



THE YOKUSLU- KALKANDERE HYDROELECTRIC POWER PLANT



3RD VERIFICATION REPORT



Document Prepared by Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti.

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Summary:

The project includes the installation of two runoff river hydroelectric power plants (HEPPs) (Kalkandere HEPP and Kızılağaç HEPP) with total installed capacity of 41.19 MWm / 40.24 MWe on İyidere River in Rize city of Turkey. The purpose of the project activity is to generate electricity and supply it into the public grid. The project activity reduces greenhouse gas (GHG) emissions that would have otherwise occurred in the absence of the project activity by avoiding electricity generation from fossil fuel sources and it includes the installation of horizontal axis three Francis turbines with the installed capacity of 11.90 MWm / 11.68 MWe each and vertical axis two Kaplan turbines with the installed capacity of 2.70 MWm / 2.60 MWe each.

The scope of the verification is the independent and objective review of the monitored GHG reductions. The verification activity is based on the validated and registered PD version 08 and dated 05/08/2011.

The project activity and the monitoring report are assessed against the requirements of the approved consolidated baseline and monitoring Methodology “ACM0002: “Grid-connected Electricity Generation from Renewable Sources” version 12.0 and VCS version 4.3.

The only purpose of the verification and certification is its usage during the issuance process as part of the VCS project cycle.

During this verification 12 Corrective Action Requests (CARs) were raised all of which were resolved by either revising the Monitoring Report or by sending objective evidence to the verification team. There hasn't been any Clarification Requests (CLs) and Forward Action Requests (FARs) issued during the verification process.

Re Carbon Ltd. hereby confirms that the level of assurance of this verification report is reasonable, with respect to material errors, omissions and misrepresentations. To guarantee this level of assurance all data that is used in the GHG emission reduction calculations have been reviewed without any sampling.

Re Carbon Ltd. also confirms the following based on the results of document review for the period between 01/09/2017 and 31/12/2020:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2017	20,114	0	0	20,114
2018	88,771	0	0	88,771
2019	73,834	0	0	73,834
2020	80,373	0	0	80,373
Total	263,092	0	0	263,092

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1 INTRODUCTION

1.1 Objective

Re Carbon Ltd. was appointed by “Sanko Enerji Sanayi ve Ticaret A.Ş.” to perform the third verification¹ of the “The Yokuslu- Kalkandere Hydroelectric Power Plant” with the service agreement dated 08/06/2021. The objective of this verification activity was to assess, with objective evidence:

- if the monitoring report version 04 dated 31/10/2022 conforms with the requirements of the monitoring plan of the registered Project Description (PD) and the approved methodology
- if the project activity conforms with the monitoring report and the registered PD, and
- if the data reported in the monitoring report are complete and transparent.

1.2 Scope and Criteria

The scope of the verification is the independent and objective review of the monitored GHG reductions. The verification activity is based on the validated and registered PD version 08 dated 05/08/2011.

The project activity and the monitoring report are assessed against the requirements of Article 12 of the Kyoto Protocol, CDM Modalities and Procedures as agreed upon in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, “ACM0002: “Grid-connected Electricity Generation from Renewable Sources” version 12.0, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other related rules, all according to the guidance given in the CDM Validation and Verification Standard for Project Activities version 3.0 and VCS version 4.3.

The only purpose of the verification and certification is its usage during the issuance process as a part of the VCS project cycle. Therefore, Re Carbon Ltd. cannot be held liable by any party for decisions made or not made based on the verification and certification opinion, which will go beyond that purpose.

1.3 Level of Assurance

Re Carbon Ltd. hereby confirms that the level of assurance of this verification report is reasonable, with respect to material errors, omissions and misrepresentations. To guarantee this level of assurance all data that is used in the GHG emission reduction calculations have been reviewed without any sampling.

¹ The previous verification having monitoring period from 01 January 2012 to 31 August 2017 and this verification have been handled by Re Carbon Ltd.in line with the exemption letter by Verra dated as 30/09/2021.

1.4 Summary Description of the Project

The project includes the installation of two runoff river hydroelectric power plants (HEPPs) (Kalkandere HEPP and Kızılağaç HEPP) and is operated by Sanko Enerji Sanayi ve Ticaret A.Ş. It is located on on İyidere River in Rize city of Turkey. The project has the installation of horizontal axis three Francis turbines with the installed capacity of 11.90 MWm/11.68 MWe each turbine (Kalkandere HEPP) and vertical axis two Kaplan turbines with the installed capacity of 2.70 MWm / 2.60 MWe each (Kızılağaç HEPP), so it has a total capacity of 41.19 MWm / 40.24 MWe in line with the electricity generation licence and provisional acceptance protocol and the project also supports the sustainable economic development in the region. The technical description of the project activity is as follows:

Table 1: Turbine and generator specifications

Component	Property
Turbine type	Francis-Horizontal shaft (3 turbines) & Kaplan vertical shaft (2 turbines)
Turbine firm	Voith (Kalkandere HEPP) & Chongqing Water Turbine Works (CWTW) (Kızılağaç HEPP)
Number of turbines	3 (Kalkandere HEPP) & 2 (Kızılağaç HEPP)
Average flow rate	16.7 m ³ /s & 25 m ³ /s
Production year	2010 & 2011
Serial numbers of the turbines	19743 & 19744 & 19745 Kalkandere HEPP) & 2011-10 & 2011-11 ((Kızılağaç HEPP)
Installed capacity of each turbine	11.68 MWe (Kalkandere HEPP) & 2.60 MWe (Kızılağaç HEPP)
Generator type	PSA-1600-X/14 (Kalkandere HEPP) & SF3150-24/3250 (Kızılağaç HEPP)
Generator firm	Indar (Kalkandere HEPP) & Chongqing Water Turbine Works (CWTW) (Kızılağaç HEPP)
Frequency	50 Hz
Production year	2010 (Kalkandere HEPP) & 2011 (Kızılağaç HEPP)
Number of generators	3 (Kalkandere HEPP) & 2 (Kızılağaç HEPP)
Serial numbers of the generators	3010000202 & 3010000203 & 3010000204 (Kalkandere HEPP) & 2011-10 & 2011-11 ((Kızılağaç HEPP)

The start date of the project activity is 30/12/2010 which the date when the project is commissioned and the electricity was first supplied to the grid as verified through the provisional acceptance protocol and the first crediting period is from 01st January 2011 until 31st December 2020 with two times renewable crediting period of 10 years.

2 VERIFICATION PROCESS

2.1 Method and Criteria

Re Carbon Ltd. was appointed by “Sanko Enerji Sanayi ve Ticaret A.Ş.” to perform the third verification of the “The Yukuslu- Kalkandere Hydroelectric Power Plant” with the service agreement dated 08/06/2021. The objective of this verification activity is to assess, with objective evidence:

- if the monitoring report version 04 dated “31/10/2022” conforms with the requirements of the monitoring plan of the registered PD and the approved methodology
- if the project activity conforms with the monitoring report and the registered PD, and
- if the data reported in the monitoring report are complete and transparent.

The scope of the verification is the independent and objective review of the monitored GHG reductions. The verification activity is based on the validated and registered PD version 08 dated 05/08/2011.

The project activity and the monitoring report are assessed against the requirements of the ACM0002: “Grid-connected Electricity Generation from Renewable Sources” version 12.0 and VCS version 4.3.

There hasn't been any sampling approach applied during the verification and all monitored data/parameters have been checked by the verification team.

The only purpose of the verification and certification is its usage during the issuance process as a part of the VCS project cycle. Therefore, Re Carbon Ltd. cannot be held liable by any party for decisions made or not made based on the verification and certification opinion, which will go beyond that purpose.

2.2 Document Review

The basis for the verification activity is the monitoring report version 01, dated 12/11/2021 which was submitted to the verification team on the same day. This monitoring report was revised several times due to issued CARs and CLs, with version 04 dated 31/10/2022 being the final version. The monitoring report and the monitoring activities were assessed against the registered PD version 08 dated 05/08/2011, the applied methodology, “ACM0002: “Grid-connected Electricity Generation from Renewable Sources” version 12.0, the relevant VCS rules and regulations including VCS version 4.3, CDM Validation and Verification Standard for project activities version 3.0, the final validation report version 03 dated 08/08/2011 and second verification report version 1.1 dated 16/06/2021.

The following actions were involved in the desk review:

- A review of the data and information presented to verify their completeness

- A review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions

The list of the documents which were reviewed during the verification period is given in Table 2-1 below:

Table 2-1: List of documents reviewed

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D01	Registered PD	08	05/08/2011
D02	Final Validation Report	03	08/08/2011
D03	Second Verification Final Report	1.1	16/06/2021
D04	ACM0002: Grid-connected Electricity Generation from Renewable Sources	12.0	-
D05	Verification Service Agreement	-	08/06/2021
D06	Monitoring Report	01	12/11/2021
D07	Monitoring Report	02	11/04/2022
D08	Monitoring Report	03	12/09/2022
D09	ER Calculation Excel Sheet	01	12/11/2021
D10	ER Calculation Excel Sheet	02	11/04/2022
D11	ER Calculation Excel Sheet	03	12/09/2022
D12	VCS Standard	4.3	22/06/2022
D13	VCS Program Guide	4.2	22/06/2022
D14	EIA Positive Decision	-	06/11/2009
D15	Lifeline Water Official Records (Signed by State Hydraulic Works)	-	18/02/2020 09/02/2021
D16	Fish Passage Photos	-	-
D17	Electricity Generation Licence (Initial Issuance & Last Amendment)	-	14/09/2006 10/10/2012
D18	TEIAS Meter Reading Forms	-	09/2017 - 12/2020
D19	EPIAS Screenshots	-	09/2017 - 12/2020
D20	Meters Test Reports for Changed Meters	-	09/09/2013 29/09/2014 29/09/2015 26/09/2016 08/11/2017 28/09/2018

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D21	Meters Test Reports for Current Meters	-	10/08/2020
D22	Electricity Meters Photos	-	-
D23	Package Waste Water Treatment Plant Photos	-	-
D24	Hazardous Waste Storage Area Photos	-	-
D25	Domestic Waste Container Photos	-	-
D26	Signed Letter by PP (About Proper Disposal of Domestic Waste by Special Administration of Rize City)	-	07/06/2021
D27	Hazardous Waste Transfer and Disposal Records	-	17/02/2016 24/02/2017 09/02/2018 31/01/2019 07/02/2020
D28	Noise Assessment Report	-	29/12/2010
D29	Signed Letter by the PP (About Double Counting and Renewable Energy Certification (REC))	-	15/10/2021
D30	Turbine and Generator Nameplates	-	-
D31	Reservoir Area Layout Drawing	-	-
D32	Signed Request/Proposal Forms by the Local Stakeholders from Ikizdere and Kalkandere Villages	-	25/09/2018 01/10/2019 09/01/2020 07/02/2020 16/04/2020
D33	Verra Exemption Letter	-	30/09/2021
D34	Provisional Acceptance Protocols	-	30/12/2010 28/01/2011 30/12/2012
D35	Reservoir Area Layout	-	-
D36	Single Line Diagrams for Kalkandere and Kızılağaç HEPPs	-	-
D37	Training Records	-	07/02/2018 03/01/2019 11-12/02/2019 04/11/2019
D38	Social Security Records for PP Site Employees	-	-

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D39	Trade Registry Gazette (About Project Ownership)		28/09/2012
D40	Site Photos	-	17/11/2021
D41	Monitoring Report	04	31/10/2022

2.3 Interviews

During the verification period, follow-up interviews were executed by the verification team to further analyze the correctness and accurateness of the information provided.

The list of individuals who were interviewed during the verification process is given in Table 2-2 below:

Table 2-2: List of individuals interviewed

Reference Number	Means of Interview ²	Full Name	Title	Organization
I01	Online SV	İsmet Kaya	Plant Manager	Sanko Enerji Sanayi ve Ticaret A.Ş.
I02	Online SV	Osman Kurtuluş	Plant Engineer	Sanko Enerji Sanayi ve Ticaret A.Ş.
I03	Online SV	Volkan Gümüşler	Administrative Staff	Sanko Enerji Sanayi ve Ticaret A.Ş.
I04	Online SV	Gamze Karaca	Consultant	Gaia Finansal Danışmanlık Hizmetleri Tic. Ltd. Şti.
I05	Online SV	Eyüp Güveli	Mukhtar (Village Head)	Hüseyinhoca Village
I06	Online SV	Niyazi Kolaylı	Mukhtar (Village Head)	Yokuşlu Village

² SV: Site visit; T: Telephone; E: E-mail

2.4 Site Inspections

As a part of the verification activities an online (remote) site visit using remote audit techniques (by means of Information and Communication Technology (ICT) was executed to the project activity's location, details of which can be seen in Table 2-3 below:

Table 2-3: Online (remote) site visit details

Date	17/11/2021	
Location	Online (remote)	
Participant	Company Name	Role in the Organization / Role in the Site Visit
İsmet Kaya	Sanko Enerji Sanayi ve Ticaret A.Ş.	Plant Manager
Osman Kurtuluş	Sanko Enerji Sanayi ve Ticaret A.Ş.	Plant Engineer
Volkan Gümüşler	Sanko Enerji Sanayi ve Ticaret A.Ş.	Administrative Staff
Gamze Karaca	Gaia Finansal Danışmanlık Hizmetleri Tic. Ltd. Şti.	Consultant
Eyüp Güveli	Hüseyinhoca Village	Mukhtar (Village Head)
Niyazi Kolaylı	Yokuşlu Village	Mukhtar (Village Head)
Points Verified	Source of Information	
Implementation and operation of the proposed VCS project activity as per the registered PD	Document review, online site visit and interviews with the PP representatives and local stakeholders from Hüseyinhoca and Yokuşlu Villages.	
Review of information flows for generating, aggregating, and reporting the monitoring parameters	Document review, online site visit and interviews with the PP representatives and local stakeholders from Hüseyinhoca and Yokuşlu Villages.	
Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in	Interviews with the PP representatives	

accordance with the monitoring plan in the PD	
Cross-check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources	Document review and online site visit
Check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD and the selected methodology	Document review, online site visit and interviews with the PP representatives and local stakeholders from Hüseyinhoca and Yokuşlu Villages.
Review of calculations and assumptions made in determining the GHG data and emission reductions	Document review
Identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters	Document review, interviews with the PP representatives and local stakeholders from Hüseyinhoca and Yokuşlu Villages.

The PP representatives and local stakeholders had been interviewed as in above during the online (remote) site visit using Zoom program and some photographic evidences like electricity meters, waste storage areas etc. have been taken along with the document review process to achieve the reasonable level of assurance during the verification as detailed in other sections of the report.

2.5 Resolution of Findings

The verification of this VCS project activity includes the following steps:

- Assessment of the conformity of the actual project activity and its operation with the registered PD version 08 dated 05/08/2011.
- An online (remote) site visit was conducted on 17/11/2021 in order to assess whether all physical features of the project activity proposed in the registered PD are in place and that the Project proponent(s) operated the project activity in line with the registered PD.
- Assessment of the compliance of the monitoring plan with the monitoring methodology “ACM0002: “Grid-connected Electricity Generation from Renewable Sources” version 12.0
- Assessment of the compliance of monitoring with the monitoring plan
- Assessment of data and calculation of greenhouse gas emission reductions

- Issuance of the verification report
- Independent technical review
- Approval of the verification report and request of issuance

The Verification Timeframe for this project activity is given in Table 2-4 below:

Table 2-4: Verification timeframe

Activity	Timeline		Total Days
	From	To	
Desk Review	13/11/2021	16/11/2021	4
Review of the MR version 01	13/11/2021	16/11/2021	4
Online (Remote) Site Visit	17/11/2021	17/11/2021	1
Issuance of the Verification Protocol version 01	04/04/2022	04/04/2022	1
Review of PPs Initial Set of Responses	02/05/2022	04/05/2022	3
Issuance of the Verification Protocol version 02	05/05/2022	05/05/2022	1
Review of PPs Second Loop Responses	21/08/2022	21/08/2022	1
Closing of all the CARs and CLs	06/10/2022	06/10/2022	1
Issuance of the Verification Report version 01	24/10/2022	24/10/2022	1
ITR Process	28/10/2022	01/11/2022	5
Issuance of the Verification Report version 02	01/11/2022	01/11/2022	1
Submission for Final Approval	02/11/2022	02/11/2022	1
Submission to the PP	02/11/2022	02/11/2022	1

The Verification Protocol is used for the assessment of each requirement during the execution of verification activities and is given in Appendix-1 of this verification report.

The Verification Protocol consists of two tables:

- Table 1 (VCS Monitoring Report (MR) Form, VCS and CDM Verification Requirements)
- Table 2 (Resolution of Corrective Action, Forward Action, and Clarification Requests)

The usage description of Table-1 in the Verification Protocol is explained in Table 2-5 below:

Table 2-5: Explanation about Table-1 in Verification Protocol

Question	Reference	MoV*	Findings, comments, references and document sources	Draft & Final Conclusion
<p>The requirements related with the VCS monitoring report and VCS and CDM verification Standards and/ or Procedures</p>	<p>Gives reference to the legislation or documents where the relevant requirement is found</p>	<p>Explains how conformance with question is investigated. Examples of means of verification are Document Review (DR), Interview (I) and Not Applicable (NA)</p>	<p>Is used to elaborate and discuss the question and/or conformance to the question by giving related references and document sources based on which the finding is issued or evidence is checked</p>	<p>Either acceptable based on the evidence provided (OK), non-compliance with the requirement (CAR), further clarification (CL) due to insufficient, unclear or not transparent information, forward action request (FAR) that needs to be solved during the next periodic verification</p>

The usage description of Table-2 in the Verification Protocol is explained in Table 2-6 below:

Table 2-6: Explanation about Table-2 in Verification Protocol

Draft Report Clarifications, Forward Action and Corrective Action Requests by Verification Team	Ref. to Questions in Table-1	Summary of Project proponents' Response	Verification Team Conclusion
The all CL, FAR and CARs determined during the draft verification report should be listed here	Gives reference to the checklist questions in Table-1 of Verification Protocol	Is used to summarize the responses by Project proponents regarding the non-conformities	Is used to summarize the responses by verification and their conclusions

The Verification Protocol is filled out by the verification team in line with the descriptions above; all CARs, CLs and FARs are listed in a transparent and clear manner.

During the verification process, a Verification Protocol (attached as Appendix 1 to this verification report) was used to submit the findings to the Project proponent(s).

In line with Re Carbon Ltd.'s internal terminology and VCS Standard version 4.3, the team reports the non-conformities in forms of Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs). When and for which type of non-conformities CARs, CLs and FARs are issued is explained below:

The verification team raises a **CAR** if one of the following occurs:

- Non-conformities with the monitoring plan or methodology are found in the monitoring and reporting, or if the evidence provided to prove conformity is insufficient.
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impair the estimate of emission reductions.
- Issues identified in a FAR during validation to be verified during verification have not been resolved by the Project proponents.

The verification team raises a **CL** if information is insufficient, not transparent or not clear enough to determine whether the applicable CDM and/or VCS requirements have been met.

The verification team raises a **FAR** during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

According to these principles a total of 12 CARs were issued, all of which are listed in the Verification Protocol. There haven't been any CLs and FARs issued during the verification.

The appointment process of the verification team considers the technical area(s), sectoral scope(s), and relevant host country experience, required amongst team members for the verification of the emission reductions, achieved by the project activity in the relevant monitoring period for this verification. The relevant VCS verification and previous ITR experiences are also assessed during the selection of the team members and the Independent Technical Reviewer (ITR), respectively. The verification team and ITR were assigned to this verification activity on 17/05/2021, taking all the above factors into consideration, and as a result of the contract review process.

The verification team and ITR details are given in Table 2-7 below:

Table 2-7: Verification team and ITR details

Name	Role	Host Country Experience	Scope Coverage	Technical Expertise	Involvement*
Mr. Anıl SÖYLER	Team Leader	☒	☒	☒	A, DR, RA, R
Ms. Öykü YAKUPOĞLU	Verifier	☒	☒	☒	A, DR, R
Mr. Sandeep KANDA	ITR	☒	☒	☒	ITR

* Explanations for the abbreviations used for involvement types are as follows:

A : Administrative

DR : Desk Review

SV : Site Visit

RA : Remote Assessment³

R : Reporting

ITR : Independent Technical Review

As a final step of verification, the final documentation including the verification report and its annexes have to undergo an internal quality control by Re Carbon Ltd. This quality control is also referred to as Independent Technical Review process.

³ The physical site visit was not executed due to "COVID-19 outbreak. Instead of that, alternative approaches like getting project site equipment details and site pictures, interviewing some available local stakeholders, checking signed documents by the local stakeholders if there are any feedbacks about the project and announcements by PP about PP's contact details in case of any complaints/ comments in the close surrounding locations etc. have been implemented through online means.

The Independent Technical Review is performed by another Team Leader who hasn't involved in the verification activities of this project activity. When the Team Leader finalizes the Verification Report, the report is sent to Independent Technical Reviewer, at this stage not only the report but all the supporting documents like emission factor calculations, supporting documents, relevant excel sheets etc. are reviewed.

Further CLs and CARs can be issued by the Independent Technical Reviewer during this review, to cover all the points that may need further clarification.

After all the CLs and CARs are closed, the verification report is reviewed and approved by the Team Leader, ITR and the Certification Manager/General Manager, and the request of issuance is submitted to the VCS Organization in line with the positive verification opinion and along with the all relevant documents.

2.5.1 Forward Action Requests

The verification team raises a FAR during the verification for actions if the monitoring and reporting require attention and/or adjustment in the next verification period, as explained in Section 2.5.

According to these principles no FAR has been issued during this verification process.

2.6 Eligibility for Validation Activities

Re Carbon Ltd. holds accreditation for the validation and verification activities in scope 1: "Energy Industries – Renewable/Non-renewable Sources" in which the project activity falls into.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The project does not participate under any emission trading program and other GHG Programs including renewable energy certificates (RECs) and this is also confirmed by the PP through the signed and sealed letter by PP dated as 15/10/2021.

Furthermore, double counting issue has also been assessed and the verification team has also checked the I-REC Registry (<https://evident.services/device-register>) wherein in total 329 projects from Turkey are listed as of this verification report date and this project isn't available within I-REC Registry database. Similarly, Gold Standard project database (<https://registry.goldstandard.org/projects?q=&page=1>) and GCC project database (https://projects.globalcarboncouncil.com/pages/submitted_projects) were checked and this project isn't available within Gold Standard and GCC projects' databases, either. Given that CDM projects are not applicable in Turkey and the project does not appear on domestic REC scheme, I-REC, Gold Standard and GCC registries, it could be confirmed that no RECs and other VER carbon credits are being issued for the project at the time of this verification.

That means, the only other eligible GHG programs in the host country is Gold Standard and Global Carbon Council (GCC) and the certification program is Renewable Energy Certification (REC), and the project hasn't been listed in any of them, hence Re Carbon Ltd. confirms that the project has not participated or been rejected under any other GHG programs since the validation.

3.2 Methodology Deviations

N/A (There haven't been any methodology deviations applied).

3.3 Project Description Deviations

The project was transferred to Sanko Enerji Sanayi ve Ticaret A.Ş. by Akım Enerji Üretimi San. ve Tic. A.Ş. as confirmed through the electricity generation licence and the trade registry gazette dated as 28/09/2012 and numbered as 8163 and PP is Sanko Enerji Sanayi ve Ticaret A.Ş. at the time of this verification process as already confirmed during the previous verification.

The project's capacity was planned to be implemented as 43,47MWm / 42,33 MWe as in the registered PD but the project has been implemented as 41,19 MWm / 40,24 MWe as confirmed through the generation licence and provisional acceptance protocols of the project. However, since the current project capacity is lower than the planned capacity, there hasn't been any adverse impact on the additionality as already confirmed during the previous verification.

The other entity involved in the project as carbon consultant was GAIA Carbon Finance in the project description. However, it's been changed as Gaia Finansal Danışmanlık Hizmetleri Tic. Ltd. Şti. at the time of this verification process as indicated in the monitoring report.

Finally, all electricity generation and consumption data in emission reductions table are checked with EPIAŞ records (PMUM has been replaced by EPIAS as of 01/09/2015 in Turkey during the monitoring period) as the main source and crosschecked with TEAIS meter reading protocol records as a conservative and correct approach. The main source of data has been defined as EPIAS records since they are the basis for billing.

Re Carbon Ltd. hereby confirms that such changes has no impact on the applicability of the methodology, additionality and the appropriateness of the baseline scenario.

3.4 Grouped Project

The project is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

Compliance of the Project Implementation with the Registered PD:

According to the registered PD, the estimated annual emission reduction is 100,089 tCO₂e and corresponding total estimated amount for the monitoring period is 333,721 tCO₂e. The actual values achieved for the current monitoring period is 263,092 tCO₂e. The actual amount of emission reduction for the current monitoring period is about 21% less than the estimated emission reduction amount. However, the difference is due to the annual changes and deviations in the precipitation regime and so as in the water flow. Besides that, the difference in the values does not lead to a substantial increment of the ER in this period in relation to the estimates in the registered PD.

The project also contributes to SDG 7 (Affordable and Clean Energy with 470,651.10 MWh net electricity generation), SDG 8 (Decent Work and Economic Growth with 23 employed staff during the recent year of operation period and all are permanent staff) and SDG-13 (Climate Action with achieved emission reduction of 263,092 tCO₂e) during the monitoring period.

The project was commissioned on 30/12/2010 which was verified by the provisional acceptance protocol. The project activity does not consist of more than one site and does not have any phased implementation.

The GHG emission reductions generated by the project are not included in an emission trading program or any other mechanism that includes GHG allowance trading, because of the position of the host country.

The project activity has not received any other form of environmental credits, as there are no such crediting schemes in the host country as declared by the PP.

Remaining Issues from Validation or Previous Verifications

There is no FAR from the previous verification process in line with the verification report version 1.1 dated 16/06/2021.

Compliance of the Monitoring Plan with the Monitoring Methodology

The monitoring plan is in accordance with the approved methodology, ACM0002 version 12.0, applied by the project activity.

In line with the methodology and the registered PD, the monitored parameters are quantity of net electricity generation supplied by the project plant to the grid ($EG_{\text{facility},y}$), installed capacity of the hydro power plant after the implementation of the project activity (CAP_{PJ}) and area of the reservoir (A_{PJ}) as in below:

- $EG_{\text{facility},y}$: The quantity of net electricity delivered to the grid has been calculated with the EPIAS (the financial settlement centre of TEIAS) records provided to the PP by TEIAS. The net electricity is measured continuously by one main electricity meter at the grid interface and recorded monthly. There is also one back up electricity meter. That means the electricity generation and consumption values have been determined through the summation of the measured values of the main meter and checked through the back up meter. All readings and billings are done via EPIAS system which is the legal database of the Ministry of Energy

and Natural Resources in Turkey. During this verification, all EPIAS and TEIAS meter reading protocol records have been reviewed by the verification team. The project mainly uses its own electricity however during the times when there is no generation, the project imports electricity from the grid. There are also internal reviews of the metered data which is checked by different parties. The EPIAS records are considered as the main source for the net electricity and the values are crosschecked with the Meter Reading Forms.

- CAP_{PJ}: According to the monitoring plan in the registered PD, the installed capacity of the power plant is monitored through the supplier information on the equipment and the number of turbines. The project has horizontal axis three Francis turbines with the installed capacity of 11.90 MWm / 11.68 MWe each turbine (Kalkandere HEPP) and vertical axis two Kaplan turbines with the installed capacity of 2.70 MWm / 2.60 MWe each (Kizilağaç HEPP), so it has a total capacity of 41.19 MWm / 40.24 MWe in line with the electricity generation licence and provisional acceptance protocol. However, since the current project capacity is lower than the planned capacity (43,47MWm / 42,33 MWe) as in the registered PD, there hasn't been any adverse impact on the additionality. Re Carbon Ltd. hereby confirms that there hasn't been any change regarding the total installed capacity of the project comparing with the registered project.
- AP_J: According to the monitoring plan in the registered PD, the area of the reservoir is monitored via topographical surveys, maps and satellite pictures. The reservoir area has been checked through the reservoir layout drawing of the project as in the registered PD and validation process and previous verification process and the reservoir area is taken as 11,442 m².

All data collected as part of monitoring will be archived electronically by the project owner and be kept at least for 2 years after the end of the last crediting period.

CAR-8 and CAR-9 were issued regarding the monitoring and it had been closed out as detailed in Appendix-1.

Compliance with the Calibration Frequency Requirements for Measuring Instruments:

The net electricity is measured continuously by one main electricity meter at the grid interface and recorded monthly. There is also one back up electricity meter.

The calibrated electricity meters were installed as per the regulations. Although, re-calibration is required after ten years, nevertheless, in case of irregular difference between main and cross-check spare meters, TEIAS (grid company) responsible are informed for the intervention. That means, TEIAS is responsible for the calibration and maintenance of the meters. The tests for the meters were performed on 09/09/2013, 29/09/2014, 29/09/2015, 26/09/2016, 08/11/2017, 28/09/2018 and 10/08/2020 (initial meter test of currently available meters), respectively and those test reports were provided to VVB.

The serial numbers of the currently available main meter (EMH model and accuracy class is C-1s) is 9674574 and that of back up meter (EMH model and accuracy class is C-1s) is 9674575, respectively and these have been verified through the meter test protocols. The serial numbers of dismantled main meter is 53087889 and that of back up meter is 53087890, respectively in line with the meter change protocol dated as 10/08/2020 (the meters were replaced due to the end of 10 year usage period of them in line with the relevant legal regulation) and these meters were available during the monitoring period. All these meters are bi-directional (meter the energy in two directions – generation and consumption).

CAR-8 was issued regarding the calibration and meter testing and this CAR had been closed as detailed in Appendix-1.

As a result of the reviewed documents, Re Carbon Ltd. hereby confirms that the project is fully implemented according to the description given in the registered PD.

It can also be confirmed through the reviewed documents that all physical features of the project activity including data collecting systems and storage have been implemented in accordance with the registered PD. The project activity is completely operational and the same has been confirmed through the provided evidences including EPIAS records, TEIAS meter reading protocols, electricity meter test protocols and the photos of electricity meters.

4.2 Safeguards

4.2.1 No Net Harm

There hadn't been any observed significant environmental impact of the project activity as indicated in the registered PD and this was also confirmed through the reviewed documents. The EIA positive decision dated as 06/11/2009 by the General Directorate of Environmental Impact Assessment and Planning of Ministry of Environment and Forestry was also provided by the PP.

Besides that, the photos of waste storage areas and the hazardous waste declaration forms to Ministry of Environment and Urbanization dated as 17/02/2016, 24/02/2017, 09/02/2018, 31/01/2019 and 07/02/2020 and the package waste water treatment plant photos have been provided by the PP. The photographic evidences of fish passage and official signed lifeline water records dated as 18/02/2020 and 09/02/2021 have also been provided.

4.2.2 Local Stakeholder Consultation

There hadn't been any complaint raised by the interviewed local stakeholders during the online (remote) verification site visit as detailed in Section 2.3.

The local stakeholders as stated in the Table 2-2 above were interviewed about the following issues and there hadn't been any complaint by the interviewed local stakeholders during the online (remote) site visit:

- Noise due to the project activity
- Impact on the aquatic life where the project had been constructed
- Sufficiency of local employment (The interviewed local stakeholders were pleased about the provided local employment opportunities by the PP)
- Waste management practices implemented by PP

It was also concluded that the grievance mechanism is in place and this was also confirmed by the interviewed local stakeholders during the online site visit. The signed request/proposal forms by the local stakeholders from Yokuşlu, Fındıklı and Hüseyinhoca Villages and dated as 25/09/2018, 01/10/2019, 09/01/2020, 07/02/2020 and 16/04/2020 were also provided to VVB. Therefore, it could also be concluded that there hasn't been any complaint during the monitoring period in line with the provided records, information by PP and interviews with some local stakeholders.

4.3 AFOLU-Specific Safeguards

N/A (The project activity is not an AFOLU project.)

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

EPIAS records are presented for all months of the monitoring period. All data in emission reductions table are checked with EPIAS records as the main source and crosschecked with TEIAS meter reading protocol records. The net electricity generated during the current monitoring period was as follows in Table 4-1 below:

Table 4-1: Net Electricity Generation

Period	Amount	Compliance Check
01/09/2017 - 31/12/2017	Export to Grid: 36,077.94 MWh Import from Grid: 94.52 MWh Net electricity supplied to grid: 35,983.42 MWh	EPIAS Records
01/01/2018 - 31/12/2018	Export to Grid: 159,006.81 MWh Import from Grid: 202.75 MWh Net electricity supplied to grid: 158,804.06 MWh	EPIAS Records
01/01/2019 - 31/12/2019	Export to Grid: 132,421.00 MWh Import from Grid: 338.43 MWh Net electricity supplied to grid: 132,082.57 MWh	EPIAS Records
01/01/2020 - 31/12/2020	Export to Grid: 144,078.71 MWh Import from Grid: 297.66 MWh Net electricity supplied to grid: 143,781.05 MWh	EPIAS Records
Total	Export to Grid: 471,584.46 MWh Import from Grid: 933.36 MWh Net electricity supplied to grid: 470,651.10 MWh	EPIAS Records

Emission factor and data and parameters available before validation are also applied in line with the registered PD and baseline excel sheet for validation.

According to the applied methodology ACM0002 version 12.0 and the registered PD, the GHG emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y$$

Where:

ER_y = Emission reductions in year y (tCO₂e/yr)

BE_y = Baseline emissions in year y (tCO₂e /yr)

PE_y = Project emissions in year y (tCO₂e/yr)

According to the applied methodology, for hydropower plants if the power density of the reservoir is higher than 10 W/m², then $PE_y = 0$. The power density of the project is calculated as follows:

$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}}$$

Where;

PD = Power density of the project activity (W/m²)

Cap_{PJ} = Installed capacity of the hydro power plant after the implementation of the project activity (W)

Cap_{BL} = Installed capacity of the hydro power plant before the implementation of the project activity (W). For new hydro power plants, this value is zero

A_{PJ} = Area of the single or multiple reservoirs measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m²)

A_{BL} = Area of the single or multiple reservoirs measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m²). For new reservoirs, this value is zero

The project activity is a green field run-of-river hydropower project, so Cap_{BL} and A_{BL} are equal to zero.

For The Yokuslu- Kalkandere Hydroelectric Power Plant:

A_{PJ} = 11,442 m² (according to the reservoir area layout and previous verification reports)

Cap_{PJ} = 40,240,000 W

The power density is calculated as follows:

$$PD = 40,240,000 / 11,442 = 3,517 \text{ W/m}^2$$

As the power density is higher than 10W/m², the project emissions of the project are equal to zero. The leakage can be neglected in line with the applied methodology. Therefore, the emission reductions generated during the monitoring period are equal to baseline emissions.

The baseline emissions in the monitoring period are calculated using the following formula:

$$BE_y = EG_{PJ,y} * EF_{grid,CM,y}$$

Where;

BE_y = Baseline emissions in year y (tCO₂/y)

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/y)

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system”(tCO₂ / MWh)

Since the project is a greenfield renewable power plant:

$EG_{PJ,y} = EG_{facility,y}$ = The amount of net electricity produced and fed into the grid by the project in year y .

Combined margin CO₂ emission factor ($EF_{grid,CM,y}$) is calculated once during the validation of the project activity and is valid throughout the first crediting period of 10 years.

It has been confirmed that the data used for emission reductions are correct. The grid emission factor taken is 0.559 tCO₂ / MWh and the value is same as fixed ex-ante in the registered PD.

It is also confirmed that the methods and formulae used for calculating baseline emissions are in line with the relevant methodology and the registered PD. The net electricity generation is multiplied with the grid emission factor to arrive at the emission reductions value.

According to the registered PD, the estimated emission reduction for this monitoring period would be 333,721 tCO₂e corresponding to the monitoring period. However, the project in operation totally reached 263,092 tCO₂e in this period.

The vintage break-up of the emission reductions during the current monitoring period was as follows in Table 4-2 below:

Table 4-2: Emission Reductions

Period	Emission reductions (tCO ₂ e)
01/09/2017 - 31/12/2017	20,114
01/01/2018 - 31/12/2018	88,771
01/01/2019 - 31/12/2019	73,834
01/01/2020 - 31/12/2020	80,373

The calculations have been reproduced by VVB and the source data (EPIAS screenshots) are presented by PP as explained above.

Re Carbon Ltd. hereby confirms that the above mentioned electricity generation figures and GHG emission reduction calculations are presented and quantified correctly and are in accordance with the monitoring methodology ACM0002 version 12.0 and the monitoring plan given in the registered PD.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The GHG emission reductions are a function of the net electricity generated and fed into the grid by the project activity and the combined margin emission factor which is determined during validation for the initial crediting period. According to the validation report version 03 dated 08/08/2011, the

combined margin emission factor had been validated and will remain the same for the first crediting period of 10 years as 0.559 tCO₂ / MWh.

The only parameter that needs to be closely verified is the net electricity generation and this value is taken from the monthly TEIAS meter reading protocol records which are along with the EPIAS records are the basis for billing and these records for each month has been submitted to and reviewed. They are recorded and saved automatically by the relevant government authority and there is no base for any option of material information.

Level of materiality is ensured by application of “Guideline on the Application of Materiality in Verifications” version 02. To guarantee this level of assurance, all data that is used in the GHG emission reduction calculations have been reviewed without any sampling.

As a cross check means, TEIAS meter reading protocol records which include the monthly generation and consumption figures of the plant for every month have been reviewed by the verification team.

The electricity meter calibration and test details have been verified and the same is available in the Section 4.2 of the report.

Therefore, Re Carbon Ltd. hereby confirms that the evidence used to determine the GHG emission reductions are sufficient in quantity and appropriate in quality.

4.6 Non-Permanence Risk Analysis

N/A. (The project isn't an AFOLU project).

5 VERIFICATION CONCLUSION

Re Carbon Ltd. performed the third verification of “The Yokuslu- Kalkandere Hydroelectric Power Plant”, a VCS project with the registry reference number “905” for the period in between 01/09/2017 and 31/12/2020. The scope of the activities covers the verification and certification of GHG emissions reductions, reported in the Monitoring Report Version 04 dated 31/10/2022 of “The Yokuslu- Kalkandere Hydroelectric Power Plant”.

Gaia Finansal Danışmanlık Hizmetleri Tic. Ltd. Şti. was responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring Plan, as indicated in the final PD. The development and maintenance of records and reporting procedures in accordance with that plan (including the calculation and determination of GHG emission reductions from the project) are under the responsibility of the management of the Project. The development and maintenance of the records and the related monitoring procedures are in accordance with the Monitoring Report Version 04.

The verification was performed by a verification team consisting of “Anıl Söyler as the team leader, Öykü Yakupoğlu as the verifier and Sandeep Kanda as the ITR”, and the project activity was checked against the applicable rules and regulations of VCS version 4.3.

Re Carbon Ltd. hereby confirms that the project activity “The Yokuslu- Kalkandere Hydroelectric Power Plant” in Turkey is implemented in accordance with the validated and registered PD version 08 dated 05/08/2011. The monitoring system is in place and the emission reductions were calculated without material misstatements as per the applied approved methodology which is “ACM0002 version 12.0”.

Re Carbon Ltd. confirms the following based on the results of the document review and the online (remote) assessment for the period between 01/09/2017 and 31/12/2020:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2017	20,114	0	0	20,114
2018	88,771	0	0	88,771
2019	73,834	0	0	73,834
2020	80,373	0	0	80,373
Total	263,092	0	0	263,092



Anıl SÖYLER



Sandeep KANDA



Esin TUNALI

Team Leader
01/11/2022

ITR
02/11/2022

Certification Manager
02/11/2022

APPENDIX 1: VERIFICATION PROTOCOL

Table 1 – (VCS Monitoring Report (MR) Form, VCS and CDM Verification Requirements)

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
Cover Page and General Requirements					
1. Are all items in the box at the bottom of the cover page completed using Arial 10.5 pt, black, regular (non-italic) font?	VCS Std. Version 4.3	DR	The all items in the MR are completed using Arial 10.5 pt, black, regular (non-italic) font.	OK	OK
2. Are the followings provided at the cover page in a tabular format?	VCS Std. Version 4.3	DR	Please see in below.	OK	OK
2.1. Name of the project?	VCS Std. Version 4.3	DR	This is available as The Yokuslu-Kalkandere Hydroelectric Power Plant.	OK	OK
2.2. Version number of the VCS MR?	VCS Std. Version 4.3	DR	This is available as version 01.	OK	OK
2.3. Report ID of the document	VCS Std. Version 4.3	DR	This is available as SNK22.	OK	OK
2.4. The issuance date of the document in DD-Month-YYYY format?	VCS Std. Version 4.3	DR	This is available as 01/04/2022 in the initial version of the MR.	OK	OK
2.5. VCS project database ID, if registered	VCS Std. Version 4.3	DR	This is available as 905.	OK	OK
2.6. Monitoring period in DD-Month-YYYY to DD-Month-YYYY format	VCS Std. Version 4.3	DR	This is available as 01/09/2017 to 31/12/2020.	OK	OK
2.7. Individual or entity that prepared the document?	VCS Std. Version 4.3	DR	This is available as GAIA Climate Consultant.	OK	OK
2.8. Physical address, telephone, email, website?	VCS Std. Version 4.3	DR	This is available.	OK	OK
3. Is this box available on the title page of the final document?	VCS Std. Version 4.3	DR	This is available in the version 01 of the MR.	OK	OK
4. Is there "Table of Contents" in the VCS MR?	VCS Std. Version 4.3	DR	Please correct the page numbers specified in the Table of Contents compatible with the MR.	CAR-1	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5. Is the VCS MR used as a basis for verification prepared in accordance with the latest template and guidance from the VCS?	VCS Std. Version 4.3	DR	Please use the latest template and guidance from the VCS for the MR.	CAR-2	OK
6. Are the VCS MR and other documents required under the VCS Program in English?	VCS Std. Version 4.3	DR	MR and all other required documents are in English except for some legal permit documents since they are in Turkish.	OK	OK
1. PROJECT DETAILS					
1.1. Summary Description of the Implementation Status of Project					
1.1.1. Has a brief summary of the project description provided under Section 1.1 of the MR?	VCS Std. Version 4.3 CDM-MR-FORM Version 9.0	DR	Please correct the number of total days for 2017 and update the comparison table accordingly in the MR and ER Calculation Excel spreadsheet.	CAR-3	OK
1.1.2. Has the purpose of the project activity and the measures taken to reduce greenhouse gas emissions been provided under section 1.1 of the MR?	VCS Std. Version 4.3 CDM-MR-FORM Version 9.0	DR	The purpose of the project activity has been provided under Section 1.1 of the MR.	OK	OK
1.1.3. Has a brief description of the installed technology and equipment been provided under Section 1.1 of the MR?	VCS Std. Version 4.3 CDM-MR-FORM Version 9.0	DR	This is available in the Section 1.1 of the MR.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.1.4. Has the relevant dates for the project activity (e.g. construction, commissioning, continued operation periods, etc.) been provided under Section 1.1 of the MR?	VCS Std. Version 4.3 CDM-MR-FORM Version 9.0	DR	This is available in the Section 1.1 of the MR.	OK	OK
1.1.5. Has the total emissions reductions achieved in this monitoring period been provided under Section 1.1 of the MR?	VCS Std. Version 4.3 CDM-MR-FORM Version 9.0	DR	This is available in the Section 1.1 of the MR.	OK	OK
1.2. Sectoral Scope and Project Type					
1.2.1. Is it indicated whether this a grouped project under Section 1.2 of the MR?	VCS Std. Version 4.3	DR	This has been indicated in the Section 1.2 of the MR.	OK	OK
1.2.2. Is the sectoral scope(s) applicable to the project indicated?	VCS Std. Version 4.3	DR	This has been indicated in the Section 1.2 of the MR.	OK	OK
1.2.3. Is the category of the project activity specified?	VCS Std. Version 4.3	DR	N/A (Since this isn't an AFOLU project, the category is not applicable).	OK	OK
1.3. Project Proponent					

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.3.1. Are the contact information for the project proponent(s) provided in the tabular format?	VCS Std. Version 4.3	DR	This is available in the Section 1.3 of the MR.	OK	OK
1.4. Other Entities Involved in the Project					
1.4.1. Are the contact information and roles/responsibilities for any other entities involved in the development of the project provided?	VCS Std. Version 4.3	DR	This is available in the Section 1.4 of the MR.	OK	OK
1.5. Project Start Date					
1.5.1. Is the project start date (the date on which the project began reducing or removing GHG emissions) indicated in day, month and year format?	VCS Std. Version 4.3	DR	This is available in the Section 1.5 of the MR.	OK	OK
1.6. Project Crediting Period					
1.6.1. Is the total crediting period including the day, month and year for the start and end dates and the total number of years indicated?	VCS Std. Version 4.3	DR	This is available in the Section 1.6 of the MR.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.7. Project Location					
1.7.1. Has complete information on the location of the project activity, including town, city, country and GPS coordinates been provided under Section 1.7 of the MR?	VCS Std. Version 4.3	DR	This is available under Section 1.7 of the MR.	OK	OK
1.8. Title and Reference of Methodology					
1.8.1. Is the following information provided regarding the methodology(s) applied to the project?	VCS Std. Version 4.3	DR	Please see in below.	OK	OK
1.8.1.1. The title of the methodology(ies)	VCS Std. Version 4.3	DR	This is available.	OK	OK
1.8.1.2. The reference of the methodology(ies)	VCS Std. Version 4.3	DR	This is available.	OK	OK
1.8.1.3. The version number of the methodology(ies)	VCS Std. Version 4.3	DR	This is available.	OK	OK
1.8.2. Is the following information provided regarding the tool(s) applied to the project?	VCS Std. Version 4.3	DR	This is available.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.8.2.1. The title of the tool(s)	VCS Std. Version 4.3	DR	This is available.	OK	OK
1.8.2.2. The version number of the tool(s)	VCS Std. Version 4.3	DR	This is available.	OK	OK
1.9. Participation under Other Programs					
1.9.1. Has it been indicated whether the project has been registered or seeking registration under any other GHG programs?	VCS Std. Version 4.3	DR	The signed and sealed letter on company letterhead that the project hasn't been registered, or hasn't been seeking registration under any other GHG programs has been provided.	OK	OK
1.9.2. If the project has been registered under any other GHG programs, have the PPs provided the registration number and details?	VCS Std. Version 4.3	DR	The project has not been registered under any other GHG programs.	OK	OK
1.9.3. If the project has been registered under any other GHG programs, have the details of any GHG credits claimed under such programs been provided in the Section 1.9 of the MR?	VCS Std. Version 4.3	DR	The project has not been registered under any other GHG programs.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.10. Other Forms of Credit					
1.10.1. Does the project reduce GHG emissions from activities that are included in an emissions trading program; or any other mechanism that includes GHG allowance trading?	VCS Std. Version 4.3	DR	The signed and sealed letter on company letterhead that project hasn't been included in an emissions trading program; or any other mechanism that includes GHG allowance trading has been provided.	OK	OK
1.10.2. If the project reduces GHG emissions from activities that are included in an emissions trading program; or any other mechanism that includes GHG allowance trading, have the PPs provided evidence on the following?	VCS Std. Version 4.3	DR	The project has not created another form of environmental credit or renewable energy certificate.	OK	OK
1.10.2.1. the reductions or removals generated by the project have or will not be used for compliance under such program(s) or mechanism(s)	VCS Std. Version 4.3	DR	The project has not created another form of environmental credit or renewable energy certificate.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.10.3. Have the project(s) created other forms of environmental credit (for example renewable energy certificates)?	VCS Std. Version 4.3	DR	The project has not created another form of environmental credit or renewable energy certificate.	OK	OK
1.10.4. If the project(s) created other forms of environmental credit (for example renewable energy certificates), has the PPs provided all relevant information about the GHG-related environmental credits and the related program?	VCS Std. Version 4.3	DR	The project has not created another form of environmental credit or renewable energy certificate.	OK	OK
1.10.5. Have all other programs under which the project is eligible to participate (to create another form of GHG-related environmental credit) been listed?	VCS Std. Version 4.3	DR	The project has not created another form of environmental credit or renewable energy certificate.	OK	OK
1.11. Sustainable Development					

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.11.1. Has it been described how the project contributes to achieving any nationally stated sustainable development priorities, including any provisions for monitoring and reporting same?	VCS Std. Version 4.3	DR	These have been explained in the Section 1.11 of the MR including the actual results of the contributed sustainable development indicators by the project during the monitoring period.	OK	OK
2. SAFEGUARDS					
2.1. No Net Harm					
2.1.1. Has it been summarized by PPs any potential negative environmental and socio-economic impacts of the project activity and the steps taken to mitigate them?	VCS Std. Version 4.3	DR	Please include the precautions taken for the possible negative environmental and socio-economic impacts of the project activity including the hazardous waste management process in the Section 2.1 of the MR.	CAR-4	OK
2.2. Local Stakeholder Consultation					
2.2.1. Has the process regarding the local stakeholder consultation been described by PPs including the following?	VCS Std. Version 4.3	DR	Please provide the signed document about the contact details of the PP relevant staff in case of any complaint by relevant local stakeholders.	CAR-5	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
2.2.1.1. The procedures or methods used for engaging local stakeholders (e.g. dates of announcements or meetings, periods during which input was sought)	VCS Std. Version 4.3	DR	This is available.	OK	OK
2.2.1.2. The procedures or methods used for documenting the outcomes of the local stakeholder communication	VCS Std. Version 4.3		This is available.	OK	OK
2.2.1.3. The mechanism for on-going communication with local stakeholders conducted prior to verification	VCS Std. Version 4.3		This is available.	OK	OK
2.2.1.4. How due account of all and any input received during ongoing communication has been taken	VCS Std. Version 4.3		This is available.	OK	OK
2.2.1.5. The details on any updates to the project design or justifying why updates are not appropriate.	VCS Std. Version 4.3		This is available.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
3. IMPLEMENTATION STATUS					
3.1. Implementation Status of The Project Activity					
3.1.1. Has a description of the implementation and operational status of the project as of this monitoring period been provided under section 3.1 of the MR?	CDM-MR-FORM Version 9.0	DR	Please correct the project start date in the provided table of Section 3.1 of the MR.	CAR-6	OK
3.1.2. Has the installed technology(ies), technical process and equipment, including the diagrams, where appropriate, been included in section 3.1 of the MR?	CDM-MR-FORM Version 9.0	DR	This is available in the Section 1.1 of the MR.	OK	OK
3.1.3. Has the starting date of operation of the project activity been provided under Section 3.1 of the MR?	EB111 Report Annex 1 §256b	DR	This is available in the Section 3.1 of the MR.	OK	OK
3.1.4. If the project activity consists of more than one site, has the status of implementation and starting date of operation for each site been clearly described under Section 3.1 of the MR?	EB111 Report Annex 1 §256b	DR	N/A	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.1.5. If the implementation of the project activity planned to be realized in different phases, has the progress of the proposed VCS project activity achieved in each phase been indicated under Section 3.1 of the MR?	EB111 Report Annex 1 §256b	DR	N/A	OK	OK
3.1.6. Do the actual project activity and its operation comply with the registered PD and/or an approved revised PD??	EB111 Report Annex 2 §354a	DR	Please see CAR-6.	CAR-6	OK
3.1.7. Have the PPs implemented and operated the VCS project activity as per the descriptions contained in the registered PD?	EB111 Report Annex 2 §354b	DR	Please see CAR-6.	CAR-6	OK
3.1.8. Has the installed technology(ies), technical process and equipment, including the diagrams, where appropriate, been included in Section 3.1 of the MR?	CDM-MR-FORM Version 9.0	DR	This is available in the Section 1.1 of the MR.	OK	OK
3.1.9. Are there any other changes (e.g. to project proponent or other entities) with respect to the registered project?	VCS Std. Version 4.3	DR	This is available in the Section 3.1 of the MR.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.2. Deviations					
3.2.1. Methodology Deviations					
3.2.1.1. Are there any deviations from the methodology?	VCS Std. Version 4.3	DR	N/A (There haven't been any deviations from the methodology).	OK	OK
3.2.1.2. If there are any deviations from the methodology, are these deviations described properly?	VCS Std. Version 4.3	DR	N/A (There haven't been any deviations from the methodology).	OK	OK
3.2.1.3. If there are any deviations from the methodology, are these deviations justified properly and clearly?	VCS Std. Version 4.3	DR	N/A (There haven't been any deviations from the methodology).	OK	OK
3.2.2. Project Description Deviations					
3.2.2.1. Are there any deviations from the registered project description?		DR	These have been provided.	OK	OK
3.2.2.2. If there are any deviations from the project description, are these deviations described properly?	VCS Std. Version 4.3	DR	These have been provided.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.2.2.3. If there are any deviations from the project description, are these deviations justified properly and clearly?	VCS Std. Version 4.3	DR	These have been provided.	OK	OK
3.2.2.4. Is the outcome of the deviation from the project description provided?	VCS Std. Version 4.3	DR	These have been provided.	OK	OK
3.3. Grouped Projects					
3.3.1. Is this a grouped project?	VCS Std. Version 4.3	DR	N/A (The project isn't a grouped project).	OK	OK
3.3.2. If it is a grouped project, is the relevant information about new instances of the project activity(ies) provided?	VCS Std. Version 4.3	DR	N/A (The project isn't a grouped project).	OK	OK
3.3.3. If it is a grouped project, is it demonstrated clearly and transparently that each new instance of the project activity(s) meets the eligibility criteria set out in the project description?	VCS Std. Version 4.3	DR	N/A (The project isn't a grouped project).	OK	OK
4. DATA AND PARAMETERS					

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.1. Data and Parameters Available at Validation					
4.1.1. Has all the data that is determined only once for the crediting period but are used after registration of the project, been listed under Section 4.1 using the tabular format?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please include all the data that is determined only once for the crediting period but are used after registration of the project in the Section 4.1 of the MR.	CAR-7	OK
4.1.2. If all the data that is determined only once for the crediting period but are used after registration of the project, does the listed data include all the parameters used to calculate baseline, project and leakage emissions as well as other relevant parameters required by the approved methodology and the monitoring plan?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK
4.1.3. In the data/parameter tables provided under Section 4.1 of the MR, for each data has the name of the data/parameters given in accordance with the registered VCS PD and the applied approved methodology?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.1.4. In the data/parameter tables provided under Section 4.1 of the MR, for each data has the unit of the data/parameters given in accordance with the registered VCS PD and the applied approved methodology?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK
4.1.5. In the data/parameter tables provided under Section 4.1 of the MR, for each data has the description of the data/parameters given in accordance with the registered VCS PD and the applied approved methodology?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK
4.1.6. In the data/parameter tables provided under Section 4.1 of the MR, for each data has the source of the data/parameters given in accordance with the registered VCS PD and the applied approved methodology?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.1.7. In the data/parameter tables provided under Section 4.1 of the MR, for each data has the values applied of the data/parameters given in accordance with the registered VCS PD and the applied approved methodology?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK
4.1.8. In the data/parameter tables provided under Section 4.1 of the MR, for each data has the justification of choice of data or description of measurement methods and procedures applied been provided?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK
4.1.9. In the data/parameter tables provided under Section 4.1 of the MR, for each data has it been indicated what the data/parameters are used for (baseline/project /leakage emission calculations)?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-7.	CAR-7	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2. Data and Parameters Monitored					
4.2.1. Has all the data that are monitored been listed under Section 4.2 using the tabular format?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	a) Please correct the back-up meter details in the Section 4.2 of the MR. b) Please provide the QA/QC procedures to be applied for each parameter in the Section 4.2 of the MR.	CAR-8	OK
4.2.2. In the data/parameter tables provided under section 4.2 of the MR, for each data has the name of the data/parameters given in accordance with the registered VCS PD and the applied approved methodology?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is in line with the registered PD.	OK	OK
4.2.3. In the data/parameter tables provided under section 4.2 of the MR, for each data has the unit of the data/parameters given in accordance with the registered VCS PD and the applied approved methodology?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	The units are available in line with the registered PD.	OK	OK
4.2.4. In the data/parameter tables provided under section 4.2 of the MR, for each data has it been described how the data is monitored?	CDM-MR-FORM Version 9.0 VCS Version 4.3	DR	This is stated in the Section 4.2 of the MR.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.5. In the data/parameter tables provided under section 4.2 of the MR, for each data has the source of data been indicated (like logbooks, daily records, surveys, etc.)?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is in line with the registered PD.	OK	OK
4.2.6. In the data/parameter tables provided under section 4.2 of the MR, for each data has the estimated values of the monitoring parameter been indicated?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is stated in the Section 4.2 of the MR.	OK	OK
4.2.7. In the data/parameter tables provided under section 4.2 of the MR, for each data has the QA/QC procedures being applied been given?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-8.	CAR-8	OK
4.2.8. In the data/parameter tables provided under section 4.2 of the MR, for each data has the purpose of data been given?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available in the Section 4.2 of the MR.	OK	OK
4.2.9. If applicable, has the calculation method, including any equations, used to establish the data/parameter been given?	VCS Std. Version 4.3	DR	This is available in the Section 4.2 of the MR.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.10. In the data/parameter tables provided under section 4.2 of the MR, for each data has it been indicated what types of equipment are used to monitor each parameter, including following, if applicable as per the monitoring plan?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available in the Section 4.2 of the MR.	OK	OK
4.2.10.1. Details on accuracy class	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available.	OK	OK
4.2.10.2. The person/entity responsible for the measurement	VCS Std. Version 4.3	DR	This is available as TEIAS and in line with the registered PD.	OK	OK
4.2.10.3. Any standards or protocols to be followed	VCS Std. Version 4.3	DR	This is available in the Section 4.2 of the MR.	OK	OK
4.2.10.4. Calibration frequency	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available as ten years.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.10.5. Serial number	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-8.	CAR-8	OK
4.2.10.6. Calibration date	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available.	OK	OK
4.2.10.7. Validity of the calibration	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available as ten years.	OK	OK
4.2.11. In the data/parameter tables provided under section 4.2 of the MR, for each data has the measurement and recording frequency been indicated?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available.	OK	OK
4.2.12. Is the calibration frequency for measuring equipment specified in the monitoring methodology, in the applied standardized baselines or in the monitoring plan??	EB111 Report Annex 2 §370 VCS Std. Version 4.3	DR	This is in line with the registered PD and relevant legal regulation.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.13. If the calibration frequency for measuring equipment isn't specified in the monitoring methodology, guidance provided by the Board or the monitoring plan, are the equipment calibrated either in accordance with the specifications of the local/national standards, or as per the manufacturer's specification?	EB111 Report Annex 2 §370 VCS Std. Version 4.3	DR	This is in line with the registered PD and relevant legal regulation.	OK	OK
4.2.14. If neither local/national standards nor the manufacturer's specification are available, have the international standards been used?	EB111 Report Annex 2 §370 VCS Std. Version 4.3	DR	This is in line with the registered PD and relevant legal regulation.	OK	OK
4.2.15. Is the calibration of the measuring equipment that have an impact on the claimed emission reductions conducted by the PPs at a frequency specified in the applied monitoring methodology and/or the monitoring plan?	EB111 Report Annex 2 §371 VCS Std. Version 4.3	DR	This is in line with the registered PD and relevant legal regulation.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.16. Has the calibration been delayed and has the calibration been implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available) for the certain monitoring period?	EB111 Report Annex 2 §366 VCS Std. Version 4.3	DR	This is in line with the registered PD and relevant legal regulation.	OK	OK
4.2.17. If the calibration is delayed and if the calibration is implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available) for the certain monitoring period, are one of the following approaches adopted by the PPs for the calculation of emission reductions?	EB111 Report Annex 2 §366 VCS Std. Version 4.3	DR	N/A (The calibration of the meters is valid ten years).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.17.1. Applying the maximum permissible error of the instrument to the measured values taken during the period between the scheduled date of calibration and the actual date of calibration, if the results of the delayed calibration do not show any errors in the measuring equipment, or if the error is smaller than the maximum permissible error; or	EB111 Report Annex 2 §366a VCS Std. Version 4.3	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
4.2.17.2. Applying the error identified in the delayed calibration test, if the error is beyond the maximum permissible error of the measuring equipment.	EB111 Report Annex 2 §366b VCS Std. Version 4.3	DR	N/A (The calibration of the meters is valid ten years).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.18. If calibration is delayed and if the calibration is implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available) for the certain monitoring period, has the error been applied in following ways?	EB111 Report Annex 2 §367 VCS Std. Version 4.3	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
4.2.18.1. The adjusted measured values of the delayed calibration result in fewer claimed emission reductions?	EB111 Report Annex 2 §367a VCS Std. Version 4.3	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
4.2.18.2. For all measured values taken during the period between the scheduled date of calibration and the actual date of calibration?	EB111 Report Annex 2 §367b VCS Std. Version 4.3	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
4.2.19. If the results of the delayed calibration aren't available, have Pss calculated the emission reductions conservatively?	EB111 Report Annex 2 §368	DR	N/A (The calibration of the meters is valid ten years).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.20. If the results of the delayed calibration aren't available, have post registration requirements been followed by the PPs?	EB111 Report Annex 2 §369	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
4.2.21. Have any information about appropriate emission factors, IPCC default values and any other reference values that have been used in the calculation of emission reductions been given in detail in the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	N/A	OK	OK
4.2.22. If the data that are monitored been listed under section 4.2 using the tabular format, does the listed data include all the parameters used to calculate baseline, project and leakage emissions as well as other relevant parameters required by the approved methodology and the monitoring plan?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3 EB111 Report Annex1 §260	DR	$EG_{\text{facility},y}$, Cap_{PJ} and A_{PJ} are monitored parameters in line with the registered PD.	OK	OK
4.2.23. Is a complete set of data available for the specified monitoring period?	EB111 Report Annex 2 §373 VCS Std. Version 4.3	DR	$EG_{\text{facility},y}$, Cap_{PJ} and A_{PJ} are monitored parameters in line with the registered PD.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3. Monitoring Plan					

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3.1. Has a description of the monitoring system been provided under Section 4.3 of the MR?	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	Please clarify the cross-check method for EG _{facility,y} under Section 4.3 of the MR. Please also see CAR-8.	CAR-9	OK
4.3.2. Has information about the data collection procedures, including following been provided under Section 4.3 of the MR?	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	Please see in below.	OK	OK
4.3.2.1. Information flow including data generation	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	The details of the data generation is available and in line with the registered PD.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3.2.2. Data aggregation	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	The details of the data aggregation is available and in line with the registered PD.	OK	OK
4.3.2.3. Data recording	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	The details of the data recording is available and in line with the registered PD.	OK	OK
4.3.2.4. Data calculation	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	N/A	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3.2.5. Data reporting	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	The details of the data reporting is available and in line with the registered PD.	OK	OK
4.3.3. Has organizational structure, roles and responsibilities of personnel, and emergency procedures for the monitoring system been provided under section 4.3 of the MR?	CDM-MR-FORM Version 9.0 EB111 Report Annex 1 §258 VCS Std. Version 4.3	DR	This is available under Section 4.3 of the MR.	OK	OK
4.3.4. Regarding to the management and operational system, are the responsibilities and authorities for monitoring and reporting in accordance with the responsibilities and authorities stated in the monitoring plan?	EB111 Report Annex 2 §361b-(iv) VCS Std. Version 4.3	DR	This is available under Section 4.3 of the MR.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3.5. Have quality assurance and quality control procedures been applied in accordance with the monitoring plan?	EB111 Report Annex 2 §361e VCS Std. Version 4.3	DR	Please see CAR-9.	CAR-9	OK
4.3.6. Are the procedures for handling internal auditing and non-conformities described?	VCS Std. Version 4.3	DR	Please see CAR-9.	CAR-9	OK
4.3.7. Where appropriate, are the line diagrams to display the GHG data collection and management system included?	VCS Std. Version 4.3	DR	N/A (This is explained without any diagram).	OK	OK
4.3.8. If the sampling approaches used in the monitoring plan, has the following been included?	VCS Std. Version 4.3	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.1. target precision levels	VCS Std. Version 4.3	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.2. sample sizes	VCS Std. Version 4.3	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.3. sample site locations	VCS Std. Version 4.3	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.4. stratification	VCS Std. Version 4.3	DR	N/A (The sampling approach hasn't been used).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3.8.5. frequency of measurement and	VCS Std. Version 4.3	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.6. QA/QC procedures	VCS Std. Version 4.3	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.7. Demonstration on whether the required confidence/precision has been met.	CDM-MR-FORM Version 9.0	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.9. Have the monitoring plan and the applied methodology been properly implemented and followed by the PPs?	EB111 Report Annex 2 §361a VCS Std. Version 4.3	DR	Please see CAR-8 and CAR-9.	CAR-8 CAR-9	OK
4.3.10. Has the monitoring of parameters (baseline / project / leakage / emission reduction) in the project activity been implemented in accordance with the monitoring plan contained in the registered PD or any accepted revised monitoring plan?	EB111 Report Annex 2 §361b-(i)-(ii)-(iii) VCS Std. Version 4.3	DR	Please see CAR-8 and CAR-9.	CAR-8 CAR-9	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3.11. Have all parameters stated in the monitoring plan, the applied methodology and relevant VCS requirements been sufficiently monitored and updated as applicable?	EB111 Report Annex 2 §361b VCS Std. Version 4.3	DR	Please see CAR-8 and CAR-9.	CAR-8 CAR-9	OK
4.3.12. Are monitoring results consistently recorded and stored as per the approved frequency?	EB111 Report Annex 2 §361d VCS Std. Version 4.3	DR	The monitoring system is available and in line with the registered PD.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5. QUANTIFICATION of GHG EMISSION REDUCTIONS and REMOVALS					
5.1. Baseline Emissions					
5.1.1. Has all the formulae used to calculate the baseline emissions been provided under section 5.1 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please see CAR-3.	CAR-3	OK
5.1.2. Has sample calculations for all formulae used and calculation of baseline emissions or baseline net GHG removals by sinks, applying actual values been provided under section 5.1 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available in the ER Calculation Excel spreadsheet.	OK	OK
5.1.3. Has all electronic spreadsheets to present full calculations in the monitoring report been attached?	CDM-MR-FORM Version 9.0	DR	This is available.	OK	OK
5.1.4. Have any assumptions used in baseline emission calculations been justified?	EB111 Report Annex 2 §373d VCS Std. Version 4.3	DR	N/A (There haven't been any assumptions used).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.1.5. If applicable, are the appropriate emission factors used for the baseline emission calculations in line with the good guidance practices? (e.g. IPCC default values and other reference values)	EB111 Report Annex 2 §373e VCS Std. Version 4.3	DR	N/A (The grid emission factor has been calculated and determined during the validation process).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.2. Project Emissions					
5.2.1. Has all the formulae used to calculate the project emissions been provided under section 5.2 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available under Section 5.2 of the MR.	OK	OK
5.2.2. Has sample calculations for all formulae used and calculation of project emissions or or actual net GHG removals by sinks, applying actual values been provided under section 5.2 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please correct Cap _{PJ} value in the ER Calculation Excel spreadsheet.	CAR-10	OK
5.2.3. Has all electronic spreadsheets to present full calculations in the monitoring report been attached?	CDM-MR-FORM Version 9.0	DR	Please see CAR-10.	CAR-10	OK
5.2.4. Have any assumptions used in project emission calculations been justified?	EB111 Report Annex 2 §373d VCS Std. Version 4.3	DR	N/A (There haven't been any assumptions used).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.2.5. If applicable, are the appropriate emission factors used for the project emission calculations in line with the good guidance practices? (e.g. IPCC default values and other reference values)	EB111 Report Annex 2 §373e VCS Std. Version 4.3	DR	N/A (The grid emission factor has been calculated and determined during the validation process).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.3. Leakage					
5.3.1. Has all the formulae used to calculate the leakage emissions been provided under section 5.3 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	The justification for leakage is available but please provide the applied methodology and its version under Section 5.3 of the MR.	CAR-11	OK
5.3.2. Has sample calculations for all formulae used and calculation of leakage emissions, applying actual values been provided under section 5.3 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available in the ER Calculation Excel spreadsheet.	OK	OK
5.3.3. Has all electronic spread sheets to present full calculations in the monitoring report been attached?	CDM-MR-FORM Version 9.0	DR	This is available.	OK	OK
5.3.4. Have any assumptions used in leakage emission calculations been justified?	EB111 Report Annex 2 §373d VCS Std. Version 4.3	DR	N/A (There haven't been any assumptions used).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.3.5. If applicable, are the appropriate emission factors used for the leakage emission calculations in line with the good guidance practices? (e.g. IPCC default values and other reference values)	EB111 Report Annex 2 §373e VCS Std. Version 4.3	DR	N/A (The grid emission factor has been calculated and determined during the validation process).	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.4. Net GHG Emission Reductions and Removals					
5.4.1. Have the total baseline emissions or baseline net GHG removals by sinks during the monitoring period been given under section 5.4 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available in the Section 5.4 of the MR.	OK	OK
5.4.2. Has the total project emissions or actual net GHG removals by sinks during the monitoring period been given under section 5.4 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available in the Section 5.4 of the MR.	OK	OK
5.4.3. Has the total leakage emissions during the monitoring period been given under section 5.4 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	This is available in the Section 5.4 of the MR.	OK	OK
5.4.4. Have the total emission reductions or net anthropogenic GHG removals by sinks during the monitoring period been given under section 5.4 of the MR?	CDM-MR-FORM Version 9.0 VCS Std. Version 4.3	DR	Please correct the values of “Net GHG emission reductions or removals” column of in Table 5 under Section 5.4 of the MR.	CAR-12	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.4.5. If there is material information that can cause overestimation of emission reductions or removals of the 73 roject activity, is this equal to higher than one of the following?	EB111 Report Annex 2 §326	DR	There hasn't been any material information detected.	OK	OK
5.4.5.1. 0.5 per cent of the emission reductions or removals for 73 roject activities achieving a total emission reduction or removal of equal to or more than 500,000 tons of carbon dioxide equivalent per year?	EB111 Report Annex 2 §326a	DR	There hasn't been any material information detected.	OK	OK
5.4.5.2. 1 per cent of the emission reductions or removals for 73 roject activities achieving a total emission reduction or removal between 300,000 and 500,000 tons of carbon dioxide equivalent per year?	EB111 Report Annex 2 §326b	DR	There hasn't been any material information detected.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.4.5.3. 2 per cent of the emission reductions or removals for large-scale 74 roject activities achieving a total emission reduction or removal of 300,000 tons of carbon dioxide equivalent per year or less?	EB111 Report Annex 2 §326c	DR	There hasn't been any material information detected.	OK	OK
5.4.5.4. 10 per cent of the emission reductions or removals 74 roject microscale 74 roject activities?	EB111 Report Annex 2 §326d	DR	There hasn't been any material information detected.	OK	OK
5.4.5.5. 5 per cent of the emission reductions or removals for small-scale 74 roject activities other than 74 roject activities covered under 5.4.5.4 above?	EB111 Report Annex 2 §326e	DR	There hasn't been any material information detected.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
6. APPENDICES					
6.1. If any further background information regarding any raw data from monitoring is provided, is this information correct and supported by the appropriate evidence?	VCS Std. Version 4.3	DR	There haven't been any appendices provided in the MR.	OK	OK
6.2. If any further background information regarding additional information used in the monitoring plan is provided, is this information correct and supported by the appropriate evidence?	VCS Std. Version 4.3	DR	There haven't been any appendices provided in the MR.	OK	OK
6.3. If any further background information regarding documentation of activities conducted from the monitoring plan and diagrams are provided, is this information correct and supported by the appropriate evidence?	VCS Std. Version 4.3	DR	There haven't been any appendices provided in the MR.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
7. OTHER REQUIREMENTS					
7.1. Forward Action Requests (FARs) Identified During Validation and/or Previous Verification					
7.1.1. Is there any remaining FARs from the validation and/or previous verification activities?	EB111 Report Annex 2 §343	DR	There hasn't been any FAR issued by the relevant DOE during the second verification process in line with the provided verification report.	OK	OK
7.1.2. If there any remaining FARs from the validation and/or previous verification activities, have the PPs addressed these FARs in the MR?	EB111 Report Annex 2 §343	DR	There hasn't been any FAR issued by the relevant DOE during the second verification process in line with the provided verification report.	OK	OK
7.1.3. Has the FARs been resolved?	EB111 Report Annex 2 §343 §346	DR	There hasn't been any FAR issued by the relevant DOE during the second verification process in line with the provided verification report.	OK	OK

*DR= Document Review, I= Interview, SV=Site Visit

Table 2 – Resolution of Corrective Action, Forward Action and Clarification Requests

Draft Report Clarifications, Forward Action and Corrective Action Requests By Verification Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Verification Team Conclusion
CAR-1 Please correct the page numbers specified in the Table of Contents compatible with the MR.	4	Corrected. Response to Review-1: Corrected.	Review-1: Please correct the page numbers specified in the Table of Contents compatible with the MR. Review-2: Ok Closed (The page numbers have been revised accordingly.)
CAR-2 Please use the latest template and guidance from the VCS for the MR.	5	The latest template has been used.	Review-1: Ok Closed (The template has been revised with the latest VCS template.)
CAR-3 Please correct the number of total days for 2017 and update the comparison table accordingly in the MR and ER Calculation Excel spreadsheet.	1.1.1	Updated. Response to Review-1: Corrected.	Review-1: Please correct the total expected amount of net GHG removals and the total expected net electricity generation values in Table 1 of the MR. Review-2: Ok Closed (The values have been corrected.)
CAR-4 Please include the precautions taken for the possible negative environmental and socio-economic impacts of the project activity including the hazardous waste management process in the Section 2.1 of the MR.	2.1.1	Included.	Review-1: Ok Closed (The precautions taken have been included in the Section 2.1 of the MR).

* CAR= Corrective Action Request, FAR= Forward Action Request, CL= Clarification Request

Draft Report Clarifications, Forward Action and Corrective Action Requests By Verification Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Verification Team Conclusion
<p>CAR-5</p> <p>Please provide the signed document about the contact details of the PP relevant staff in case of any complaint by relevant local stakeholders.</p>	<p>2.2.1</p>	<p>Mukhtars of Findikli, Yokuslu and Huseyinhoca villages had already taken the contact information of the company's Plant Manager so that the local stakeholders can reach Plant Manager whenever they have any complaints, suggestions, or ideas about the project. Stakeholders convey their requests and objections to the project owner by phone or individual application or local public meetings with a form. The Complaint & Request & Proposal form has been submitted as proof documents. Requests received by the local people by phone or individual application have been submitted.</p>	<p>Review-1:</p> <p>Ok Closed (The sample request/proposal forms by the local stakeholders proving about having contact details of the PP relevant staff and dated as 19/03/2018, 01/10/2019, 09/01/2020 and 16/04/2020 have been provided).</p>
<p>CAR-6</p> <p>Please correct the project start date in the provided table of Section 3.1 of the MR.</p>	<p>3.1.1</p>	<p>Corrected.</p>	<p>Review-1:</p> <p>Ok Closed (The project start date has been revised correctly.)</p>
<p>CAR-7</p> <p>Please include all the data that is determined only once for the crediting period but are used after registration of the project in the Section 4.1 of the MR.</p>	<p>4.1.1</p>	<p>Included.</p>	<p>Review-1:</p> <p>Ok Closed (Section 4.1 of the MR has been revised accordingly).</p>
<p>CAR-8</p> <p>a) Please correct the back-up meter details in the Section 4.2 of the MR.</p>	<p>4.2.1</p>	<p>a) Corrected. b) Provided.</p>	<p>Review-1:</p> <p>a) Ok Closed (The back-up meter details have been revised correctly).</p>

* CAR= Corrective Action Request, FAR= Forward Action Request, CL= Clarification Request

Draft Report Clarifications, Forward Action and Corrective Action Requests By Verification Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Verification Team Conclusion
b) Please provide the QA/QC procedures to be applied for each parameter in the Section 4.2 of the MR.			b) Ok Closed (The QA/QC procedures to be applied have been indicated for each parameter in the Section 4.2 of the MR).
CAR-9 Please clarify the cross-check method for $EG_{facility,y}$ under Section 4.3 of the MR.	4.3.1	Clarified.	Review-1: Ok Closed (The cross-checked method has been indicated in the Section 4.3 of the MR).
CAR-10 Please correct Cap_{PJ} value in the ER Calculation Excel spreadsheet.	5.2.2	Corrected.	Review-1: Ok Closed (The Cap_{PJ} value in the ER Calculation Excel spreadsheet has been revised correctly).
CAR-11 Please provide the applied methodology and its version under Section 5.3 of the MR.	5.3.1	Provided.	Review-1: Ok Closed (The applied methodology and its version have been included in the Section 5.3 of the MR).
CAR-12 Please correct the values of "Net GHG emission reductions or removals" column of in Table 5 under Section 5.4 of the MR.	5.4.4	Corrected. Response to Review-1: Please find the difference between EPIAS and OSF records in the ER excel spreadsheet. Since the difference is 0.006%, it can be neglected. In addition, since EPIAS values are the main source, EPIAS values were used in the calculation of baseline emissions.	Review-1: The values of "Net GHG emission reductions or removals" column in Table 5 have been revised but please clarify the differences in some months between EPIAS and OSF records along with the relevant evidence. Review-2: Ok Closed (The difference in EPIAS and OSF records is quite low as checked through the ER

* CAR= Corrective Action Request, FAR= Forward Action Request, CL= Clarification Request

Draft Report Clarifications, Forward Action and Corrective Action Requests By Verification Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Verification Team Conclusion
			Calculation Excel spreadsheet and at negligible level).

* CAR= Corrective Action Request, FAR= Forward Action Request, CL= Clarification Request

APPENDIX 2: VERIFICATION TEAM AND ITR COMPETENCE

Mr. Anıl SÖYLER holds a B. Sc. in “Environmental Engineering” from Middle East Technical University/Ankara. He has more than 15 years of professional experience in environmental management, monitoring and auditing, environmental and social impact assessments, GHG emission reporting as well as projects’ validation and verification. He has been involved in the validation/verification services of more than 200 GHG emission reduction projects. Anıl has also been involved in both national and international projects, supported by IFC, the World Bank and EBRD. With re-carbon, Anıl is a free-lance Team Leader and an ITR.

Ms. Öykü YAKUPOĞLU holds a B.Sc. degree in “Environmental Engineering” from Middle East Technical University/Ankara and currently undergoes a M.Sc. program in “Chemistry”. She is experienced in ISO 14001: 2015 - Environment Management System, ISO 50001: 2018- Energy Management System, ISO 45001: 2018 - Occupational Health and Safety, Management System, ISO 9001: 2015 - Quality Management System Internal Auditor, ISO 14001: 2015 - Environment Management System Internal Auditor and an ISO 50001: 2018-Energy Management System Internal Auditor. With re-carbon, Öykü is an internal Validator/Verifier and Team Leader Trainee.

Mr. Sandeep KANDA holds a B.Sc. degree in “Mechanical Engineering”, a M.Sc. degree in “Energy Systems Engineering” from the Indian Institute of Technology/Bombay and a Post Graduate Diploma in “Industrial Safety & Environmental Management” from the National Institute of Industrial Engineering in India. He has more than ten years of work experience with auditing and consultancy firms, seven years thereof with Designated Operational Entities under the CDM. He is experienced in working on diversified areas of energy and environmental management, including policies, Clean Development Mechanism (CDM), Corporate Sustainability Reporting (CSR) Audits, energy audits, utility audits and product development. Sandeep has audited more than 30 CDM projects as an ITR, 40 projects as a Team Leader and 7 PoAs in various capacities, covering a broad range of sectoral scopes, such as Energy industries (renewable-/non-renewable), Energy distribution, Energy demand, Manufacturing industries, Chemical industries, Transport, Metal production, Waste handling & disposal and Agriculture. With re-carbon, Sandeep is a free-lance Team Leader and ITR.

Appendix 2-1: Appointment Certificates

CERTIFICATE OF APPOINTMENT



Within the scope and in strict accordance to the appointments indicated below, the bearer may:

- Participate in assessments conducted by re-carbon Ltd.
- Take the appointed positions within and outside of an assessment team
- Bring specific expertise to assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated. There is no defined validity period for this Certificate. However, The Certificate may be updated, suspended or cancelled at any time, as a result of performance assessments and/or other reasons as defined above.

This Appointment Certificate is granted on the date of **03.08.2022** by:

Christian Johannes
(General Manager)

This Certificate of Appointment is given to

Mr. Anil Söyler

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:



Gold Standard
Climate Security & Sustainable Development



SECTORAL SCOPE	TECHNICAL AREA	Gold Standard					Verified Carbon Standard									
		VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT					
SS 01: Energy industries	TA 1.1: Thermal energy generation															
	TA 1.2: Renewables	08-02-2021	08-02-2021		03-08-2022	08-02-2021	08-02-2021	08-02-2021	08-02-2021	03-08-2022	08-02-2021	08-02-2021	08-02-2021	03-08-2022	08-02-2021	
SS 02: Energy distribution	TA 2.1: Energy distribution															
SS 02: Energy demand	TA 3.1: Energy demand															
SS 13: Waste handling and disposal	TA 13.1: Solid waste and wastewater	08-02-2021	08-02-2021		03-08-2022	08-02-2021	08-02-2021	08-02-2021	08-02-2021	03-08-2022	08-02-2021	08-02-2021	03-08-2022	08-02-2021		
	TA 13.2: Manure															
SS 15: Agriculture	TA 15.1: Agriculture															



ICR International Carbon Registry

BioCarbon Registry

SECTORAL SCOPE	TECHNICAL AREA	GCC					ICR					BioCarbon				
		VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
SS 01: Energy industries	TA 1.1: Thermal energy generation															
	TA 1.2: Renewables															
SS 02: Energy distribution	TA 2.1: Energy distribution															
SS 02: Energy demand	TA 3.1: Energy demand															
SS 13: Waste handling and disposal	TA 13.1: Solid waste and wastewater															
	TA 13.2: Manure															
SS 15: Agriculture	TA 15.1: Agriculture															

COUNTRY EXPERTISE:

Turkey, China

CERTIFICATE OF APPOINTMENT



Within the scope and in strict accordance to the appointments indicated below, the bearer may:

- Participate in assessments conducted by re-carbon Ltd.
- Take the appointed positions within and outside of an assessment team
- Bring specific expertise to assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated. There is no defined validity period for this Certificate. However, The Certificate may be updated, suspended or cancelled at any time, as a result of performance assessments and/or other reasons as defined above.

This Appointment Certificate is granted on the date of **01.08.2022** by:

Christian Johannes
(General Manager)

This Certificate of Appointment is given to

Ms. Öykü Yakupoğlu

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:



Gold Standard
Climate Positively & Sustainably Development



SECTORIAL SCOPE	TECHNICAL AREA	Gold Standard					Verified Carbon Standard				
		VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
SS 01: Manufacturing Industries	T4.11: Thermal energy generation										
	T4.12: Renewables						01.08.2022	01.08.2022			01.08.2022
SS 02: Manufacturing - Distribution	T4.13: Energy distribution										
SS 03: Manufacturing - Demand	T4.14: Energy demand										
SS 13: Waste handling and disposal	T4.13.2: Solid waste and wastewater										
	T4.13.2: Maritime										
SS 15: Agriculture	T4.15: Agriculture										



ICR International Carbon Registry

BioCarbon Registry

SECTORIAL SCOPE	TECHNICAL AREA	GCC					ICR					BioCarbon				
		VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
SS 01: Manufacturing Industries	T4.11: Thermal energy generation															
	T4.12: Renewables						01.08.2022	01.08.2022			01.08.2022					
SS 02: Manufacturing - Distribution	T4.13: Energy distribution															
SS 03: Manufacturing - Demand	T4.14: Energy demand															
SS 13: Waste handling and disposal	T4.13.2: Solid waste and wastewater															
	T4.13.2: Maritime															
SS 15: Agriculture	T4.15: Agriculture															

COUNTRY EXPERTISE:

Turkey

CERTIFICATE OF APPOINTMENT



Within the scope and in strict accordance to the appointments indicated below, the bearer may:

- Participate in assessments conducted by re-carbon Ltd.
- Take the appointed positions within and outside of an assessment team
- Bring specific expertise to assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated. There is no defined validity period for this Certificate. However, the Certificate may be updated, suspended or cancelled at any time, as a result of performance assessments and/or other reasons as defined above.

This Appointment Certificate is granted on the date of **01.08.2022** by:

Christian Johannes
(General Manager)

This Certificate of Appointment is given to

Mr. Sandeep Kanda

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:



Gold Standard
Climate Ready & Sustainable Development



SECTORIAL SCOPE	TECHNICAL AREA	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
		SS 01: Energy industries	TA 1.1: Thermal energy generation	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022
	TA 1.2: Renewables	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022
	TA 2.0: Energy distribution	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022
	TA 3.0: Energy demand	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022
	TA 3.2: Solid waste and wastewater	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022
	TA 3.2: Manure	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022
SS 15: Agriculture	TA 15.1: Agriculture	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022



ICR International Carbon Registry

BioCarbon Registry

SECTORIAL SCOPE	TECHNICAL AREA	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
		SS 01: Energy industries	TA 1.1: Thermal energy generation	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022								
	TA 1.2: Renewables	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022										
	TA 2.0: Energy distribution	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022										
	TA 3.0: Energy demand	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022										
	TA 3.2: Solid waste and wastewater	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022										
	TA 3.2: Manure	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022										
SS 15: Agriculture	TA 15.1: Agriculture	01.01.2022	01.01.2022	01.01.2022	01.01.2022	01.01.2022										

COUNTRY EXPERTISE:

China, India, Indonesia, Mexico, Nepal, Philippines, Tanzania, Thailand, Türkiye, Vietnam