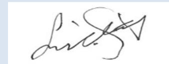
KARGILIK 24 MW HYDROPOWER PLANT, TURKEY
3RD VERIFICATION REPORT

Report Prepared By: Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti.

Project Title	Kargilik 24 MW Hydropower Plant, Turkey
Version	01.1
Report ID	600

Report Title	Kargilik 24 MW Hydropower Plant, Turkey 3rd Verification Report
Client	Tektug Elektrik Üretim A.Ş.
Pages	61
Date of Issue	26-June-2020
Prepared By	Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti.
Contact	**Address:** Bagi's Plaza, Muhsin Yazıcıoğlu Cad. 43/11 06520 Balgat-Ankara/TURKEY **Tel.:** 0090-312-287 51 22 **Fax:** 0090-312-287 33 73 **email:** info@re-carbon.net **Website:** www.re-carbon.net

Approved By	Mrs. Fikriye Seda ATABEK Technical Reviewer	Mr. Anıl SÖYLER Certification Manager
		
Work Carried Out By	**Verification Team Leader**	**Verification Team Members**
	Mr. Anıl SÖYLER	N/A
Summary:		

The project includes the installation of a runoff river hydroelectric power plant (HEPP) with an installed capacity of 24 MWe on Kesis River in Kahramanmaras province 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 vertical shaft Francis type two turbines with the installed capacity of 12 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 03 and dated 15/05/2009.

The project activity and the monitoring report are assessed against the requirements of the Article 12 of the Kyoto Protocol, CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, Approved consolidated baseline and Monitoring Methodology "ACM0002: "Grid-connected Electricity Generation from Renewable Sources" version 9.0, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other related rules, according to the guidance given in the CDM Validation and Verification Standard version 02.0, CDM Project Standard version 02.0, CDM Project Cycle Procedure version 02.0 and VCS version 4.0.

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 19 Corrective Action Requests (CARs) and 01 Clarification Request (CL) were raised all of which were resolved by either revising the Monitoring Report or by sending objective evidence to the verification team.

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 April 2011 and 27 March 2016:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2011	33,949	0	0	33,949
2012	57,590	0	0	57,590
2013	41,255	0	0	41,255
2014	20,723	0	0	20,723
2015	50,396	0	0	50,396
2016	16,436	0	0	16,436
Total	**220,348**	**0**	**0**	**220,348**

TABLE OF CONTENTS

1 INTRODUCTION

1.1 Objective

Re Carbon Ltd. has been appointed by “Tektug Elektrik Üretim A.Ş.” to perform the third verification of the “Kargilik 24 MW Hydropower Plant, Turkey” with the service agreement dated 26/02/2020. The objective of this verification activity is to assess, with objective evidence:

- if the monitoring report version 03 dated 08/06/2020 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 03 and dated 15/05/2009.

The project activity and the monitoring report are assessed against the requirements of the Article 12 of the Kyoto Protocol, CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, ACM0002: “Grid-connected Electricity Generation from Renewable Sources” version 9.0, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other related rules, according to the guidance given in the according to the guidance given in the CDM Validation and Verification Standard version 02.0, CDM Project Standard version 02.0, CDM Project Cycle Procedure version 02.0 and VCS version 4.0.

The only purpose of the verification and certification is its usage during the issuance process as part of the VCS project cycle. Therefore, Re Carbon Ltd. can’t 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 assurrance all data that is used in the GHG emission reduction calculations have been reviewed without any sampling.

1.4 Summary Description of the Project

Kargilik 24 MW Hydropower Plant, Turkey has been located on Kesis River in Kahramanmaras province of Turkey and developed by Tektug Elektrik Üretim A.Ş. The project has vertical shaft Francis type two turbines with the installed capacity of 12 MWe each turbine, so it has a total capacity of 24 MWe in line with the electricity generation licence and the project also supports the sustainable economic development in the region.

The key parameters about the technical design of the project are listed below in Table-1:

Table 1: Technical specifications of the project

Component	Property
Turbine type	Francis
Turbine firm	Alstom
Rotation	750 r / min
Production year	2004
Average flow rate	9 m^3 / s
Number of turbines	2
Installed capacity of each turbine	12 MWe

The start date of the project activity is 24/04/2005 which the date when electricity was first supplied to the grid as verified during the initial monitoring period and the first crediting period is from 28th of March 2006 until 27th of March 2016 with two times renewable crediting period of 10 years.

2 VERIFICATION PROCESS

The relevant details with regards to the verification process are available in the following sub sections.

2.1 Method and Criteria

Re Carbon Ltd. has been appointed by “Tektug Elektrik Üretim A.Ş.” to perform the third verification of the “Kargilik 24 MW Hydropower Plant, Turkey” with the service agreement dated 26/02/2020. The objective of this verification activity is to assess, with objective evidence:

- if the monitoring report version 03 dated 08/06/2020 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 03 and dated 15/05/2009.

The project activity and the monitoring report are assessed against the requirements of the Article 12 of the Kyoto Protocol, CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, ACM0002: “Grid-connected Electricity Generation from Renewable Sources” version 9.0, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other related rules, according to the guidance given in the according to the guidance given in the CDM Validation and Verification

Standard version 02.0, CDM Project Standard version 02.0, CDM Project Cycle Procedure version 02.0 and VCS version 4.0.

The only purpose of the verification and certification is its usage during the issuance process as part of the VCS project cycle. Therefore, Re Carbon Ltd. can't 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 24/03/2020 which was submitted to the verification team on the same date. This monitoring report was revised due to the issued CARs and CLs, version 03 dated 08/06/2020 being the final version. The monitoring report and the monitoring activities were assessed against the registered PD version 03 and dated 15/05/2009, ACM0002: "Grid-connected Electricity Generation from Renewable Sources" version 9.0, the relevant CDM and VCS rules and regulations including CDM Validation and Verification Standard version 02.0, CDM Project Standard version 02.0, CDM Project Cycle Procedure version 02.0 and VCS version 4.0, the final validation report dated 30/07/2009, the initial monitoring period verification report dated 23/11/2009 and the second monitoring period verification report dated 17/08/2011.

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 validation period is given in the Table 2-1 below:

Table 2-1: List of documents reviewed

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D01	Registered PD of Kargilik 24 MW Hydropower Plant, Turkey	03	15/05/2009
D02	Final Validation Report of Kargilik 24 MW Hydropower Plant, Turkey	-	30/07/2009
D03	Initial Monitoring Period Final Verification Report	-	23/11/2009
D04	Second Monitoring Period Final Verification Report	-	17/08/2011
D05	ACM0002: Grid-connected Electricity Generation from Renewable Sources	9.0	-
D06	Verification Service Agreement	-	26/02/2020
D07	Monitoring Report	01	24/03/2020

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D08	Monitoring Report	02	15/05/2020
D09	Monitoring Report	03	08/06/2020
D10	ER Calculation Excel Sheet	01	24/03/2020
D11	ER Calculation Excel Sheet	02	15/05/2020
D12	ER Calculation Excel Sheet	03	08/06/2020
D13	CDM Validation and Verification Standard For Project Activities	2.0	29/11/2018
D14	CDM Project Standard For Project Activities	2.0	29/11/2018
D15	CDM Project Cycle Procedure For Project Activities	2.0	29/11/2018
D16	VCS Standard	4.0	19/09/2019
D17	VCS Program Guide	4.0	19/09/2019
D18	EIA Out of Scope Decision	-	24/11/2009
D19	Project Introductory File	-	08/2004
D20	Electricity Generation Licence (Last Amendment)	-	04/06/2009
D21	TEIAS Monthly Reading Protocols	-	04/2011-03/2016
D22	EPIAS Screnshoots		04/2011-03/2016
D23	Meters Test Reports	-	10/12/2010 10/10/2015 20/11/2016 30/12/2017 01/12/2018 01/12/2019
D24	Electricity Meter Photos	-	-
D25	Power Plant Coordinates	-	-
D26	Reservoir Area Google Earth Screenshot	-	-
D27	Turbine and Generator Nameplate Photos	-	-
D28	Turbine Technical Details Document	-	-
D29	Signed Letter by the Göztasi Village Head (Mukhtar) (About the Contact Details of PP Relevant Staff In case of Any Complaint)	-	15/04/2020
D30	Announcement Evidence Photos (About the	-	15/04/2020

Document Number	Document Name	Version	Date (dd/mm/yyyy)
	Contact Details of PP Relevant Staff In case of Any Complaint)		
D31	Letter by the PP (About Double Counting)	-	15/04/2020
D32	Letter by the PP (About Renewable Energy Certification (REC)	-	15/04/2020
D33	Provisional Acceptance Protocol	-	24/04/2005
D34	Final Acceptance Protocol	-	27/04/2006
D35	Equipment Noise Measurement Report	-	22/04/2005
D36	Social Security Rords for PP Site Employees	-	-
D37	Training Records	-	21/02/2013 07/06/2014 26/05/2016 22/03/2018
D38	Domestic Waste Disposal Aprroval Letter by the Municipality	-	24/12/2014
D39	Hazardous Waste Storage Area Photos	-	-
D40	Wastewater Transfer and Disposal Records	-	29/05/2014 04/06/2015 11/10/2016 10/05/2017 27/02/2017 14/11/2017 24/04/2018 24/07/2019
D41	Hazardous Waste Declaration Records (Provided to the Ministry of Environment and Urbanization)	-	2015 2016 2017 2018 2019

2.3 Interviews

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

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

Table 2-2: List of persons interviewed

Reference Number	Means of Interview[1]	Full Name	Title	Organization
I01	T	Ramazan Asarkaya	Plant Operation Chief	Tektug Elektrik Üretim A.Ş.
I02	T	Mahir Sapmaz	Electrical Engineer	Tektug Elektrik Üretim A.Ş.
I03	T	Sıla Duran	Consultant	Sekans Danışmanlık Ltd.
I04	T	Mustafa Açıkkır	Mukhtar (Village Head)	Göztasi Village

2.4 Site Inspections

As a part of the verification activities, the physical site visit hadn't been performed due to COVID-19 outbreak but the following had been implemented, details of which can be seen in the Table 2-3 below:

Table 2-3: The details about implemented actions instead of physical site visit

Points Verified	Source of Information
Implementation and operation of the proposed VCS project activity as per the registered PD	Document review and phone call interviews
Review of information flows for generating, aggregating and reporting the monitoring parameters	Document review and phone call interviews
Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD	Phone call interviews
Cross-check between information provided in the monitoring report and data from other sources such as plant log books,	Document review and phone call interviews

[1] SV: Site visit; T: Telephone; E: E-mail

inventories, purchase records or similar data sources	
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 and phone call interviews
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

That means, the alternative approaches to the physical site visit like getting project site equipment details and site pictures including waste storage areas and legal documents issued for the project, 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 had been implemented.

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 03 and dated 15/05/2009
- Assessment of the compliance of the monitoring plan with the relevant methodology ACM0002: "Grid-connected Electricity Generation from Renewable Sources" version 9.0
- 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 Protocol is used for the assessment of each requirement during the execution of verification activities and is given in Annex-1 of this verification report.

The Verification Protocol consists of two tables:

- Table 1 (Monitoring Report and VCS verification requirements) and
- Table 2 (Resolution of Corrective Action, Forward Action and Clarification Requests)

The usage description of Table-1 in Verification Protocol is explained in Table 2-4 below:

Table 2-4: Explanation about Table-1 in Verification Protocol

Question	Reference	MoV*	Findings, comments, references and document sources	Draft & Final Conclusion
The requirements related with the monitoring report and verification	Gives reference to the legislation or documents where the relevant requirement is found	Explains how conformance with question is investigated. Examples of means of verification are Document Review (DR), Interview (I) and Not Applicable (NA)	Is used to elebarote 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	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

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

Table 2-5: 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 Participants' 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 participants regarding the non-conformities	Is used to summarize the responses by verification and their conclusions

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

During the verification period, a Verification Protocol which is attached in Annex 1 to this verification report was used to submit the findings to the project participants.

In line with Re Carbon Ltd. internal terminology and VCS version 4.0, the team reports the non-conformities in the 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 are 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 participants.
- The verification team raises a CL if information is insufficient or not transparent 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 if the monitoring and reporting require attention and/or adjustment for the next verification period.

According to these principles total of 19 CARs and 01 CL were issued all of which are listed in the Verification Protocol. There hasn't been any FARs issued during the verification.

The appointment process of the verification team takes into account 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 Independent Technical Reviewer (ITR), respectively. The verification team and ITR are assigned to this verification activity on 30/01/2020 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 2-6 below:

Table 2-6: Verification team and ITR details

Name	Role	Host Country Experience	Scope Coverage	Technical Expertise	Involvement*
Anıl Söyler	Team Leader	☒	☒	☒	A, DR, R
Fikriye Seda Atabek	ITR	☒	☒	☒	ITR

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

A : Administrative

DR : Desk Review

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.

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 and 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 verification for actions if the monitoring and reporting require attention and/or adjustment for the next verification period as explained in Section 2.5.

According to these principles, no FARs were issued during the verification.

2.6 Eligibility for Validation Activities

Re Carbon Ltd. holds accreditation for the validation and verification activities in scope 1: "Energy Industry – 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 other GHG Programs including renewable energy certificates (RECs) and this is also confirmed by the PP through the signed and sealed letters by PP dated as 15/04/2020.

3.2 Methodology Deviations

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

3.3 Project Description Deviations

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

3.4 Grouped Project

The project is not a grouped project.

4 VERIFICATION FINDINGS

The verification findings have been detailed as in below.

4.1 Project Implementation Status

Compliance of the Project Implementation with the Registered PD:

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.

According to the registered PD, the estimated annual emission reduction is 43,717 tCO2e and corresponding total estimated amount for the monitoring period is 218,226 tCO_2e. The actual values achieved for the current monitoring period is 220,348 tCO_2e. The actual amount of emission reduction for the current monitoring period is 1% more 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 and it is in quite acceptable range.

The project was commissioned on 24/04/2005 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.

The only other eligible GHG program in the host country is Gold Standard 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.

Remaining Issues from Validation or Previous Verifications

There hasn’t been any issued Forward Action Requests (FARs) from the previous verification in line with the provided second monitoring period verification report dated as 17/08/2011.

Compliance of the Monitoring Plan with the Monitoring Methodology

The monitoring plan is in accordance with the approved methodology, ACM0002 version 9.0, applied by the project activity.

In line with the methodology and the registered PD, the only parameter that need to be monitored is the quantity of net electricity generation supplied by the project plant to the grid (Egfacility,y) as in below:

- Egfacility,y parameter: 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 two main electricity meters at the grid interface and recorded monthly. There are also two back up electricity meters. That means, the electricity generation and consumption values have been determined through the summation of the measured values of two main meters and checked through two back up meters. All readings and billings are done via EPIAS system which is the legal database of the Ministry. During this verification, all EPIAS and TEIAS meter reading 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. SCADA system is available from which daily reports are taken and the data collected daily is saved in plant manager computer and backed up.

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-15 and CAR-16 were issued regarding the monitoring and they had been closed out as detailed in Annex-1.

Compliance with the Calibration Frequency Requirements for Measuring Instruments:

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

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 10/12/2010, 10/10/2015, 20/11/2016, 30/12/2017, 01/12/2018 and 01/12/2019, respectively and those test reports were provided to VVB.

The serial numbers of the main meters (both are Actaris model and accuracy class is 0.5s) are 53036050 and 53036078 and those of back up meters (both are Actaris model and accuracy class is 0.5s) are 53036051 and 53036079, respectively and these have been verified through the provided meter photos and meter test protocols. All these meters are bi-directional (meter the energy in two directions – generation and consumption). These electricity meters were installed on 01/12/2019 and the serial numbers of dismantled main meters were 53077750 and 53077752 and dismantled back up meters were 53077751 and 53077753, respectively.

CAR-12 was issued regarding the calibration and meter testing and this CAR had been closed as detailed in Annex-1.

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 not required decision dated as 24/11/2009 by the Provincial Directorate of Environment and Urbanization was also provided by the PP.

Besides that, the photos of waste storage areas and the hazardous waste and waste water transfer and disposal records have been provided by the PP.

The project also contributes to SDG 7 (Affordable and Clean Energy with 357,707.75 MWh net electricity generation), SDG 8 (Decent Work and Economic Growth with 9 employed staff during the recent year of operation period) and SDG-13 (Climate Action with achieved emission reduction of 220,348 tCO_2e) during the monitoring period.

4.2.2 Local Stakeholder Consultation

There hadn't been any complaint raised by the interviewed local stakeholders in line with the provided evidences including the signed letter by the Göztaşı Village Head (Mukhtar) and some local stakeholders dated as 15/04/2020, the announcement evidences and phone call interviews as indicated in the 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 phone call:

- Noise due to the project activity
- Impact on the aquatic life where the project had been constructed
- Waste management practices implemented by PP

It was also concluded that the grievance mechanism is in place and this was also confirmed through the phone call interviews and the reviewed documents. The document showing the contact details of the relevant person within PP with the signature of Göztaşı Village Mukhtar (Village Head) and confirming that there hasn't been any complaint was also provided to DOE. The evidences regarding the announcements and communication with Göztaşı Village residents about the project have been provided to VVB.

4.3 AFOLU-Specific Safeguards

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

4.4 Accuracy of GHG Emission Reduction or Removal Calculations

EPİAŞ records are presented for all months of the monitoring period. All data in emission reductions table are checked with EPİAŞ records as the main source and crosschecked with TEAIS 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
01/04/2011-31/12/2011	Export to Grid: 55,244.38 MWh Import from Grid: 133.17 MWh Net electricity supplied to grid: 55,111.21 MWh	Monthly EPIAS records
01/01/2012-31/12/2012	Export to Grid: 93,623.16 MWh Import from Grid: 133.60 MWh Net electricity supplied to grid: 93,489.56 MWh	Monthly EPIAS records
01/01/2013-31/12/2013	Export to Grid: 67,142.41 MWh Import from Grid: 170.79 MWh Net electricity supplied to grid: 66,971.62 MWh	Monthly EPIAS records
01/01/2014-31/12/2014	Export to Grid: 33,874.13 MWh Import from Grid: 232.31 MWh Net electricity supplied to grid: 33,641.82 MWh	Monthly EPIAS records
01/01/2015-31/12/2015	Export to Grid: 81,956.24 MWh Import from Grid: 144.24 MWh Net electricity supplied to grid: 81,812.00 MWh	Monthly EPIAS records
01/01/2016-27/03/2016	Export to Grid: 26,710.41 MWh Import from Grid: 28.87 MWh Net electricity supplied to grid: 26,681.54 MWh	Monthly 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 9.0 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 (tCO_2e/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/m^2, then Pey = 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/m^2)

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 (m^2)

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 (m^2). For new reservoirs, this value is zero

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

A_{PJ} = 57,248.84 m^2 (according to the provided Google Earth screenshot of the project)

Cap_{PJ} = 24,000,000 W

The power density is calculated as follows:

PD = 57,248.84 / 24,000,000 = 419.2 W/m^2

As the power density is higher than $10W/m^2$, the project emissions of the project are equal to zero. 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 (t CO_2/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 CO_2 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”(t CO_2 / 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 CO_2 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 0.616 tCO_2 / 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 218,226 tCO_2e corresponding to the monitoring period. However, the project in operation totally reached 220,348 tCO_2e 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_2e)
01/04/2011 – 31/12/2011	33,949
01/01/2012 – 31/12/2012	57,590
01/01/2013 – 31/12/2013	41,255
01/01/2014 – 31/12/2014	20,723
01/01/2015 – 31/12/2015	50,396
01/01/2016 – 27/03/2016	16,436

Calculations have been reproduced by DOE and the source data (EPIAS records) are presented by PP as explained above.

CAR-17 and CAR-18 were issued regarding the emission reduction calculations and the data used for these calculations and it had been closed as detailed in Annex-1. Therefore, 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 9.0 and the monitoring plan given in the registered PD.

4.5 Quality of Evidence to Determine GHG Emission Reductions or 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 whole crediting period. According to the validation report dated 30/07/2009, the combined margin emission factor had been validated and will remain the same for the first crediting period of 10 years as 0.616 tCO2/MWh.

The only parameter that needs to be closely verified is the net electricity generation and this value is taken from the EPIAS records. 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.

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. has performed the third verification of "Kargilik 24 MW Hydropower Plant, Turkey" which is a project with the VCS registry reference number "264" for the period between 01 April 2011 and 27 March 2016. The scope of the activities cover the verification and certification of GHG emissions reductions reported in monitoring report version 03 dated 08/06/2020.

Sekans Danışmanlık Ltd. is 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 indicated in the registered PD. The development and maintenance of the records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of both Sekans Danışmanlık Ltd. and 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 03.

The verification has been performed by a verification team consisting of "Anıl Söyler as team leader and Fikriye Seda Atabek as ITR" and the project activity was checked against the applicable rules and regulations of CDM including Section I of CDM Modalities and Procedures, the relevant guidance and decisions of the COP/MOP, CDM EB and VCS Organization, CDM Validation and Verification Standard version 02.0, CDM Project Standard version 02.0, CDM Project Cycle Procedure version 02.0 and VCS version 4.0.

Re Carbon Ltd. hereby confirms that the project activity "Kargilik 24 MW Hydropower Plant, Turkey" in Turkey is implemented in accordance with the validated and registered PD version 03 and dated 15/05/2009. The monitoring system is in place and the emission reductions are calculated without material misstatements as per the applied approved methodology, which is ACM0002 version 9.0.

Re Carbon Ltd. confirms the following based on the results of document review for the period between 01 April 2011 and 27 March 2016:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2011	33,949	0	0	33,949
2012	57,590	0	0	57,590
2013	41,255	0	0	41,255
2014	20,723	0	0	20,723
2015	50,396	0	0	50,396
2016	16,436	0	0	16,436
Total	**220,348**	**0**	**0**	**220,348**

Anıl SOYLER
Team Leader
26/06/2020

Fikriye Seda ATABEK
ITR
26/06/2020

Anıl SOYLER
Certification Manager
26/06/2020

ANNEX 1: VERIFICATION PROTOCOL

Table 1 – VCS Monitoring Report (MR) Form Requirements

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 4.0	DR	Please clarify whether all items in the box at the bottom of the cover page and all Sections text part using Arial 10.5 pt, black, regular (non-italic) font since the provided MR is pdf document.	CAR-1	OK
2. Are the followings provided at the cover page in a tabular format?	VCS Std. Version 4.0	DR	Please see in below.	OK	OK
2.1. Name of the project?	VCS Std. Version 4.0	DR	This is available as Kargilik 24 MW Hydropower Plant, Turkey.	OK	OK
2.2. Version number of the VCS MR?	VCS Std. Version 4.0	DR	This is available as version 01.	OK	OK
2.3. Report ID of the document	VCS Std. Version 4.0	DR	This is available as KARMONITORING2.	OK	OK
2.4. The issuance date of the document in DD-Month-YYYY format?	VCS Std. Version 4.0	DR	This is available as 24/03/2020.	OK	OK
2.5. VCS project database ID, if registered	VCS Std. Version 4.0	DR	This is available as 264.	OK	OK
2.6. Monitoring period in DD-Month-YYYY to DD-Month-YYYY format	VCS Std. Version 4.0	DR	This is available as from 01/01/2009 to 31/12/2015 but please correct the monitoring period start and end dates in line with the previous monitoring and crediting period dates.	CAR-2	OK
2.7. Individual or entity that prepared the document?	VCS Std. Version 4.0	DR	This is available as Sekans Danişmanlik.	OK	OK
2.8. Physical address, telephone, email, website?	VCS Std. Version 4.0	DR	These details are available.	OK	OK
3. Is this box available on the title page of the final document?	VCS Std. Version 4.0	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 4.0	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
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 4.0	DR	Please see CAR-1.	CAR-1	OK
6. Are the VCS MR and other documents required under the VCS Program in English?	VCS Std. Version 4.0	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 4.0 CDM-MR-FORM Version 7.0	DR	The brief summary is available but please see in below: a) Please provide the previous and current monitoring period details under Section 1.1 of the MR.	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 4.0 CDM-MR-FORM Version 7.0	DR	The purpose of the project activity and the measures taken to reduce greenhouse gas emissions have 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 4.0 CDM-MR-FORM Version 7.0	DR	Please include the brief description of the installed technology and equipment including turbine types, their brief specifications and reference documents in the Section 1.1 of the MR.	CAR-4	OK
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 4.0 CDM-MR-FORM Version 7.0	DR	These details are 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 4.0 CDM-MR-FORM Version 7.0	DR	The total emissions reductions achieved in this monitoring period has been provided under 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
1.2. 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 4.0	DR	This has been indicated and the project is not a grouped project.	OK	OK
1.2.2. Is the sectoral scope(s) applicable to the project indicated?	VCS Std. Version 4.0	DR	The sectoral scope of the project 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 4.0	DR	N/A (Since this isn't an AFOLU project, the category is not applicable).	OK	OK
1.3. Project Proponent					
1.3.1. Are the contact information for the project proponent(s) provided in the tabular format?	VCS Std. Version 4.0	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 4.0	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 4.0	DR	This is available as 24/04/2005.	OK	OK
1.6. Project Crediting Period					
1.6.1. Is the total crediting period including the day,	VCS Std. Version 4.0	DR	The start and end dates of crediting period has been provided in the	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
month and year for the start and end dates and the total number of years indicated?			Section 1.6 of the MR.		
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 4.0	DR	Please include the reference document information for all provided coordinates in Section 1.7 of the MR.	CAR-5	OK
1.8. Title and Reference of Methodology					
1.8.1. Is the following information provided regarding the methodology(ies) applied to the project?	VCS Std. Version 4.0	DR	Please see in below.	OK	OK
1.8.1.1. The title of the methodology(ies)	VCS Std. Version 4.0	DR	This is available.	OK	OK
1.8.1.2. The reference of the methodology(ies)	VCS Std. Version 4.0	DR	This is available.	OK	OK
1.8.1.3. The version number of the methodology(ies)	VCS Std. Version 4.0	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 4.0	DR	Please see in below.	OK	OK
1.8.2.1. The title of the tool(s)	VCS Std. Version 4.0	DR	The title of the referred tool is available.	OK	OK
1.8.2.2. The version number of the tool(s)	VCS Std. Version 4.0	DR	The version number of the referred tool has been provided.	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	VCS Std. Version 4.0	DR	It has been stated that the project hasn’t been registered or seeking registration under other GHG programs but please provide a signed and sealed letter on company letterhead that the project hasn’t been	CAR-6	OK

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

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
any other GHG programs?			registered, or hasn't been seeking registration under any other GHG programs.		
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 4.0	DR	N/A (It has been stated that the project hasn't been registered or seeking registration under 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 4.0	DR	N/A (It has been stated that the project hasn't been registered or seeking registration under other GHG programs).	OK	OK
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 4.0	DR	a) Please clarify if the project has created another form of credit in the Section 1.10 of the MR. b) Please provide a signed and sealed letter on company letterhead that project hasn't been created other forms of credit (e.g. renewable energy certificates).	CAR-7	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 4.0	DR	Please see CAR-7.	CAR-7	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 4.0	DR	Please see CAR-7.	CAR-7	OK
1.10.3. Have the project(s) created other forms of environmental credit (for example renewable energy certificates)?	VCS Std. Version 4.0	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
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 4.0	DR	Please see CAR-7.	CAR-7	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 4.0	DR	Please see CAR-7.	CAR-7	OK
1.11. Sustainable Development					
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 4.0	DR	These have been explained in the Section 1.11 of the MR.	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 4.0	DR	Please provide the following records: - The noise assessment report, if any, - The photographic evidences of waste and waste water storage areas	CL-1	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 4.0	DR	Please see in below.	OK	OK
2.2.1.1. The procedures or methods used for engaging local stakeholders (e.g. dates	VCS Std.	DR	These are available 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
of announcements or meetings, periods during which input was sought)	Version 4.0				
2.2.1.2. The procedures or methods used for documenting the outcomes of the local stakeholder communication	VCS Std. Version 4.0		These are available in the MR.	OK	OK
2.2.1.3. The mechanism for on-going communication with local stakeholders conducted prior to verification	VCS Std. Version 4.0		a) Please provide the signed document about the contact details of the PP relevant staff in case of any complaint by close surroundings and whether there is any complaint received by the Muhktars from the local stakeholders. b) Please clarify the communication methods (announcements and meetings) with the local stakeholders during the monitoring period and please provide such relevant details in the Section 2.2 of the MR.	CAR-8	OK
2.2.1.4. How due account of all and any input received during ongoing communication has been taken	VCS Std. Version 4.0		Please clarify if there are any complaint by the local stakeholders during the monitoring period and how all and any input received during ongoing communication has been taken due account by the PP in the Section 2.2 of the MR.	CAR-9	OK
2.2.1.5. The details on any updates to the project design or justifying why updates are not appropriate.	VCS Std. Version 4.0		It has been indicated that there hasn't been any updates to the project design in the Section 2.2 of the MR.	OK	OK
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 7.0	DR	These are available in the Section 1.1 of the MR.	OK	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 7.0	DR	This has been provided 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?	EB93 Report Annex 4 §257b	DR	The starting date of operation of the project activity has been provided 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
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?	EB93 Report Annex 4 §257b	DR	N/A	OK	OK
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?	EB93 Report Annex 4 §257b	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??	EB93 Report Annex 5 §357a	DR	The actual project activity and its operation complies with the registered PD.	OK	OK
3.1.7. Have the PPs implemented and operated the VCS project activity as per the descriptions contained in the registered PD?	EB93 Report Annex 5 §357a	DR	The actual project activity and its operation complies with the registered PD.	OK	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 7.0	DR	This has been provided 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 4.0	DR	The changes with respect to other entities involved in the project comparing with the registered project has been provided but please correct the monitoring period number in the Section 3.2 of the MR.	CAR-10	OK
3.2. Deviations					
3.2.1. Methodology Deviations					
3.2.1.1. Are there any deviations from the methodology? •	VCS Std. Version 4.0	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 4.0	DR	N/A (There haven't been any deviations from the methodology).	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
3.2.1.3. If there are any deviations from the methodology, are these deviations justified properly and clearly?	VCS Std. Version 4.0	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	N/A (There haven't been any deviations from the project description).	OK	OK
3.2.2.2. If there are any deviations from the project description, are these deviations described properly?	VCS Std. Version 4.0	DR	N/A (There haven't been any deviations from the project description).	OK	OK
3.2.2.3. If there are any deviations from the project description, are these deviations justified properly and clearly?	VCS Std. Version 4.0	DR	N/A (There haven't been any deviations from the project description).	OK	OK
3.2.2.4. Is the outcome of the deviation from the project description provided?	VCS Std. Version 4.0	DR	N/A (There haven't been any deviations from the project description).	OK	OK
3.3. Grouped Projects					
3.3.1. Is this a grouped project?	VCS Std. Version 4.0	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 4.0	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 4.0	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 7.0 VCS Std. Version 4.0	DR	All data that is determined only once for the crediting period but are used after registration of the project, has been listed under Section 4.1 of the MR but please correct the table numbers under Section 4.1 of the MR in line with the registered PD.	CAR-11	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 7.0 VCS Std. Version 4.0	DR	All data that is determined only once for the crediting period but are used after registration of the project, has been listed under Section 4.1 of the MR but please also see CAR-11.	CAR-11	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 7.0 VCS Std. Version 4.0	DR	All data that is determined only once for the crediting period but are used after registration of the project are in line with the registered PD.	OK	OK
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 7.0 VCS Std. Version 4.0	DR	All data that is determined only once for the crediting period but are used after registration of the project are in line with the registered PD.	OK	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 7.0 VCS Std. Version 4.0	DR	This is in line with the registered PD.	OK	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 7.0 VCS Std. Version 4.0	DR	This is in line with the registered PD.	OK	OK
4.1.7. In the data/parameter tables provided under	CDM-MR-FORM	DR	This is 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
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?	Version 7.0 VCS Std. Version 4.0				
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 7.0 VCS Std. Version 4.0	DR	This is in line with the registered PD.	OK	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 7.0 VCS Std. Version 4.0	DR	This is 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
4.2. 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 7.0 VCS Std. Version 4.0	DR	EG_y is the monitored parameter in line with the registered PD.	OK	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 7.0 VCS Std. Version 4.0	DR	EG_y is the monitored parameter 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 7.0 VCS Std. Version 4.0	DR	The unit (MWh) is 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 7.0 VCS Version 4.0	DR	This is stated in the Section 4.2 of the MR.	OK	OK
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 7.0 VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	DR	This has been provided.	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 7.0 VCS Std. Version 4.0	DR	a) Please include the meter test and calibration dates of the electricity meters. b) Please provide the electricity meter change details, if any, in the Section 4.2 of the MR. c) Please provide the photographic evidences of electricity meters. d) Please provide the photographic evidences of turbine name	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
			plates and turbine documents. e) Please provide the reservoir area evidence documents.		

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

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.8. 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 7.0 VCS Std. Version 4.0	DR	This is available in 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 4.0	DR	This is available in the Excel spreadsheet.	OK	OK
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 7.0 VCS Std. Version 4.0	DR	Please see in below.	OK	OK
4.2.10.1. Details on accuracy class	CDM-MR-FORM Version 7.0 VCS Std. Version 4.0	DR, SV	Please provide the accuracy class information of the electricity meters in the Section 4.2 of the MR.	CAR-13	OK
4.2.10.2. The person/entity responsible for the measurement	VCS Std. Version 4.0	DR	This is available and in line with the registered PD.	OK	OK
4.2.10.3. Any standards or protocols to be followed	VCS Std. Version 4.0	DR	This is available in the Section 4.2 of the MR.	OK	OK
4.2.10.4. Calibration frequency	CDM-MR-FORM Version 7.0 VCS Std. Version 4.0	DR	This is available as ten years.	OK	OK
4.2.10.5. Serial number	CDM-MR-FORM Version 7.0 VCS Std. Version 4.0	DR, SV	These are available as 53036050 and 53036078 for the main meters and 53036051 and 53036079 for the back-up meters but please include the transformer information details in the Section 4.2 of the MR.	CAR-14	OK
4.2.10.6. Calibration date	CDM-MR-FORM Version 7.0 VCS Std. Version 4.0	DR	Please see CAR-10.	CAR-10	OK

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

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.2.10.7. Validity of the calibration	CDM-MR-FORM Version 7.0 VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	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??	EB93 Report Annex 5 §368 VCS Std. Version 4.0	DR	This is in line with the registered PD and relevant legal regulation.	OK	OK
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?	EB93 Report Annex 5 §373 VCS Std. Version 4.0	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?	EB93 Report Annex 5 §373 VCS Std. Version 4.0	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?	EB93 Report Annex 5 §374 VCS Std. Version 4.0	DR	This is in line with the registered PD and relevant legal regulation.	OK	OK
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	EB93 Report Annex 5 §369 VCS Std.	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
the certain monitoring period?	Version 4.0				
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?	EB93 Report Annex 5 §369 VCS Std. Version 4.0	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
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	EB93 Report Annex 5 §369a VCS Std. Version 4.0	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.	EB93 Report Annex 5 §369b VCS Std. Version 4.0	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
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?	EB93 Report Annex 5 §370 VCS Std. Version 4.0	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?	EB93 Report Annex 5 §370a VCS Std. Version 4.0	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	EB93 Report Annex 5	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
scheduled date of calibration and the actual date of calibration?	§370b VCS Std. Version 4.0				
4.2.19. If the results of the delayed calibration aren't available, have Pss calculated the emission reductions conservatively?	EB93 Report Annex 5 §371	DR	N/A (The calibration of the meters is valid ten years).	OK	OK
4.2.20. If the results of the delayed calibration aren't available, have post registration requirements been followed by the PPs?	EB93 Report Annex 5 §372	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 7.0 VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0 EB93 Report Annex 4 §260	DR	EG_y is the monitored parameter in line with the registered PD.	OK	OK
4.2.23. Is a complete set of data available for the specified monitoring period?	EB93 Report Annex 5 §376 VCS Std. Version 4.0	DR	EG_y is the monitored parameter in line with the registered PD.	OK	OK
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 7.0 EB93 Report Annex 4 §259 VCS Std. Version 4.0	DR	The details of the monitoring system is available and in line with the registered PD but please see in below: a) Please check the number of employees both in the organizational structure diagram and text part of the Section 4.3 of the MR along with the relevant evidence. b) Please check the monitoring parameters in line with the registered PD in the Section 4.3 of the MR. c) Please correct the meter numbers in the Section 4.3 of the MR.	CAR-15	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 7.0 EB93 Report Annex 4 §259 VCS Std. Version 4.0	DR	Please see in below.	OK	OK
4.3.2.1. Information flow including data generation	CDM-MR-FORM Version 7.0 EB93 Report Annex 4 §259 VCS Std. Version 4.0	DR	The details of the data generation is available and in line with the registered PD.	OK	OK
4.3.2.2. Data aggregation	CDM-MR-FORM Version 7.0 EB93 Report Annex 4 §259 VCS Std. Version 4.0	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 7.0 EB93 Report	DR	The details of the data recording 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
	Annex 4 §259 VCS Std. Version 4.0				

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

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.3.2.4. Data calculation	CDM-MR-FORM Version 7.0 EB93 Report Annex 4 §259 VCS Std. Version 4.0	DR	The details of the data calculation (net electricity generation) is available and in line with the registered PD.	OK	OK
4.3.2.5. Data reporting	CDM-MR-FORM Version 7.0 EB93 Report Annex 4 §259 VCS Std. Version 4.0	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 7.0 EB93 Report Annex 4 §259 VCS Std. Version 4.0	DR	The brief information about the roles and responsibilities of each personnel (like project manager and technicians etc.) has been provided in the 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?	EB93 Report Annex 5 §364b-(iv) VCS Std. Version 4.0	DR	The brief information about the roles and responsibilities of each personnel (like project manager and technicians etc.) has been provided in the Section 4.3 of the MR.	OK	OK
4.3.5. Have quality assurance and quality control procedures been applied in accordance with the monitoring plan?	EB93 Report Annex 5 §364e VCS Std. Version 4.0	DR	These are in line with the registered PD.	OK	OK
4.3.6. Are the procedures for handling internal	VCS Std. Version 4.0	DR	Please include the procedures, if any, for handling internal auditing	CAR-16	OK

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

Question	Reference	Means of verification*	Findings, comments, references and document sources	Draft opinion	Final opinion
auditing and non-conformities described?			and non-conformities described in the Section 4.3 of the MR.		
4.3.7. Where appropriate, are the line diagrams to display the GHG data collection and management system included?	VCS Std. Version 4.0	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 4.0	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.1. target precision levels	VCS Std. Version 4.0	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.2. sample sizes	VCS Std. Version 4.0	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.3. sample site locations	VCS Std. Version 4.0	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.4. stratification	VCS Std. Version 4.0	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.5. frequency of measurement and	VCS Std. Version 4.0	DR	N/A (The sampling approach hasn't been used).	OK	OK
4.3.8.6. QA/QC procedures	VCS Std. Version 4.0	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 7.0	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?	EB93 Report Annex 5 §364a VCS Std. Version 4.0	DR	The monitoring system is available and in line with the registered PD.	OK	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?	EB93 Report Annex 5 §364b-(i)-(ii)-(iii) VCS Std. Version 4.0	DR	The monitoring system is available and in line with the registered PD.	OK	OK
4.3.11. Have all parameters stated in the monitoring plan, the applied methodology and	EB93 Report Annex 5	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
relevant VCS requirements been sufficiently monitored and updated as applicable?	§364b VCS Std. Version 4.0				
4.3.12. Are monitoring results consistently recorded and stored as per the approved frequency?	EB93 Report Annex 5 §364d VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	DR	a) Please clarify why electricity consumption value for April 2012 and April 2015 months are zero. b) Please provide TEIAS meter readings in line with the monitoring period. c) Please correct the ER value and net electricity generation in the Excel spreadsheet and throughout the MR considering above corrections and monitoring period start and end dates.	CAR-17	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 7.0 VCS Std. Version 4.0	DR	This is available in the Excel spreadsheet calculation but please see CAR-17.	CAR-17	OK
5.1.3. Has all electronic spread sheets to present full calculations in the monitoring report been attached?	CDM-MR-FORM Version 7.0	DR	This is available in the Excel spreadsheet calculation.	OK	OK
5.1.4. Have any assumptions used in baseline emission calculations been justified?	EB93 Report Annex 5 §376d VCS Std. Version 4.0	DR	N/A (There haven't been any assumptions used).	OK	OK
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)	EB93 Report Annex 5 §376e VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	DR	The power density calculation isn't available in the Excel spreadsheet calculation as indicated in the MR.	CAR-18	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 7.0 VCS Std. Version 4.0	DR	This is available in the Excel spreadsheet calculation.	OK	OK
5.2.3. Has all electronic spreadsheets to present full calculations in the monitoring report been attached?	CDM-MR-FORM Version 7.0	DR	This is available in the Excel spreadsheet calculation.	OK	OK
5.2.4. Have any assumptions used in project emission calculations been justified?	EB93 Report Annex 5 §376d VCS Std. Version 4.0	DR	N/A (There haven't been any assumptions used).	OK	OK
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)	EB93 Report Annex 5 §376e VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	DR	The leakage emissions are zero and this has been explained in the MR but please correct the methodology name and version in the Section 5.3 of the MR.	CAR-19	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 7.0 VCS Std. Version 4.0	DR	The leakage emissions are zero and this has been explained in the MR.	OK	OK
5.3.3. Has all electronic spread sheets to present full calculations in the monitoring report been attached?	CDM-MR-FORM Version 7.0	DR	The leakage emissions are zero and this has been explained in the MR.	OK	OK
5.3.4. Have any assumptions used in leakage emission calculations been justified?	EB93 Report Annex 5 §376d VCS Std. Version 4.0	DR	N/A (There haven't been any assumptions used).	OK	OK
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)	EB93 Report Annex 5 §376e VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	DR	Please also see CAR-17.	CAR-17	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 7.0 VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	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 7.0 VCS Std. Version 4.0	DR	Please also see CAR-17.	CAR-17	OK
5.4.5. If there is material information that can cause overestimation of emission reductions or removals of the project activity, is this equal to higher than one of the following?	EB93 Report Annex 5 §329	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 project activities achieving a total emission reduction or removal of equal to or more than 500,000 tons of carbon dioxide equivalent per year?	EB93 Report Annex 5 §329a	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 project activities achieving a total emission reduction or removal between 300,000 and 500,000 tons of carbon dioxide equivalent per year?	EB93 Report Annex 5 §329b	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 project activities achieving a total emission reduction or removal of 300,000 tons of carbon dioxide equivalent per year or less?	EB93 Report Annex 5 §329c	DR	There hasn't been any material information detected.	OK	OK
5.4.5.4. 10 per cent of the emission reductions or removals for the microscale project activities?	EB93 Report Annex 5 §329d	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 project activities other than project activities covered under 5.4.5.4 above?	EB93 Report Annex 5 §329e	DR	There hasn't been any material information detected.	OK	OK
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 4.0	DR	There hasn'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 4.0	DR	There hasn'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 4.0	DR	There hasn'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?	EB93 Report Annex 5 §38 §349	DR	There hasn't been any FARs in line with the provided second monitoring period 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?	EB93 Report Annex 5 §38 §349	DR	There hasn't been any FARs in line with the provided second monitoring period verification report.	OK	OK
7.1.3. Has the FARs been resolved?	EB93 Report Annex 5 §38 §349 §347d	DR	There hasn't been any FARs in line with the provided second monitoring period 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 clarify whether all items in the box at the bottom of the cover page and all Sections text part using Arial 10.5 pt, black, regular (non-italic) font since the provided MR is pdf document.	1	All related items are Arial 10.5 pt, black, regular (non-italic) font.	Review-1: Ok Closed (MR is in line with the required format requirements).
CAR-2 Please correct the monitoring period start and end dates in line with the previous monitoring and crediting period dates.	2.6	The monitoring period start and end dates have been corrected. Review-1: The monitoring period end date has been corrected.	Review-1: The monitoring period start and end dates in line with the previous monitoring and crediting period dates have been corrected but please clarify why last day of the crediting period hasn't been included. Review-2: Ok Closed (The end date of the monitoring period has been corrected).
CAR-3 Please provide the previous and current monitoring period details under Section 1.1 of the MR.	1.1.1	Please check Table 2.	Review-1: Ok Closed (The previous and current monitoring period details have been provided under Section 1.1 of the MR).
CAR-4 Please include the brief description of the installed technology and equipment including turbine types, their brief specifications and reference documents in the Section 1.1 of the MR.	1.1.3	Please see Table 3. Review-1: The turbines' model and brand information have been included.	Review-1: Please include the turbines' model and brand information in the Section 1.1 of the MR. Review-2: Ok Closed (The turbines' model and brand information have been provided in the Section 1.1 of the MR).
CAR-5 Please include the reference document information for all provided coordinates in Section 1.7 of the MR.	1.7.1	Google Earth screenshot of the coordinates has been provided. Review-1: Google Earth screenshot is available to the DOE.	Review-1: Please provide Google Earth screenshot of the mentioned coordinates. Review-2: Ok Closed (Google Earth screenshot of the coordinates has been provided).

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

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-6 It has been stated that the project hasn't been registered or seeking registration under other GHG programs but please provide a 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.	1.9.1	The signed and sealed letter is available to the DOE. Review-1: The signed and sealed letter has been provided to the DOE.	Review-1: Please provide a 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. Review-2: Ok Closed (The signed and sealed letter has been provided).
CAR-7 a) Please clarify if the project has created another form of credit in the Section 1.10 of the MR. b) Please provide a signed and sealed letter on company letterhead that project hasn't been created other forms of credit (e.g. renewable energy certificates).	1.10.1	a) Section 1.10 of the MR has been revised accordingly. b) The signed letter is available to the DOE. Review-1: b) The signed letter has been provided to the DOE.	Review-1: a) Ok Closed (Section 1.10 of the MR has been revised accordingly). b) Please provide a signed and sealed letter on company letterhead that project hasn't been created other forms of credit (e.g. renewable energy certificates). Review-2: b) Ok Closed (The signed and sealed letter has been provided).
CAR-8 a) Please provide the signed document about the contact details of the PP relevant staff in case of any complaint by close surroundings and whether there is any complaint received by the Muhktars from the local stakeholders. b) Please clarify the communication methods (announcements and meetings) with the local stakeholders during the monitoring period and please provide such relevant details in the Section 2.2 of the MR.	2.2.1.3	a) Signed document about the contact details of the PP relevant staff has been provided to the DOE. b) Section 2.2 has been revised accordingly.	Review-1: a) Ok Closed (The relevant signed letter by the Mukhtar and some local stakeholders has been provided). b) Ok Closed (Section 2.2 of the MR has been revised accordingly).
CAR-9 Please clarify if there are any complaint by the local stakeholders during the monitoring period and how all and any input received during ongoing communication has been taken due account by the PP in the Section 2.2 of the MR.	2.2.1.4	Section 2.2 of the MR has been revised accordingly.	Review-1: Ok Closed (Section 2.2 of the MR has been revised accordingly and it was confirmed that there hadn't been any complaint by the local stakeholders during the monitoring period).

* 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
CAR-10 Please correct the monitoring period number in the Section 3.2 of the MR.	3.1.9	The monitoring period number has been corrected.	Review-1: Ok Closed (The monitoring period number has been corrected in the Section 3.2 of the MR).
CAR-11 Please correct the table numbers under Section 4.1 of the MR in line with the registered PD.	4.1.1	Table numbers under Section 4.1 have been corrected.	Review-1: Ok Closed (Section 4.1 of the MR has been corrected).
CAR-12 a) Please include the meter test and calibration dates of the electricity meters. b) Please provide the electricity meter change details, if any, in the Section 4.2 of the MR. c) Please provide the photographic evidences of electricity meters. d) Please provide the photographic evidences of turbine name plates and turbine documents. e) Please provide the reservoir area evidence documents.	4.2.7	a) The meter test date has been added to the section and all tests are available to the DOE. b) The details have been added under section 4.2. c) The photographic evidences of electricity meters have been provided to the DOE. d) The photographic evidences of turbine name plates and turbine documents have been provided to the DOE. e) Google Earth screenshot showing the reservoir areas has been provided to the DOE. Review-1: a) Serial number of changed back up meter for Gorup-2 in the Section of the MR has been corrected.	Review-1: a) Please correct the serial number of changed back up meter for Group-2 in the Section 4.2 of the MR. b) Ok Closed (The relevant electricity meter change details have been provided in the Section 4.2 of the MR). c) Ok Closed (The current electricity meter photos and the relevant meter test protocols have been provided). d) Ok Closed (The relevant turbine documents have been provided). e) Ok Closed (The relevant Google Earth screenshot document has been provided). Review-2: a) Ok Closed (The serial number of changed back up meter for Group-2 has been corrected in the Section 4.2 of the MR).
CAR-13 Please provide the accuracy class information of the electricity meters in the Section 4.2 of the MR.	4.2.10.1	The accuracy class information has been added under the Section 4.2.	Review-1: Ok Closed (The accuracy class information of the electricity meters have been provided in the Section 4.2 of the MR).
CAR-14 Please include the transformer information details in the Section 4.2 of the MR.	4.2.10.5	The transformer information details have been included.	Review-1: Ok Closed (Section 4.2 of the MR has been revised accordingly).

* 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
CAR-15 a) Please check the number of employees both in the organizational structure diagram and text part of the Section 4.3 of the MR along with the relevant evidence. b) Please check the monitoring parameters in line with the registered PD in the Section 4.3 of the MR. c) Please correct the meter numbers in the Section 4.3 of the MR.	4.3.1	a) The number of employees has been corrected. b) Section 4.3 has been revised accordingly. c) The meter numbers have been corrected.	Review-1: a) Ok Closed (Section 4.3 of the MR has been revised and the relevant evidence documents have been provided). b) Ok Closed (Section 4.3 of the MR has been revised accordingly). c) Ok Closed (Section 4.3 of the MR has been revised accordingly to include as four meters).
CAR-16 Please include the procedures, if any, for handling internal auditing and non-conformities described in the Section 4.3 of the MR.	4.3.6	Section 4.3 has been revised accordingly.	Review-1: Ok Closed (Section 4.3 of the MR has been revised).
CAR-17 a) Please clarify why electricity consumption value for April 2012 and April 2015 months are zero. b) Please provide TEIAS meter readings in line with the monitoring period. c) Please correct the ER value and net electricity generation in the Excel spreadsheet and throughout the MR considering above corrections and monitoring period start and end dates.	5.1.1	a) Since the units worked with full capacity, the consumption has taken from the generated electricity and subtracted from the volume to be sold through netting. b) TEIAS meter readings are available to the DOE. c) ER value and net electricity generation have been corrected. Review-1: - a) The consumption value of February 2015 has been corrected. - b) The values may slightly be difference. Additionally, the values may differ due to the meter changes. However, EPIAS values show the exact generation amount which are in line with TEIAS readings. - c) March 2016 calculation and end date in 2016 vintage have been corrected. - d) The ER value and net electricity generation in the Excel spreadsheet and throughout the MR have been corrected.	Review-1: a) Please correct the consumption value of February 2015. b) Please clarify the difference in some months between TEIAS meter reading and EPIAS screenshot values. c) Please correct March 2016 calculation and end date in 2016 vintage considering the monitoring period end date. d) Please correct the ER value and net electricity generation in the Excel spreadsheet and throughout the MR considering above corrections. e) Please correct the Table-1 in the MR accordingly. Review-2: a) Ok Closed (The consumption value has been corrected). b) Ok Closed (The differences are in acceptable range and they are deemed as acceptable). c) Ok Closed (March 2016 calculation and

* 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
		- e) Table-1 in the MR has been revised accordingly.	end date in 2016 vintage have been corrected). d) Ok Closed (ER value and net electricity generation have been corrected). e) Ok Closed (Table-1 has been revised in the MR).
CAR-18 The power density calculation isn't available in the Excel spreadsheet calculation as indicated in the MR.	5.2.1	ER spreadsheet has been revised as including the power density calculation.	Review-1: Ok Closed (The power density calculation has been revised in the Excel spreadsheet).
CAR-19 Please correct the methodology name and version in the Section 5.3 of the MR.	5.3.1	The methodology name and version have been corrected.	Review-1: Ok Closed (The methodology name and version information has been revised in the Section 5.3 of the MR).
CL-1 Please provide the following records: a) The noise assessment report, if any, b) The photographic evidences of waste and waste water storage areas	2.1.1	a) Noise assessment report is available to the DOE. b) The photographic evidences of waste and waste water storage areas are available to the DOE. Review-1: - b) The photographic evidences of waste storage areas and waste containers have been provided to the DOE.	Review-1: a) Ok Closed (The noise measurement report dated as 21/04/2005 has been provided). b) Please provide the photographic evidences of waste storage areas in addition to the waste containers. Review-2: c) Ok Closed (The photographic evidences of hazardous waste storage area have been provided).

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

ANNEX 2: VERIFICATION TEAM AND ITR COMPETENCE

Anıl SÖYLER, Bsc. in Environmental Engineering, has completed his Bachelor degree in Middle East Technical University, Turkey. His Master study in the same field is at thesis stage and has totally 15 years of professional experience in environmental management, monitoring and auditing, waste and waste water management, environmental and social impact assessment, GHG emission report and projects' validation and verification, environmental reports, and quality management systems. He has been involved in both national and international projects supported by IFC and World Bank. He has been working as Certification Manager in the context of Re Carbon.

Fikriye Seda ATABEK, B.Sc. in Chemical Engineering has completed her M.Sc. degree in Istanbul Technical University in Energy Science and Technology. She is an auditor and trainer for ISO 50001 and auditor for ISO 14001 and has about 3 years of experience in management systems and 7 years of experience in energy management in industry. She has been involved in more than 50 CDM, GS and VCS projects as a team leader/validator/verifier/trainee validator/verifier especially in the energy sector. She has been working as contracted voluntary market projects' team leader/validator/verifier and CDM validator/verifier in the context of Re Carbon.

Annex 2-1: Appointment Certificates

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti. Bagi's Plaza Muhsin Yazıcıoğlu Cad. 43/11 TR / 06520 Balgat-Ankara Tel.: 0090-312-287 5122 Fax: 0090-312-287 5373	**Certificate of Appointment**	re-carbon
	Carbon Division	Page: 1/1

This Certificate of Appointment is given to **Mr. Anıl SÖYLER** as a confirmation of compliance with internal qualification requirements as follows:

Clean Development Mechanism				
Validator	Verifier	Team leader	Technical reviewer	Technical Expert
05-05-2017	05-05-2017	N/A	N/A	05-05-2017

Verified Carbon Standard, Gold Standard, World Commission on Dams, Social Carbon				
Validator	Verifier	Team leader	Technical reviewer	Technical Expert
05-05-2017	05-05-2017	05-05-2017	N/A	05-05-2017

Speciality	Regional expertise	Financial expertise	Technical area
N/A	Turkey, China and Saudi Arabia	N/A	1.2 and 13.1

Within the scope and in strict accordance to the appointment indicated above, the bearer can:

1. Participate in the assessments conducted by Re Carbon Ltd.
2. Take the roles within and outside of the assessment team
3. Bring specific expertise to the 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 and 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 the performance assessments and/or other reasons as defined above.

APPOINTMENT IS GRANTED BY			
Mr. Christian JOHANNES	General Manager	05-05-2017	
Name	Position	Date	Signature

F.C.053/03/05.2017.00

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti. Bagi's Plaza Muhsin Yazıcıoglu Cad. 43/11 TR / 06520 Balgat-Ankara Tel.: 0090-312-287 5122 Fax: 0090-312-287 3373	Certificate of Appointment	re-carbon
	Carbon Division	Page: 1/1

This Certificate of Appointment is given to **Mrs. Fikriye Seda ATABEK** as a confirmation of compliance with internal qualification requirements as follows:

Clean Development Mechanism				
Validator	**Verifier**	**Team leader**	**Technical reviewer**	**Technical Expert**
05-05-2017	05-05-2017	N/A	N/A	05-05-2017

Verified Carbon Standard, Gold Standard, World Commission on Dams, Social Carbon				
Validator	**Verifier**	**Team leader**	**Technical reviewer**	**Technical Expert**
05-05-2017	05-05-2017	05-05-2017	N/A	05-05-2017

Speciality	Regional expertise	Financial expertise	Technical area
N/A	Turkey and China	N/A	1.2

Within the scope and in strict accordance to the appointment indicated above, the bearer can:

1. Participate in the assessments conducted by Re Carbon Ltd.
2. Take the roles within and outside of the assessment team
3. Bring specific expertise to the 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 and 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 the performance assessments and/or other reasons as defined above.

APPOINTMENT IS GRANTED BY			
Mr. Anıl SÖYLER	Certification Manager	05-05-2017	
Name	**Position**	**Date**	**Signature**

F-C-003 / 05.05.2017 - 00