main social impacts (risks and benefits)
(o) Main environmental impacts (risks and benefits)
(p) Financial structure

Findings

Certification will not change. Thus, the request can be closed.

- Unit for Emission reductions estimated was changed as requested.
- A management plan of the HCVF was provided.

Request closed.

Final Conclusion

☒ Accepted
☐ Accepted with FAR (01-01 ID of the FAR)
☐ Not accepted with NCR (01-01 ID of the NCR)

Shapefiles

***Shapefiles* and *supporting documents* as well as respective references shall be provided.**

The following information shall be clearly defined by the use of shapefiles:
(a) Project area
(b) Planting areas
(c) Eligible planting area
(d) Modelling Units
(e) Infrastructure (roads, houses, etc.)
(f) Water bodies
(g) Sites with special significance for indigenous people and local communities - resulting from the Local Stakeholder Consultation (LSC)
(h) Where indigenous people and local communities are situated
(i) Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance

Findings

Shapefiles were provided. During the onsite visit the following inconsistencies were detected:

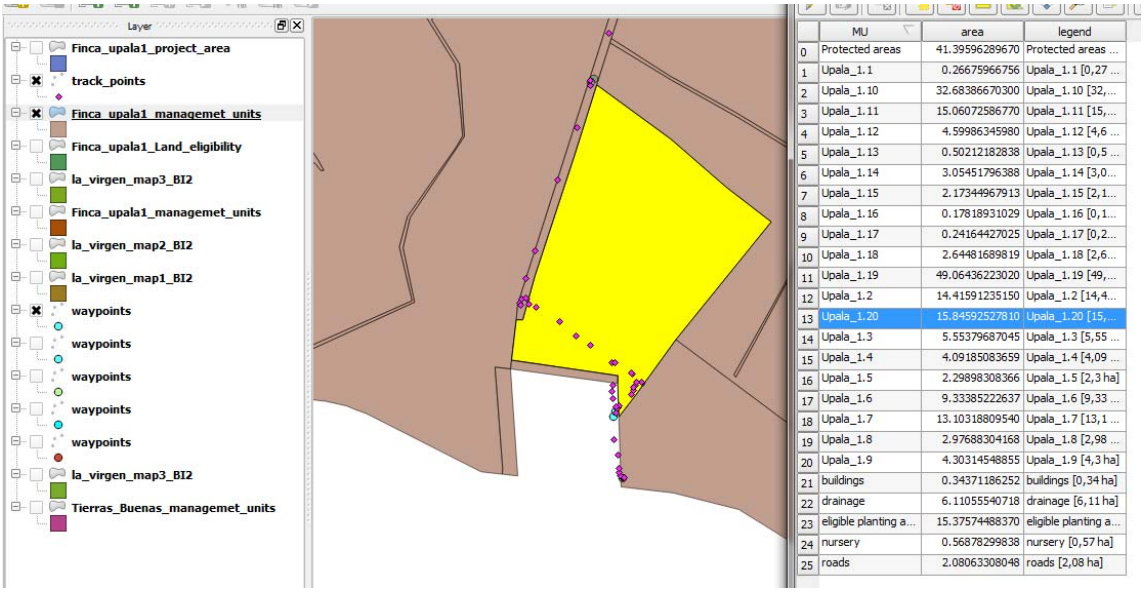
1. At the plantation Finca Upala an unplanted area is treated as planted.
2. At the plantation Finca Upala a road was used which is not reflected in the shapefiles provided.
3. At the planation Finca Upala are canals. It is unclear, if these canals fall under the Articolo 148 of the Ley de Aquas Costa Rica.
4. At the plantation Las Virgen at the area San Ramon 2.3 the boundary to the adjacent protection area (water course) is not correct.

The following information shall be clearly defined by the use of shapefiles: (a) Project area (b) Planting areas (c) Eligible planting area (d) Modelling Units (e) Infrastructure (roads, houses, etc.) (f) Water bodies (g) Sites with special significance for indigenous people and local communities - resulting from the Local Stakeholder Consultation (LSC) (h) Where indigenous people and local communities are situated (i) Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance
Findings
CR / CAR
Corrective Action Request 2. Provide revised shapefiles **Clarification Request 1.** Clarify if canals fall under the Articolo 148 of the Ley de Aquas Costa Rica.
Respond by PP: CAR 2: Shapefiles of the Finca Upala and the Finca La Virgen-2 have been revised and updated in the supporting documentation. Where required because of changes in areas of certain Modelling Units, the calculation of CO2-certificates (Chapter 5.3) has been aligned accordingly. The amount of predicted CO2-certificates was adjusted after corrections have been made in the calculation of CO2-certificates. CR 1: Article 148 of the “Ley de Aguas 276” of Costa Rica refers only to rivers (“rios”), creeks (“arroyos”) and springs (“manantiales”). Artificial drainage channels on private land do not fall under this article (Ref. 4.1-03). *Ref. 2.1-06 Ley_de_Aguas_Costa_Rica (Artículo 148, PDF page 36)*
Conclusion Audit Team: The shapefiles have been updated (IRL 7). *Finca UPALA* The area found unplanted during the onsite visit still is treated as planted:

The following information shall be clearly defined by the use of shapefiles:

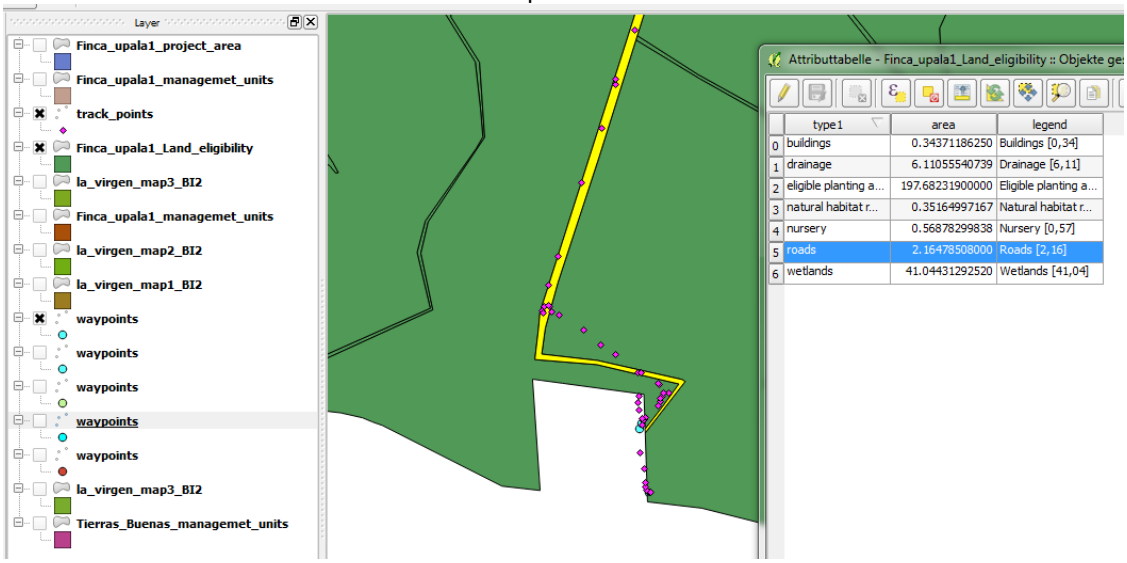
(a) Project area
(b) Planting areas
(c) Eligible planting area
(d) Modelling Units
(e) Infrastructure (roads, houses, etc.)
(f) Water bodies
(g) Sites with special significance for indigenous people and local communities - resulting from the Local Stakeholder Consultation (LSC)
(h) Where indigenous people and local communities are situated
(i) Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance

Findings



	MU	area	legend
0	Protected areas	41.39596289670	Protected areas ...
1	Upala_1.1	0.26675966756	Upala_1.1 [0,27 ...
2	Upala_1.10	32.68386670300	Upala_1.10 [32,...
3	Upala_1.11	15.06072586770	Upala_1.11 [15,...
4	Upala_1.12	4.59986345980	Upala_1.12 [4,6 ...
5	Upala_1.13	0.50212182838	Upala_1.13 [0,5 ...
6	Upala_1.14	3.05451796388	Upala_1.14 [3,0...
7	Upala_1.15	2.17344967913	Upala_1.15 [2,1...
8	Upala_1.16	0.17818931029	Upala_1.16 [0,1...
9	Upala_1.17	0.24164427025	Upala_1.17 [0,2...
10	Upala_1.18	2.64481689819	Upala_1.18 [2,6...
11	Upala_1.19	49.06436223020	Upala_1.19 [49,...
12	Upala_1.2	14.41591235150	Upala_1.2 [14,4...
13	Upala_1.20	15.84592527810	Upala_1.20 [15,...
14	Upala_1.3	5.55379687045	Upala_1.3 [5,55 ...
15	Upala_1.4	4.09185083659	Upala_1.4 [4,09 ...
16	Upala_1.5	2.29898308366	Upala_1.5 [2,3 ha]
17	Upala_1.6	9.33385222637	Upala_1.6 [9,33 ...
18	Upala_1.7	13.10318809540	Upala_1.7 [13,1 ...
19	Upala_1.8	2.97688304168	Upala_1.8 [2,98 ...
20	Upala_1.9	4.30314548855	Upala_1.9 [4,3 ha]
21	buildings	0.34371186252	buildings [0,34 ha]
22	drainage	6.11055540718	drainage [6,11 ha]
23	eligible planting a...	15.37574488370	eligible planting a...
24	nursery	0.56878299838	nursery [0,57 ha]
25	roads	2.08063308048	roads [2,08 ha]

Now a road is marked that has been on another part of the area:



	type1	area	legend
0	buildings	0.34371186250	Buildings [0,34]
1	drainage	6.11055540739	Drainage [6,11]
2	eligible planting a...	197.68231900000	Eligible planting a...
3	natural habitat r...	0.35164997167	Natural habitat r...
4	nursery	0.56878299838	Nursery [0,57]
5	roads	2.16478508000	Roads [2,16]
6	wetlands	41.04431292520	Wetlands [41,04]

Clarification regarding national legislation was provided and sustained by the audit team.

The following information shall be clearly defined by the use of shapefiles: (a) Project area (b) Planting areas (c) Eligible planting area (d) Modelling Units (e) Infrastructure (roads, houses, etc.) (f) Water bodies (g) Sites with special significance for indigenous people and local communities - resulting from the Local Stakeholder Consultation (LSC) (h) Where indigenous people and local communities are situated (i) Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance
Findings
Respond by PP: Shapefiles of the Finca Upala and the Finca La Virgen-2 have been revised and updated in the supporting documentation. The amount of predicted CO2-certificates was adjusted after corrections have been made in the calculation of CO2-certificates.
Conclusion Audit Team: The unplanted area is removed from the project area. Thus, the area of the respective MU complies with the reality observed onsite. Also the location of the road is now correctly included in the GIS files, as confirmed through the GPS readings that the audit team took onsite. The respective requirements are now met.
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Boundaries

Boundaries of the project area and the planting area shall be clearly distinguishable in the field
Findings
During the onsite visit, the audit team sustained that the boundaries are clearly distinguishable in the field due to the differing species composition.
CR / CAR
-
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Legal Rights (3.5)

Secured Titles

1. For all project participants, the following information shall be provided:
   (a) Name and contact details
   (b) Each entity's legal registration number and documentation by the governing jurisdiction that proves that the entity is in good standing.

2. For the duration of the crediting period the project owner shall:
   (a) Own the CO2 user rights or carbon sequestration rights for the project area, AND
   (b) Hold an uncontested legal land title for the project area, AND
   (c) Own the rights for timber and non---timber forest products for the project area, AND
   (d) Hold all necessary permits to implement the project (planting permits, infrastructure permits, harvesting permits, etc.), AND
   (e) Participate in the financing of the project.

   If the project owner does not meet all of the above requirements, the persons or legal entities that do meet those respective requirements shall endorse the expected project being undertaken by the project owner through an agreement that aligns with the duration of the crediting period.

Findings

Name and contact details are provided. The following companies are involved:

- BaumInvest 2 GmbH & Co KG
- Isla Bosques Numero II de Costa Rica S.A. (100 % subsidiary of BaumInvest 2 GmbH & Co KG)
- Querdenker GmbH
- Puro Verde Paraiso Forestal S.A.

Copies of extract of the commercial register in Freibrug i.Brg. as well as of the national register of the Republic of Costa Rica are provided proofing that the entity is in good standing (IRL 9, 10, 11).
Based on the documents provided as well as the local experience the audit team confirms the full legal right of the PPs over the project including the rights to implement the project as described as well as carbon rights.

CR / CAR

Final Conclusion

☒ Accepted
☐ Accepted with FAR (01-01 ID of the FAR)
☐ Not accepted with NCR (01-01 ID of the NCR)

Project Representatives

3. The project owner shall define the authorities of all project participants with respect of:
   (a) Instructing The Gold Standard secretariat, AND
   (b) Requesting or communicating the addition or edits of project participants, AND
   (c) Receiving all information from The Gold Standard Secretariat on matters related to the project.

Findings

An authority of all project participants with respect to the above mentioned requirements is appointed as required.
Querdenker GmbH, Goethestr. 20, 79100 Freiburg, Germany

CR / CAR

Final Conclusion

3. The project owner shall define the authorities of all project participants with respect of: (a) Instructing The Gold Standard secretariat, AND (b) Requesting or communicating the addition or edits of project participants, AND (c) Receiving all information from The Gold Standard Secretariat on matters related to the project.
Findings
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Terms & Conditions and Cover Letter

4. The project owner shall sign The ‘ Gold Standard Terms & Conditions’ and the declarations of the ‘Cover Letter’.

Findings
Cover Letter and Terms & Conditions are provided as requested
CR / CAR
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Additionality (4.1)

Option of Additionality	
☒ Option 1 – A/R CDM Tool	☐ Option 2 – Positive List

Option 1: A/R CDM Tool

Process for New Area Certification

For the New Area Certification the project owner can select between the following 3 options:

a) Identify *key elements* of the project's existing additionally test and provide evidence that these *key elements* are not changed due to the *new areas*. *Key elements* shall include barriers (in case of the barrier analysis), the economic assumptions (in case of the investment analysis), or elements of 'Option 2 - Positive List' (in case this was selected). The most recent version of the 'Additionality - New areas' template shall be used.

b) Repeat the process for the Initial Certification, but only with regard to the *new areas*, not the entire project. The most recent version of the 'Additionality' template shall be used.

Findings

The PP selected Option a).
At New Area Certification, additionality was demonstrated by applying an investment analysis.
Key element has been the IRR (Internal Rate of Return) and the RRR (Required Rate of Return) to be met by the investment.
According to the PDD, the IRR is even lower for the New Area Certification (5.39%) than at the time of the Initial Certification (5.98%).
The mentioned key elements have not been updated since initial certification.

CR / CAR

Corrective Action Request 3.

Provide an updated financial analysis in order to prove the additionality of the project activity.

Respond by PP:

The calculation of the Internal Rate of Return (IRR) has been sent to the audit team in order to demonstrate that the IRR of the "new areas" is even lower than the correspondent equity IRR calculated for the "Initial Certification". The key financial indicators for the benchmark calculation of the Required Rate of Return (RRR) regarding the "new areas" have been updated (Ref. 4.1-03): As investments with a risk-free basic interest rate for 20-year terms are not available for comparison, we have based our calculation on government bonds issued by the German Federal Bank with a 7 year term. The interest rates from these bonds in the relevant time period of 2009 for the "New Area Certification" have been around 4 % (range: 3.5 – 4.5 %) before tax, which is exactly the same range of the relevant time period for the "Initial Certification" (2007). The same applies to the country risk premium of 2.5% for Costa Rica in 2007 referring to government bond ratings (Ba1) carried out by the rating agency Moody´s, where no changes occurred until the upgrade from Ba1 to Baa3 in February 2010. Our update of the key financial indicators supports the assumption that the proposed project activity including the new areas is unlikely to be financially attractive without sales of carbon credits and, hence, it is additional.

Ref. 4.1-03 CR-BRP_-_Additionality_benchmark_calculation_update_141114

Conclusion Audit Team:

Un updated financial analysis jointly with an updated calculation of the benchmark was provided (IRL 58). Both documents prove the additionality of the project in compliance with the applied tool. The date of the input parameters to calculate the benchmark (for the background of the financial crisis) was sustained on basis of the issuance date "BaumInvest Beteiligungsprospekt". The date in compliance with § 11 of the

German Verkaufsprospektgesetz. Request closed.
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

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Option 2: Positive List – Part I

2. The project shall meet **all of the requirements (a), (b) and (c)** in the list below and at least one of the requirements from (d) to (g) in order to be considered as additional under Option 2.

   (a) The project is located in a Less Developed Country (LDCs) or in a region with a recent *UNDP Human Development Indicator* below 0.8.
   (b) The project shall have no intention of creating a forest for the commercial use of the timber or non-timber forest products.
   (c) The project activities shall not be mandatory by any law or regulation, OR if it is mandatory, it shall demonstrate that these laws or regulations are systematically not enforced.

Findings
N/A

Positive List – Part II

2. The project shall meet **all** of the requirements (a), (b) and (c) in the list below and **at least one of the requirements from (d) to (g)** in order to be considered as additional under Option 2.

   (d) The project area is located in a region with a mean annual precipitation of less than 600 mm.
   (e) The soil pH of the planting area is less than 4.0.
   (f) The planting area is planted with minimum 5 different native tree species in mixed stands, covering at minimum 50% of the planting area.
   (g) The project area is located:
   - In a country or region with a recent *UNDP Human Development Indicator* below 0.5, OR
   - In a *Small Island Developing State (SIDS)*

Findings
N/A

Retroactive submission

3. If the submission to the Pre-Feasibility Assessment was after the planting start, the project proponent shall demonstrate that
   (a) the revenues from CO2-certificates were seriously considered in the decision to implement the project, AND
   (b) there was continuous interest in CO2-certificates for the project in parallel with its implementation.

Evidence to support this can include: contracts, draft versions of project information, correspondence with financial institutions or other stakeholders, minutes and notes of meetings, agreements or negotiations with auditors, publications in newspapers.
For Option 1, this replaces requirement 7 of the '*Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities*'.

Findings
N/A

No deforestation

4. The planting area shall not have been *forest* for at least 10 years prior to the planting start, OR If the planting area was deforested during the 10 years prior to the planting start, the eligibility of the project shall be determined by The Gold Standard Secretariat. This will be done as part of the Pre-Feasibility Assessment
Findings
The PP analysed if forest was on the "eligible planting area" 10 years prior to the project start. This was sustained through aerial photographs from 1992. As parts of the aerial photographs used are covered with clouds the PPs also used official forest cover maps of Costa Rica from 2000. Parts of the project area are likely to have been deforested 10 years prior to project start (IRL 2, 16). However, no relation had been between the (cause of) deforestation and the PP. Evidence was provided that no forest had been on the project area at the time the PP bought the project area (IRL 3). Therefore, it is concluded that the project is in compliance with the eligibility criteria. The "no deforestation" was discussed in depth during the onsite visit and was sustained via interviews held with neighbours.
CR / CAR
Therefore, it is concluded that the project is in compliance with the eligibility criteria. The "no deforestation" was discussed in depth during the onsite visit and was sustained via interviews held with neighbours.
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Applicability (5.1)

The project area shall meet all of the requirements below for this methodology to be applicable for the calculation of CO_2-certificates from the project. 1. Areas shall not be on *wetlands.* 2. Areas with *organic soils* shall not be drained or irrigated (except for irrigation for planting). 3. Soil disturbance (through ploughing, digging of pits, stump removals, infrastructure, etc.) on *organic soils* shall be in less than 10% of the area that is submitted to certification (not 10% of the entire project area). 4. The most likely scenario without the project (baseline scenario) shall be defined for the project area. This scenario shall not show any *significant* increase of the Baseline biomass ('tree' and 'non-tree').
Findings
1. Wetland was mapped and classified as protection areas. During the onsite visit the correct mapping of the wetlands was sustained by the audit team 2. According to a soil analysis provided shows content of organic matter of less than 20% (IRL 2) 3. According to a soil analysis provided shows content of organic matter of less than 20% (IRL 2) 4. The most likely land use scenario without the project was determined according to the land use around the project are and a land use map respectively (IRL 17). It would be cattle farming, cultivation of pineapple or rice. This could by sustained by the audit team during the onsite visit.
CR / CAR
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Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Conversion Procedure (5.2)

1. Conversion factors shall be determined at the level of a Modelling Unit:
   (a) Wood Density
   (b) Biomass Expansion Factor
   (c) Root-to-Shoot ratio

All factors shall be based on the best available scientific sources.

2. When aggregated together, the factors shall lead to a conservative calculation approach. This means that in the consideration and calculation:
   (a) The CO2-Fixation shall not be overestimated, AND
   (b) The Baseline and Leakage shall not be underestimated.

3. The following default factors shall be used for all conversion:
   (a) 0.5 [tC/tdm] as the 'Carbon fraction' for 'tree biomass'
   (b) 0.4 [tC/tdm] as the 'Carbon fraction' for 'non---tree biomass'
   (c) 44/12 [tCO2/tC] is used to convert 'C to CO2'

4. The following *default factors* shall be used when no rigorous scientific information is available:

   For the parameters of CO2---Fixation:
   (a) 0.3 [tdm/m3] Wood density
   (b) 1.1 [ ] BEF
   (c) 0.2 [ ] Root---to---Shoot ratio for 'tree biomass'

   For the parameters of Baseline or Leakage:
   (d) 0.7 [tdm/m3] Wood density
   (e) 3.5 [ ] BEF
   (f) 0.8 [ ] Root---to---Shoot ratio for ' tree biomass'
   (g) 4.0 [ ] Root---to---Shoot ratio for 'non---tree biomass'

Findings
1. Conversion factors were determined on level of the Modelling Unit. 2. A conservative approach was chosen by applying e.g. the lowest value of a range of values or capping the value for certain factors 3. The default values have been used as required 4. Scientific information was used to identify applicable conversion factors (IRL 29 – 57)
CR / CAR
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Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Calculation of CO2-certificates (5.3)

1. The number of CO2-certificates is determined for every year (t) of the crediting period using the following formula.

CO2-certificates MU,t
= (CO2-Fixation MU,t - Baseline MU,t - Leakage MU,t - Other Emissions MU,t) * Eligible planting area MU

2. For the calculation of the parameters CO2-Fixation, Baseline and Leakage, the following carbon pools shall be assessed:

Carbon Pools		Includes	CO_2-Fixation	Baseline	Leakage
Tree biomass	Aboveground	Stem, branches, bark	Yes	Yes	Yes
	Belowground	Tree roots	Yes	Yes	Yes
Non-tree biomass	Aboveground	Grass, herbs, etc.	No	Yes	No
	Belowground	Roots of grass, herbs, etc.	No	Yes	No
Soil		Organic material	No	No	No
Harvested wood (timber & energy wood)		Furniture, construction material, etc.	No	No	No
Litter & Lying dead-wood		Leaves, small fallen branches, lying dead wood	No	No	No

Findings

1. CO2-certificates are calculated in compliance with the formula provided. The calculations in the Excel files provided by the PP were checked by the audit team in depth; TÜV SÜD considers the numbers in the Excel sheet to be correct.
2. Carbon Pools:
   - CO2-Fixation: Carbon Pools are included as required
   - Baseline: For the baseline only the Non-tree biomass was assessed as the eligible areas are plane grassland/fallow land
   - Leakage: Carbon Pools are included as required

CR / CAR

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Final Conclusion

☒ Accepted
☐ Accepted with FAR (01-01 ID of the FAR)
☐ Not accepted with NCR (01-01 ID of the NCR)

Other Emissions (5.4)

1. Where existing 'tree' and 'non-tree' biomass of the Baseline is burned for the purpose of land preparation, an additional 10% of the Baseline shall be deducted. This is to account for the non-CO2 green-house-gas emissions (N2O and CH4) that are released during the burning process. 2. 0.005 tCO2 per kg of nitrogen (N) fertilizer shall be deducted. No differentiation is made between synthetic and organic fertilizer.

Findings
1. Not relevant as existing tree or non-tree biomass was not burned for area clearance. This was sustained during the onsite visit via side inspection as well as interviews held with neighbours. 2. According to the PD rd., 36 kg of nitrogen fertilizer was applied per hectare. In total 0.1 tCO2 was deducted for *La Virgen* and 0.2 tCO2 for *Las Delicias* were deducted. Respective calculations were provided and checked by the audit team. The amount of fertilizer utilized is considered adequate for the project activity.
CR / CAR
NOTE: According to Clarification Request ID 001 accounting for fertilizer use is not required anymore (http://www.goldstandard.org/luf_clarification-requests)
Respond by PP: Since the account for fertilizer use is not required any more, we adjusted this factor for "Other Emissions" to zero.
Conclusion Audit Team: "Other 'Emissions" have been set to zero in compliance with the Clarification Request ID 001.
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Baseline (5.5)

1. The Baseline shall be determined by estimating the ‘tree’ and ‘non-tree’ biomass that is present in the eligible planting area just prior to the planting start.

2. To determine the Baseline of the eligible planting area the land shall be
   (a) stratified according to its vegetation types (grassland, bushland, etc.)
   (b) for each of these strata, scientifically based *local*, regional or national *default values* shall be found which state the biomass of these vegetation types.

   International default values from the IPCC shall only be used if no other values are available.

3. The Baseline shall be determined on a Modelling Unit (MU) level using the following formula

$$\text{Baseline}_{MU,t}\ [tCO_2/ha] = \text{Baseline}_{\text{Eligible planting area}}\ [tCO_2] \,/\, \text{Eligible planting area}\ [ha]$$

The Baseline is deducted in the first year (t=1)

Findings
The Baseline was determined by estimating the biomass present in the eligible planting areas One stratum per project area was identified, Grassland 01 (La Virgen 2) and Grassland 02 (Las Delicias). The baseline was assessed during the onsite visit via side inspection and interviews held with neighbours.
CR / CAR
-
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Leakage (5.6)

1. Describe the selection of your categories.
   (a) collection of wood (for firewood, charcoal, etc.)
   (b) timber harvesting
   (c) agriculture (crop cultivation, shrimp cultivation, etc.)
   (d) livestock

2. The Baseline shall be determined on a Modelling Unit (MU) level using the following formula

   Leakage MU,t [tCO_2/ha]
   = **Leakage** Project area [tCO_2] / **Eligible planting area** [ha]

   The Baseline is deducted in the first year (t=1)

   Formula for category (a) (b) and (c)

   Leakage Project area [tCO_2]
   = **Area** [ha] * **% of activity-shift** [%] * **CO_2-stock** [tCO_2/ha]

   Formula for category (d)

   Leakage Project area [tCO_2]
   = **Displaced heads** [head] * **Grazing capacity** [ha/head] * **CO_2-stock** [tCO_2/ha]

Findings
Categories (a) and (b) was not selected as these activities were not exercised in the project areas. Category (c) was not selected as agriculture used to be the land use activity at the project area *Las Delicias* but the former owner of the land finished the agricultural land use before selling it to the PP. Thus the PPs purchased fallow land before project start. Category (d) was selected for the New Areas at the Project Area *La Virgen*. As the total stock of cattle was slaughtered after the sale of the land the number of displaced heads is zero. Thus no changes since the New Area Certification and the last New Area Certification respectively. Leakage was assessed during the onsite visit via side inspection and interviews held with neighbours.
CR / CAR
-
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

CO2-Fixation (5.7)

1. The yearly (t) CO2-Fixation is determined at the level of Modeling Unit (MU) during the crediting period.
2. For every MU a growth model and conversion factors (see section 5.2) shall be determined
4. Existing 'tree biomass' from the carbon stock of the Baseline that is not removed shall be reflected in the growth-model.
5. A realistic survival-rate shall be reflected in the growth-model.

Long-term CO2-Fixation

6. The long-term CO2-Fixation shall be determined depending on the silvicultural method applied/envisioned
   Option 1 – Selective harvesting or Conservation forest
   Option 2 – Rotation forestry

Findings

1. The CO2-Fixation is determined at the level of the Modelling Unit (MU) for the rotation period
2. See section 5.2
4. Not applicable as the project are was plane grassland and fallow respectively. Thus, no 'tree biomass' does not need reflection. See also chapter Baseline
5. The survival-rate assumed is 95%. The survival-rate was assessed via field inspection and respective sampling. A calculation of the survival-rate was not provided.
6. The silvicultural method is rotation forestry, which was sustained during the onsite visit.

CR / CAR

Corrective Action Request 4.

Provide a calculation of the survival rate. If necessary, adapt the CO2-Fixation calculation respectively. Ensure to use for the conversion of C to CO2 the correct factor (44/12 instead of 3,666)

Respond by PP:

- The survival rate was determined from forest inventories carried out in permanent sample plots at the project areas. The calculation of the survival rate was sent to the audit team and the calculation of CO2-certificates has been adapted accordingly (Ref. 5.7-300).
- The conversion factor has been corrected in the growth model summary (Ref. 5.7-300).

Ref. 5.7-300_Growth model summary_CO2_Fix_BRP_BI2

Conclusion Audit Team:

The calculation of the CO2-certificates was updated.

- The calculation of the survival rate was not provided
- The conversion factor was not corrected (spread sheet "project area La Virgen", cells Q 9-15, 17, 18, 20, 21

Respond by PP:

- The calculation of the survival rate has been sent to the audit.
- The conversion factor has been corrected, although the "project area La Virgen" is not part of the current "New Areas Certification". The "project area La Virgen" has been validated earlier according to CarbonFix Standard v3.2, where the conversion factor was 3,666 instead of 44/12.

Conclusion Audit Team:

The calculations of the survival rates (IRL 59) were provided as requested. At the project area Las Delicias survival rates based on sampling were applied, either species specific or, in case of not enough individuals per sample, average values from all samples. At the project area Las Virgen2 species specific values based on sampling were applied. The survival rate applied is plausible and realistic.
Request closed.

Final Conclusion

☒ Accepted
☐ Accepted with FAR (01-01 ID of the FAR)
☐ Not accepted with NCR (01-01 ID of the NCR)

Forest Inventory

1. The growth-models of the MUs shall be confirmed/adjusted by the results of MU specific forest inventories
2. For the forest inventories the guidelines of the BioCarbon Fund or CarbonFix shall be followed.
3. The process of a forest inventory shall be documented clearly and easy replicated.
4. Forest inventories shall be repeated at minimum before every Performance Certification
5. The number of sample plots of a forest inventory shall be sufficient to meet a MU precision with a maximum error of ±20% at a 90% confidence interval. Where the error is above 20%, the additional difference shall be deducted. Provide an overview for which MUs this requirement was relevant and describe the adaptation.

Findings
No results of inventories were provided. Reliable inventories have not yet been conducted.
CR / CAR
-
Final Conclusion
☒ Accepted ☐ Accepted with FAR (01-01 ID of the FAR) ☐ Not accepted with NCR (01-01 ID of the NCR)

Annex 2: Information Reference List

<table>
<tr><th>Ref. No.</th><th>Author/Editor/ Issuer</th><th>Title, Type of Document</th><th>Date</th></tr>
<tr><td>1.</td><td></td><td>Interviewed Persons:
<table>
<tr><th></th><th>Name</th><th>Position, Organisation</th></tr>
<tr><td>1.</td><td>Guillermo Alvarado</td><td>Regente Forestal, Puro Verde</td></tr>
<tr><td>2.</td><td>Stefan Pröstler</td><td>Gerente, Puro Verde</td></tr>
<tr><td>3.</td><td>Michael Metz</td><td>Project Manager</td></tr>
<tr><td>4.</td><td>Workers at the plantation</td><td>During the onsite visits interviews were conducted with workers at the plantation.</td></tr>
</table></td><td></td></tr>
<tr><td>2.</td><td>PP</td><td>PDD BaumInvest Reforestation Project Version before Onsite Visit</td><td>Aug 2014</td></tr>
<tr><td>3.</td><td>PP</td><td>Certificates and Management Units</td><td>22 Aug 2014</td></tr>
<tr><td>4.</td><td>PP</td><td>PDD BaumInvest Reforestation Project</td><td>28 Mar 2013</td></tr>
<tr><td>5.</td><td>GFA</td><td>FSC Audit Report</td><td>29 Jul 2013</td></tr>
<tr><td>6.</td><td>PP</td><td>Plan de Manejo Maestro</td><td>Oct 2013</td></tr>
<tr><td>7.</td><td>PP</td><td>Shaphefiles</td><td>Aug 2014</td></tr>
<tr><td>8.</td><td>PP</td><td>Maps</td><td>Aug 2014</td></tr>
<tr><td>9.</td><td>Local Court Freiburg i.Brg</td><td>Commercial Registry BaumInvest Gmbh & Co KG</td><td>17 Jan 2008</td></tr>
<tr><td>10.</td><td>Local Court Freiburg i.Brg</td><td>Commercial Registry BaumInvest II Gmbh & Co KG</td><td>04 Nov 2009</td></tr>
<tr><td>11.</td><td>Municipalidad de Sarapiqui Direccion Finaciera y Tributaria</td><td>Certificacion de Estado Tributario Numero</td><td>06 Aug 2014</td></tr>
<tr><td>12.</td><td>Caja Costarricense de Seguro Social</td><td>Constanica de no Patrono</td><td>05 Aug 2014</td></tr>
<tr><td>13.</td><td>Registro Nacional Repbulica de Costa Rica</td><td>Constitucion de Sociedad Anonima</td><td>23 Sep 2009</td></tr>
</table>

Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
14.	REPUBLICA DE COSTA RICA REGISTRO NACIONAL CONSULTA POR NUMERO DE FINCA	Extracts of the National Register of the Republic of Cost Rica	May 2014
15.	PP	Mortality survey/calculation, excel-file	Oct 2014
16.	La Garceta, Diario Oficial	DECRETO Nº 36818-MINAET	11 Nov 2011
17.	Asistencia Técnica ECG-UNA	MAPA DEL USO DE TIERRA	Aug 2011
18.	UNDP	Human Developement Report 2013, Costa Rica, HDI values and rank changes in the 2013 Human Development Report	2013
19.	EL CONGRESO CONSTITUCIONAL DE LA REPUBLICA DE COSTA RICA	Ley de Aguas Nº 276	1996
20.	LA ASAMBLEA LEGISLATIVA DE LA REPÚBLICA DE COSTA RICA	LEY FORESTAL	1998
21.	LA ASAMBLEA LEGISLATIVA DE LA REPÚBLICA DE COSTA RICA	Ley de Conservación de la Vida Silvestre	2012
22.	LA ASAMBLEA LEGISLATIVA DE LA REPÚBLICA DE COSTA RICA	LEY DE BIODIVERSIDAD	1998
23.	LA ASAMBLEA LEGISLATIVA DE LA REPÚBLICA DE COSTA RICA	LEY ORGANICA DEL AMBIENTE	1998
24.	Refugio Nacional de Vida Silvestre Mixto Maquenque	Plan de Manejo del Refugio Nacional de Vida Silvestre Mixto Maquenque	2006
25.	IPCC	2006 IPCC Guidelines for National Greenhouse Gas Inventories	2006
26.	PP	Stickstoffdüngerberechnung_140819 (Fertilizer Calcuation), Excel-File	2014
27.	PP	Promotional brochure_VisionsWald	2011

Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
28.	PP	Sponsorship agreement_VisionsWald - CONFIDENTIAL	2014
29.	IPCC	Good Practice Guidance for Land Use, Land-Use Change and Forestry	2003
30.	Karenzel et al	Carbon storage of harvest-age teak (Tectona grandis) plantations, Panama	26 Dec 2001
31.	www.worldagroforestry.org	http://db.worldagroforestry.org/wd/species/Tectona_grandis	Accessed Oct 2014
32.	www.worldagroforestry.org	http://db.worldagroforestry.org/wd/species/Terminalia_amazonia	Accessed Oct 2014
33.	Catie	Terminalia Amazonia; ecologia y silvicultura	2005
34.	www.worldagroforestry.org	http://db.worldagroforestry.org/wd/species/Calophyllum_brasiliense	Accessed Oct 2014
35.	L.A. FOURNIER	Dipteryx panamensis (Pittier) Record & Mell	2009
36.	www.worldagroforestry.org	http://db.worldagroforestry.org/wd/species/Swietenia_macrophylla	Accessed Oct 2014
37.	Alvaro Redondo-Brenes et al	Growth, productivity, aboveground biomass, and carbon sequestration of pure and mixed native tree plantations in the Caribbean lowlands of Costa Rica	May 2006
38.	Diego Perez et al	Stand growth scenarios for Tectona grandis planations in Costa Rica	Feb 2005
39.	Montagnini F et al	Mixed plantations with native trees on abandoned pasture lands: restoring productivity, ecosystem properties and services in a humid tropical site. In: S. Günter, B. Stimm, M. Weber, R. Mosandl (eds.). Silviculture in the Tropics, pp. 501-511	2011
40.	L.A. FOURNIER	Vochysia guatemalensis Donn. Sm.	2009
41.	Fonseca, G.W. et al	models for biomass estimation in native forest tree plantations and secondary forests in the Costa Rican Caribbean Region. Bosque, 2009, vol. 30, n.1, pp. 36-47	2009
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